

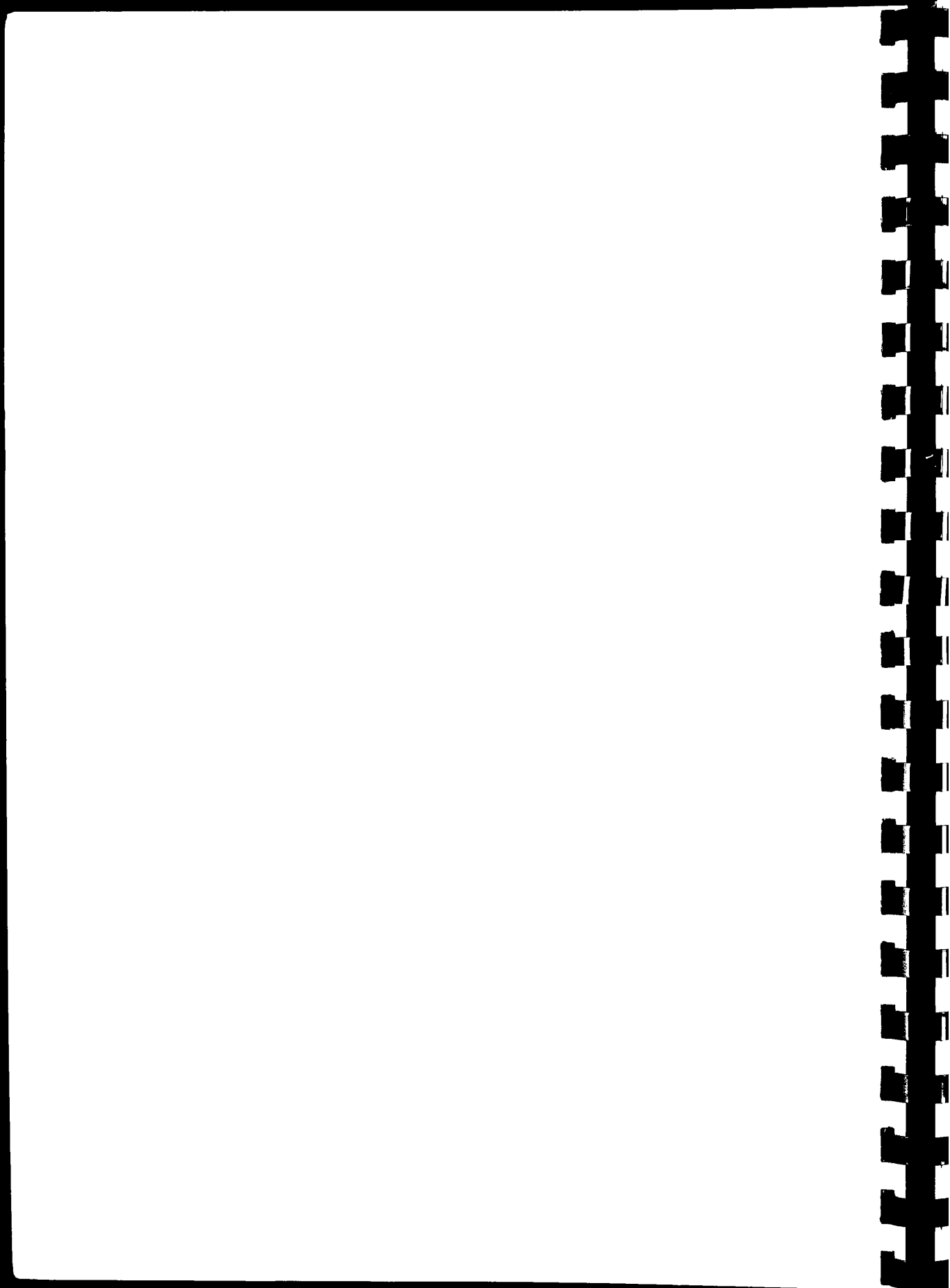
**PROTOCOL FOR PART OF THE NATIONAL
EVALUATION OF TOTAL PURCHASING PILOT
SCHEMES, OCTOBER 1995 - SEPTEMBER 1997,
RELATING TO DEPARTMENT OF HEALTH
CONTRACT 121/6090, DATED 6 DECEMBER 1995**

**KING'S FUND POLICY INSTITUTE
LONDON SCHOOL OF ECONOMICS
THE UNIVERSITIES OF BRISTOL, EDINBURGH AND
SOUTHAMPTON
THE NATIONAL PRIMARY CARE RESEARCH AND
DEVELOPMENT CENTRE**

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SUMMARY: HOW THIS PROTOCOL RELATES TO THE OTHER COMPONENTS OF THE NATIONAL EVALUATION OF TOTAL PURCHASING PILOT SITES

The protocol which follows describes those components of the national evaluation of 53 'second wave' total purchasing pilot sites commissioned by the Department of Health from a Health Research Consortium headed by the King's Fund Policy Institute which form research contract 121/6090 dated 6 December 1995. The two tables (A and B) which follow summarise the evaluation as a whole. The elements in the second part of each table are not described here. They refer to components on the effect of total purchasing on specific services and users which are currently the subject either of separate contracts (ie those on maternity services and mental illness services) or separate proposals which have not to date been agreed for incorporation in contract 121/6090 (ie that on community and continuing care).

The protocol relates to work to be carried out in the period October 1995 - September 1997 which will be reported as soon as possible after that time.

TABLE A

Component of the evaluation of total purchasing (TP)	Four objectives to which component relates			
	Success conditions	Transactions Costs	Changes in activity, costs etc	Patient benefits
<u>Included in this Protocol</u>				
Set-up and operation of TPPs (4)	XX	X	X some data	
Activity and quality changes in 7 services (5.1)			XX	X some indirect data
Service costs and purchaser efficiency (5.2)	XX		XX	
Prescribing changes (5.3)			XX	
Transactions costs (6)	X	XX		
<u>Not Described in this Protocol</u>				
A&E/Emergency admissions (Sanderson and Dixon)			X	XX
Experience of patients with severe mental illness (Roland <i>et al</i>)			X	XX
Experience of people with complex needs for community care services (Popay)			X	XX
Experience of users of maternity services (Wyke <i>et al</i>)			X	XX

TABLE B

Component of the evaluation of total purchasing (TP)	Sections in DH research brief to which component relates					
	Operation of schemes	Cost of TP	Effectiveness of TP	Benefits to patients	Services for special attention	Best practice models
<u>Included in this Protocol</u>						
Set-up and operation of TPPs (4)	XX	X	X a little data		X some data	XX
Activity and quality changes in 7 services (5.1)				X some indirect data	XXX	
Service costs and efficiency (5.2)			X			X
Prescribing changes (5.3)			X		XX	
Transactions costs (6)	X	XX				X
<u>Not Described in this Protocol</u>						
A&E/Emergency admissions			X	XX	XX	
Experience of patients with severe mental illness			X	XX	XX	
Experience of people with complex needs for community care services			X	XX	XX	
Experience of users of maternity services			X	XX	X	

1: INTRODUCTION

The purchasing of all hospital and community health services by groups of GPs is potentially the most important development in the NHS internal market since conventional fundholding was first outlined in *Working for Patients* in 1989. Compared with standard GP fundholding (SFH), GP total purchasing (TP) has far more profound implications for the development of NHS trusts and health authority purchasing. If TP is to provide the new basis for a primary care led NHS purchasing function, it needs to be thoroughly evaluated in a wide range of settings in terms of its potential impacts on the NHS internal market, its acceptability to GPs and other staff and its effects on patients. This means that the team undertaking the national evaluation needs to have easy access to all parts of the country, to a wide range of skills and to strong GP involvement.

The Department of Health research brief is wide-ranging and demanding since it covers the process of setting up and running the total purchasing pilots (TPPs) as well as the best models of TP, its costs, impact on service provision and benefits to patients in 53 sites in England and Scotland. The proposed project team has come together to match these tough requirements in line with the increasing recognition in health services research of the virtues of collaboration (eg MRC Health Services Research Initiative) and the extraordinary geographic spread of the TP sites. The project team from the King's Fund Policy Institute, London School of Economics, National Primary Care Research and Development Centre, London School of Hygiene and the Universities of Bristol, Edinburgh and Southampton has the mix of expertise, knowledge and experience required by the study as a whole. Table 1.1 summarises the expertise and knowledge within the team.

TABLE 1.1

EXPERTISE IN THE TEAM	KNOWLEDGE BASE
Policy analysis	GP fundholding
Health care evaluations (complex interventions)	General practice/primary care including prescribing and referral
Health economics/economics of quasi-markets	Community care
Epidemiology	Needs assessment and evidence-based purchasing
Statistics/data management	Health authority contracting/transactions costs
Medical sociology	Budgetary management and resource allocation
Clinical medicine (primary care)	Acute hospital services
Public health	Mental health services
	Routine health services' data sources
	Range of research methods, including analysis of large datasets, patient experience surveys, patient outcome measurement, depth interviews, computer-assisted telephone interviews etc

A number of the researchers involved in the team have direct experience of working with and researching SFH (eg Gwyn Bevan, Jennifer Dixon, Nicholas Mays, John Howie and John Posnett). John Howie was responsible for the official Scottish Home and Health Department-funded evaluation of SFH which reported recently. The project advisors include Angela Coulter and Howard Glennerster who are two of the leading researchers on SFH. Other members of the team have a strong track record in primary care research (eg John Howie, Martin Roland and Sally Wyke). In Ray Robinson and Julian Le Grand, the team has two of the leading analysts of the working of the NHS internal market and effects of the NHS reforms. James Raftery is an expert on purchasing and especially on the contracting process. Jennie Popay has published extensively on patients' and carers' experience of health and social care.

In addition, the proposed project team has the geographical spread necessary to sustain a pattern of fieldwork across the whole of England and Scotland with researchers based in London (King's Fund Policy Institute, London School of Economics and London School of Hygiene and Tropical Medicine), Southampton (Institute for Health Policy Studies and Wessex Institute of Public Health), Bristol (Department of Social Medicine), Manchester, Salford and York (National Primary Care R&D Centre) and Edinburgh (Department of General Practice). Without this spread, it will not be possible to visit each of the TPP sites economically during the life of the project or to develop an understanding of the local policy context.

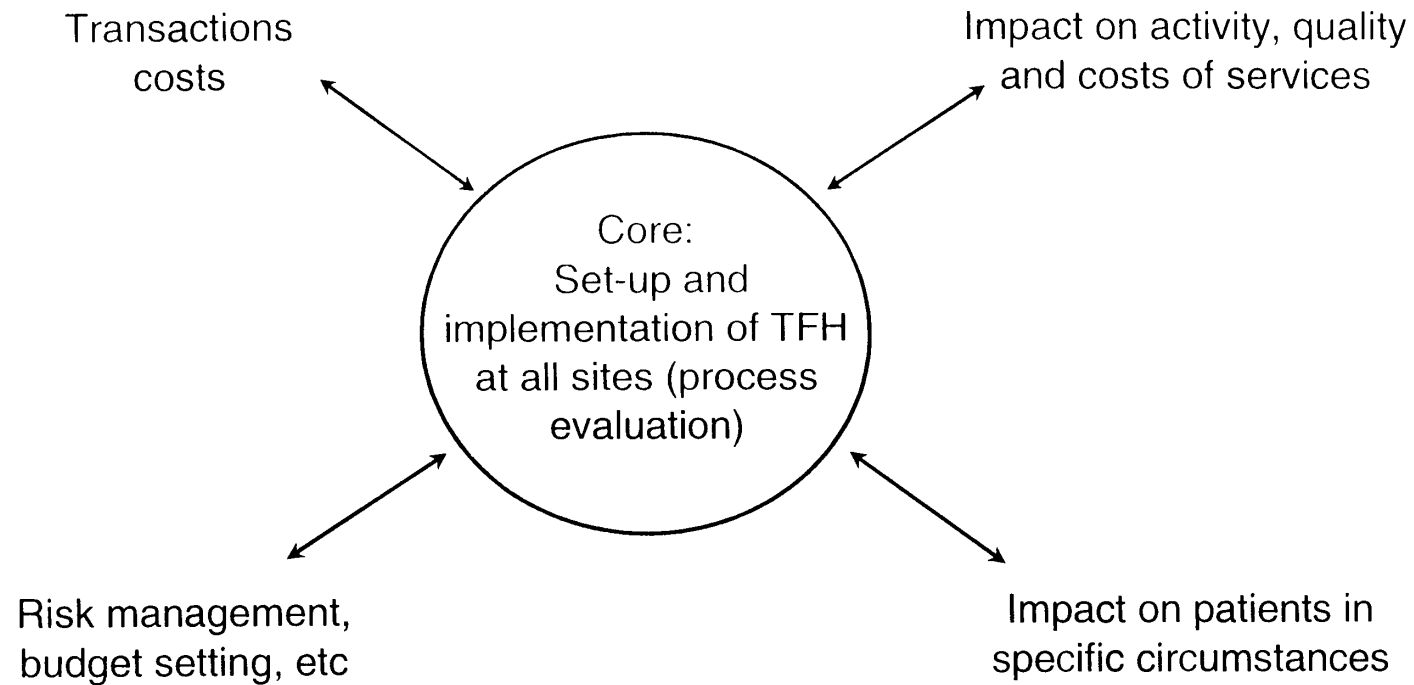
A project of the size of complexity required by the Department will require strong project management. The King's Fund Policy Institute will have the lead responsibility for ensuring that the project is co-ordinated and brought to a successful conclusion with the production of a single integrated project report. Nicholas Mays, Director of Health Services Research at the Policy Institute, will spend half his time on the project and will be the project director. Each of the collaborating research centres has nominated a senior member of staff who will be responsible for the contribution of the specific centre (Figure 1 shows a conceptual framework of the elements in the project).

To ensure that the project amounts to a coherent whole, each one of the collaborating centres will take primary intellectual responsibility for the design and analysis of a component in the evaluation. For those elements in the study which involve *all* the TPP sites, the fieldwork will be undertaken by the most accessible collaborating centre. In some cases, data collection from samples of TPP sites and their comparators will be undertaken exclusively by the lead collaborating centre while in others it will be more appropriate for this work to be carried out by the nearest collaborating centre.

Following Section 2 on the overall aims and objectives of the evaluation, each of the subsequent sections which describe the components of the study agreed with DH under contract 121/6090 includes the specific objectives and questions to be tackled, together with an outline of the methods to be used. Inevitably, given the newness and potential complexity of TP, the precise details of each component will need to continue to be refined throughout the life of the project. A further reason for building some flexibility into the proposed research design lies in the fact that TP does not have the legal status of SFH. The precise nature of TP in each pilot site is likely to be the product of local interests, relationships and negotiation between the TPP practices and the DHA/FHSA. The final design must reflect and take account of this diversity.

FIGURE 1.1

National Evaluation of GP Total Purchasing: Structure



2: OVERALL AIMS AND OBJECTIVES

AIMS

The overall aims of the evaluation set out in the DH brief are to assess the costs and benefits attributable to the *extension* of GP fund holding to total purchasing (TP). Specifically, evidence is required on :

- the factors associated with successful set-up and operation of total purchasing;
- the costs and effectiveness of total purchasing compared with health authority purchasing in the context of ordinary GP fundholding (SFH);
- the benefits to patients of total purchasing compared with health authority purchasing in the context of SFH;

so that the best models for further development of primary care-led purchasing in the NHS can be developed.

OBJECTIVES

The proposed national evaluation of second wave TPPs is structured to shed light on a number of more detailed research questions which build on previous theoretical and empirical work on the operation of internal or quasi-markets for health services. Robinson and Le Grand (1994) identify five central goals of the implementation of reforms such as TP against which the success of such schemes can feasibly be evaluated:

- quality;
- efficiency;
- responsiveness to the concerns of patients;
- choice of service and/or provider;
- service provision in relation to need.

Following Bartlett and Le Grand (1993), they go on to specify five plausible conditions which have to be satisfied for reforms such as TP to stand a good chance of achieving the above goals. The conditions are:

1. access to accurate information on activity, the costs and quality of services, especially for purchasers;
2. a competitive market structure (except where a natural local monopoly exists on the provider side which needs to be matched by an equally strong local purchaser);
3. appropriate motivation on the part of purchasers and providers (ie providers must to some degree be motivated by financial considerations and purchasers by patients' well-being);
4. regulation of any incentive for either purchasers or providers to discriminate between patients in favour of those who are least expensive to treat;

5. a reasonable level of transactions costs (ie for any level of additional benefit which TP may create, the administrative costs must be lower than the bureaucratic systems which it replaces).

In addition to the five conditions identified by Bartlett and Le Grand (1993), a specific condition raised by both SFH and TP is the **size of the population base**. TPPs are all considerably smaller than their local DHAs which will have implications for the management of risk and increase the likelihood that some services will be bought relatively infrequently. Even at present, districts can find their purchasing strategies disrupted by very expensive, hard to predict cases such as orders made by a court for the long term inpatient care of someone with severe mental illness. However, TPPs themselves vary tremendously in size so that in the smaller sites individual GPs will be conscious of acting as supplier of primary care, gatekeeper to secondary care and insurer for all hospital and community health services. In larger TPP sites, individual GPs will occupy an intermediate position between having no direct responsibility for the finance of non-elective secondary care as under DHA purchasing and having an immediate responsibility as under single practice TPP. Such variation in the starting conditions of TPPs may have a major bearing on its successful implementation.

Thus the **first objective** of the evaluation will be to ascertain as far as possible the degree to which above mentioned conditions exist at different TPP sites for them and their effects in delivering improvements in efficiency, choice and responsiveness without adversely affecting fair service provision in relation to need. This objective relates closely to the requirement in the research brief for evidence on **the factors associated with the successful set-up and operation of TP** (see main section 4, below). It will be important to be able to say whether those sites which appear to have been able to either reduce service costs and/or improve service quality for their patients relative to health authorities, without their transactions costs increasing to offset these gains (see objectives 2 and 3, below), share any characteristics in common. For example, it should be possible to say, with varying degrees of confidence, which of the following appear to contribute to successful TP:

- nature and clarity of objectives and motivation for going into TP;
- an effective decision making structure embracing relations between and within practices at each site;
- sound business planning arrangements (needs assessment, predicting activity levels, contract setting, contract monitoring, etc);
- strong financial management and use of cost containment strategies (eg utilisation review, development of intermediate forms of care);
- consistent local rules for sharing surpluses, coping with expensive cases, etc;
- the size of the population base for 'insurance' purposes;
- the level of capitation funding in relation to population need indicators and demands for care;
- availability of good data on activity, costs and quality from local providers;
- access to independent evidence on cost-effectiveness of services and interventions;
- an effective means of assessing the needs and views of their patients;
- a feasible choice of providers over a range of services (including the possibility of new service providers and/or types of service);
- a belief among GPs and other key stakeholders that, on balance, benefits of TP exceed costs;
- good relations between the pilot sites and the local health authority and local authority social services;
- good relations with local clinicians;
- creative use of the fund holding and other management allowances to cope with the additional work of TP;

the distribution of managerial work between the lead GPs in each practice involved in each site.

The second objective of the evaluation will be to discover whether TP generates additional **transactions costs** compared with health authority commissioning (see section 6, below). An important part of this will be to look at TPP contracting and whether it involves new forms of contracting or more detailed contract specification and monitoring. Another important consideration for the long term viability of TP concerns the distribution of transactions costs. If a high proportion of the costs fall on GPs who are able temporarily to absent themselves from their full clinical commitments, a question arises as to whether this is a generalisable model to be rolled out across the Service as a whole.

The third objective is to determine using a before-and-after method with concurrent controls the **changes in activity, quality indicators and costs** associated with passing the commissioning responsibility for a wider range of services to consortia of GP practices (see section 5, below). A number of questions will be looked at:

1. is the balance of care and choice of provider altered at pilot sites as compared with health authority purchasing (ie will TPPs make greater use of sources of care other than acute hospitals, eg use of alternative therapists; will TPPs adopt different priorities compared with health authorities?)
2. what effect does TP have on A&E attendances, emergency admissions, length of inpatient stays, day cases, outpatient referrals, investigations and prescribing?
3. to what extent are the activity changes associated with TP also associated with changes in the per patient costs of these services (ie do TPPs manage to make 'savings' in the costs of services)?
4. if cost reductions are shown, how are the freed up resources used by TPP sites?
5. does TP result in changes in activity by the primary health care team (eg an increase in GPs' availability to patients or access to services such as minor injuries clinics in order to avert hospital utilisation?)?
6. how closely do the objectives and business plans of the TPP sites correspond with the changes in activity patterns observed in practice?
7. to what extent are the changes in the nature or location of activity purchased by TPP sites a response to the needs, views and /or experiences of patients?
8. does TP produce improvements in indicators of the quality of the process of health care (eg outpatient and inpatient waiting times, the speed with which test results and discharge summaries are made available) greater than those in SFH practices?

The fourth objective of the evaluation, and, in many ways the most important in a strategic sense, is to assess the effectiveness of TP through the **benefits to patients**. Given the timescale of the evaluation (October 1995 - September 1997), prospective data collection will only be possible on a maximum of 12 months before and after TP. The vast majority of TPP sites will only start purchasing in April 1996 with 1995/6 as a preparatory year. In this time, it is likely that any overall changes in patient outcomes will be modest and detecting them would require access to infeasibly

large samples of patients. Instead, the primary focus will be on patients' experiences of services in four carefully selected sets of circumstances - A&E attendances, dependent people with complex needs requiring access to a range of community care services, people with severe mental illness and users of maternity services. Full descriptions of these elements in the overall evaluation are not included in this protocol since they are the subject of separate contracts with the Department of Health, although they are fully integrated in research terms with the evaluation as a whole. Protocols for these studies are available from Nicholas Mays at the King's Fund Policy Institute, on request. The studies of maternity services and mental illness services include comparisons between TPPs, extended SFH and SFH populations. The A&E study is at present limited to a feasibility exercise. A decision as to whether to fund a full study will be taken in mid-1996.

Patients' experiences will be studied in terms of their level of involvement, and degree of choice as to what is provided for them, the appropriateness of their care and their views about TP. Outcome data will be collected over a 12-month period but it is unlikely that sufficiently large changes will be observed for any clear conclusions to be drawn.

In the case of people with serious mental illness and those requiring community care in order to maintain their quality of life in the community, an important question is whether consortia of GP practices can develop the expertise and relationships with providers and social services to act as purchasers and individual 'case managers' for vulnerable people and their carers who often have complex, multiple social and health care needs which straddle health and social services and who may require a changing combination of primary, secondary and domiciliary support over time. The coherence of the care 'packages' which TPPs secure for their patients, the gaps in their provision and the continuity of care which their patients experience will be indicators of the success with which the pilots tackle this aspect of their new roles. Other aspects which may be influential include their ability to balance the needs of patients with different severities of ill-health and to ensure that particular sorts of needs are not overlooked.

3: DESIGN OF THE EVALUATION OF TOTAL PURCHASING PILOT SITES

THE INTERVENTION AND ITS CONTEXT

Since TP is a novel approach to health care purchasing, the nature of which remains to be defined through the research, the design of the evaluation will inevitably have to be developed during the first part of the study rather than be set out in detail at the outset.

The proposal which follows contains as much detail of the design of the evaluation of the TPPs as it has been possible to include ahead of analysing the results of the first set of site visits to all 53 TPPs in the autumn/winter of 1995 (see section 4, below). Nonetheless, there are two design issues which it is most important to be *conceptually* clear about from the outset; the *comparisons* to be made both among the TPP sites and with reference SFH practices and the *basis for choosing* TPP sites and SFH practices for these comparisons. These issues are relevant to all the components of the evaluation which involve studying sub-samples of TPPs and comparator practices as well as those parts which involve all the TPPs such as the study of the process of implementing TP (section 4) and the analysis of activity data (section 5.1).

Total purchasing of hospital and community health services by GP consortia is a complex, non-specific intervention which can be implemented in a potentially wide variety of different ways. It is being introduced into the NHS in a large number of sites which are themselves likely to vary widely in important, hard to predict ways which will influence the eventual consequences of TP. The range of potential confounders is therefore very wide, making sampling of TP sites a difficult task. Furthermore, TP is currently still evolving and is likely to continue to change throughout most of the evaluation period as GPs and health authorities find ways of enabling GPs to have a greater influence over the purchasing process. There is no national 'blueprint' for TP because of its informal legal status and this contrasts with even the situation of the first wave standard fund holders.

Sites are in varying states of readiness. This means that the more advanced ones made changes associated with TP ahead of the April 1995 start date. Some sites will begin to act as genuine purchasers gradually throughout 1995-96, while others are likely to spend the whole of 1995-96 in preparation for purchasing in 1996-97. In addition, it must be remembered that HCHS purchasing and general practice/primary care are themselves undergoing significant changes and will continue to do so during the life of the evaluation.

All these features pose problems for design and interpretation of an evaluation. They indicate that some caution will have to be exercised in interpreting any changes which are observed as due to TP even when a controlled before-and-after design is adopted.

CHOICE OF COMPARISONS TO BE MADE

Parts of the study where data are available for all practices

For some aspects of the evaluation, all total purchasing sites will be studied. These include the nature of services being purchased, relationships with health commissions etc (see section 4, below). In these parts of the study, the unit of both data collection and analysis will be the site rather than the individual practice, although there will be limited opportunity to examine variation within sites. In relation to services purchased, comparisons in these areas will be able to be drawn between what the TP sites are doing, and what their host health commissions are doing on behalf of the patients of non TP practices.

For the routine data on referrals, admissions and length of stay (see section 5, below), the unit of analysis will be the individual practice. Certainly no attempt should be made to analyse by individual referring GP because these data are unreliable. Because data are available by practice, there will be an opportunity to analyse differences within sites and between sites as well as differences between TP sites and reference practices (see below). Use should be made of this opportunity, since within site variation may be large.

There will also be the opportunity to look specifically at sub-groups of sites (eg sites which have a specific interest in mental health). The appropriate comparisons will then be of rates within sites with a special interest, between special interest TP sites and TP sites without a special interest, and between TP sites and reference practices. In addition, there may be opportunity to examine differences between large and small sites, and differences between sites where a wide range of services is being purchased contrasted with those where purchasing responsibility is only being taken on for a narrow range of services.

Parts of the study where data will be collected from selected practices.

For the components such as the studies of specific services (eg mental health, community care and maternity described in detail elsewhere), a small number of sites will be selected for more detailed study, and in each case it is likely that one or two practices within any one site will be all that can be studied. Resources will only allow study of a relatively small number of practices, probably ranging from 3 to 10. There is then a question of whether the practices selected for special study should be randomly selected or selected from among those with a special interest in a particular field. A working definition of a site with a special interest is that it should have an expressed intention in its business plan to reconfigure services in that field, or have an informally expressed interest which is matched by identifiable commissioning initiatives. These intentions will be identified in the first set of major TPP site visits described in more detail in the next section.

It would be possible to compare randomly selected TP practices with reference practices to identify the overall effect of TP on one particular service. However, this would risk missing important effects, especially as the study is confined to the first year of TP (1996/97), and sites are only going to have the time and energy to address a few issues within their purchasing strategy - the rest of the contracts are likely to be largely unaltered in the first year. Because of the short term nature of the study, it would be preferable to seek to describe the most extreme effects rather than average effects across the whole group of total purchasers.

The alternative is to focus specifically on practices which have a special interest in a particular area. If practices selected for study are those with an expressed special interest (eg. in mental health problems), and these are compared to reference practices who are neither total purchasers, nor have a special interest in mental health, then the combined effects of being a total purchaser and wishing to produce change in mental health services are being measured. The results will then be criticised on the grounds that it is impossible to distinguish between these two possible drivers of change. The analyses would answer the

question, 'What could be achieved by a practice that both has an interest in mental health and is a total purchaser?'. This is likely to represent the maximal effect that could be achieved. This is a valid approach, but the effects of both TP and the special interest are thus being measured.

Isolation of the total purchasing effect from the special interest effect might be achieved by comparing TP practices with a special interest with non TP practices which also have the same special interest. However, it is likely to be very difficult to identify reference non-TP practices which have explicit objectives to change particular services. So comparison with non-TP special interest practices is unlikely to be feasible. Furthermore, an attempt to identify local non TP practices which share a common special interest with the TP practices implies that 'special interest' and 'total purchasing' are independent variables: this is not the case as some practices may have gone into total purchasing precisely because they wish to produce change, and furthermore, these changes may impact on the District as a whole (ie the TPP site may be acting in some sense in the 'vanguard' of change which the health commission also ends up making). For this reason, it would be desirable in some cases to compare TP sites with reference practices in districts which do *not* have TP sites.

It will be possible to examine the effect of special interest *within* TPP sites. Comparisons could be made between individual practices with a special interest (eg. in mental health) with those which do not have a special interest. This would isolate the special interest effect from the TP effect, and would be the most efficient way to disentangle the special interest effect from the TP effect.

In summary then, it is proposed the following comparisons should be considered where resources permit:

1. All TP practices versus all other practices in the district
2. TP sites with a special interest in a particular area against selected reference practices
3. TP practices with a special interest against TP practices without an expressed special interest in a particular service.
4. TP practices with a special interest against reference practices in districts without any TP sites

In practice, it is likely to be neither feasible nor desirable to collect data for all four comparisons for each of the components of the evaluation. The matrix on the following page suggests which comparisons might be feasible.

Each comparison will be dependent on the resources available. Within any individual column, comparisons in the rows nearer the top of the table will in general take priority over comparisons in rows lower down. Although comparisons marked with a question mark on the bottom line look difficult to make, there may be opportunities to choose research instruments to facilitate comparisons with other widely based studies (eg the Audit Commission survey of maternity services, PSSRU survey of community care, National Primary Care R&D Centre's work on 24 hour emergency centres). Each of these will be explored as the design of the studies of specific services ('tracer' studies) is refined.

	Range of services provided (Section 4)	Routine activity data (Section 5.1)	Service costs efficiency (Section 5.2)	Prescribing (Section 5.3)	Transactions costs (Section 6)	A&E	Mental health	Community care	Maternity services
All TP practices versus all local non TP practices, ie rest of district	*	*	*	*	*	-	-	-	-
Special interest TP practices versus selected local reference practices	-	-	-	-	-	*	*	*	*
Special interest TP practices versus non special interest TP practices	*	*	-	-	-	*	*	*	*
Special interest TP practices vs health districts without TP	?	*	?	*	*	*	*	*	*

Table 3.1: Possible comparisons to be drawn in each of the major study areas

CHOICE OF REFERENCE PRACTICES.

In parts of the evaluation where a small number of practices will be selected for more detailed study, greater attention needs to be given to identification of reference practices. In general, reference practices should be chosen from the same region, and they will often be from the same district. In each case, important factors to be controlled for should be considered under the main headings of:

nature of provider market

characteristics of practice and its population

Some of the factors to be taken into account are suggested in Table 3.2. In each case, the ability to control for more than three or four characteristics may be severely limited. For a number of studies (ie mental health, community care, A&E and maternity), the major change being examined is an alteration in the configuration of services provided by secondary care or social services providers. It is, therefore, important that reference practices should use the same providers (eg mental health services, maternity hospital, social services department etc). A second important factor to consider may be rurality. Within one district, urban practices may have very different access to services compared with rural practices. A third factor is the socio-economic mix of the practice population. This may be important if total purchasers start to purchase some types of care from the private sector, and is highly likely to be related to use of social services and A&E.

	Mental health	Community care	Maternity services	A&E
Provider market features	Existence of community mental health team, or psychiatrist as main route of referral	Pre-existing high/low residential care provision	Single large maternity hospital / existence of local GP delivery facilities / type of midwifery care/overall styles of care	Community hospital / other minor injury provision
Practice/population features	Socio-economic profile Rurality	Socio-economic profile Age structure of population	Socio-economic profile Rurality Age structure of population	Socio-economic profile Rurality

Table 3.2: Factors to be controlled for in selection of reference practices for 'tracer' studies

4: FACTORS ASSOCIATED WITH THE SET-UP AND OPERATION OF GP TOTAL PURCHASING (THE 'CORE' EVALUATION)

Lead: N Mays, King's Fund Policy Institute
Core Research Team: N Goodwin, J Dixon (King's Fund Policy Institute) and S Wyke (Edinburgh) with G Bevan (Bristol) and R Robinson (Southampton)
Main comparison: Between all TP sites and versus local health authorities (for selected aspects)

INTRODUCTION

This part of the national evaluation of total purchasing which will be led by the King's Fund Policy Institute will comprise an initial basic description of the 53 second wave English and Scottish pilot sites, followed by an analysis of the process of setting up all the pilots and their eventual structure and organisation. Basic factual information will also be collected on the four first wave TPPs which are the subject of separate intensive evaluation and will be collected via the local evaluation teams for each of these TPPs. Face-to-face data collection will not be possible at the four first-wave TPP sites which are currently actively engaged in purchasing. This will lead into an assessment of how total purchasing is sustained and developed at each of the 53 sites, including an account of the GPs' own assessments over time of the balance of costs and benefits of the scheme. The long-term viability and generalisability of TP depends, firstly, on the principal participants continuing to believe that the time and effort required is justified by demonstrable benefits and, secondly, on the scheme leading either to a reduction in the costs of services or an increase in quality sufficient to offset its transactions costs. This part of the evaluation will also include specific work led by the University of Bristol on budget-setting, risk management and the use of evidence in purchasing decisions by TPPs. IHPS and WIPHM will contribute work on the methods and contents of contracting undertaken by the TPPs in order to attempt to bring about service quality improvements.

SPECIFIC OBJECTIVES

The information collected in this part of the evaluation is designed primarily but not exclusively to describe the variation between sites in the structure and processes through which TP is implemented in response to local circumstances and to contribute to identifying the factors which can subsequently be associated with more and less 'successful' TP. The detailed quantitative and qualitative data collected in this part of the programme is also designed to help with the interpretation of the routine data describing any changes in the pattern, quality and cost of care which are associated with TP pilot sites as against health authority commissioning (see section 5, below). The first phase of fieldwork on this part of the project will assist generally in the subsequent selection of TP sites and reference SFH practices for more detailed investigation.

Since TP is a locally flexible pilot scheme without a defined national blueprint and since no published studies are available to date, it is impossible to decide *a priori* all the relevant features of sites on the basis of which to sample, the extent of variation in these characteristics between sites, and, therefore, how many TP sites and comparator SFH practices it will be appropriate to study in-depth for the work on specific services such as those for people with schizophrenia and on specific features of TP such as transactions costs. Thus, for example, while it seems reasonable to select sites for the study on maternity services purposively on the basis of the extent to which the TP pilots' purchasing plans both appear to differ from those of their local health commission and appear to exhibit similarities, it is impossible without undertaking the first round of site visits to know which these are and on which features their plans differ. It will also be important in the early visits and subsequent CATIs to establish to what extent it is appropriate in the in-depth study to compare the TP pilots with the

experiences of patients in SFH practices in the *same* health commission area as against SFH practices elsewhere. If a TP pilot's motivation in purchasing a particular service is precisely as a reaction to the purchasing priorities of the local health commission, then exclusively choosing local SFH comparators risks exaggerating the likely effects of TP.

The data will also enable a comparison to be made between the TP pilot sites' objectives and the extent to which these are realised in practice. A further comparison will be made between how the TP sites purchase, and the patterns of services which they purchase, and the policies and practices of the local health authority, FHSA or integrated health commission. Some of these data will provide the basis for more detailed work on specific services in selected TP sites and reference practices (eg for maternity services and mental health services). It will be important to explore how the health authority involves GPs and local communities in purchasing outside TP pilot sites. The final objective will be to monitor GPs' and other important participants' (eg TP managers') perceptions over time of the costs and benefits of involvement in a TP pilot.

METHOD

For a few of the 53 TP sites in this study, it may be possible to study nearly two years of commissioning of particular services; for others which were less fully prepared in April 1995, the period of purchasing is likely to be not much more than 12 months in 1996/97 preceded by a period of preparation in 1995/96. In all cases, it will be possible to see whether TP sites make an appreciable difference to the contracting process and the content of contracts even if the effects of such changes are not necessarily discernible in alterations in the pattern of care within the timescale of the research. Care will need to be taken to ensure, as far as possible, that changes at the sites which took place before the study began but in response to the prospect of TP can be identified (ie some practices may have begun to gear up for TP in 1994-95).

Each TP site (excluding the four first wave TP sites which are the subject of separate evaluations) will be the subject of a site visit in October-December 1995 consisting of **face-to-face, semi-structured interviews** with the lead GPs, principal TP manager and key local health authority and FHSA or health commission purchasing and primary care staff (eg members of the local TP executive committee) and selected local providers as soon as possible after the beginning of the study and again approximately 12-14 months later. A member of staff from the local social services department involved in joint health and social services commissioning will also be interviewed. Site visits will be used primarily to collect attitudinal, motivational and other subjective data which cannot be collected in other ways. In advance of the first site visit and at intervals subsequently, a range of **documentary material** will be obtained from each site such as individual practice annual reports and plans, TP business plans, TP contracts, TP accounts and other financial information together with health authority purchasing plans etc. Between the site visits, a series of **telephone interviews** will be used to monitor progress with the implementation of TP and to ensure that all sites are made to feel that they are actively involved in the evaluation, since their co-operation is essential to the research.

Computer-assisted telephone interviews (CATI) will be carried out approximately every six months at all TP sites (ref: Harris D, Grimshaw J, Russell IT, Taylor R. The use of computer-assisted telephone interview techniques in a general practice research study. *Family Practice* 1993; 10: 454-8). Survey forms will be posted to each site in advance, an interview time will be booked and up to a 45-minute telephone interview conducted.

CATI is not an alternative to face-to-face interviews, but rather a means of collecting data rapidly and reliably from a large number of sites. CATI will allow each TP site to be interrogated according

to a common format across a wide range of issues, such as its progress on contracting, but relatively economically. Since CATI allows direct entry of data and rapid analysis, it will also enable interim analysis of the progress of sites in implementing TP to inform the subsequent direction of other parts of the evaluation (see below). The research team includes members from WIPHM with experience of CATI, for example from a recent NHSE-sponsored survey of all purchaser DHAs which obtained a 100% response rate. The same approach will be used in this project.

The face-to-face interviews will be undertaken from the research centre which is most accessible to the site using a common protocol. Interviewers will be trained and briefed centrally at the King's Fund Policy Institute to ensure consistency in undertaking the semi-structured interviews. Documentary data collection will also be collected locally by the nearest centre. The majority of the telephone interviewing will be carried out from the King's Fund Policy Institute with technical support from the Wessex Institute of Public Health. A vital part of the work will be to establish good early relations with the sites and sustain them through regular contact.

No face-to-face fieldwork will be undertaken at the four first wave TPPs which are being separately evaluated but a limited amount of the more 'factual' data will be requested from the relevant researchers on these sites for comparability with the 53 second wave sites.

The sites and their context

The findings from the work of the NHSE-commissioned 'facilitation team' (Jeff Girling and Ian Savage) will be used as a basis for developing a detailed description of each of the sites and its constituent practices. The central 'facilitation team' have collected a range of preliminary information on the degree to which each site is prepared for TP, covering such things as the site's initial objectives in entering the scheme, project management, business planning intentions, management information systems, relationships with key stakeholders locally, organisational development requirements and so on. This information will be made available to the research team. Census and other routinely available population data such as the proportion of the site's population attracting GP Deprivation Payments will be used to characterise each site's patients. Information will also be collected on the pattern and accessibility of health care providers to the sites. Practice annual reports, etc will be used to build a description of each TP practice in terms of features such as list size, number of partners, other staffing, services offered and conventional fund holding 'career'. Information on practice software and local provider information systems will be collected by telephone interview and will contribute towards the subsequent selection of a sub-sample for more detailed analysis in comparison with non-TP sites.

Staff at Regional level responsible for SFH and TP will be interviewed about how sites were chosen, whether any were rejected or withdrew and why and what requirements TP sites face in becoming involved in TP.

Setting up the site for total purchasing - the first site visit

The first site visit in October-December 1995-96 will enable the research team to deepen its understanding of the process of setting up each TP pilot site and to help refine hypotheses and research questions (eg for the analysis of routine activity data which follows in section 5.1) and to assist with the selection of sites for in-depth work. The visit is likely to comprise five days of fieldwork and a maximum of twelve face-to-face interviews undertaken by a research fellow from the nearest research consortium centre.

Care will be taken in the first site visit to ascertain the objectives which the sites have for the seven services areas new to TP which will be studied in more detail, including any new services which they may purchase, how they are likely to choose to contract for these services, how they plan to manage their allocations for these services etc. Specific prompts will be included concerning purchasing intentions and more detailed plans or draft contracts for the service areas which will be the subject of further investigation in a sample of sites and 'controls'. The reasons for any differences will be explored in a subsequent CATI. Documentation will be retrieved and analysed for these service areas. The first site visit will be followed by telephone interviews. Particular attention will be given in the first set of depth interviews to the following:

- how the site became involved in TP scheme;
- aims, objectives and motives for entering the scheme;
- success criteria identified by each site;
- structure and organisation of the site;
- progress on purchasing, including planned changes in services;
- relationships with the health authority, social services and providers;
- accountability for priorities and use of resources;
- resource allocation to the site;
- arrangements for risk management;
- general financial management;
- time commitment and direct administrative costs of becoming a TP site.

Rough draft semi-structured interview schedules for use with lead GPs and TP site managers at the first site visits are attached in Annexes 1 and 2. Further interview schedules for use with health commission purchasers, local providers etc are under development. The list of topics and interviewees is given in Table 4.1.

At the point of the first site visits, progress in relation to a number of important issues is likely to have been relatively limited and these topics will, therefore, become the focus of subsequent telephone interviews. For example, details of site-specific arrangements for virement, dealing with surpluses, over-spending, monitoring of expenditure against contracts, dealing with costly cases etc are only likely to be firmed up nearer to the beginning of actual purchasing by TP sites (see below for more on these issues). In most cases, this will not occur before April 1996.

Sustaining total purchasing - subsequent data collection in 1995/96

In the interim between the initial site visits and interviews and their repetition approximately 12-14 months later, contact will be maintained with the sites in three ways:

through periodic requests for documentary material and routine data (eg contracts as they are 'signed off', information from TP financial software systems and accounts if available);

through telephone questionnaires to the site TP manager/lead GPs, health commission or local provider representatives;

and, through sending each lead GP, site manager and health commission lead at all TP sites a weekly diary card on which to record her/his global perceptions of the costs and benefits of TP on a 10-point analogue scale (from 'none' to 'a lot'). This will be a modified version of the card successfully used in the Edinburgh study of GP fund holding (Howie, Heaney and Maxwell, 1995). In addition, cards will be sent weekly to *all* partners in one practice in each

of 12 TPP sites. Each month, respondents will be sent a 'critical incident' card to record significant positive and negative events associated with the TPP.

Each of these approaches to data collection will enable the team to keep in touch with all the sites economically and are summarised in Table 4.2. For example, it will be possible to discover whether the objectives of the pilot sites change over time. The back of the diary card also offers the opportunity to obtain information regularly on topics for which there may not be easily accessed alternative sources (eg on GPs' use of private sector providers as part of their TP activity). The diary card provides a crude, but simple way of plotting the immediate participants' perceptions of the pros and cons of the TP experiment over time in relation to other events at the sites, the development of expertise in total purchasing, the evolution of relationships with local providers and with the health authority and so on. This may be important since the sustainability of TP is likely to depend on the commitment and enthusiasm of a small number of GPs in each site and their ability to minimise the burden which the TP process may create. Annexe 3 gives more information about this element in the evaluation.

The diary cards will enable an assessment to be obtained of the time doctors and their managers spend on tasks associated with the existence of TP. These data will be fed into the analysis of the transactions costs of TP (see section 6, below, for more on this).

The second site visits, 1996-97

The second site visit will be used to assess the extent to which the objectives and plans of the TP sites have been realised, the extent and nature of organisational and services changes at the sites and the capacity of sites to make efficient use of their allocations while managing clinical risk. The second set of interviews, taken in conjunction with documentary evidence and financial and activity data from the TP sites, will be an opportunity to explore such things as the scope sites had for switching resources between different elements in their total budget; the way TP priority-setting decisions impacted on TP GPs as against DHA decisions; how different sites accounted for emergency and unplanned utilisation as against DHAs; how different sites and DHAs dealt with very costly cases; how they dealt with highly specialised services; how TPs and DHAs used evidence (eg on needs) and obtained information from providers for contracting and contract monitoring; the extent to which service changes were achieved by TPs and DHAs (and, if not, any obstacles to change); and, what improvements in quality TPs were able to engineer. Again, particular attention will be given to those services areas which are new to TP and which will be the subject of specific investigation in the remainder of the evaluation (eg A&E, emergency medical care, community care, maternity services, mental health services).

Analysis of data

This component of the evaluation which focuses on the establishment and implementation of TP will generate a wide variety of documentary, routine quantitative, and quantitative and qualitative interview data which will feed into other parts of the study (eg the data on contracts and the contract negotiation, the data on the time which GPs and others spend on TP administration and management, etc). The most time-consuming activity will be the content analysis of the semi-structured interviews. The approach taken to the initial analysis of these interview will be exploratory and will be used to put forward possible explanations for any changes which may be observed in the pattern of activity at the TP sites and controls (see section 5.1). This knowledge of the strategic objectives of TP sites will be valuable in interpreting the results of the analysis of data such as HES data on emergency admissions, maternity and regional specialties. Equally, the findings

emerging from the analysis of activity data will suggest research questions and lines of enquiry for subsequent analyses of the interview data.

The interviews at the site visits will be tape recorded as well as being noted in detail by the interviewer during the interview. The recording will not be transcribed but will be used as an aide-memoire for the subsequent analysis which will be undertaken by the interviewer as soon as possible after the interview.

The aim of the analysis will be to produce a summary of the respondent's answers to 'meta-questions' or key *general* issues identified *a priori* as important by the research team, linked to an understanding of the *specifics* of the particular setting as interpreted by the participants. In order to do this, the interviewer will have an analysis guide for summarising interviews with each type of respondent, as well as a guide for the site visit as a whole. The guide will include open fields for verbatim quotes, comments concerning issues which appear to be important at the interview/site but which do not emerge as such in the guide for 'meta-questions' determined in advance by the research team. The open fields will also allow the interviewer to reflect on the interview process and make suggestions for improvements for subsequent site visits. Annexe 4 gives an example of the analysis guide for the first face-to-face interview with lead GPs at TPP sites.

An example may help in understanding the relationship of the guide for analysis to the specifics of questions in an individual interview. The draft GP interview includes questions about the amount of extra work involved in TP pilot sites, including a question about whether TP is generating any particular problems for GPs and other staff in the site. One of the issues which lies behind these questions is the sustainability of TP and especially its reliance on the commitment of individual GPs. Thus, the analysis template might include a question to the interviewer about whether he/she judges that the GPs, managers or site as a whole is 'coping' and how well and whether the systems they have in place suggest a sustainable form of TP.

A final aspect of the analysis of data from the site visits concerns the extent to which each interview and each site modifies our understanding of the 'meta-questions' and, thereby, our understanding of the nature, and pros and cons of TP as a form of NHS purchasing. It is proposed that each interviewer prepares a short statement of this kind about TP at the beginning of fieldwork and then modifies it, if necessary, after each site visit is completed until a 'verdict' is reached, at least for a single round of visits.

Training of interviewers

Since the site visits will consist of semi-structured in-depth interviews undertaken by at least six research fellows based in different research institutions, consistency of approach to the interviews and subsequent data analysis will be crucial to the production of reliable data across over 50 TP pilot sites. Yet the sites are likely to vary considerably at the time of the first set of site visits, both in terms of how they are approaching the task of implementing TP and in terms of how much progress they have made. Levels of knowledge and understanding of the issues will vary. In different sites, different aspects of TP will be the responsibility of different sorts of respondents. In some sites, there may be no single GP or manager who 'leads' and the interview pattern will have to adapt to this.

As a result of this, the interviewers will have to be flexible in the interviews while maintaining the objective of collecting similar data on the same wide range of questions at each site. Training and general orientation concerning the context of TP will be organised at the KFPI for all the interviewers. It is likely to consist of the following:

background to NHS reforms, especially GP fundholding;
mechanics of SFH and terms used;
background to TP initiative;
rationale for the evaluation design;
introduction to theory and methods of depth interviewing;
explanation of and familiarisation with interview checklists;
dummy interviews (possibly with participants at four first wave sites and members of KF College learning sets etc);
feedback and discussion of interviews;
introduction to analysis themes and methods;
analysis of (taped) dummy interviews;
feedback and discussion of summary analysis.

ISSUES FOR DETAILED INVESTIGATION RELATED TO THE 'CORE' EVALUATION

Achieving quality in contracting (Ray Robinson, IHPS, James Raftery, WIPHM and Tom Fahey, Bristol)

Contract negotiations are likely to be at an early stage by the time of the first site visits. Thus, subsequent telephone interviews will be used to study **contracting** issues at each site, such as the relationship between TP contracting and TPs' strategic objectives, the extent to which TPs attempt to build up relations of trust and permanence with providers or stress contestability, the types of contracts they negotiate and why and whether they are able to bring about service quality improvements through contracting. TP sites will be asked about any special 'deals' they have been able to strike with providers and why. The issue of what **currency** is specified in contracts is also important, not least in enabling comparisons to be made between contracts. Most DHA acute sector contracts are priced at average specialty costs, while GPFH contracts are based on procedure costs. HRGs may be developed sufficiently to be used by TPs. Data will be collected from each TP on the currencies used in its entire range of contracts with emphasis on the seven services areas specified in the project brief, along with TPs' perceptions of these and their plans for change. Data will also be collected on the degree to which contracts specify quality standards or use, clinical protocols or guidelines. In addition, data will be collected on how TP contracts and health authority contracts are priced both for predicted activity and for any over-runs which may be priced at marginal cost. The degree to which prices are negotiated will be explored. In the second year of the study, issues such as contract monitoring will become salient and will be explored with sites. Some more detailed face-to-face interviews on contracting are likely in a smaller number of sites and control districts (see section 6, below on transactions costs).

All TPPs and their health authorities will be asked about their acquisition and use of evidence for contracting as part of the face-to-face interviews at the site visits described above. The role of data on needs, costs and effectiveness in making changes which are eventually reflected in contracts will be explored at all sites and their health authorities. In addition, at those TPP sites which report making changes in the pattern of services for cardiovascular disease and mental illness more detailed information will be collected from the GPs and staff at the local health authority as part of one of the regular CATIs on the nature of the changes, the reasons for the changes, the role of evidence in the changes (if at all) and their appraisal of the utility of the available evidence.

Budget setting and risk management (Lead: Gwyn Bevan, Bristol, supported by Kate Baxter and Max Bachman, Bristol)

As part of the 'core' evaluation, work will be undertaken to compare the level of funding allocated to the TPPs and health authorities purchasing the same services and to explore the methods used to derive these allocations. If total purchasing is found to be successful a means of allocation must be developed which is both fair and perceived to be so.

Data on whether TP lead GPs and staff at local health commissions view allocation methods as fair will be collected as part of the face-to-face interviews discussed above (also see Annexes 1 and 2). Data on the methods used to make TPP and health authority allocations will be collected by CATI from KFPI after the first set of site visits which will be followed by a workshop at which the findings will be fed back to staff at health authorities so that they can compare their approaches. Questions in the CATI will include the coverage of the formula, methods used to allow for demography and morbidity, how past spending was estimated and how actual allocations were made allowing for factors such as cost improvements and waiting list monies. In addition to the above, data will be collected from each local health authority on the allocation given to each TPP, its past level of spending and TPP population details to enable an analysis of the variation between TPPs in allocation levels, between TPPs and health authorities in allocations and fair shares (targets) and between the TPPs before and after the advent of TP.

Although the potential for GPs to select out patients at high risk of being costly is frequently discussed in relation to SFH and also exists in theory in relation to TP, it would be extremely difficult in a two-year before-and-after evaluation to identify whether or not it had been occurring. Instead, the emphasis will be on the extent to which GPs *could* predict their high cost patients at the beginning of the financial year, the characteristics which they would use to do so and whether taking account of these characteristics would be helpful in any subsequent resource allocation formula for TP. There may be practices among those involved at the 53 TPP sites which collect good data on the health care utilisation and costs of individual patients on their lists. These practices will be identified through the site visits. GPs will be approached to work with staff at Bristol to see how well they are able to predict the characteristics of their high cost patients. At the beginning of 1996/97, GPs will be asked to identify criteria for identifying such patients and at the end of the year the extent to which these criteria have been successful will be assessed for possible inclusion in any future resource allocation formula.

The cost-effectiveness of different budgetary arrangements developed at single-practice sites, multi-practice sites where budgets are split between practices and multi-practice sites with a single budget will be compared. It is proposed to carry out CATIs with all TPP sites during 1996/97 to obtain information, among other things, on contingency reserves, overspends/underspends, controlling expenditure, budget-setting within the overall allocation to the site, monitoring expenditure against budget, arrangements for virement, sanctions and incentives and information on the costs and time required for budgetary management. This work will be integrated with work on attitudes to risk at TPP sites, arrangements for sharing risk with the local health authority, other TPPs and providers and assessing the first year of TPP purchasing from the point of view of risk management.

Most of the data required will be collected through the face-to-face interviews as part of the main site visits with support from CATIs. In addition to information on attitudes to risk and to expensive cases at sites, data will be collected on the stop-loss arrangements in place at all sites together with the mechanisms put in place to deal with very costly patients and to share costs. Contracts for rare high cost treatments/patients will be inspected. More detailed interviews with a sub-set of sites representative of different approaches to risk sharing and management will be undertaken by staff

from Bristol in order to explore sites' experiences of the first year of covering costly cases and any changes which they would wish to make in future.

Table 4.1: Proposed respondents and topics for face to face interviews at first set of site visits

<i>Topic</i>	<i>Lead GP</i>	<i>TP Manager</i>	<i>HA/HC Lead on TP</i>	<i>HA/HC Purchaser Lead</i>	<i>Social Services</i>	<i>Providers</i>	<i>RHA</i>
1. Process of becoming a TP	X	X	X				X
2. Aims, objectives and priorities	X	X	X				
3. Success criteria	X	X	X	X		X	
4. Structure/ organisation/ constitution	X	X	X				
5. Enabling/ disabling factors	X	X	X	X		X	
6. Adverse selection (cream skimming)	X	X		X			
7. IT/info systems		X	X	X		X	
8. Perceptions of costs and benefits	X	X	X	X	X	X	
9. Time commitment	X	X	X	X	X	X	
10. Budget and scope for virement	X	X	X	X			
11. Accountability - consultation	X			X	X		X
12. Previous involvement in contracting	X			X			
13. Relations with social services, HA and local providers	X	X		X	X		
14. Population Needs Assessment and use of research evidence for purchasing	X	X		X			
15. Comparison with HA Purchasing	X			X	X		
16. Resource Allocation	X	X	X	X			X

Table 4.2: Summary of data collection methods for 1995-96 topics

<i>Topic</i>	<i>Principal Methods To Be Used</i>			
	<i>'Face to face'</i>	<i>Telephone</i>	<i>Documentation</i>	<i>Diaries</i>
1. Process of becoming a TP	X			
2. Aims, objectives, priorities	X		X	
3. Planned changes in service delivery	X	X	X	
4. Success criteria	X			X
5. Structure/ organisation/ constitution	X	X	X	
6. Enabling/ disabling factors	X			X
7. Adverse selection (cream skimming)	X		X	
8. IT/info systems	X	X		
9. Perceptions of costs and benefits	X			X
10. Time commitment	X	X ¹	X	X
11. Local site specific rules		X	X	
12. Arrangements for contract negotiation	X	X	X	
13. Types of contracts, contract specification		X	X	
14. Budget and scope for virement	X		X	
15. Accountability - consultation	X			
16. Previous involvement in contracting	X			
17. Relations with social services, HA and local providers	X			
18. Population Needs Assessment and use of research evidence for purchasing	X	X	X	
19. Comparison with HA Purchasing	X		X	
20. Risk management	X		X	

¹ For direct administrative costs

5: ACTIVITY CHANGES AND SERVICE COSTS

5.1: CHANGES IN ACTIVITY IN SEVEN SERVICES

Lead: J Raftery, Wessex Institute of Public Health Medicine

Main comparison: All TPP sites' activity versus activity in SFH and non-FH practices (ie rest of population), before and after implementation of TP

Specific Hypotheses

The project brief identified seven services for monitoring before and after TP and in comparison with SFH populations. This section starts with hypotheses about the effects of TP on each of these services, which are summarised in Table 5.1. These hypotheses will be expanded to include those due to individual TP objectives which will be established in the first set of site visits. Annex 5 gives further details of the thinking behind each hypothesis.

Table 5.1

Hypotheses of Effects of TP on seven services
(to be supplemented by objectives of individual TPP sites)

Service	Hypotheses
Emergency Admissions ²	Reduction in emergency hospitalisation rates in total and in relation to specific conditions Reduction in length of stay, especially of long stay patients Shift in balance of acute/social care for specific groups (eg stroke) Changes in choice of providers at the margin
Maternity Services	Shift to more client-centred approach Shift to midwife (as opposed to consultant) assisted deliveries, depending on pricing policies Greater continuity of care Increase in home births

² The term 'Emergency Admissions and A&E' as used in the project brief requires clarification since DHAs currently contract in very different ways for each of these. Emergency admissions are paid for per FCE depending on the form of the contract, while A&E is a host District funded service that is paid for by a simple block contract. Very little information is available on activity or costs in A&E. The degree to which emergency admissions are routed through A&E depends on local circumstances. The focus here is on emergency admissions which comprise the largest single aspect of TPP compared to standard fundholding. A&E is dealt with separately in the next section of the proposal.

Regional specialties i) neurosurgery ii) cardiothoracic iii) spinal injuries iv) specialised paed's v) neonatal intensive vi) Medium secure units/challenging behav. vii) renal viii) rehabilitation ix) genetics	i)-v) are services for relatively rare conditions, in which one would expect either cost per case contracts plus perhaps a move to more co-ordinated purchasing with the HA or other TPPs As above, but scope for maintenance contracts (per patient year) Expect TPPs to purchase more, either separately or as part of packages Small but growing. Expect cost per test contracts plus growth of TPP site clinical genetics
Palliative care	Shift to more patient-oriented care Shift from acute hospital spells to community services Contracts for packages of care or whole services Development of respite care
Mental illness	Shift in balance of drug/inpatient treatment (fewer inpatient spells and inpatient days, change in drugs such as SSRIs, depending on evolving literature) Increase in use of distant NHS and private beds in emergencies if no NHS bed available locally Change in emphasis to primary care mental health services with knock-on effects on providers
Community services	More closely targeted & monitored Contracts for staff inputs/whole services
Health promotion	Shift to interventions with known cost-effectiveness Contracts for staff inputs/whole services

Method

Routine NHS data from England and Scotland will be used to describe changes in the seven services at all the TPP sites before and after TP. There will be two comparators: patients of SFH practices in the relevant district and all the patients whether of SFH or non-FH practices of the district as purchaser. The impact of TP on A&E service use will be studied separately because of the lack of activity data available routinely. A feasibility study has been undertaken which is the subject of a

separate proposal and contract (not included in this proposal). The scope for using routine NHS data to monitor changes in the seven services discussed above is summarised in Table 5.2, which suggests that the routine data, notably the Hospital Episode Statistics (HES) in England, would provide valuable information in relation to three services: emergency admissions, maternity and regional specialties. HES can provide up-to-date data on all inpatient and day case episodes, along with demographic and clinical data. National HES data for 1993/4 along with regional data for 1994/5 and 1995/6 would be used to set baseline levels. Regional data would be used to monitor changes in each of these services. Members of the team have considerable expertise in such analysis at both regional and national level and are confident about being able to negotiate national HES through the National Casemix Office, as has been the case for other projects. (One of the team - James Raftery - works part time for the National Casemix Office.) Local HES data would be obtained via the TPP site/DHA. Preliminary consultations with Scottish Home and Health Department statisticians indicates that Scottish routine data are highly compatible with English HES and of higher quality. There should be no great difficulty producing an Anglo-Scottish analysis of activity trends. Routine data would have to be supplemented by collection of data at TPP level on use of non-NHS services. This could be obtained from TPP practice software for those sites reporting use of non-NHS services during the fieldwork described in the previous main section.

Routine data, specifically HES, Community Korner and PACT data, would be of more limited use in the other four services, for which developments in information for contracting might also be expected (see Table 5.2). Both palliative care and mental health, which have growing elements of community and domiciliary care, are only partially captured by routine data, with its emphasis on NHS inpatient activity, leaving gaps regarding community service contacts with patients linked to diseases or to GPs. Although total community health service contacts are recorded, these cannot be linked to specific client groups or patients (the advent of the new computable NHS number will change this - the scope for its use by TPPs will be explored). Data on activity in both community health services and on health promotion are so weak that TPPs may choose to contract on the basis of staff inputs and/or clinics and sessions. For each of these services, routine NHS data would be supplemented by data from each TPP site, depending on how these data are specified by each in their contracting and monitoring arrangements.

Table 5.2
Routine data by topic and adequacy to detect changes in patterns of services

Service	Routine Data	Adequacy
Emergency Admissions	HES/SMR1	OK (all below omit private sector)
Maternity	HES/SMR1	ditto
Regional specialties	HES/SMR1	ditto
Palliative care	HES/SMR1 re NHS inpatients only	missing community service contacts to terminally ill
Mental illness	HES/SMR1 re NHS inpatients only, CPN contacts, PACT	missing community service contacts to mentally ill
Community services	contacts Staff numbers	no linkage to client groups
Health promotion	Clinics Staff numbers	ditto

HES diagnostic data has strict limitations. It is likely that it will only be possible to analyse trends in major diagnostic grouping or by ICD chapters.

Ideally, the analysis of routine data (eg HES/SMR1) would be undertaken for 1993/94, 1994/95, 1995/96 and 1996/97 as soon as possible after the end of March 1997 in order to contribute these analyses to the final report due at the end of September 1997. Unfortunately, there is likely to be a considerable lag in the availability of routine data. It could be October before a complete 1996/97 HES/SMR1 data set is available. Thus, it may not be possible to report on the changes in activity rates before the end of 1997.

Additional data to validate and interpret routine data

It is proposed to collect additional data directly from TPP sites and their health commissions in order to validate the routine data, and to assist interpretation of routine data on service use. Some of this will come from the 'core' evaluation site visits and CATIs (section 4) and some from CATIs specifically designed and carried out by WIPHM.

Without knowledge of structures and processes in particular units, interpretation of routine data is hazardous. Perhaps the critical factor affecting the use of routine data is the degree to which TPPs contracts specify such data and monitor it. Those contracts that are framed in terms of routine data (emergency admissions, maternity, regional specialties) might be expected to raise issues to do with data accuracy and quality. The degree to which providers already have contracts with health commissions that employ routine data might be expected to influence TPPs' contracts. Issues such as grossing up for missing data (KP70 adjustment), FCE 'inflation' (multiple FCEs in a single admission) and inpatient FCEs with zero length of stay (around 8% of all acute sector FCEs) might be expected to arise. The WIPHM team have expertise in these topics due to having carried out such work recently for the London Implementation Group.

Additional information required to interpret routine information for the relevant services, besides the degree to which it is used in contracts, might include the strategic or tactical objectives of the TPP site and knowledge of the processes followed in particular provider units. Given secular trends and variation in time, interpretation of trends in routine data need to be backed up by knowledge of the degree to which strategic objectives included such trends. For example, a decline in length of stay for a particular condition might or might not have been a direct result of TPP policy. Information on the objectives of TPPs would be collected in the first set of site visit interviews, and updated as part of an ongoing survey process (see section 4, above).

Knowledge of structures and processes followed by particular units is also important because they may affect the way data are recorded. For example, emergency admissions of over 75 year olds may in one unit may go straight to geriatric medicine, and in another unit go first to general medicine followed by transfer to geriatric medicine as a separate FCE. Differences in length of stay and cost of an admission for stroke might be affected by the degree to which that unit included rehabilitation assessment and/or rehabilitation.

Data would also need to be collected on the ways in which other contracts were specified. Routine HES and Korner data offers some scope for monitoring changes in mental health services (HES and PACT) and in palliative care (HES on hospital deaths). For community health services and for health promotion, routine data would appear to have less to offer and contracts may well be specified in terms of staff inputs of blocks of service such as clinic sessions.

The changes in activity recorded in the routine NHS data will be linked to consideration of their costs and, thereby, to an attempt to discover whether TPP sites are more efficient purchasers than health authorities. In order to do so, the work on activity data analysis will be closely co-ordinated with the section which follows on service costs and purchaser efficiency (5.2, below).

5.2: SERVICE COSTS AND PURCHASER EFFICIENCY

Lead: J Le Grand, KFPI/LSE

Main comparison: All TPP site service costs versus costs of local health authorities; costs at all TPP sites before and after introduction of TP; cost comparisons for service packages in 'tracer' studies between TPPs and reference practices (see section 7)

Research team: J Le Grand, J-A Mulligan, KFPI, J Raftery, WIPHM

Introduction

A crucial question for the evaluation will be whether the TPPs are more efficient purchasers than health authorities. More specifically, can they purchase services of a comparable quantity and quality to that of the Health Authority but at a lower total cost; or, equivalently, can they purchase services of higher quality and/or quantity for the same total cost?

This question will be approached in three ways. First, routine data on unit costs will be examined to see whether the TPPs succeed in obtaining lower prices per FCE than HAs. This will give an indication of the ability of TPPs to reduce the cost per unit for services purchased.

Second, detailed estimates will be constructed of the cost of the services used by the patients who will form the subject of the service-specific sub-studies (the 'tracer' studies -see below, section 7, for details). For the controls, it will be necessary to have data on the volume of services used by each patient and the cost per unit of service.

Finally, the quality of what is purchased by TPPs will be monitored using the various indicators specified in the tracer studies themselves (eg patients'/users' satisfaction in the A and E and community care studies) to see whether any differences in total cost per patient between the pilot sites and controls are associated with differences in the quality indicators (see the second part of 5.2, below).

The detailed development of methods in this part of the evaluation will be informed by discussions with economists in DH/NHSE during early 1996.

SERVICE COSTS AND PURCHASER EFFICIENCY USING ROUTINE ACTIVITY DATA

Specific Objectives

Specific objectives are to compare the costs of TPP site activity with the costs of activity for all other patients in the same districts and to compare TPP site costs before and after the introduction of TP in order to provide answers to the following:

- 1) What are the cost implications of any changes in activity observed in section 5.1, above?
- 2) What are the opportunity cost implications of any changes in activity?
- 3) How do changes in the TPP and comparator DHA Efficiency Indices compare?
- 4) Are there quality changes associated with TPP purchasing that can be ascertained using routine data?
- 5) How will any efficiency improvements achieved by TPP through clinical activity and/or cost changes compare with changes in transactions costs associated with TPPs?

Methods

Objective 1 will be met by linking activity data with unit cost data. The latter will be obtained from DHA Financial Returns for all or main providers (HFR22/TFR2). These will be requested from TPPs and DHAs. Where appropriate, they will be supplemented by data from the service-specific (tracer) studies which are the subject of separate proposals.

Under objective 2, 'opportunity cost' is defined as the value of the alternative activities foregone through actual TPP purchases. It is therefore appropriate to measure this by linking the cost and activity data.

Objective 3 will be met using data from the previous objectives. To avoid some of the well-known problems with the Efficiency Index, sensitivity analyses will be undertaken, calculating different versions of the index using alternative weighting structures.

Objective 4 will be undertaken using data on mortality, length of stay and destination on discharge. Objective 5 will be undertaken in conjunction with the transactions costs component of the evaluation (see section 6, below) supplemented where possible by other sources.

SERVICE COSTS AND PURCHASER EFFICIENCY FOR SPECIFIC SERVICES

Specific Objectives

The objectives of this part of the evaluation are to:

1. determine whether TPPs can purchase specific services (ie maternity services, those for people with serious mental illness, and those for people with complex needs for community care) of a comparable quantity and quality to that of a health authority, but at a lower total cost.
2. or, equivalently, to determine whether TPPs can purchase services of higher quality and/or quantity, for the same total cost.

The project will run alongside three components of the evaluation looking at maternity services, community care and services for people with serious mental illness which are the subject of separate but related proposals.

Methods

Estimates will be constructed of the cost of services used by TPP patients and those of reference practices in the service-specific studies. For this purpose, it will be necessary to collect data on the services used by each patient and the cost per unit of service.

For each service-specific study, the project team intend to:

1. review the literature on costing methodologies;
2. describe possibly pathways of care;
3. identify utilisation data for the tracer study team to collect;

4. attach costs per unit of utilisation;
5. compare costs for actual packages of care using activity data collected by the tracer study team for TPP patients and 'controls';
6. compare costs with outcomes.

Data Requirements

Cost Information

The wide range of direct HPSS costs will be considered in each service-specific study (see separate proposals). Annexe 6 gives examples of some generic services and their estimated costs from PSSRU calculations. Where data are obtained from national routine sources, the usual caveats on quality, accuracy and local context apply. In each case, information will be required on:

- the nature of the service or intervention
- the appropriate measurement unit (eg time, contact rate)
- the total number of clients sharing the service (where relevant).

Service Utilisation Data

Data on service utilisation will be collected as part of the service-specific studies. These will use a combination of:

- Practice records (could be limited on non-NHS provision)
- Provider records
- Case manager interview
- Client interview
- Client diaries (*possibly*)

Cost Measurement

Information on costs can be obtained from three main sources:

- Published cost studies
- Facility-specific costs, ideally from provider financial accounts, but if necessary from nationally published data on average costs (eg CIPFA)
- Prices charged to SFHs and health authorities by local providers

Facility-specific costs are probably the most relevant for services which show a wide variation in scale, purpose and location, such as accommodation or day activity services. Financial accounts compiled by the providing agency within their normal processes will be the starting point. For other services, national costs or cost data from published studies (perhaps with regional weighting) may be more appropriate. Interpreting data on prices may be problematic since they are likely to be constructed in different ways for different providers. It will be made clear what is included or excluded in each cost estimate.

Outcome Measurement

If variations in cost are to be relevant, we need to be able to say something about the relative costs of achieving given levels of outcome. For example, for maternity services, it is intended to interview women using an appropriately validated client questionnaire (see proposal from Wyke *et al*). Methods of outcome measurement for the 'tracer' studies are given in the relevant proposals, elsewhere. Outcome assessments will be linked to any differences in direct HPSS costs of 'packages' of care purchased by TPPs and health authorities on behalf of reference practice populations.

5.3: CHANGES IN PRESCRIBING

Lead: J Howie, University of Edinburgh

Main comparison: Prescribing outturn in all TPP and samples of SFH and non-FH practices, before-and-after TP

Introduction

The evaluation brief states that the evaluation should 'assess the nature of developments in key areas of performance, such as prescribing patterns'. The proposal recognises this as a worthwhile area, if not major, since it is likely that the most marked impacts of budgets on general medical services (GMS) prescribing will be associated with the cash-limited prescribing budget in standard GP fundholding.

However, interesting developments continue to occur, such as recent evidence that SFH practices are reducing their prescribing costs by buying drugs for their discharged patients from the hospital, thereby reducing cost compared with retail pharmacies while improving pharmaceutical continuity. TPPs may make greater use of these post-discharge drug packages from hospital. Prescribing costs and their control are thus an important issue for GMS generally. Research on the quality of prescribing is handicapped by the widely recognised absence of an adequate measure of volume of prescribing which can be applied at practice level or any adequately defined 'gold standard'. 'Prescribed items' have been shown (Leeds, Prescribing Research Unit) to be weakly correlated with total quantity prescribed and previous fundholding research (Edinburgh, Department of General Practice) using the 'daily defined dose' (DDD) technique has shown this to be a superior approach, affording different insights than previously available. DDDs are not yet available in England, but may be available to be attached to PACT data during 1996. Regrettably, Scottish research cannot be directly translated to English prescribing research because the two systems of handling prescribing data (PACT and SPA) are not computer compatible. The amount of resource which would be needed to solve this problem for the current evaluation is not realistic. However, a number of sensible checks on prescribing issues can be incorporated at relatively little expense, given the support of medical advisors/prescribing advisors. The Audit Commission suggested a number of quality measures or proxies, none are yet of proven value nor known to be workable at practice level. However, there have been promising developments on quality assessment using routine data such as McGavock *et al*'s work in Northern Ireland which will be reviewed and used if deemed appropriate.

Specific questions

1. What is the outturn in terms of cost per patient in relation to GMS prescribing budget and historic patterns of spending in TPP and reference SFH practices?
2. What systems have been put in place at TPP practices to monitor and control drug expenditure (eg formularies, drug utilisation review, drug supply from hospitals etc) or to incorporate novel prescribing issues into contracts?
3. What is the profile of use of mental illness drugs such as anxiolytics (including hypnotics), antidepressants in general, and SSRIs, specifically, in TPP and reference SFH practices?
4. What new awareness of prescribing issues will be introduced into TPP contracts as against SFH contracts?

Overall, it is hypothesised that there will be no difference between TPP and SFH practices in patterns of prescribing.

Questions 1-3 are budgeted for in the resources available under Contract 121/6090. Question 4 can only be addressed with additional resources not currently available, and is not included in the contract to which this protocol refers. However, it has emerged as a consequence of discussions between DH officials and members of the research consortium. A study in this area may be funded as part of a separate contract if it appears that TPPs *are* making explicit statements about prescribing in their contracts.

Method

The principal comparisons to be made in this component of the evaluation will be, firstly, between all TPP practices and selected reference SFH practices and non-SFH practices in the same health authority area and, secondly, between 'high' and 'low' funded TPP sites and local reference SFH and non-SFH practices. The selection of appropriate local comparison practices for each TPP site will be made by April 1996 on the basis of the findings from the first round of main site visits conducted in autumn/winter 1995.

During the first site visits (see section 4, above), the interviewer will obtain information about TPP measures to reduce prescribing costs or to incorporate novel prescribing issues into contracts. The feasibility of obtaining the equivalent of PACT level 3 data on BNF chapter 4 from 1 April 1995 for all TPP practices and local SFH practices will also be determined.

'Prescribing amounts' and statistics for cost per patient in TPP, SFH and non-FH practices will be requested from local medical or prescribing advisers. The levels of prescribing budgets set in 1995-96, 1996-97 and 1997-98 will be calculated and tabulated on a per patient basis along with prescribing expenditure. Item counts will be recorded, but are unlikely to be of great use.

In order to answer the third question posed above on the use of mental illness drugs such as anxiolytics and antidepressants, especially SSRIs, the DDD method will be used. The prescribing of psychotropics is of particular interest because both TPP practices and SFH practices are involved in purchasing mental health services. Previous work has suggested that DDDs prescribed for SSRIs in absolute terms and as a proportion of all antidepressants may be different in SFH and non-SFH practices. In order to obtain a general picture of how TPP sites approach psychotropic prescribing, contracts for mental health services negotiated by TPP sites and their host health authority will be obtained as part of the 'core' evaluation and content analysed in Edinburgh for remarks and stipulations concerning psychotropic prescribing. This part of the evaluation will be closely integrated with the service-specific study on services for people with serious mental health problems led by Prof M Roland and subject of a separate, but related proposal.

This will be followed by an analysis based on DDDs of the prescribing of anxiolytics and antidepressants (BNF 4.1 and 4.3, equivalent to PACT level 3) using the method previously reported by the Edinburgh team (*BMJ* 309: 705-10). Samples of six 'high' and six 'low' prescribing budget TPP sites and twelve local reference SFH practices will be randomly selected to provide 10,000 TPP patients and 10,000 SFH patients. Prescribing data will be obtained from the local FHSAs.

It may be desirable, if time allows, to repeat this analysis for H₂ antagonists as well as SSRIs. Advice on data analysis and interpretation for this part of the study will be available from the Leeds Prescribing Research Unit (Peter Clappison).

In order to address the fourth question above concerning the prescribing content (medicines management) of TPP versus SFH contracts, a qualitative study may be undertaken to investigate whether TPP practices and SFH practices differ in the details on prescribing issues which are written into contracts. Whether this study goes ahead will depend whether changes are negotiated informally by TPPs or made explicit in contracts. It may be possible to establish this through telephone interviews before deciding whether to

invest additional resources in this area. If it goes ahead, this study would also attempt to ascertain whether any differences are greater as the level of prescribing budgets per patients becomes lower. The analysis would concentrate initially on three areas: patients discharged from A&E; early discharge from surgical wards; and, day case surgery. In each area, the requirements in contracts concerning the drugs to be provided to patients would be described.

The same 24 practices used in the DDD analysis of psychotropic drug use would be used for this study. Structured CATIs would be conducted with lead GPs and those involved in contract negotiations in mid-1996, autumn 1996 and early 1997. This work would be informed by the general analysis of the content of contracts carried out by IHPS, Southampton as part of the 'core' evaluation.

6: TRANSACTIONS COSTS OF TOTAL PURCHASING

Lead: J Posnett, NPCRDC at York

Main comparison: Detailed costs at a small number of TPP sites versus matched sample of districts without TPPs

Introduction

If TP is to find a secure place in the NHS, it must be established whether or not the transactions costs of the scheme exceed the improvements in quality and efficiency which may flow from TP. The site visits, telephone interviews and diary cards to GPs and practice managers described in section 4 above will provide basic information on the most visible, direct transactions costs associated with TP both at the TPP sites and in local purchaser and provider organisations and how these compare with the direct costs of the same practices previously under SFH. This part of the evaluation will also begin the process of differentiating between the costs of different models of TPP (eg whether large sites have lower costs *pro rata* to total budget than small sites) and the different types of contracts which TPPs set. However, a more detailed analysis will be required in a sample of sites to provide secure estimates of the total costs associated with TP as against health authority purchasing and the additional costs of TP over SFH.

Transactions costs are incurred throughout the purchasing process, principally when purchasers have to decide what to purchase (obtaining evidence on cost-effectiveness, setting priorities etc), for whom (needs assessment, patient preferences etc), from whom (negotiations with providers), on what terms (contract specification, including volume, price and quality) and with what consequences (contract compliance, expenditure monitoring, managing risk, dealing with over- and under-spends etc). In addition, at the outset, some other organisation has to determine how much purchasing power should be allocated to the purchaser (budget setting). All these processes will be studied in this part of the evaluation.

The working definition adopted here is that all costs not directly assignable to the production or delivery of health care are transaction costs.

Transaction costs arise primarily because of uncertainty and imperfect information, and are the result of the need to commit real resources to the contracting process. Some of the most important sources of cost are: a) the costs of *search* (information costs); b) the costs of *negotiation*; c) the costs of *monitoring*, and d) the costs of *enforcement*. In its broadest application, transaction cost economics addresses the comparative costs of organising transactions directly (between consumer and supplier) and through the medium of a firm.

In the context of health care an equivalent comparison might be between the costs of organisation in a centrally planned and coordinated NHS, and the costs of organisation within an internal market. However, given the aims of the national evaluation the objective of this study is more circumscribed: the focus here is on the relative transaction costs associated with *alternative models of purchasing* within the internal market. In particular, our objective is to compare models of purchasing with and without 'Total Purchasing' by general practitioners.

Objectives

The primary objective of this work is to provide an estimate of the transaction costs associated with the introduction of TP into the NHS. However, the empirical estimation of transaction costs has never been attempted at this level of detail before in any UK study, and an important secondary objective is to develop and test an appropriate methodology for the identification and measurement of transaction costs in the health care sector, particularly in primary care.

Throughout the study, a distinction will be maintained between the start-up costs associated with the introduction of TP and those costs likely to be dominant in a steady state. It is the latter costs which are of primary interest.

Models of Purchasing

The focus of the proposed study is on the incremental costs associated with the introduction of TP into the NHS. Figure 6.1 illustrates three possible models of purchasing:

Model 1 is one in which all health care within the NHS is purchased by the District Health Authority. In this model, the key contractual relationship is between the DHA and the provider.

Model 2 adds standards GP fundholders (SFHs) to the set of purchasers. A new relationship is added between the contracting GP fundholder and the provider.

Model 3 adds total purchasing by general practitioners (TPPs) to create three separate potential purchasers: the DHA, SFHs and TPPs. Three direct contractual relationships exist between providers and purchasers and, because part of the budget held by total purchasing GPs is devolved from the DHA (which retains ultimate responsibility for that budget), a further relationship of accountability between DHA and GPTP is created.

The study will focus on the *incremental* costs associated with the change from Model 2 to Model 3, and will consider costs falling on all of the main affected parties: GPs; the DHA/FHSA; and the main acute, community and mental health providers. The way in which the comparison has been framed means that it is not possible to restrict attention solely to the transaction costs borne by general practitioners.

Specific questions

Within the budget set for the study, the extent of comparative information which can be collected is limited. However, it should be possible to address a number of key research questions.

1. *What differences exist, if any, in the transaction costs associated with different TP sites? What seem to be the ways of minimising transaction costs?*

Some information will be available from the first phase of the 'core' evaluation (involving all sites in England and Scotland - see section 4) to allow a broad taxonomy to be developed of different ways of organising total purchasing, and of differences between sites in terms of level of activity. A comparison of the costs associated with different sites drawn from the taxonomy should provide some insight into the main determinants of differences in cost.

The core evaluation will also provide some limited information on transaction costs for all sites which will strengthen this aspect of the comparison.

2. *What are the likely costs to primary care providers (general practice teams) involved in a move from standard fundholding to total purchasing?*

This question can be addressed in two ways: i) by means of a before-and-after comparison of pilot sites within the study which were previously standard fundholders; and ii) by a comparison of costs in the TPP site with those in a matched SFH control practice (or group of practices) within the same DHA.

3. *What are the additional costs (to GPs, DHA/FHSA and local providers) resulting from the introduction of total purchasing alongside DHA and SFH purchasers?*

As a minimum, this question can be addressed by a before-and-after comparison of costs to the DHA/FHSA, GPs themselves and the main local providers. For the DHA/FHSA and providers, a before-and-after design may not be necessary, since they will be dealing currently with both SFHs and TPPs. In this case it should be possible to isolate incremental costs directly.

If resources are sufficient, it would also be useful to compare the costs to DHA/FHSA and providers in a TPP District with costs in a comparable District without a TPP. This would be a useful control against the possibility that Districts with TPP sites are in some way unrepresentative of Districts as a whole.

To facilitate comparison, the magnitude of transaction costs will be expressed initially as a percentage of total health expenditures. The study will, however, offer an opportunity to test the viability of other possible units of comparison.

Method

Apart from the work of Bevan (1995a, b), which is set very much at a macro level, and one unpublished study commissioned by the NHS Executive, there are no previous studies in the UK which attempt to estimate transaction costs in the NHS (or in health care more generally. See Pitelis (ed), 1993). Developing and testing a suitable methodology is therefore an important objective of this study.

With the exception of the limited amount of information which will be collected as part of the core evaluation covering all of the TPP sites, all of the information relevant to this study will be collected from a sample of sites drawn from the national pilots. Details of the principles of sample selection are outlined below.

Transaction costs arise from functions or activities associated with the need to obtain information, and the need to negotiate, monitor and enforce contracts. The main part of the study will involve a series of semi-structured interviews with key stakeholders in each of the organisations identified above: the TP manager and lead GP in the TPP site; the DHA/FHSA lead; the lead GP in a control SFH practice locally; and representatives of each main local provider (typically the main acute, community and mental health Trusts).

The objective of the interviews will be to identify:

1. the range of additional *functions* or *activities* associated with total purchasing; and
2. the *resources* (in terms of personnel, time and other resources) which are devoted to undertaking these activities and functions.

Information will be collated and analysed within a structure such as that shown in Figure 6.2, which will also form the basis of a questionnaire to be used in the interviews. In Figure 6.2 the main potential sources of transaction costs are classified into four groups: i) the costs of information; ii) contract-related costs; iii) costs which are activity-related; and iv) the costs associated with coordinating activity within the TPP group and between the TPP and the DHA/FHSA. This is a generalisation of the main sources of transaction costs identified above.

It is in the nature of the questions which need to be addressed in this part of the work that most of the relevant information (for example, about functions and activities) will be qualitative. This will be supplemented with quantitative data on resource use and costs.

Further contact with the TPP site, the DHA/FHSA lead and the main provider organisations will seek to identify:

3. the *costs* of the real resources associated with functions, and with the time and personnel inputs identified in the interview.

It is expected that each site will be visited at least twice: once in each of the two contracting years of the study. Data will be analysed in line with the research questions outlined above.

The use of a diary card in the periods between interviews to record the use of time will be considered. This is a feature of the design of the core evaluation which may usefully be adapted for use in the present study.

In addition, it is intended to attempt a broader (macro) approach to estimating transaction costs by comparing total health expenditure in the sample Districts with some global measure of activity (such as FCEs) in each of the sample years and in the preceding year. Although crude, some global measure of NHS expenditure per FCE (or incremental FCE per £000 of additional budget in each year) will give an indication of the extent to which additional spending is associated with additional activity or additional administration costs.

Sample Selection

The size of sample which can be handled within the study is a function of the extent of resources available. The design suggests the need to carry out 6-7 interviews per year for each pilot site included in the sample: even more if a comparison is attempted with a non-TPP District. The need to collect additional cost information will increase the number of potential contacts by a further 50 per cent.

With the equivalent of one half-time research fellow assigned to the project, the number of sample sites must be limited to four. The alternative is to reduce the number or intensity of contacts at each site, but this is not a strategy which is consistent with our aims of undertaking a thorough analysis and of testing a new methodology.

Each of the four selected sites will be visited twice: once in each year of the study. Additional visits will be required to collect cost data and (undoubtedly) to respond to requests to feedback information to participants. In the second year, if resources are available, it is also intended to include interviews with DHA/FHSA and provider representatives (around 3-4) in four non-TPP control Districts.

On the basis of information collected as part of the core evaluation (see section 4), it should be possible to construct a taxonomy of different ways of organising total purchasing (for example, different ways of coordinating participating practices, or different means of communication between the DHA/FHSA and the TP pilot) which are expected to be of relevance to the level of transaction costs. The sample of sites will be selected as far as possible to be representative of this taxonomy.

FIGURE 6.1
MODELS OF PURCHASING

	Model 1 DHA	Model 2 DHA +SFH	Model 3 DHA+SFH+GPTTP
DHA/FHSA	x	x	x
GPTP			x x
SFH		x	x
PROVIDER	x	x x	x x x

FIGURE 6.2
TRANSACTIONS COSTS - BY SOURCE OF COST

SOURCES OF COST	PROCESS AND ACTIVITY		PERSONNEL AND TIME	OTHER RESOURCES (SUCH AS I.T.)
INFORMATION				
1. Needs/demand forecast	*	+	TO BE IDENTIFIED	TO BE IDENTIFIED
2. HC supply	*			
3. Competitors		+		
4. Purchaser plans		+		
5. Risk assessment	*	+		
CONTRACT-RELATED				
5. Specifying contracts	*		“	“
6. Negotiations	*	+		
7. Monitoring	*			
8. Enforcement	*			
9. Advertising/marketing		+		
10. Contract pricing		+		
11. Contract compliance		+		
12. Risk sharing	*	+		
ACTIVITY-RELATED				
13. Admitting		+	“	“
14. Billing		+		
15. Claims processing	*			
16. Management information systems		+		
CO-ORDINATION/OTHER				
17. Strategic planning	*		“	“
18. Business planning		+		
19. Resource allocation			⊕	
20. Budget setting			⊕	
21. Strategic planning/co- ordination			⊕	
22. Liaison			⊕	
23. Surplus sharing			⊕	
24. Protocols			⊕	

*= purchaser += provider ⊕= group

7: IMPACT ON PATTERN AND COST OF CARE AND PATIENTS' EXPERIENCES OF SPECIFIC SERVICES

7.1: RATIONALE FOR STUDIES OF SPECIFIC SERVICES AND GROUPS OF PATIENTS

It is clearly important in the national evaluation of TPP sites to be able to report on the impact of the experiment from the patients' and carers' point of view. It is now well established that this sort of evidence cannot validly be collected by asking samples of the patient population general questions about their perceptions of services. The focus has to be on groups of people who have specific needs which relate to specific services and who can be asked specific questions not about their global satisfaction, but about their actual care.

In the timescale of the evaluation and given the fact that in many sites TP implementation stresses the *combination* of the ethos of SFH with health authority skills within an agreed strategic framework, it is likely that only very large changes in patient *health* outcome will be discernible without hugely expensive sample sizes. In these circumstances, the focus of attention in studying patient benefits has to be on patients' experiences of the process of care in terms of issues such as choice, degree of involvement in treatment decisions, their perceptions of the appropriateness of care and their views about TP in so far as they are aware of its existence.

Four patient studies on four 'tracer' groups of patients and services will be undertaken as part of the overall evaluation. They are **patients attending A&E and admitted as emergencies, people with complex needs for community care, people with serious mental illness and users of maternity services**. In each study, the focus will be on the effects of TP on patients and the costs of their specific services. Each study is the subject of a separate proposal fully integrated with the elements of the overall evaluation described in this protocol. It should be noted that both the maternity study and the serious mental illness study include comparisons between services, costs and outcomes at TPP sites with and without a special interest in the relevant service area, extended SFH pilot sites and ordinary SFH practices. The community care study does not include any extended SFH pilot practices.

The four areas outlined have been chosen to reflect a combination of:

- frequency (A&E and emergency medical admissions);

- unpredictability and large resource implications for TPP budgets (A&E, community care and serious mental illness);

- possibility of changes in pattern and nature of provision through TPPs to reduce cost and/or improve effectiveness (all groups);

- complexity of care packages and challenge to traditional expertise of GPs (serious mental illness and community care); and

- user choice and involvement in care planning (community care and maternity services);

- interface with social services (serious mental illness and community care).

This is not to say that other candidate areas of TPP purchasing, such as stroke services, are without merit as 'tracers', but some routine data on these areas will be available from the component of the

evaluation on activity changes (see section 5.1, above). In certain common acute conditions such as severe asthma, where TPP practices might substitute home care for hospital, it would be difficult to identify patients who were not admitted to look at their experiences.

8: ALLOCATION OF WORK BETWEEN TEAM MEMBERS

With a large and complex project and an equally large and complex team, it is vital, at the outset, to have a clear understanding of how the work to implement the different components of the project will be distributed between the team members.

The overall co-ordination of the research activities will take place from the King's Fund Policy Institute. At the level of the collaborating research centres, the broad areas of *lead* responsibility for ensuring that the original data collection takes places will be as follows:

1. Set-up and operation of TPP sites (section 4) - King's Fund Policy Institute (but with major input to design and fieldwork from all collaborating centres, especially Edinburgh and Bristol);
2. Activity and quality changes in seven services identified in the DH research brief (section 5.1) - Wessex Institute of Public Health;
3. Service costs and efficiency (section 5.2) - King's Fund Policy Institute/LSE;
4. Prescribing (section 5.3) - Department of General Practice, University of Edinburgh;
5. Transactions costs of TP (section 6) - National Primary Care R&D Centre at York
6. Study of patients using A&E/emergency admissions services - King's Fund Policy Institute/LSHTM (subject of a separate proposal for a feasibility study);
7. Study of patients with serious mental health problems - NPCRDC at Manchester (see separate proposal);
8. Study of people with complex needs for community care services - NPCRDC at , Salford) (see separate proposal);
9. Study of users of maternity services - Department of General Practice, University of Edinburgh (see separate proposal).

Table 8.1 gives more detail on each of these components plus the allocation of tasks which do not involve primary data collection but which are essentially integrative and analytic, based on the raw data collected elsewhere in the project, and for other purposes (eg work on the management of risk including insurance against very high cost patients etc).

Since *all* the TPP sites and their districts/health commissions will be the subject of the fieldwork outlined in section 4 of the proposal (set-up and operation of TP sites), this work will be led by the King's Fund Policy Institute. However, data collection will be shared between the collaborating centres in order to maximise accessibility, as follows:

1. Wessex Institute for Public Health Medicine and Institute of Health Policy Studies, Southampton

South Thames (6 sites, 27 practices)
South and West (part) (4 sites, 9 practices)
Anglia and Oxford (part) (1 site, 6 practices)

ANNEXE 1

NOT FOR USE WITHOUT PERMISSION OF TP RESEARCH CONSORTIUM

DRAFT INTERVIEW TOPIC GUIDE FOR USE FACE-TO-FACE WITH TPP SITE LEAD GPs

The following interview schedule identifies the key themes and questions that need to be asked of 'lead' GPs. Variants have been developed for other participants (e.g. TP managers, health authority staff). Notes in *[italics]* contain information for the benefit of the interviewer. These include general notes on the questions asked and come in three main types:

[prompt] these notes help to open up particular areas.

[link to q.] tells interviewer that question is likely to cross-over with others asked in the interview under separate themes. Should help avoid duplication of questions.

[checklist] information possibly obtained on checklist so question either not required or details of checklist can be ratified.

The Interview Schedule is intended to be used in conjunction with the Analysis Guide (appendix 4). Under each section of the interview, key themes established from the Analysis Guide are highlighted which will remind the interviewer about the issues to be addressed. In addition, questions marked with an arrow (\Rightarrow) are those which must be answered whilst other questions listed may, or may not, be relevant in particular cases. In these circumstances it is the judgement of the interviewer that decides which other questions are important/relevant in particular cases. The interviewer should also be aware of the time being taken during the interview and ensure that all sections are covered.

PRELIMINARIES

1. Introduction of self, the consortium and the research objectives.
2. Check with interviewee that basic facts of TP site profile seem correct.
3. Describe content of questionnaire that follows to give interviewee a further refresher on the subject headings and structure of the interview.
4. Say how long the interview is likely to last (1 hour +)
5. Say that the interview is being taped and that the tapes are confidential such that the interviewees anonymity is assured. The interview is not going to be transcribed at this stage.

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DRAFT

'LEAD' GP INTERVIEW

Respondent Details

Name:

Position:

Location/Site:

Date of Interview:

Place of Interview:

Background of Interviewee:
[Posts held/training received]

Interviewed by:

The following questions relate to specific tracer studies (♦).

Focus on Maternity Care

- Are you planning anything in the area of maternity care?

If so, what are you planning?

If not, why not? [*move to next focus*]

- Will you negotiate your own contracts for maternity care or will you mirror those of your local HA/HC/HB? What are your reasons for this decision?
[*look for answers about: minimising hassle/not doing everything at once, ensuring women centred care, achieving goals in Changing Childbirth*]

Focus on Mental Health

- Are there things which your site is trying to achieve in relation to patients with serious mental illness? [*prompt for schizophrenia if asked to define question*]

If so, what are you planning?

[*prompt for any new services which TPs hope to provide in Mental Health*]

[*prompt for planned improvements to quality of service*]

If not, why not?

- Are there any particular problems with mental health services in your district? If so, what are they?
- Why do/don't you see that the TP has a role to play in trying to improve this situation?
- Are there any ways in which you have thought particularly about the needs of mentally ill patients when drawing up your plans?

Focus on A&E/Emergency Services

- How far is it a priority for the TP to influence the use of emergency care?

If a priority, which areas does the TP intend to tackle?

[attendance at A&E, emergency admissions?]

and, in this case, how does the TP intend to purchase emergency care?

[contract with DHA or separate contract. Block, cost & volume or cost per case?]

If not a priority, why not?

Focus on Community Care/Complex Needs

- Are there things which your site is trying to achieve in relation to community care and patients with continuing health care needs?

If so, what specific plans for change have you developed?

[prompt for involvement in community care plans; development of continuing care guidelines and policy. Also prompt for relations, involvement and arrangements with social services - link to q.F3]

If not, why not?

[prompt for difficulties in community care area and relations with LA]

⇒ B3. Are new objectives/priorities planned for subsequent years? If so, what is planned?

SECTION C : SUCCESS CRITERIA

KEY THEMES: *How to measure 'success', what are the enabling and constraining factors, problem of adverse selection.*

⇒ C1. How will you know whether you have made a success of TP in one to two years' time?

⇒ • What sort of outcomes would you personally find most convincing as a measure of the success of TP at your site?

[open ended question: no prompting. Looking to see where interviewee places emphasis - e.g. on organisational abilities, clinical improvements, personal satisfaction, financial improvements, better patient care etc.]

⇒ C2. *[adverse selection/cream skimming]* How do you think that total fundholding will effect the clinical care of your patients?

[prompt: Are you concerned that you could be put in a position where resources determined the type of patients you treated?]

[prompt: How will it effect how patients perceive your role?]

• Do you have any other reservations about the relations between TP and clinical care? If so, what are these?

[If problem with dealing with expensive patients arises then go to questions concerning budgetary management/risk management - q.G2]

⇒ C3. *[enabling and disabling factors]* In your opinion, what particular local circumstances are likely to affect the success of the TP site?

[i.e. what is going to enable and hinder the site in realising its objectives?]

[prompt on size/complexity issue; prompt on level of resources for implementation - link q.G2; and outside help - link section F; prompt on cohesion of GP involvement - link q.D1]

[prompt on level of HA support, help from external organisations - link section F]

[prompt on degree of regulation]

SECTION D : ORGANISATIONAL STRUCTURE AND MANAGEMENT

KEY THEMES: *Organisational framework, degree of complexity, cohesion of practices and GPs, allocation of responsibilities, development of expertise.*

⇒ D1: [*organisational chart/key tasks*] How does your organisation, as shown in your chart/key tasks, work?

[*If a formal subcommittee of the HA/HC how this works*]

• Is this an extension of previous management arrangements under your previous consortium or multifund? [*link with q.A3*]

• What is your view about the way this site is organised at present?

• Have you taken on any extra staff or changed existing staff job descriptions?
[*see section H*]

• How committed are your colleagues to this management system? How enthusiastic are they?
[*teamwork vs. autonomous practices loosely connected - link with q.A2*]

• How often do GPs in the TP site meet together and what sort of things do you discuss?

SECTION E : GEARING-UP FOR PURCHASING

KEY THEMES: *Problem of identifying activity rates and costs, progress on purchasing and contracting, accountability.*

⇒ E1. [*current progress*] What is the position in relation to your business plan? [*i.e. with purchasing intentions - on checklist?*]

- If not ready, when do you think your business plan and purchasing plan will be ready?
- If ready, how did you set about this task and who was involved?

⇒ • How have you collected/how will you collect data which might indicate what your population requires?

• How have you collected/how will you collect data which might indicate what your population currently receives?

⇒ • How easy has it been to obtain this information on needs from the HA/HC?
[*e.g. on activity in current DHA contracts, costs of current activity*]
[*prompt for involvement of patients*]

- [*expertise/skills*] How did you develop, and what is your current position, on the following issues of gaining expertise and skills in running the TP site?

⇒ Needs Assessment Skills

• Do you have any previous experience of practice-based Health Needs Assessments? (e.g. use over 75s assessment information)

- Scope for PH sessional input?
- How paid for?

⇒ E3. [*Scope of purchasing*] You highlighted the services you regarded as a priority earlier[q.B2]. Of all the new services you can purchase, which services have you decided to manage yourselves and which have you left to the DHA to manage? Why so?

[*prompt by service area: Maternity ♦, A&E/Emergency ♦, Community Care ♦, Continuing Care/Complex Needs ♦, Mental Health ♦, Palliative Care, Regional Specialities, Health Promotion*]

- Will all the practices in the TP site be purchasing the same menu of services?

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⇒ • Is there anything that you are NOT going to purchase in your TP site that was purchased for you [by the HA]?

• How will contract negotiations be handled at your site? Have any clinical protocols or guidelines for use in contracts been established?

[prompt for guidelines established by TP and by providers]

⇒ E4. *[accountability]* Who do you see yourselves as primarily accountable to?
[prompt for local population, patients, HA/HC, Region, NHSE, national policy goals]

• What are you accountable for?

• Do you think that the issue of accountability will be a greater burden to you as a total purchaser than it was when you were an ordinary fundholder?

• What scope for freedom/flexibility/autonomy of decision-making do you have?

• What are you expected to achieve at your site in relation to Health of the Nation, the Patient's Charter etc.? i.e. what do you perceive your site has, or will have to, sign up to?

[prompt for Purchaser Efficiency Index, HSG(95)8 on continuing care responsibilities; DHA corporate contract within Region and performance management arrangements]

• Did you consult your patients on the issue of becoming a TP?

• Do you plan to involve your patients in setting your purchasing priorities?

2. King's Fund Policy Institute
North Thames (6 sites, 38 practices)
Trent (southern part) (4 sites, 10 practices)
Anglia and Oxford (part) (2 sites, 5 practices)
3. Department of Social Medicine, University of Bristol
West Midlands (6 sites, 11 practices)
South and West (part) (2 sites, 6 practices)
Anglia and Oxford (part) (1 site, 1 practice)
4. National Primary Care R&D Centre, Manchester, York and Salford
North West (8 sites, 39 practices)
North East (former Yorkshire) (4 sites, 17 practices)
Trent (northern part) (4 sites, 19 practices)
5. Department of General Practice, University of Edinburgh
Scotland (6 sites, 22 practices)
North East (2 sites, 10 practices)

The contents of the face-to-face interviews and telephone questionnaires and the specifications for requests for data and documents from these sites and controls will be drawn up based on the collective requirements of those leading those parts of the evaluation which need information from all the sites. Thus, for example, the subsequent detailed work on transactions costs and contracting by TPPs which will be led by John Posnett (York) (section 6) will depend on appropriate basic information being collected from all sites throughout the evaluation and will also require major input from Ray Robinson (Southampton) on the costs of contracting. Similarly, work on risk management and the 'insurance' aspects of TP led by Gwyn Bevan (Bristol) with James Raftery (WIPHM) will require access to data collected from all sites.

For the remaining components of the evaluation (in Table 8.1), a specific centre and individuals within each centre will be responsible for design, analysis and reporting. However, the fieldwork and data collection will not necessarily all be undertaken from the lead centre. Thus, whereas it is the intention that all the data collection on A&E will be undertaken by LSHTM, the detailed data collection on service costs and efficiency (section 5.2) will be shared between the collaborating centres with the design, analysis and reporting undertaken by King's Fund Policy Institute staff.

TABLE 8.1

DISTRIBUTION OF WORK BETWEEN TEAM MEMBERS FOR THE EVALUATION AS A WHOLE

COMPONENTS OF THE EVALUATION AND TASKS (Numbers in brackets refer to sections of this protocol)	NO OF TPP SITES AND CONTROLS/ COMPARATORS	LEAD TEAM MEMBER, OTHERS RESPONSIBLE	TIMESCALE OF DATA COLLECTION
Factors associated with set-up and operation of TP (4)	All TPP sites and local health authorities (selected aspects)	N Mays (KFPI lead, 2.5 days pw)	Oct 1995 - March 1997
Overall design/content		N Mays, J Dixon (KFPI)	April-Sep 1995
Design of face-to-face interviews		S Wyke (Edin)	
Design of CATI		J Raftery (WIPH)	
Design and use of 'critical incident diary'		J Howie (Edin)	
Risk management, budget-setting and financial management		G Bevan (Bristol)	
Basic transactions costs		J Posnett (NPCRDC at York)	
Contracting methods		R Robinson (Soton), J Raftery	
Needs assessment, public health advice etc		G Bevan	
Strategic aims, practice objectives, relations with HAs		M Roland (NPCRDC at Manchester)	
Changes in activity in seven services (using routine data) (5.1)	All TPP sites before and after TP compared with activity of rest of non-TP population including SFH and non-SFH practices	J Raftery (lead)	April 1995 - June 1997
Additional data to validate/interpret routine data	As in 4, above	N Mays, R Robinson	Oct 1995 - March 1997

Service costs and purchaser efficiency (5.2)	All TPP sites versus local health authorities before and after TP	J Le Grand (lead, KFI) N Mays (KFI), R Robinson (Soton)	July 1995 - June 1997
Prescribing (using PACT/SPA) (5.3)	All TPP sites and selected SFH and non-SFH controls	J Howie (lead, Edin)	April 1995 - June 1997
Transactions costs (6)	See below	J Posnett (lead, NPCRDC at York) R Robinson (Soton) N Mays	
Direct (basic) administrative costs/transactions costs (4)	All TPP sites as in 4, above		Oct 1995 - March 1997
Indirect (detailed) transactions costs	Sample of TPP sites and DHAs without TPPs, to be decided		August 1995 - March 1997
Patients attending A&E and emergency admissions (subject to feasibility study)	No of A&E depts to be decided based on feasibility study to compare patients of TPPs and local SFHs	C Sanderson (lead, LSHTM) J Dixon (KFI)	April 1996 - March 1997
Service provision, outcomes and costs for seriously mentally ill people	Generally, samples of TPP sites with and without a special interest in mental health, extended SFH pilot practices and ordinary SFH practices	M Roland (lead, NPCRDC at Manchester)	
Work of CPNs			April 1996 - March 1997
Strategic approaches and services for mental health services			April 1995 - June 1997
Outcomes for severely mentally ill people			April 1996 - March 1997

Costs of mental health services		J Le Grand (lead, KFI)	September 1995 - July 1997
Service provision, outcomes and costs for people with complex needs for community care services (at proposal stage)	Small number of TPP sites with/without a special interest and SFH practices (total c.8)	J Popay (lead, NPCRDC, Salford)	August-December 1996
Costs of community care services	Small number of TPP sites and SFH practices (total c.9)	J Le Grand (lead, KFI)	September 1995 - July 1997
Users of maternity services	6 extended SFH pilot practices, 6 TPP sites with special interest in maternity, 6 ordinary SFH practices and 6 TPPs with no special interest	S Wyke (lead, Edin) with J Hewison (Leeds) J Piercey (York) and G Young (Penrith)	
Pattern of maternity care purchased			Dec 1995 - March 1997
Users' experiences of maternity services			Dec 1995 - June 1997
Costs of maternity services			Dec 1995 - July 1997

9: PROJECT MANAGEMENT

MANAGERIAL STRUCTURE

In a project with such a wide range of topics and a high level of complexity which is virtually an evaluation of the NHS as a whole in over 50 sites in England and Scotland, strong project management is essential. In view of this and bearing in mind the strategic importance of the evaluation, the King's Fund Policy Institute will devote approximately half of Nicholas Mays' time over the period of the study to enable him to be the Project Manager on behalf of the research team which has been assembled. His time will not be charged to the budget, but he will have a full-time research fellow to support him who will be a charge on the budget.

Mays will take day-to-day responsibility for the project and will provide the main point of contact between the Department of Health as customer and the project as a whole. He will chair a Project Management Group which will have executive power to take all strategic decisions affecting the conduct of the project (see Figure 9.1). Nonetheless, Mays will be ultimately responsible for the successful completion of the project. As a result, the King's Fund will contract with the Department to undertake the project and the other collaborating centres will be sub-contractors of the Fund. The Department will, therefore, not have to liaise and negotiate with a large number of different institutions and research teams.

The Project Management Group will comprise Mays plus a nominated senior researcher from each collaborating centre. The Group will be advised by a small Advisory Group of experts in fund holding research and research methodology. The role of this Advisory Group will be particularly important in the early stages of the work. Likewise, the Project Management Group will need to meet frequently in the first 6 months of the project (weekly at certain times) and bi-monthly thereafter.

COORDINATING ANALYSIS AND REPORTING

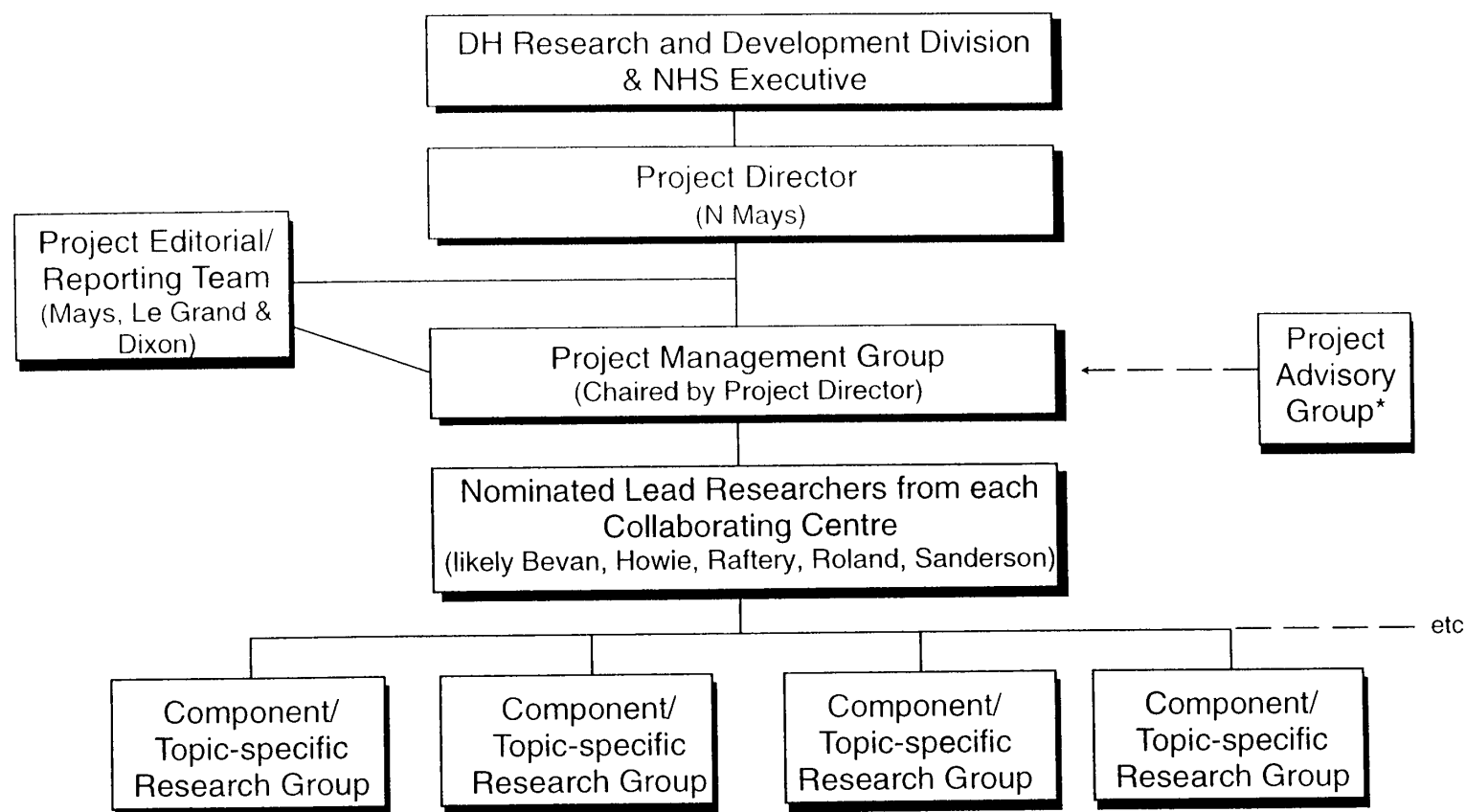
Each of the research teams responsible for individual components and topics in the study (see section 8 and especially Table 4 for details), will have the task of analysing the data and writing up the material relevant to their specific part of the project. These responsibilities have been clearly established. However, it is recognised that the richness of a multi-faceted evaluation must be reduced to a series of clear conclusions and differences of perspective reconciled. In view of this, a Project Editorial/Reporting Team will be established to draw together the contributions from the lead researchers in each area and to edit a final report for the sponsors. This Team consisting of Mays, Le Grand and Dixon will also be responsible for interim and progress reports.

LIAISON WITH THE TPP SITES AND CONTROL PRACTICES

A member of the Project Management Group will be nominated to take the lead in developing good relations with the pilot sites and their comparators. One very simple way of avoiding over-load on individual practices will be to schedule all contacts with practices centrally so that demands on time and for data and cooperation are evenly spread through the data collection periods and do not clash.

FIGURE 9.1

National Evaluation of GP Total Purchasing: Project Management Structure



* Angela Coulter (King's Fund Centre), Howard Glennerster (LSE)

SECTION A: PROCESS OF BECOMING A TOTAL PURCHASER

KEY THEMES : *History of TP site - Motivation (Why?), Process (How?) and Context (background).*

⇒ A1. *[process]* In your practice, **how** did you decide to become a TP site?
[prompt for other practices in the TP site]

[prompt for how the practices got together? How they were selected? Who orchestrated the set-up and selection procedure? and the role the HA/HC played]

⇒ A2. *[motivation]* **Why** did you decide to become a total purchasing pilot site?
[link with question B1]

- **When** did the site come forward officially and begin preparations for becoming a TP?

A3. *[history/context]* Other than fundholding *[if they were a GPFH previously]*, were you, or your partners, involved in other types of purchasing previously?
[prompt for involved in a GPFH consortium, multifund or a HA generated scheme such as locality purchasing]
[omit if known from checklist, link with q.D1]

- ⇒
- If so, how far did this influence your decision to become a TP site?

SECTION B : AIMS & OBJECTIVES

KEY THEMES: *Perceived/actual benefits of TP, Priorities, Objectives/Changes by Service Area.*

⇒ B1. *[objectives-perceived]* In general terms, what **additional** benefits do you expect to achieve from the extension to a TP? *[link with q.A1]*

⇒ • *[objectives-actual change]* What specific **tangible** benefits do you aim to achieve as a TP site?
[i.e. what actual changes are planned/are being achieved - link with q.B2 on priorities]

⇒ • How do you expect to realise these **tangible** benefits in the next 12 months? What steps are you taking/going to take to realise these aims? *[link to q.B2]*

• *[If TP site is a multiple of practices]* Do other GPs in your site have any other benefits in mind? If the latter, was there overall agreement to these objectives?

⇒ B2. *[priorities]* Which services does the site intend to get involved in in the next 12 months and, in these prioritised services, what are your reasons for targeting them?

[prompt by service area: Maternity ♦, A&E/Emergency ♦, Community Care ♦, Continuing Care/Complex Needs ♦, Mental Health ♦, Palliative Care, Regional Specialities, Health Promotion]

[prompt for documents which might contain this information in more detail]

If services are marked with a ♦ then address questions from specific studies below.

[also prompt for BROAD aims (e.g. referrals, investigations, management) and LOCAL aims (e.g. save a hospital, move a contract away from a poor supplier). Also prompt about changing the balance of spending]

[prompt on reasons for prioritising services targeted : patient choice, quality, efficiency, maximising numbers treated, new balance of care]

SECTION F : RELATIONSHIP WITH EXTERNAL ORGANISATIONS

KEY THEMES: *Extent of contacts, type of relationships.*

F1. Relations with the HA/FHSA/HC and other SFH practices.

- Were you involved in practice-sensitive or locality purchasing schemes in the past?
- ⇒ • What do you perceive to be the role of the HA/HC/FHSA in your site?
- ⇒ • How would you describe your relations with the DHA in terms of purchasing and contracting?:
[looking for degree of collaboration or independence on purchasing]
- ⇒ • Overall, how would you describe your relationship with the HA/HC/FHSA?
- ⇒ • Do you see TP as a collaboration with the HA/HC or do you have an alternative vision? Do you consider it an extension of GPFH or something rather different?
[prompt on degree of freedom]
- Do you think that things need to change? If so, in what ways can the relationship be improved to bolster the potential success of the TP site?
- What, if any, is your relationship with other SFH or TP sites in the area? Is there some form of dialogue (vis. purchasing) or do you work in isolation?

F2. Relations with Local Providers (including the private and voluntary sectors)

[prompt for different types of providers: acute, community, combined, mental health, private, voluntary sector, etc.]

- ⇒ • What is the extent of the contact between the TP site and managers and clinicians in the provider units?
[who attends these meetings?]
- How important do you regard such contact?

F3. Relations with Social Services

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⇒ • Have you had any contact with local social services departments? If so, to what effect?

SECTION G : RESOURCE ALLOCATION AND BUDGETARY MANAGEMENT

KEY THEMES: *Allocation method, budget management, risk management*

⇒ G1. Do you know your allocation for 1996-7? *[for 1995-6 if purchasing already]*

If not, when do you expect to know?

⇒ G2. Has agreement been reached on the method of allocation? and, if so, can you please give details of this allocation method?

[prompt for details of weightings used, parts of budget they apply to and how the relative HA budget was ascertained. Ask for relevant documents describing allocation methods]

⇒ G3. How do you intend to manage the resources you will be allocated? *[e.g. will each practice have a budget? how much individual GP discretion is there? management of ECRs? etc.]*

• How have the GPs in the site discussed resource management?

• How do you think you will check that funds are being spent in line with contracts?

⇒ G3. *[risk management]* How do you intend to deal with very expensive cases? Have you discussed this with your colleagues? If so, what policy, if any, has resulted?

⇒ G4. *[prescribing costs]* On what basis are TP prescribing budgets being set?
[prompt for historic or capitation - link to q.G2]

⇒ • Does the interviewee know of any mechanism being explored locally to reduce prescribing costs or to incorporate novel prescribing issues into contracts? *[if so, get interviewee to expand]*

• Do you know whether the lead FHSA official *[name of this official?]* can provide the equivalent of PACT Level 3 data on BNF ch.4 from 1st April 1995 for his site SFH controls?

SECTION H : COSTS OF THE NEW TP STRUCTURE

KEY THEMES: *impact of administration costs (time and money), transaction costs*

⇒ H1. TP is likely to involve additional work for you, your GP colleagues and practice staff. Where is this extra work coming from?

[information gathering? contracting? risk management? co-ordination/liaison?]

- Who is doing this extra work? Who bears the brunt of the greater time commitments?
- How much extra work is involved (hours per week) compared to ordinary fundholding?
- Are there things you would otherwise be using this time for?
[i.e. what areas of work suffer because of the greater burden of managing a TP site?]
- How are the practices at your site managing with the additional GP time being spent on TP?

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FINAL QUESTIONS

- ⇒ • What would you say the key tasks of your TP site are for the next 6 months?

- ⇒ • What would you consider to be the main pros and cons so far of being a total purchaser when compared to being a standard fundholder?

- Are there any circumstances under which you and your colleagues might consider pulling out of total purchasing?

END OF INTERVIEW

End of Questionnaire Responsibilities

1. Thank the interviewee
2. Ask for personal details of interviewee (for front of questionnaire)
3. Tell the interviewee broadly what happens in the future (CATIs, further visits etc.)
4. Ask if interviewee would like to ask anything about the evaluation.
5. Using the analysis guide, write a report on the interview a.s.a.p. using your notes, and the tape recording, to help you.

ANNEXE 2

NOT FOR USE WITHOUT PERMISSION OF TP RESEARCH CONSORTIUM

DRAFT INTERVIEW TOPIC GUIDE FOR USE FACE-TOFACE- WITH TPP SITE MANAGERS

The following interview schedule identifies the key themes and questions that need to be asked of TP site managers. Variants have been developed for other participants (e.g. 'lead' GPs, health authority staff). Notes in *[italics]* contain information for the benefit of the interviewer. These include general notes on the questions asked and come in three main types:

[*prompt*] these notes help to open up particular areas.

[*link to q.*] tells interviewer that question is likely to cross-over with others asked in the interview under separate themes. Should help avoid duplication of questions.

[*checklist*] information possibly obtained on checklist so question either not required or details of checklist can be ratified.

The Interview Schedule is intended to be used in conjunction with the Analysis Guide (appendix 4). Under each section of the interview, key themes established from the Analysis Guide are highlighted which will remind the interviewer about the issues to be addressed. In addition, questions marked with an arrow (\Rightarrow) are those which must be answered whilst other questions listed may, or may not, be relevant in particular cases. In these circumstances it is the judgement of the interviewer that decides which other questions are important/relevant in particular cases. The interviewer should also be aware of the time being taken during the interview and ensure that all sections are covered.

PRELIMINARIES

1. Introduction of self, the consortium and the research objectives.
2. Check with interviewee that basic facts of TP site profile seem correct.
3. Describe content of questionnaire that follows to give interviewee a further refresher on the subject headings and structure of the interview.
4. Say how long the interview is likely to last (1 hour +)
5. Say that the interview is being taped and that the tapes are confidential such that the interviewees anonymity is assured. The interview is not going to be transcribed at this stage.

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NATIONAL EVALUATION OF TOTAL PURCHASING PILOT SCHEMES

TP Site Manager Questionnaire

Respondent Details

Name:

Position:

Location/Site:

Date of Interview:

Place of Interview:

Background of Interviewee:
[*Posts held/training received*]

Interviewed by:

SECTION A: PROCESS OF BECOMING A TOTAL PURCHASER

A1. [*motivation*] Why did you decide to become a total purchasing pilot site?

A2. [*process*] In your practice, and between your practice and others in the TP site, how did you decide to become a TP site?

- Who was involved in the decision to become a TP site?
- How were your colleagues (in your practice and in other practices of the site) involved in the decision?
- How did the practices get together? How were they selected? Who orchestrated the set-up and selection procedures?
- How committed are you to total purchasing? What sort of things would make you and your colleagues think about pulling out of total purchasing?
- Did some practice(s) withdraw? Have any that dropped out since become a site elsewhere?
- How supportive are your colleagues (in your practice and in other practices) towards the TP site in general?

A3. [*history/context*] Other than fundholding [*if they were a GPFH previously*], were you, or your partners, involved in other types of purchasing previously?

- Were you, or your colleagues, involved in a GPFH consortium, Multifund or involved in a HA generated scheme such as locality purchasing?
- If so, how far did this influence your decision to become a TP site?

SECTION B : AIMS & OBJECTIVES

B1. *[aims and objectives]* What was the most important advantage of becoming a TP site?

B2. *[priorities]* What are the services that the TP site is going to get involved in?

[prompt on services that TPs should now be able to provide by service area]

- Why did you get involved in these areas?
- What exactly are you aiming to do in [each service targeted and each main service area] ?

[prompt for BROAD aims (e.g. referrals, A&E improvements) and LOCAL aims (e.g. save a hospital, move a contract away from a poor supplier). Also prompt about virement]

- What evidence are you using to reach these objectives/priorities?
- What are the main outcomes you are trying to achieve?

[prompt(?) for patient choice, quality, efficiency, maximising numbers treated, new balance of care]

For Maternity Care Project

- What are you planning in the area of maternity care?
- Will you negotiate your own contracts for maternity care or will you mirror those of your local HA/HC/HB? What are your reasons for this decision?
[look for answers about: minimising hassle/not doing everything at once, ensuring women centred care, achieving goals in Changing Childbirth]

Focus for Mental Health Project

- Are there things which your site is trying to achieve in relation to patients with serious mental illness? *[prompt for schizophrenia if asked to define question]*
- Are there any new services which you hope to provide in this area?
- Or any improvements in quality of service?
- Are there practices or Gps within your group which have a particular interest in mental health?
- Are there any particular problems with mental health services in your district?
- Do you see that TP has a role in trying to improve this situation?

SECTION C : ORGANISATIONAL STRUCTURE

C1: *[organisational chart/key tasks]* Your organisational framework, as shown in your chart/key tasks, how well does this structure work in practice? *[If a formal subcommittee of the HA/HC ask if this seems the right organisational arrangement]*

- Who's in charge of the TP site? Who takes the decisions about how the site develops?
- Do you have a project plan in place?
- What have been the key tasks since you became a TP site?
- Is there a special arrangement for the running of the TP site such as a project management team?
- Who does what? How are the key tasks approached? Is there specialisation between GP practices in the site or are tasks more widely shared?

[teamwork vs. autonomous practices loosely connected]

- How committed are your colleagues to this management system? How enthusiastic are they?
- How often do GPs in the TP site meet together? How closely do you work together?

C2. *[expertise/skills]* How did you develop, and what is your current status, on the following issues of gaining expertise and skills in running the TP site?

Information Technology

- What IT is required for the management of TP?
- What IT do you have up and running? Is this based on existing GPFH software or is it a new system?
- Is this enough or do you need it improving? In what ways does it need improving?
- Where did you obtain your IT support?
- Who manages the IT? What was the extent of the training required? Have you hired new personnel? If so, what kind of personnel and how many extra staff?

TP Management Skills

- What special skills are required for the management of TP?
- How much guidance or training were you/are you being given? Is this enough or do you need more advice? In what ways could TP management be improved?

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- Who, if anyone, provides you with TP management support and, if you do have support, what is the nature of the support you receive?
- What was the extent of the training required?
- Are you newly employed or have you been associated to the practices in the site previously?

Outcomes Monitoring [*e.g. readmission rates*]

- What methods are you using to monitor outcomes?
- How should this be improved?
- Do you/how do you intend to develop outcomes monitoring in the future?
- What main problems do you face with regard to monitoring outcomes?

SECTION D : GEARING-UP FOR PURCHASING

D1. [*current progress*] Have you produced a TP business plan? [*i.e. with purchasing intentions*]

- How did you set about this task?
- Who was involved?
- How have you collected the data which might indicate what your population requires? and currently receives? How easy has it been to obtain this information from the HA/HC and at what cost?
[*e.g. on activity in current DHA contracts, costs of current activity*]
[*prompt for involvement of patients*]
- Is there anything that you are NOT going to purchase in your TP site that you purchased before? [*and vice-versa*]
- How have you collected the data which might indicate the cost and quality of services which you would make use of?
- How will contract negotiations be handled at your site? What protocols or guidelines in contracting have been established?

D2. [*accountability*] One disabling factor that has been suggested is the greater degree of accountability required from TP sites.

- To what extent do you agree with this statement?
- What are you expected to achieve at your site in relation to Health of the Nation, the Patient's Charter etc.? i.e. what do you perceive your site has signed up to?
[*e.g. Purchaser Efficiency Index, HSG(95)8 on continuing care responsibilities; DHA corporate contract within Region and performance management arrangements*]
- Do you think HA/HC and national targets (such as Health of the Nation) should be applicable at the TPP site level?
[*prompt for robustness of such targets*]
- Is there an accountability framework? If so, what does it consist of?
- Do you plan to involve your patients in setting your purchasing priorities?

D3. [*Scope of purchasing*] Have you decided which services you will manage and which you will leave to the DHA? If so, what are they?
[*prompt by service area, ensure community care is included in the prompt*]

- Will all the practices in the TP site be purchasing the same menu of services?

SECTION E : RELATIONSHIP WITH EXTERNAL ORGANISATIONS

E1. Relations with the HA/FHSA/HC and other SFH practices.

- What do you perceive to be the role of the HA/HC/FHSA in your site?
- To what extent have they been accessible and available?
- Have you ever been let down? If so, in what ways?
- Do you consider that you require extra support from the HA/HC/FHSA?
If so, is it likely that greater support will be forthcoming?
- To what extent can you access information held by the HA/HC/FHSA?
[e.g. on IT support]
- Which of the following most accurately describes your approach to purchasing and contracting:

- (1) we contract independently of DHA and perhaps buy in consultancy support.
- (2) we contract independently of DHA and buy in consultancy support.
- (3) we leave some services to the DHA to purchase on our behalf.
- (4) we collaborate fully with the DHA on purchasing issues.

- Overall, how would you describe your relationship with the HA/HC/FHSA?

- (1) Paternal [*dictatorial?*]
- (2) Collaborative
- (3) Co-operative
- (4) Begrudging [*hostile?*]
- (5) Adversarial [*competitive?*]

- Do you think that things need to change? If so, in what ways can the relationship be improved to bolster the potential success of the TP site?

- What, if any, is your relationship with other SFH or TP sites in the area? Is there some form of dialogue (vis. purchasing) or do you work in isolation?

E2. Relations with local providers (including the private and voluntary sectors)

[prompt for different types of providers: acute, community, combined, mental health, private, voluntary sector, etc.]

- What is the extent of the contact between the TP site and managers and clinicians in the provider units?
- Have you begun to negotiate contracts? If so, which services have you negotiated for and what are your main objectives in these negotiations?
- Does the TP site deal directly with providers or do you do it through the HA/HC/FHSA? or with a member of the HA/HC/FHSA present?

E3. Relations with Social Services

- Have you had any contact with local social service departments?
 - If not, do you intend to in the future?
 - If yes, in what form did this take place and what did you discuss? What outcomes from this discussion resulted?

E4. Relations with Region

- What role has region played in relation to TP in general and your site specifically?
- Has this role been a useful one?

SECTION F : RESOURCE ALLOCATION AND BUDGETARY MANAGEMENT

F1. Have you begun to negotiate a basis for the resources to be allocated to your site?

- How is the allocation (likely) to be set?
[Calculations of targets for HCHS: weights used for age (and sex), and surrogates for morbidity]
- Do you know your allocation for 1996-7? If not, when do you expect to know?
- Are you in a position to inform providers of a major shift in services for 1996-7 as a consequence of becoming a TP site?
- If yes, what are these major changes likely to be?
- Do you see problems in being able to notify providers by September of your intended changes?
- If no, when do you expect to make changes?

F2. How do you intend to manage the resources you will be allocated? [e.g. will each practice have a budget? how much individual GP discretion is there? management of ECRs? etc.]

- How are budgetary responsibilities organised in managerial terms? (e.g. in a multi-practice site, does each practice have a budget?) What discretion does each GP have to make clinical decisions within the budgetary arrangements?
- How is spending managed over time to ensure that there is enough money at the end of each financial year?
- How is spending managed against contracts [where relevant: i.e. cost and volume and cost per case but not block contracts]
- How have the GPs in the site discussed resource allocation?
- How do you think you will deal with the cost of very expensive cases? Have you discussed this with the HA/HC/FHSA?

F3. [Risk Management] What arrangements, if any, have been made for a contingency reserve?

SECTION G : COSTS OF THE NEW TP STRUCTURE

G1. TP involves additional work for you, your GP colleagues and practice staff. Where is this extra work coming from? [*information gathering? contracting? risk management? co-ordination/liaison?*]

- What problems does this cause?
- What subsidy, in cash or in kind, have you had from the HA/HC/FHSA apart from the £20k allowance provided by Region?

Last Question

- In practice, what would you say the key tasks of your TP site are for the next 6 months?

END OF INTERVIEW

End of Questionnaire Responsibilities

1. Thank the interviewee
2. Ask for personal details of interviewee (for front of questionnaire)
3. Tell the interviewee broadly what happens in the future (CATIs, further visits etc.)
4. Ask if interviewee would like to ask anything about the evaluation.
5. Using the analysis guide, write a report on the interview a.s.a.p. using your notes, and the tape recording, to help you.

ANNEXE 3

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STAFF PERCEPTIONS OF COST AND BENEFIT OF TP USING A DIARY CARD

The brief for the evaluation refers to a number of operational issues including the 'the administrative workload for the practices and members of the team'. Previous work in the Scottish fundholding evaluation by a member of the current team showed that, using a simple diary method of assessing time spent, lead doctors worked an average of 7.9 hours/day as against 7.2 hours per day for non-lead doctors and that this included an extra hour per day for administration (3.0 against 2.1 hours) associated with less time for 'breaks' during the day (0.6 hours against 1.0 hours).

Similarly, when participating doctors and budget clerks/managers were asked to indicate their perceptions of the global perceived costs and benefits of being fundholders on a 10-point analogue scale (extremes 'none' and 'a lot') lead general practitioners reported both higher costs and higher benefits than did non-lead general practitioners, while budget clerks/managers reported the highest perceived costs, and benefits intermediate between the two groups of doctors. By the end of the year studied, it appeared that perceived benefits were about to exceed perceived costs for lead doctors and for non-lead doctors and that the gap between costs and benefits for clerks and managers was narrowing.

Specific Questions

1. What are the relative perceptions of global costs and benefits held by lead doctors, non-lead doctors and budget managers in standard fundholding practices after the settling-in year has passed?
2. Will the first year of TP produce increases in perceived costs over benefits for participating doctors and administrators?
3. After the first year of TP, will the perceptions of costs and benefits in TPP and SFH practices be different?

The hypothesis is that, after a settling-in period, perceptions of benefit will exceed those in costs in both TPP and SFH practices, that the start-up relation between costs and benefits in TPP practices may initially be unfavourable, and that larger term perceptions of benefits to costs may be greater in TPP than in SFH practices.

Method

The diary card used to collect information on perceived costs and benefits in the Edinburgh fundholding project will be adapted for use in this part of the evaluation. The global 1-10 analogue scale for costs and benefits will be used on one side of the record card, and appropriate additional questions covering time spent on administrative and developmental work on TP - which may vary as the project develops - will be included on the reverse side.

All lead GPs, TP site managers and health commission TPP leads at all sites will be asked to complete cards at the end of each week throughout the study. In addition, all partners in one practice with 10,000-15,000 patients at each of 6 TPP sites and in one practice with 6,000 patients or less at each of 6 TPP sites, will be asked to complete weekly diary cards. Furthermore, each month all respondents will be asked to fill in a critical incident card giving information on significant positive and negative experiences of TP.

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ANNEXE 4

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DRAFT ANALYSIS FRAMEWORK FOR FACE-TO-FACE INTERVIEW WITH TPP SITE LEAD GPs

EXPLANATORY NOTES

The core of this first piece of analysis from the first set of site visits is *description* so that others can understand and make their own interpretations subsequently for a number of different purposes in the evaluation. There are a limited number of interpretative questions in what follows, but the emphasis is on establishing basic information on each site as perceived by each informant such as the objectives of the site, the key features of the setting, the organisational structure and the main tasks which have been accomplished so far. Sections where the interviewee's responses are required are clearly distinguished from those where the interviewer's interpretation/ view is asked for. As far as possible the analysis guide has been informed by the original objectives of the study as set out in the proposal. When all the site specific data are assembled it will be possible to undertake cross-case analysis with a view to seeing if a sensible classification of sites is possible for use in subsequent sampling, etc.

It is assumed that the interviewer has access to his/her detailed notes made during the interview as well as a recording of the interview. In the time likely to be available, the interviewer will probably listen through the tape once while amending and adding to the interview notes. The revised notes will have to serve as the basis for this first descriptive analysis. There will not be time for a detailed coding of interview transcripts followed by content analysis.

The writing-up of the interviews should be in the following format:

1. Respondent Details
2. Site Details
3. Interview Analysis (by key themes)
4. Post-Interview Details

The analysis framework that follows details the information required under these four headings.

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PRE-INTERVIEW INFORMATION

RESPONDENT DETAILS

The respondent's details can be noted on the front of the interview guide before the interview takes place. Personal details concerning the background of the interviewee might be better obtained at the end of the interview. The respondent details should thus comprise the following:

Date and Place of the Interview

Name of the TP site

Name of the Respondent

Position held by the Respondent

Background of the Respondent

Name of the Interviewer

The first page of the interview report, therefore, will comprise these details.

SITE DETAILS (not necessary for all interviews)

The second section of the interview report will comprise details of the site itself. Much of this information will have been collected by checklist and the interviewee will check to make sure the following details of each site have been collected:

Number of practices in the site

Number of GP(s) in each practice in the site

Total patient population covered by the site

Number, and types, of other staff in the constituent practices

Services the site delivers on-site

Previous fundholding history (individual GPFHs, locality purchasers, multifund, etc)

Status of Health Agency (i.e. has the health authority merged with FHSA and/or with other health authorities and, if so, when).

Organisational Structure (in the form of a chart of internal management arrangements)

In addition, please list all the documentation that describes the site, its objectives, its purchasing intentions, and so forth, which has been produced to date. Copies of all this material should be lodged with the King's Fund Interview with the interview report.

ANALYSIS OF INTERVIEW BY KEY THEMES

1. HISTORY OF THE SITE

Were the practices previously involved with one another? If so, in what way (e.g. locality purchasing, SFH consortium, etc)?

What role did the health authority/health commission play in identifying and recruiting the site?

When was the site officially confirmed and when did it begin its preparation?

What was the extent of discussion and interaction between the practices and the individual GPs?

2. AIMS AND OBJECTIVES

What are the aims (general philosophy and motives) of the site for TP?

What are the site's objectives in relation to each service area in TP in the first year of the scheme with particular reference to services which will be the subject of specific study?

These services are: A&E/Emergency (♦); Mental Health (♦), Community Care (♦), Continuing Care/People with Complex Needs (♦); Maternity (♦); Palliative Care; Regional Specialities; and Health Promotion of which the services marked with a (♦) are subject to further study as components of the evaluation.

Include details of changes to any of these services which the site wishes to make in year one.

Are there any new objectives for subsequent years?

How would the site assess whether or not its objectives had been realised?

What are the main local and national enabling and retarding factors for success as perceived by the respondent?

3. ORGANISATION AND STRUCTURE

Please provide an organisational chart of the internal management arrangements at the site, particularly the relations between practices and the relations between the site and the health authority. Show who is involved in which tasks (this should be requested from the site prior to interview).

How would you characterise the organisation in terms of complexity?

4. MANAGEMENT

What is the extent of health authority staff involvement in decisions affecting the site?

What is the level of GP involvement in the management of the site?

Are outside skills brought into the site? If so, which, how, and to what?

5. BUSINESS PLANNING AND PURCHASING INTENTIONS

How far has the site got with identifying its 'inheritance' of activity and costs? What were the particular problems with this process?

How far has the site got with setting out its purchasing intentions and any changes it wishes to make from the historic pattern of services?

How far has the site got with negotiating contracts and for which services?

Are there any agreed, inter-practice differences in purchasing intentions?

Is there any specialisation between practices/GPs in terms of their purchasing responsibilities?

What role have patients' views played in the process of identifying purchasing intentions?

6. ACCOUNTABILITY

What is the nature of local accountability of the site to the local population, its patients, the health authority/commission, region, NHSE (accountability for national policy goals)?

7. EXTERNAL RELATIONSHIPS

How would you characterise the nature of the relations between the site and the following:

- Health authority/health commission;
- FHSA (if relevant);
- Main local providers (how defined?);
- Region;
- Social services;
- Other TP sites;
- Other SFH practices and non-FH practices.

[Dimensions which may be relevant to characterising the relationships include closeness-remoteness, cooperation-conflict, etc]

Which of the following most closely describes the TP sites relationship with the DHA in terms of purchasing and contracting? [if there is a more accurate description then please say so]

- (1) The TP site contracts independently of DHA and may buy in consultancy support.
- (2) The TP site contracts independently of DHA and buys in consultancy support.

(3) The TP site leaves some services to the DHA to purchase on its behalf.

(4) The TP site collaborates fully with the DHA on purchasing issues.

Overall, how would you describe the relationship between the TP site and the HA/HC/FHSA? [again, please state a more accurate description of the relationship than the ones listed if there is one]

(1) Paternal [dictatorial?]

(2) Collaborative

(3) Co-operative

(4) Begrudging [hostile?]

(5) Adversarial [competitive?]

8. RESOURCE ALLOCATION & BUDGETARY MANAGEMENT

Has a budget been agreed for the site?

Has agreement been reached on the method for setting the budget?

How is the budget set/to be set?[Include details of any weightings used, which parts of the budget they apply to and how the relative health authority budget was ascertained.]

What arrangements if any have been agreed for dealing with expensive cases?

9. TRANSACTIONS COSTS

What identifiable, direct additional costs has the site incurred so far associated with the decision to become a TP pilot?

How have these costs been met?

Have any existing staff been redeployed from other duties?

How much time has the lead GP and other GPs spent on average each week since the site became a TP pilot on TP-related work?

How have the practices coped with the clinical consequences of having GPs working on TP tasks?

10. GP's PERCEPTIONS OF THE MAIN PROS AND CONS OF TOTAL PURCHASING

Please list these in comparison with being a SFH practice/practitioner.

What appears to be the attitude towards the possibility of adverse selection (cream-skimming)?

11. STATE OF READINESS FOR ACTUAL PURCHASING

Is the site already purchasing? If so, what?

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Where would you locate the site on a continuum from 'unprepared' to 'ready'?

If the site is not ready to negotiate contracts, what are the main things which still need to be put in place?

12. STRENGTHS AND WEAKNESSES OF THE SITE (Interviewer's perceptions)

Are the objectives of the site clear?

Are they compatible?

Are they feasible?

What is the level of awareness at the site of strategic, operational and other NHS policy issues?

What is the level of awareness of the tasks and work required to do total purchasing?

Is a plan for project management in place?

Is the structure of the site, and its formal management arrangements, appropriate?

Is the distribution of work sustainable?

What are relations like between practices, between GPs and with other staff at the site?

How committed is the site to making a success of Total Purchasing?

13. NATURE OF TOTAL PURCHASING AT THIS SITE

Which description (e.g. GP-health authority collaboration, health authority delegation, GP-led alternative to health authority purchasing, etc) best fits total purchasing at this site (in your own words)?

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POST-INTERVIEW ANALYSIS

VERBATIM QUOTATIONS

Please note down any responses which you believe to be particularly revealing in relation to any of the main themes above.

FEEDBACK TO THE RESEARCH TEAM RESPONSIBLE FOR THE INTERVIEW CHECKLISTS AND ANALYSIS GUIDES

Were there any issues salient at the site which emerged in the face-to-face interview but which are not currently covered explicitly in the interview guide? If so which are they?

Did you have any other difficulties with using the interview guide?

After this interview have you any suggestions for issues which should be dealt with in future data collection in more detail?

Are there major themes and questions missing from the analysis guide? If so what are they?

EFFECT OF THE INTERVIEW ON INTERVIEWER'S INTERPRETATION OF TOTAL PURCHASING

Has your current view of the pros and cons of total purchasing been altered in any way by the above interview? In what ways?

ANNEXE 5

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HYPOTHESES CONCERNING CHANGES IN SEVEN SERVICES DUE TO TP

Emergency admissions

Hypotheses to do with the effects of TP on emergency admissions can be framed at both general and specific levels. General changes include possible changes in:

1. hospitalisation rates,
2. lengths of stay and
3. the balance between acute and community / social care.
4. choice of provider.

Changes in hospitalisation rates and lengths of stay seem more likely than in the balance of care or choice of provider.

1. The emergency hospitalisation rate might be expected to reduce relative to baseline and to SFH practices due to TPPs being charged for them. Such changes might be expected at the margin and for specific conditions which could be treated in other ways. Interpretation would include statistical assessment of the significance of any such changes.
2. The average length of stay might be expected to fall for emergency FCEs if THFs took greater control, depending in turn on the degree to which contracts included incentives in terms of pricing, the use of protocols, discharge arrangements, and perhaps the development of utilisation review and case management. The collection of data on contracts is outlined below.
3. TPPs might be expected to change the balance of care purchased with substitution of community and social care for acute and perhaps vice versa, depending on the specific condition.
4. Changes might be expected in TPPs' choice of provider, again probably at the margin. A change in provider might be related to some or all of the above factors. However, the financial gains of withdrawal of all work from a particular provider may be offset for TPPs by the possibility of making a provider non-viable. Much closer relationships might be expected between provider management/clinicians and TPPs. Changes might also be expected in the locations of care settings, with a shift to more community or domiciliary settings if of demonstrated cost effectiveness.

Changes in each of these dimensions might be expected at the level of specialties and more so at the level of specific conditions. Specific hypotheses will be derived for all the major conditions leading to emergency admissions, based on the literature, including 30 NHS-E sponsored health needs assessment co-edited by one of the applicants (J Raftery), the Effectiveness Bulletins and other relevant literature.

Maternity Services

TPPs might be expected to involve the following changes:

1. a shift to more client centred approach,
2. a shift to midwife (as opposed to consultant) assisted deliveries, depending to some extent on pricing policies in contracts,

3. greater continuity of care, perhaps through purchase of packages of care with protocols,
4. an increase (perhaps) in the proportion of home births, depending on the views of the GPs involved.

Regional specialties

As no standard list of regional specialties exists, the following list of 8 services based on EL(93)98 will be used for convenience:

neurosurgery
cardiothoracic
spinal injuries
specialised paediatrics
neonatal intensive
medium secure units/challenging behaviour
renal
rehabilitation
genetics.

The effects of TP on each of these may be expected to vary, but broadly similar effects might be expected for the first seven which are services catering for relatively rare conditions. As few patients at TPP level might be expected to require these services, TPPs may want to explore the scope for more integrated purchasing, perhaps in conjunction with the DHA. Overall, changes similar to those applying to emergency admissions might be expected.

TPPs may wish to contract for **renal services** on the basis of maintenance contracts as some DHAs have done as a means of avoiding the problems associated with contracting on the basis of a mixture of FCEs and outpatient attendances.

As **rehabilitation** is a service with many more potential clients, a different pattern may emerge. Stroke provides a useful example, in that almost all admissions are emergency, and changes might be expected from TP, with a shift from long stay acute care to rehabilitation whether in hospital, community or at home. Nationally, around 10% of stroke patients stay in acute hospitals for long spells and account for around 60% of inpatient days. These might be expected to be shifted more rapidly either to their homes, with community service backup, or to nursing homes, depending on availability and finance. TPPs may well contract separately for rehabilitation inputs or specify them as part of inpatient stays. Other groups requiring rehabilitation include younger persons who have been seriously injured (such as head injuries). TPPs might spur local strategies to deal with rehabilitation in general.

Genetics is a small but growing services which includes clinical and lab services. Much depends on the advent of new tests which are proliferating. TPPs might be expected to develop overall strategies, perhaps in conjunction with DHAs. Alternatively, TPPs might contract individually on a cost per test basis with laboratories and provide the clinical genetics service, which is largely education and counselling, at TP level.

Palliative care

TP might be expected to lead to more patient-oriented palliative care. A rise in the proportion of deaths occurring at home might be expected given evidence on patients' preferences. A shift might also be expected from costly acute hospital spells to community services, with greater co-ordination of the range of inpatient, community and hospice services.

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Mental illness

TP might be expected to lead to a shift in the balance between drug and inpatient treatment as the costs of the latter become more obvious. Prescriptions of new costly psychiatric drugs such as the SSRIs might be expected to change, relative to both SFH controls and to the baseline year (see below section on prescribing). An increase might be expected in the use of distant NHS beds or private sector beds in emergencies if no NHS beds are available locally.

Community services

TP might be expected to lead to innovative forms of service and these services becoming more closely targeted on needs and more closely monitored. Information deficiencies on activity might be expected to lead to contracts being based on staff inputs or for provision of whole services. Health visiting might be queried given the debate over its value.

Health Promotion

TP might be expected to lead to increased use of interventions with superior cost-effectiveness, again subject to information deficiencies, which might lead to contracts for staff inputs or for whole services.

With all of these services, individual GPs, practices or sites may of course have other aims and objectives, progress to which would also be monitored. These aims and objectives would be established as part of site visits and would be monitored both qualitatively and quantitatively (see section 4).

ANNEXE 6

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NATIONAL AVERAGE UNIT COSTS FOR GENERIC SERVICES USED IN COMMUNITY CARE

<i>Item</i>	<i>Activity data source</i>	<i>Cost data source</i>	<i>Unit</i>	<i>Cost estimate</i>	<i>Price base</i>
Speech Therapist - NHS	Client, case manager	Netten (1994)	£/hour	£17	1993/94
Art and Music Therapist - NHS	Client, case manager	Netten (1994)	£/hour	£15	1993/94
Drama Therapist - NHS	Client, case manager	Netten (1994)	£/hour	£15	1993/94
Occupational Therapist - NHS	Client, case manager	Netten (1994)	£/visit £/hour £/hour ¹	£23 £15 £34	1993/94
Physiotherapist - NHS	Client, case manager	Netten (1994)	£/hour £/hour ¹ £/visit ² £/visit ³ £/typical episode ⁴	£16 £28 £23 £9 £147	1993/94
Chiropodist - NHS	Client, case manager	Netten (1994)	£/hour £/visit ² £/visit ³	£16 £14 £8	1993/94
Psychologist - NHS	Client, case manager	Netten (1994)	£/hour £/hour ¹ £/hour ⁵	£23 £59 £30	1993/94
Community Psychiatric Nurse - NHS	Provider records, case manager	Netten (1994)	£/hour £/hour ¹	£16 £44	1993/94
Health Visitor - NHS	Provider records, case manager	Netten (1994)	£/hour £/hour ¹	£15 £44	1993/94
District Nurse - NHS	Provider records, case manager	Netten (1994)	£/hour £/hour ¹	£15 £31	1993/94
Auxiliary nurse - NHS	Provider records, case manager	Netten (1994)	£/hour £/hour ¹	£7 £11	1993/94
Practice nurse - NHS	Provider records, case manager	Netten (1994)	£/hour £/hour ¹	£14 £23	1993/94
General Practitioner - NHS	Provider records, case manager	Netten (1994)	£/minute £/visit ⁶ £/visit ²	£0.82 £7.62 £22	1993/94
Social worker - Local Authority	Provider records, case manager	Netten (1994)	£/hour £/hour ⁷	£13 £17	1993/94
Home care workers - Local Authority	Provider records, case manager	Netten (1994)	£/hour £/hour ⁷	£6 £8	1993/94

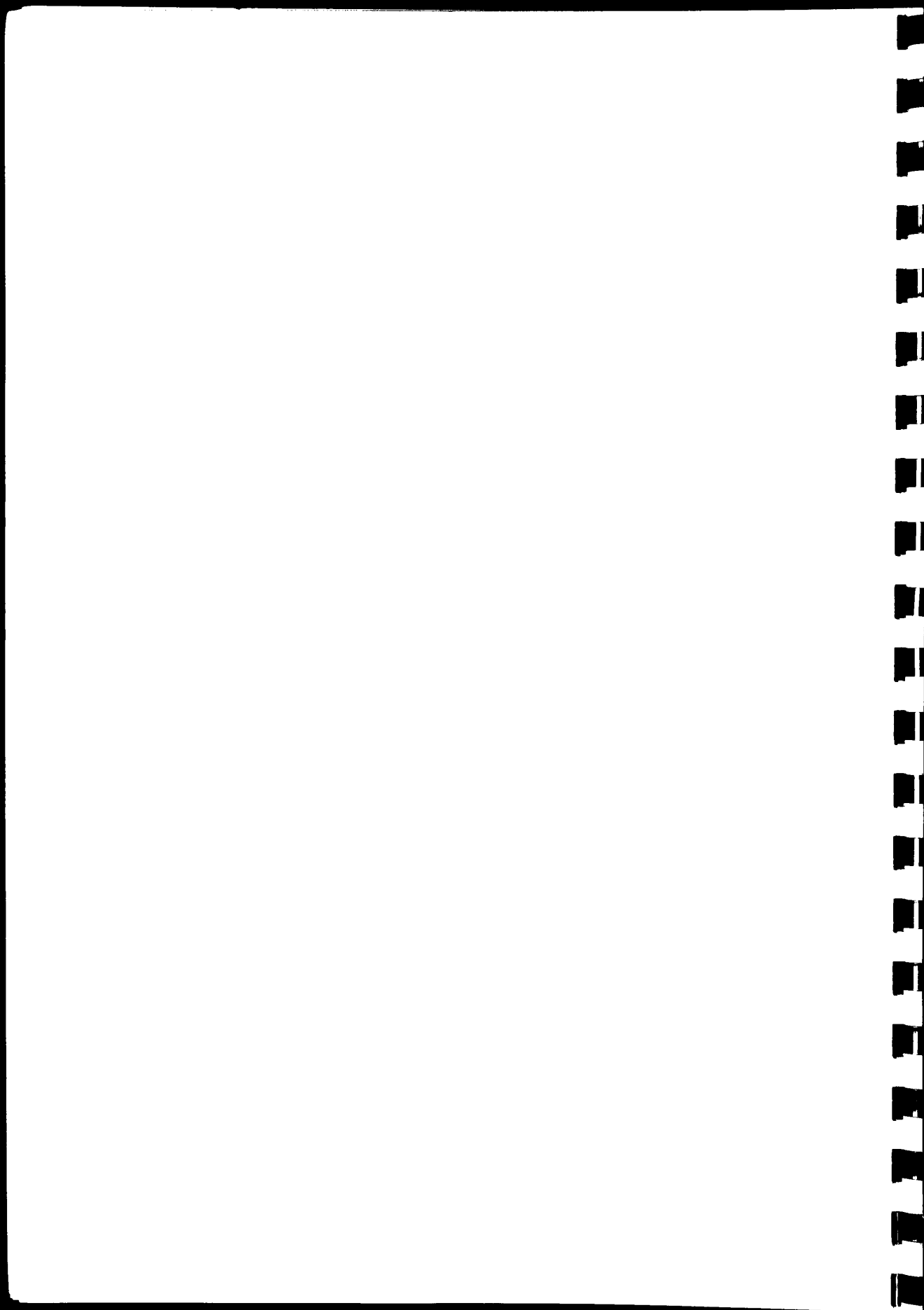
26 January 1996

Notes

1. Per hour of client contact
2. Per domicillary visit
3. Per clinic visit
4. Example episode
5. Per professional chargeable hour
6. Per surgery visit
7. Per hour client-related activities

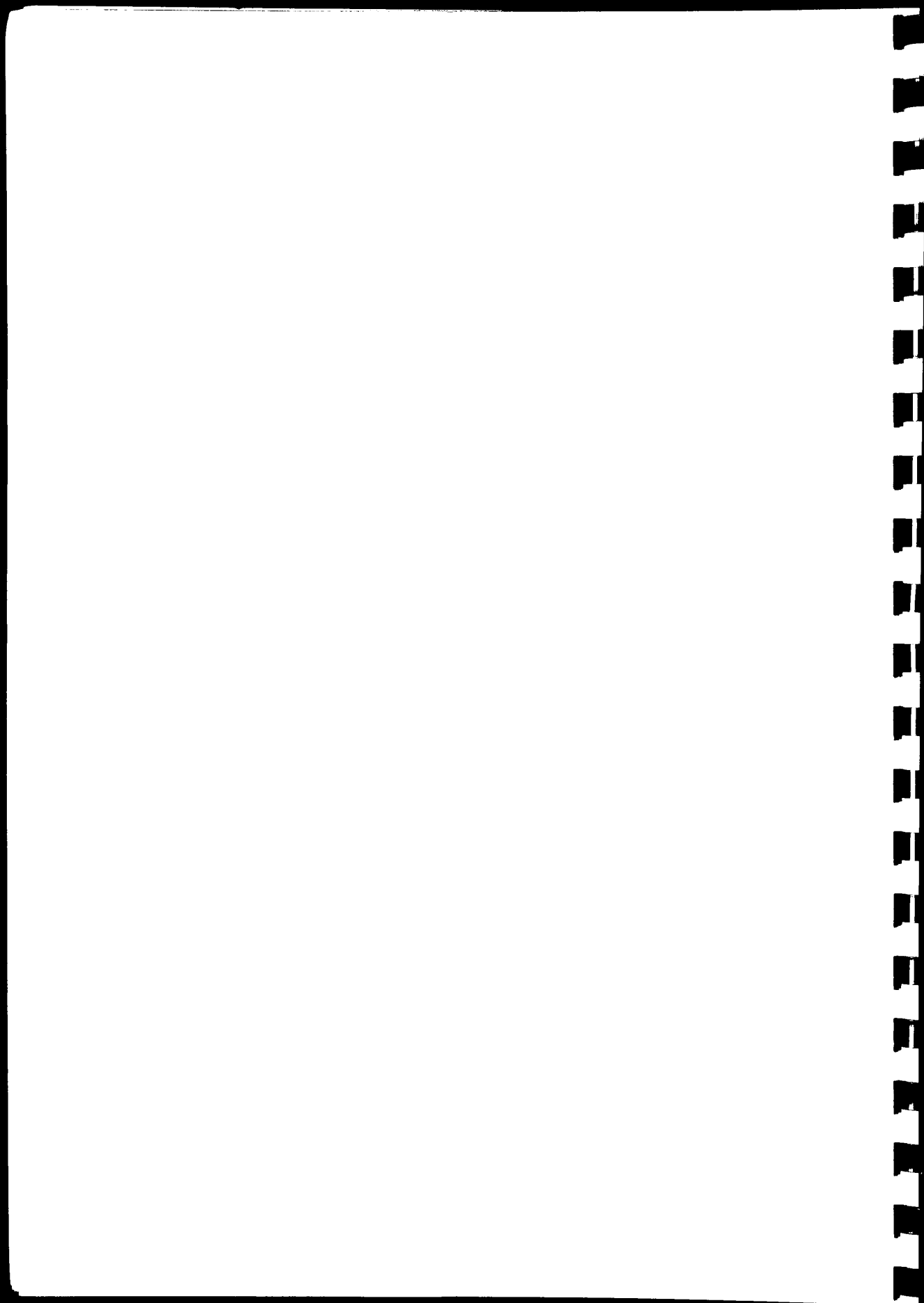
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**NATIONAL EVALUATION OF TOTAL
PURCHASING PILOT SCHEMES
1995-1997**

**ACCIDENT AND EMERGENCY CARE AND
EMERGENCY ADMISSIONS**



ACCIDENT AND EMERGENCY CARE AND EMERGENCY ADMISSIONS

Lead: C Sanderson, LSHTM and J Dixon, KFI

Main comparison: A&E attendances and emergency admissions of patients of TPP practices versus reference SFH patients at selected hospitals (to be decided) before and after introduction of TP

INTRODUCTION

Costs of emergency care (attendances at A&E departments and emergency admissions) are often unpredictable and substantial. TPP sites therefore have a strong incentive to reduce their risk of expenditure by either contracting for emergency care through the health authority or by improving the access and quality of care in general practice to reduce the need for an attendance or admission to hospital.

It is hypothesised that TPPs will maximise the access to primary care for patients requiring emergency, urgent and non-urgent care. The result may be that attendances at A&E or emergency admissions to hospital will reduce, the proportion of attendances or admissions occurring without prior contact with a GP will be reduced, and that attendances and admissions for conditions treatable in primary care will reduce (see figure 7.1).

Incentives to minimise use of A&E care will be greater in TPP sites that choose to hold budgets for specific A&E services. It is anticipated that initially at least, many will use block contracts, either directly or with the local health commission. There will be particular interest in sites that go for cost and volume or cost per case contracts for A&E. Contracting for A&E care is one of the key differences from SFH and early signs from the TPPs show that a number are interested in taking responsibility for contracting in this area. The Bromsgrove first-wave TPP experience suggests that even block TPP contracts can be associated with purchasing-based changes in A&E services.

Therefore it is likely that the effects of TP on A&E services will depend on whether the TPP sites use block or variable cost contracts. Other relevant, and potentially confounding, factors include numbers of patients covered by the contract, distance to A&E, and whether there is a local choice of A&E sites rather than a single provider. Given the resources available for the study, it will only be possible to assess the influence of all these factors if enough suitable sites can be involved.

Selection of sites for study will also depend on whether enough A&E departments in different contexts have reliable computerised information on attendances. Although most larger hospitals (those open for 24 hours with medical staff) do have computer records of A&E attendances consistent with the accident and emergency minimum dataset, the accuracy and completeness of these data are variable and the scope for down-loading in a form suitable for statistical analysis is unclear. The extent to which data from A&E systems can be validated against data from the relevant GP data systems also needs to be investigated.

Selection of sites for study will also depend on the completeness and consistency of coding of emergency admissions on routine data systems such as the patient administration system. The definitions (and therefore coding) of an emergency admission may change over time, as may the completeness of coding of admissions recorded on routine data systems.

A feasibility study prior to the main study will be required to assess the availability and completeness of local data. An outline of this approach is given below.

A considerable amount of data on the impact of TP on A&E and emergency admissions will be collected from all TPP sites as part of the 'core' process evaluation described in Section 4, above. This will cover the extent to which the improvement of A&E and emergency care is a TPP priority; what new services are provided or purchased by TPPs for A&E and emergency care; how TPPs contract for these services, particularly what quality standards they include; the TPP GPs' views about any improvements in services which they are able to achieve (eg better communication with A&E staff); how budgets are set for A&E and emergency care at TPP sites; and, how well these budgets are managed by the TPPs as against their local health commissions.

In addition, the component of the overall evaluation in which routine activity data are analysed (see Section 5.1, above) will provide information from the Hospital Episode Statistics (HES) system in England and equivalent data in Scotland on the extent to which all TPP sites which choose to contract separately for A&E and emergency care alter the type, volume and length of stay of emergency admissions as defined in HES.

The description which follows concentrates on the design of a component of the national evaluation which focuses specifically on A&E/emergency care. This is in two main parts; one on A&E attendances; and, the other on emergency admissions. It is dependent on carrying out a preliminary feasibility study as explained above.

FEASIBILITY STUDY

Method

From the initial data collected from all TPP sites in summer 1995 as part of the 'core' process evaluation (section 4), sites intending to purchase accident and emergency care separately from the health authority will be identified. Also identified will be: the type of contracts (eg block, cost and volume) to be used; the major provider of A&E care for each TPP; and the TPP sites which intend to make a priority of purchasing A&E care.

Further investigation will be needed to establish for TPP sites which intend to contract separately for A&E:

the nature of the contracts involved and the information on which the budgets were based;

the presence or absence of other specific potential confounders at each site;

the quality of the information systems in the A&E departments with which contracts are placed, and whether the necessary information can be obtained in suitable format for evaluation;

local practices and conventions that may affect the completeness and coding of data on A&E attendances and emergency admissions;

the routes by which patients can be admitted as an emergency (see figure 7.1)

local definitions of an 'emergency' admission

the quality of the information systems of the GPs using these A&E departments

availability of other forms of A&E provision locally, such as minor injuries clinics, and any plans to increase availability of these.

Resources and timetable

Because of the need to commence the main study (see below) not later than January 1996, it is anticipated that data will be collected for as many TPP sites as possible which intend to contract separately for A&E by the end of November 1995.

The work will be undertaken on a consultancy basis by the researchers employed already by members of the evaluation consortium in Edinburgh, Manchester, York, Bristol, Southampton and London to undertake the 'core' evaluation.

It is unlikely that more than 20 TPP sites will intend to contract for A&E separately from their parent health authority. For each of these sites, information will be collected from the main provider of A&E care. It is assumed it will take two days to collect information from each provider and half a day to write-up the findings. Co-ordinators at the London School of Hygiene and Tropical Medicine (JD and CS) will organise the study, provide support and collate the overall results.

MAIN STUDY OF A&E ATTENDANCES FROM DATA ROUTINELY COLLECTED IN A&E DEPARTMENTS

Methods

Selection of TPPs and A&E Depts

Data on A&E attendances will be collected in A&E departments selected after the feasibility study and serving TPP sites which have a clear intention to purchase A&E and emergency care separately from the health authority. As far as possible, departments will be selected so as to cover combinations of the following factors:

block and variable cost contracts;
large and small TPPs;
metropolitan, suburban or rural sites.

Where there is more than one TPP in a 'cell' (a cell being, for example, large TPP + block contract + suburban) the choice will be based on the quality of the local information systems. If there are many empty cells it may be necessary to restrict the number of explanatory factors considered.

The number of A&E departments providing services to each TPP as well as the availability of minor injuries facilities will have to be considered. In general, TPPs will be chosen in which one A&E department is used by more than 70% of A&E attenders, in which case only that A&E department will be studied. Subjects (patients of GPs in TPP practices) and controls (patients of GPs outside such schemes) will be selected from the same departments. For the 'minority' providers, a broad indication of changes in attendance rates will be given by HES data on emergency admissions from the component of the evaluation on activity changes (see section 5.1, above).

Information to be collected

The main information needed should be recorded routinely by A&E departments for each attendance. The most important items will be:

GP (registered or referring)
date of birth
sex
broad disease category/condition
method of referral (eg self or GP; local definitions to be clarified)
method of transport to A&E
time first arrived in A&E
time first seen
time of exit
disposal (eg admission or home)
letter to the GP

Other less crucial but nonetheless desirable information would include:

ethnicity
postcode
time of day examined
professional examined by
diagnostic tests

If the extent to which patients receive accident and emergency care in hospital without attending a casualty department (eg a minor injuries unit) is of concern, a prospective system will be set up, with clinicians recording the basic patient details. It is not possible to be more precise about this until local practices are identified. Where specific alternative sources of care have been set up such as minor injury clinics, activity data for these will also be sought. Changes in the use of A&E services will be interpreted in the light of such services or new approaches to care developed by the TPP practices (obtained from the 'core' project).

Where TPP practices have their own information on the number of A&E attendances by hospital in the pre- and post-TP periods, this will be used to check where patients of TPPs are attending for A&E care, and to validate the data collected from the A&E sites.

Number of sites to be analysed

The number of sites analysed will depend upon the adequacy of data on A&E attendances where, if the routine data are adequate and can be downloaded for analysis, it will be possible to examine detailed time series of attendances. Data will also be collected from as many of the A&E departments which the TPP patients attend for A&E as have adequate computerised data. The introduction of variable-cost A&E contracts may well be preceded, or at least accompanied, by improvements in A&E and GP data systems. For A&E departments with good data, information on all patients will be collected, starting at least four months before the introduction of TP, and continuing for 15 months.

If few of the routine information systems in A&E are adequate, ad hoc studies will be necessary involving more limited numbers of patients. A researcher will collect data on attendances for patients from TPP and selected reference practices from paper records at each A&E department. At different periods the researcher will collect information on patients attending during the day and out of hours. The number of weeks the researcher will spend in each A&E department will depend on the number of attendances by patients from TPPs and reference practices. The target will be 200 patients per subgroup (ie for each A&E department, before and after the introduction of TP, and for TPP patients and for reference practice patients). This would give 95% confidence intervals of, for example, 19%-

32% on 25%, and 43%-57% on 50%. Aggregating subgroups to 400 would give 95% CIs of 21%-29% and 44%-56%, respectively.

Using information obtained from the Department of Health on the number of new and follow-up attendances at A&E departments in larger hospitals, at least 30,000 attendances would be expected per A&E department per year. Assuming a 40% coverage of the population by the larger TPPs, it would take about a week to accumulate the necessary number. If the coverage is only 10%, it would take about 4 weeks.

Analysis

The experience of TPP and reference practice patients in the pre- and post-TP periods will be compared with respect to:

rates of attendance (overall, by time of day, by age group, by method of transport to hospital, by broad disease category);

length of time waiting (in casualty before being examined, in casualty from entry to exit);

proportion attending for either 'primary care'-type treatment or conditions which were amenable to treatment in primary care;

rates of diagnostic tests performed;

proportion of attenders admitted to hospital;

proportion of self-referred to GP-referred patients (route F compared to route E as shown on figure 7.1);

and, proportion of patients where letter sent to GP, and content of the letter.

The dependent variables will mainly be proportions. Analyses will involve between-group comparisons of proportions with confidence intervals, and if there are sufficient data on potential confounders, logistic regression. Waiting times will be analysed using medians and/or means with standard errors.

MAIN STUDY OF EMERGENCY ADMISSIONS

Patients may take several alternative pathways to admission, some involving contact with a GP and others not (as shown in figure 7.1). All possible pathways will have been identified in the feasibility study (above) as will the definition of an emergency admission in each study hospital.

The extent to which patients have used routes D,E,F (on figure 7.1) will largely have been measured in the study of attendances in A&E. However, not all patients who are admitted as an emergency will have attended A&E - some are admitted directly to a hospital ward from home or from outpatients (routes A, B, C). The numbers of patients using these routes may increase as a result of total purchasing, especially for patients with chronic disease who are well known to the hospital. This part of the study will identify the total volume of emergency admissions, the proportion which follow routes A-C to admission, and the casemix of patients admitted.

Methods

Selection of TPPs and hospitals

Four study hospitals will be selected from those used in the study of A&E attendances (outlined above).

Source of information

Firstly, all patients from TPPs and reference practices who were admitted as an emergency at the four hospitals will be identified using data from the patient administration system, information from casualty records already carried for the A&E study, and information from ward admission books or nursing 'Kardex'. Secondly, the route by which the patient was admitted will be identified using information from the casualty record or from the casenotes or the patients themselves. Thirdly, the definition (official and working definitions) of emergency admissions in each hospital will be identified during the study periods.

Analysis

The analysis will involve examining:

the rate of emergency admissions in the before- and after-TP periods and in comparison with reference practice patients;

the total volume of emergency admissions for patients from TPPs and reference practices as compared with those recorded on HES data;

the proportions of patients taking different routes into hospital, such as bypassing their GP;

the main diagnosis and age recorded on discharge data;

whether there was any change in the official or working definition of an 'emergency' admission.

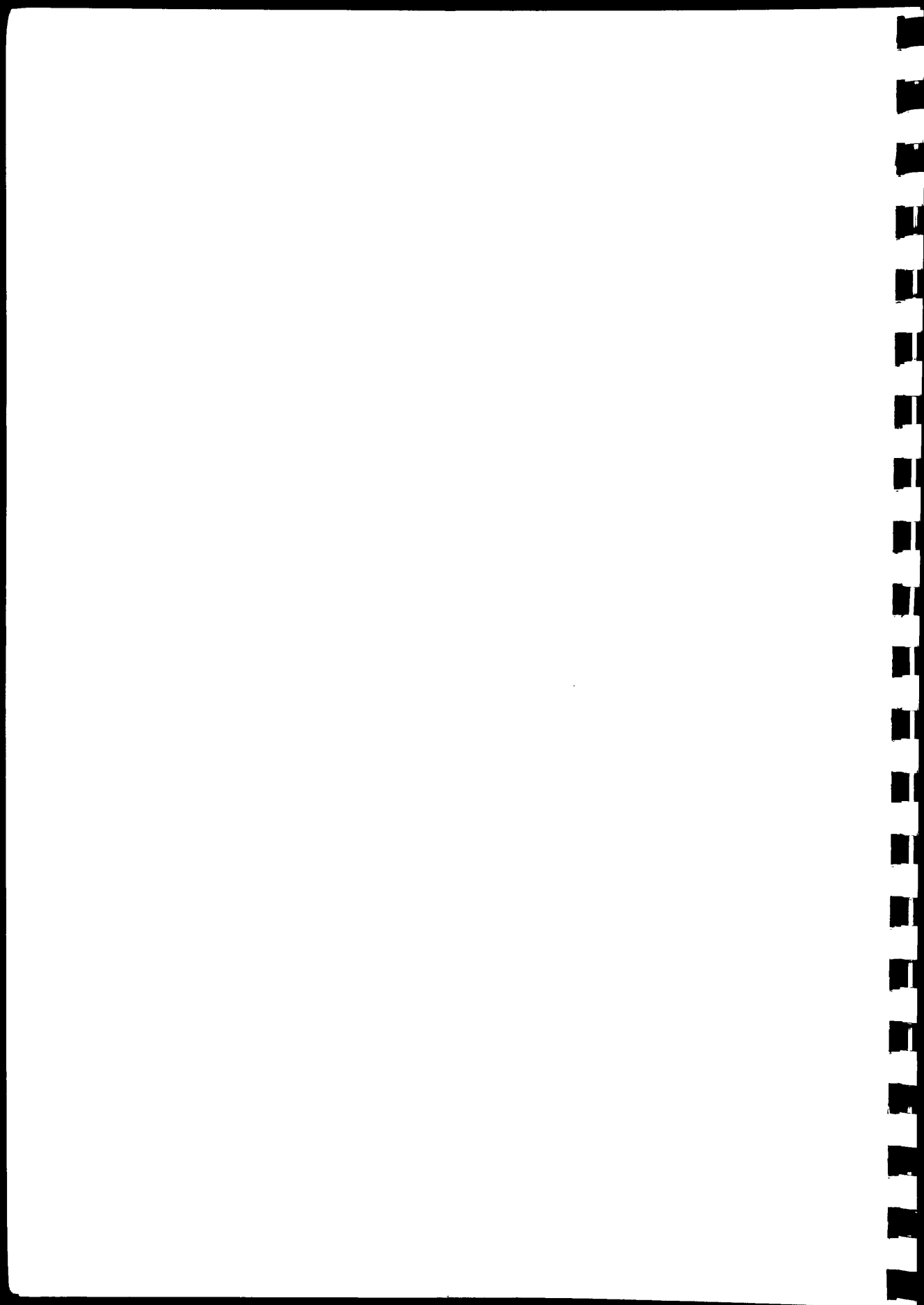
The dependent variables will mainly be proportions. Analyses will involve between-group comparisons of proportions with confidence intervals, and if there are sufficient data on potential confounders, logistic regression.

Consent

This project will be discussed fully with relevant parties including A&E staff, hospital managers, reference and TPP practice staff and Local Medical Committees where appropriate. Ethical committee approval will be obtained where required.

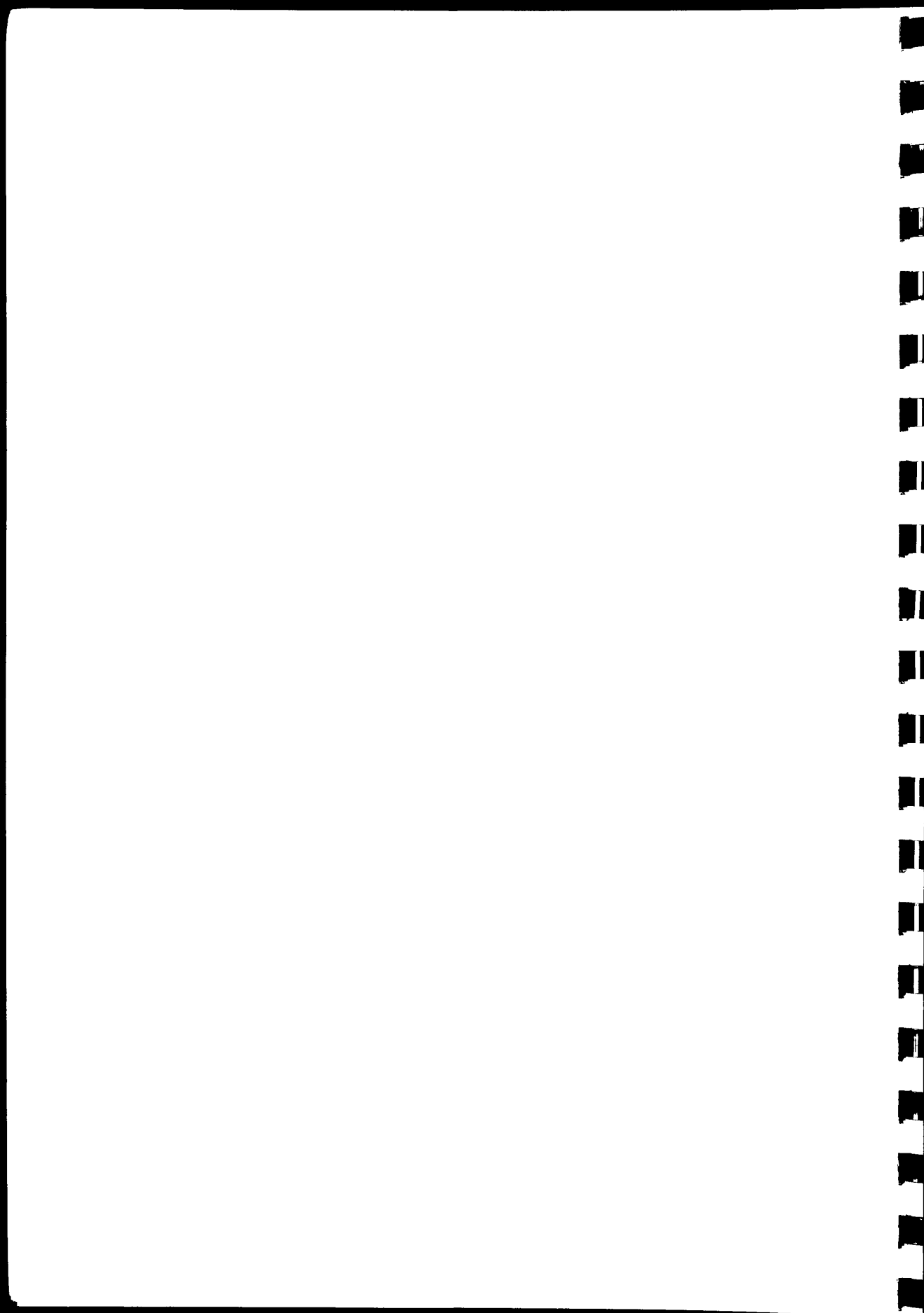
Schedule

September- November	Feasibility study
December 1995	Researcher in post
	Pilot manual data collection if necessary
January 1996	Begin pre-intervention audit/data collection at A&E sites
March 1996	End pre-intervention data collection
January 1997	Begin post-intervention data collection
March 1997	End post-intervention data collection
Oct 1997	Analysis and report complete



**NATIONAL EVALUATION OF TOTAL
PURCHASING PILOT SCHEMES
1995-1997**

**SERVICE PROVISION AND OUTCOMES
FOR SEVERELY MENTALLY ILL PEOPLE**



7.3

EVALUATION OF THE IMPACT OF

TOTAL PURCHASING and STANDARD GP FUNDHOLDING PLUS MENTAL ILLNESS IN-PATIENT TREATMENT

ON SERVICE PROVISION AND OUTCOMES FOR SEVERELY MENTALLY ILL PEOPLE .

from the National Primary Care Research and Development Centre, based at Manchester.

Stuart Donnan, Professor of Epidemiology and Public Health
Martin Roland, Professor of General Practice
Linda Gask, Senior Lecturer in Community Psychiatry

15th Nov 1995

ABSTRACT

A study of service provision and patient outcomes for mentally ill people is proposed, comparing Total Purchasing sites (TP), GP fundholding sites extended to include inpatient treatment for mental health problems (GPMH) and GP fundholding sites as originally conceived (GPF). Basic information will be obtained from all the TP and GPMH sites (by means of data from routine sources, questionnaires and telephone interviews), supplemented by more detailed information from a sample of Total Purchasing sites, GPMH practices and reference GP fundholders.

The proposed study is in four sections focusing on: services provided, outcomes in terms of accessibility and quality, the work of professional staff, and the impact of total purchasing on service costs and efficiency. In the first instance, comparisons will be made between the initial position and the situation which has developed after the first year of total purchasing. Longer follow-up would give much more information about change but resources are not available for this at present.

The methods described would enable work already proposed on the evaluation of Total Purchasing to expand to the evaluation of extending standard fundholding to include mental illness in-patient treatment (GPMH). Economies of scale will increase the efficiency of the related studies, and more valuable information would be obtained by carrying out the studies together. A single budget is presented for the combined studies described in this proposal.

INTRODUCTION AND BACKGROUND

Total Purchasing sites will have considerable freedom to organise hospital and community services for their patients. One of the opportunities will be to optimise the organisation of care for mentally ill people. However, mental health services may be amongst the more difficult and expensive to configure. Sites have incentives to avoid both emergency and elective hospital admissions since they will have to pay for those admissions. There is likely to be pressure to reconfigure services provided within the primary care teams and by their related specialist mental health workers.

For practices joining the mental health extension to standard fundholding scheme (GPMH), mental health is a priority by virtue of their entry into the scheme. While the scope for change in GPMH practices in some ways falls short of that within TP sites, there are likely to be significant changes in admissions and in the nature of the care provided for the severely mentally ill.

The care and protection of severely mentally ill people is the subject of draft guidance issued in October 1994 by Health Care (Administration) Division 3 of the Department of Health. By severely mentally ill people the guidance paper means individuals who are suffering from some sort of mental illness (typically people suffering from schizophrenia or a severe affective disorder, but including dementia) who (i) suffer substantial disability as a result of their illness, such as an inability to care for themselves independently, or the inability to sustain relationships; (ii) are currently displaying florid symptoms, or are suffering from a chronic, enduring condition; (iii) have suffered recurring crises leading to frequent admissions or interventions.

Severely mentally ill individuals are relatively few in number but their illness causes a major burden to the patients themselves, to their families and to society. It is therefore important to assess service provision and outcomes for these patients in the Total Purchasing and GPMH sites, but some of the questions and comparisons inevitably involve more general views of processes and outcomes for all mentally ill people.

GENERAL AIMS AND METHODS

A national consortium is currently evaluating the impact of Total Purchasing on mental health care in four general areas:

- * study of strategic approaches and services provided;
- * study of the impact of purchasing decisions on outcomes for severely mentally ill people;
- * study of the impact of purchasing decisions on the work of primary care teams and specialist mental health workers;
- * study of the impact of total purchasing on service costs and efficiency.

The study will compare the initial position regarding services and strategies for mental health and illness at all Total Purchasing sites with the situation after the first year of operation. More useful information will be obtained if the study is extended to the second year of operation. Information will be collected in the initial general survey of Total Purchasing sites and using similar methods after one year and also later if additional resources are made available.

Although some information will be collected from all Total Purchasing sites, the studies involving the collection of information from professional staff and focus groups will be carried out on a sample. The choice of the sample sites, in relation to their special interest in mental health, will be made in accordance with a general policy decision reached by the consortium for all of its patient outcome studies in the total purchasing evaluation (see Appendix). The definition of a site with a special interest in mental health is that it should have an expressed interest in its business plan to reconfigure mental health services, or an informally expressed interest matched by an identifiable commissioning initiative.

Additional sites will be selected from those participating in the GPFH Mental Health In-Patient pilot study (GPMH) and similar methodology employed. Comparisons for both TP and GPMH will be required with reference GP fundholding practices. For TP sites with a special interest in mental health and GPMH sites, reference GP fundholders will be identified which use the same major provider of mental health services as the TP and GPMH sites, and which are so far as possible matched for rurality and social class mix of the practice populations. Details and justification for the types of comparison that can be made between different purchasing models are included as a separate paper which is attached as an Appendix to this proposal.

Some of the important information on reference GP fundholding practices may be able to be collected retrospectively from routine sources or as part of the initial data collection, especially where it relates to the purchasing plans of health commissions, or to configuration of secondary care services.

For the study of outcomes related to patients, methodology combining both limited quantitative data collection directly from patients and qualitative data collection from patients and other stakeholders within the community representing service users will be employed within the special study sites.

STUDY 1: STRATEGIC APPROACHES AND SERVICES PROVIDED FOR MENTAL HEALTH

This section of the study will address the following groups of questions, comparing Total Purchasing sites (with and without a special interest in mental health), GPFH practices, and reference GP fundholders initially and at follow-up:

- * *Accessibility:* are the services available to and planned for severely mentally ill people and to the professional staff caring for them different with respect to their range, including the Care Programme Approach, and what is relative role of TP and GPMH sites in influencing changes in service provision?
- * *Utilisation:* are there differences in the use of mental health services (referral and admission) between TP sites, GPMH sites and reference practices?
- * *Need assessment and information:* are there differences in the approach to need assessment and differences in relevant information systems within the district and the providers?
- * *Relationships with Authorities:* do the structural relationships with DHAs, FHSAs and Local Authorities (including housing agencies) differ?

Methods

Identifying sites, and aims of individual sites

Total purchasing sites with a special interest in mental health problems are being identified during an initial series of visits to all sites which are due to be complete by the end of 1996. GPMH sites have, by definition an interest in mental health problems. By a combination of telephone interview and site visits, standard fundholding practices will be identified which can act as reference practices for the TP and GPMH sites. The aims of individual sites will be established by a combination of information from their purchasing plans, and interviews with lead GPs and fund managers.

Accessibility of services

Information about *availability* of services will be obtained partly at the initial interview at every Total Purchasing site. Sufficient information will be needed at this interview to characterise current service provision for sites with a mental health interest to identify reference practices. This basic information on availability of services will need to be supplemented during telephone interviews in early 1996. Subsequent data on availability will be collected by questionnaire or

telephone interview focused on mental health problems with the Total Purchasing manager at every site in late 1996 or early 1997. Information will also be collected from key stakeholders and providers in GPMH sites in the first part of 1996, and subsequently, depending on when they have 'live' budgets.

The composite information collected from questionnaires and telephone interviews will cover details of provider contracts (which may tend to focus on more severely mentally ill people) and of services bought in to the site (which may tend to focus on more minor mental illnesses) and also the site's strategic aims and intentions for developments, including the Care Programme Approach. (The functioning of the CPA may be able to be assessed by asking sites specifically to collect data on the number of CPA meetings attended by GPs, this information being sought from practices or provider groups.) This part of the study will address all mental health services, not just those related to severely mentally ill people.

Information on *availability* of services will be collected from all Total Purchasing sites, allowing comparison between Total Purchasing sites with and without a special interest in mental health (see appendix). Contracts will be reviewed to assess what are the aims for the quality and provision of services, and also the criteria for assessing quality.

A different perspective on the *availability* of services will also be sought from all the Provider units related to a sample of the Total Purchasing sites with and without a special interest in mental health and from GPMH sites. By means of telephone interviews with Clinical Directors followed where necessary by personal visits, the relative contributions of the different purchasing models to changes in the availability and configuration of services will be defined, comparing the start-up period with one year later.

Utilisation of services

Information about *utilisation* of services will be obtained from hospital in-patient episode databases, focusing on admission rates and length of stay for patients with diagnoses in ICD9 Chapter V who are registered with GPs in each Total Purchasing site, in GPMH practices, and also in each reference site. These data will be analysed for April 1995 to March 1996, and for April 1996 to March 1997. Information will be sought from the study sites about any action taken to reduce admissions and length of stay, e.g. the employment of nurses to visit the in-patient units to expedite discharge.

For out-patient referrals information will be sought from the relevant providers including practices and Community Mental Health Teams by means of available databases (including practice billing systems) and also through individual Community Psychiatric Nurse workload schedules in the sample of Total Purchasing, GPMH and reference sites selected for special study. This will depend on the availability of routine nursing data being available from existing sources. Reliable

outpatient information will be difficult to collect because of the wide variety of types of secondary mental health contact, and it will not be possible to determine how much out patient data will be collected until individual sites are visited. Changes in outpatient utilisation rates are not essential to this part of the study.

Needs assessment and information systems

Information about *need assessment and information systems* including the use of registers will be sought by telephone interview or questionnaires to the relevant managers of each Total Purchasing, GPMH and reference site included in the sample for special study. This will be supplemented by telephone interviews both with the relevant managers of the providers used by the special study sites and also with representatives of the relevant Health Authorities or Commissions (the first contact being aimed at a Consultant in Public Health Medicine).

Relationships with Health Commissions and Local Authorities

Information about *relationships with authorities* will be obtained during the same telephone interviews of the relevant managers of each Total Purchasing, GPMH and reference site included in the sample for special study and with representatives of the relevant Health Authorities or Commissions (probably Consultants in Public Health Medicine). It will be supplemented by telephone interviews with representatives of the relevant Local Authorities and Housing Departments if information about those areas is not obtained via the Health Authorities.

The data collection exercise for Total Purchasing sites, GPMH sites and reference sites will be repeated after 12 months of operation of the schemes, allowing for identification of changes before and after the sites had budgets which included the full range of mental health services.

Sample size and power

In relation to strategic aims and configuration of services, data will be collected from all the TP and GPMH sites. For admission rates, data will be collected and analysed from routine data available at the National Casemix Office in Winchester. The sample size of both groups is fixed and any modest increase of statistical power from choosing more than one reference site for each TP or GPM site would add relatively little to the study. Power calculations were done on recent data from 2 East Anglian counties which had mean (geometrical mean) psychiatric admission rates of 0.8 and 0.4 admissions per 1000 patients per year. The study would have the power to detect a reduction in rates in TP sites to 0.55 and 0.3 respectively, i.e. a reduction in admission rate of between a quarter and a third (80% power, 5% significance). The power to detect changes in admission rates in GPMH sites will be less than this because of their reduced numbers.

Assessment instruments

Interview schedules will be drawn up as part of the overall approach to collection of information about the TP and GPMH sites, and related interview schedules will be used for visits and telephone interviews for follow-up, for the reference GP fundholders, and for the relevant Health and Local Authorities.

STUDY 2: THE IMPACT OF PURCHASING DECISIONS ON OUTCOMES FOR SEVERELY MENTALLY ILL PEOPLE

This section will address the following groups of questions relating to severely mentally ill people, looking at changes over time and differences between TP, GPMH and other GPF sites:

- * Are patient outcomes different as reported by patients and carers (including how many severely mentally ill people fall out of contact with the specialist services, and rate of unplanned admissions or readmissions)?
- * Do the accessibility and quality of services provided differ for patients between TP, GPMH and other GPF sites, and why?
- * Are there differences in the removal of severely mentally ill people from the practice lists?
- * Are there differences in the involvement of patients in the Care Programme Approach?

Methods

Methodology combining both limited quantitative data collection directly from patients and qualitative data collection from patients and other stakeholders within the community representing service users will be employed within the special study sites.

A sample of districts will be chosen which contain new study sites (either TP or GPMH). In each district qualitative methods will be employed to obtain views of key stakeholders representing service users (eg. National Schizophrenia Fellowship, MIND, Community Health Councils, advocacy and user groups, and other relevant local voluntary agencies) with respect to the questions of accessibility and quality given above, with specific regard to severe and enduring mental illness. These will identify the domains of quality regarded as important by the various groups, and explore the extent to which quality is judged to have improved as a result of changes which have actually taken place in the TP and GPMH practices. We will distinguish between views expressed as a result of knowledge of the management of individual patients, and views about care in general.

Some quantitative measures of patient outcome will be collected directly from a sample of patients but the extent of this is yet to be determined. The sample size required to inform a quantitative

comparison is beyond the scope and budget of this proposal but some data on direct service use are required to inform the economic analysis.

Assessment instruments

A trained and experienced senior researcher will use a semi-structured approach to addressing the relevant questions. The interview exercise will be repeated after 12 months, again giving the opportunity to examine longitudinal changes. A final decision has not yet been taken on whether these interviews will take place on a one to one basis or in groups.

STUDY 3: THE IMPACT OF PURCHASING DECISIONS ON THE WORK OF PRIMARY CARE TEAMS AND SPECIALIST MENTAL HEALTH WORKERS

This section will address the following question, based on the CPNs working in relation to the selected sample of TP, GPMH and reference sites, with follow-up at one year:

- * Are the mental health nurses targeted more explicitly on the most severely mentally ill people?

Methods

CPN working with mentally ill people on the practice lists at the selected TP, GPMH and reference sites will be identified at visits to the practices. The staff will be interviewed at their practice site twice, during Spring and Summer 1996, and one year later.

As in Study 1, questions will address the balance of use of resources within practices including purchasing from providers and buying in staff to work in the practices. However, more detailed information will be collected from staff, and may include some detailed collection of workload data. It is important that this section of the study addresses all mental health problems, not just those related to severely mentally ill people, as different purchasing models may alter the balance of CPN care committed to serious and less serious forms of mental illness.

Sample size

The data collection and analysis for this study will be mainly descriptive. Since a deliberate decision has been made to study a small number of sites in greater depth, the power of this study to detect quantitative differences in workload will be limited.

Assessment instruments

Interview schedules will be prepared for the mental health nurses, relating to their work and to patients whom they see. These will be based on the work of Butterworth who also works with the National Centre in Manchester.

STUDY 4: IMPACT OF TOTAL PURCHASING ON SERVICE COSTS AND EFFICIENCY

This part of the study will be carried out in collaboration with the economists involved in the Total Purchasing Evaluation Consortium (John Posnett, York; Julian LeGrand, LSE; Gwynn Bevan, Bristol; James Raftery, Southampton). The aims of the economic aspects of this study are:

- * to examine service cost implications of any differences in service use by TP, GPMH sites and their comparators;
- * to explore the link between costs and outcomes.

Data will be collected on the NHS resource use by TP sites, GPMH sites and their comparators. Only direct costs will be considered, i.e. those that fall within the NHS or Social Services. Indirect costs (i.e. those incurred by users and informal carers) are beyond the scope of this study, given the resources available. The study will compare study sites to controls and will compare the initial position regarding services for mental health and illness at all study sites with the situation after the first year of operation.

Methods

Physical resource use

Data on the physical quantities of resources will be as far as possible collected prospectively as part of Study 1. Inpatient data including admission rates, length of stay and destination on discharge will be collected from HES data. For outpatient referrals and other services information will be sought through a combination of the Community Mental Health Team and individual Community Psychiatric Nurse workload schedules. Until individual sites are visited it will not be clear to what extent such data can feasibly be collected.

The evaluation of Total Purchasing includes assessment of transaction costs. It is not proposed to replicate this for GPMH sites, since contracting just for inpatient mental health services is unlikely to represent a long term purchasing model.

Unit costs

For unit costs, there is a choice of obtaining estimates from the sites themselves or of using nationally available data. The PSSRU have already undertaken an extensive review of unit costs within Mental Health and it would seem appropriate to draw upon this resource (Netten A, Detten J. Unit Costs of Community Care. PSSRU, 1995; see attached Table). However, unravelling the impact of local practices on prices might show that more high cost resources also deliver more effective care than those employed in the field more generally. We expect to collect some data locally on the prices of individual contracts, though comparisons will be restricted to contract prices rather than trying to cost each individual item of resource.

Outcomes

Measuring outcome and determining to what extent any differences in outcome are directly attributable to differences in service costs is complex. Although the evaluation will not be a full cost-effectiveness analysis it will describe any differences in outcomes detected in Study 2 and compare these with any differences found in overall service costs.

FUNDING FOR THE GROUP OF FOUR LINKED STUDIES

Some of the basic information for the first study is supported by funding from other parts of the total purchasing project. However further data collection from GPMH sites and comparators and visits to provider units involving a senior researcher will be needed as well as secretarial support and researcher's time for analysis and writing up.

For the second study an experienced researcher will again be needed to collect the qualitative and quantitative data at the study sites.

For the third study visits to the selected sites will once more be needed, involving an experienced researcher.

A composite budget for the first three studies is therefore as follows:

Experienced research assistant , 1.0 wte, 2 years	£48.0K
Senior Researcher's time, 0.1 wte, 1 year	£6.7K
Secretarial support, 0.2 wte, 2 years	£5.6K
Overheads at 40%	£24.1K
Travel and subsistence	£8.0K
Stationery, telephones etc.	£4.0K
TOTAL	£96.4K

The field work would begin in January 1996, related to the lead-in period for Total Purchasing, for visiting GPMH practices and establishing a baseline for Total Purchasing and reference sites. Visits to the providers on the one hand, and to stakeholder groups on the other, would be spread evenly over the 18 months after April 1996, giving a 12 month follow-up for the various sites which would be entered into the study in a staggered manner. Time for analysis would also be allowed within the on-going survey work. The final writing up would occupy the last 3 months of the 2 year study.

Identical methods would be used to study standard fundholding which was extending to include mental illness in-patient treatment. Therefore there would be economies of scale and the time frame would also be identical.

The present funding proposal is for two years. The power of the study to detect differences between the purchasing models will be considerably enhanced if funding becomes available for an additional year, as this will give more time for service reconfiguration to take place.

Appendix

Design issues in the evaluation of purchasing models: specific issues from the overall evaluation of Total Purchasing (TP) relevant to the mental health extension of standard fundholding (GPMH)

Two important design issues need to be considered in the evaluation of Total Purchasing. The first relates to the comparisons to be made and the choice of total purchasing sites for these comparisons, and the second relates to the choice of reference practices. These issues are relevant to all parts of the total purchasing project where we intend to study a small group of practices (eg mental health, maternity, A&E, community care, prescribing, transaction costs), but also to analyses which will involve all total purchasing practices. These issues are relevant to the research questions which are being addressed in the evaluation of GPMH practices.

1. Choice of comparisons to be made

1.1 Parts of the study where data are available for all practices

For some aspects of the study, we will be looking at all total purchasing sites and GPMH sites. These include the nature of services being purchased, relationships with health commissions etc. In these parts of the study, the unit of both data collection and analysis will be the site rather than the individual practice, although there will be limited opportunity to examine variation within sites. In relation to services purchased, comparisons in these areas will be able to be drawn between what the TP sites are doing, and what their host health commissions are doing for on behalf of the patients of non TP practices.

For the routine data on referrals, admissions and length of stay, the unit of analysis will be the individual practice. Certainly no attempt should be made to analyse by individual referring GP because these data are unreliable. Because data are available by practice, we will have the opportunity to analyse differences within sites and between sites as well as differences between TP sites GPMH and reference practices (see below). We should make use of this opportunity, since within site variation may be large. We will also have the opportunity to look specifically at individual groups, eg. Sites which have a specific interest in mental health. The appropriate comparisons will then be of rates within sites with a special interest, between special interest TP sites and TP sites without a special interest, and between TP sites GPMH and reference practices. We may also have the opportunity to examine differences between large and small sites, and differences between sites where a wide range of services is being purchased contrasted with those where purchasing responsibility is only being taken on for a narrow range of services.

1.2 Parts of the study where data will be collected from selected practices.

For the study of TP sites with a special interest in mental health services and GPMH practices, we will be selecting a small number of sites for more detailed study, and in each case we are likely to have to focus on one or two practices within any one site. In each case, our resources will only allow us to study a relatively small number of practices, probably ranging from 3 to 10. There is then a question of whether the TP practices selected for special study should be randomly selected or selected from among those with a special interest in a particular field. A working definition of a site with a special interest is that it should have an expressed intention in the business plan to reconfigure services in that area, or an informally expressed interest which is matched by identifiable commissioning initiatives.

It would be possible to compare randomly selected total purchasing practices with reference practices to identify the overall effect of total purchasing on one particular service. These could also be compared with GPMH practices. However, this would risk missing important effects, especially as our study is confined to the first year of total purchasing, and sites are only going to have the time and energy to address a few issues within their purchasing strategy - the rest of the contracts are likely to be largely unaltered in the first year. Because of the short term nature of the study, it would be preferable to seek maximal effects rather than average effects across the whole group of total purchasers.

The alternative is to focus specifically on practices which have a special interest in a particular area. If practices selected for study are those with a expressed special interest (eg. in mental health problems), and these are compared to reference practices who are neither total purchasers, nor have a special interest in mental health, then we are measuring the combined effect of being a total purchaser and wishing to produce change in mental health services. The results of our analyses will be criticised on the grounds that we are unable to distinguish between these two possible drivers of change. The analyses would answer the question 'What could be achieved by a practice that both has an interest in mental health and is a total purchaser?'. Likewise, study of GPMH practices will also address this question since these practice have specifically applied for a mental health extension to standard fundholding. The effects seen are likely to represent the maximal effects that could be achieved within the parameters which we are examining. This is a valid approach, but we need to acknowledge that the effect of both purchasing model and special interest in mental health is being measured.

Isolation of the special interest effect might be achieved by comparing TP practices with a special interest with non TP practices who also have the same special interest. However, it is likely to be very difficult to identify reference practices which have explicit objectives to change the services in a particular area - so comparison with non-TP special interest practices is unlikely to be feasible. Furthermore, an attempt to identify local non TP practices which share a common special interest with the TP practices implies that 'special interest' and 'total

purchasing' are independent variables: this is not the case as some practices may have gone into total purchasing precisely because they wish to produce change, and furthermore, these changes may impact on the District as a whole, the 'Vanguard' effect. For this reason, it would be desirable in some cases to compare TP sites with practices in districts which do not have TP sites.

It will be possible to examine the effect of special interest within total purchasing sites. Comparisons could be made between total purchasing practices with a special interest (eg. in mental health) with those who do not have not expressed a special interest. This would isolate the special interest effect from the total purchasing effect, and would be the most efficient way to disentangle the special interest effect from the total purchasing effect.

Where resources permit, the following comparisons should be considered:

- I. All total purchasing practices versus all other practices in the district
- ii. Total purchasing sites with a special interest in a particular area, and GPMH practices, against selected reference practices
- iii. Total purchasing practices with a special interest against total purchasing practices without an expressed special interest in that area.
- iv. Total purchasing practices with a special interest against reference practices in districts without any TP sites

In practice, it is likely to be neither feasible nor desirable to collect data for all four comparisons for each of the subjects to be studied. The following matrix suggests which comparisons might be feasible. It relates specifically to the Total Purchasing evaluation.

In each case, what is actually done will be dependent on the resources available. Within any individual column, comparisons in the rows nearer the top of the table will in general take priority over comparisons in rows lower down.

This table also puts the mental health evaluation in the context of other parts of the total purchasing project.

	Range of services provided	Routine activity data	Service efficiency	Transaction costs	Mental health	Community care	Maternity services	Prescribing	A&E
All TP practices / GPMH practices versus all local non TP GPMH practices, ie rest of district	*	*	*	*	Data in previous columns only	-	-	*	?
Special interest TP practices / GPMH versus selected local reference practices	-	-	-	-	*	*	*	-	*
Special interest TP practices versus non special interest TP practices	*	*	-	-	*	*	*	-	*
Special interest TP practices vs health districts without TP	?	*	?	*	-	?	?	*	-

Table 1. Possible comparisons to be drawn in each of the major study areas

Although comparisons marked with a question mark on the bottom line look difficult to make, there may be opportunities to choose research instruments to facilitate comparisons with other widely based studies, eg. The audit commission survey of maternity services, PSSRU survey of community care, National Primary Care Centre's work on 24 hour emergency centres.

2. Choice of reference practices.

In parts of the study where a small number of practices will be selected for more detailed study, greater attention needs to be given to identification of reference practices. In general, reference practices should be chosen from the same region, and they will often be from the same district. In each case, important factors to be controlled for should be considered under the main headings of:

Nature of provider market

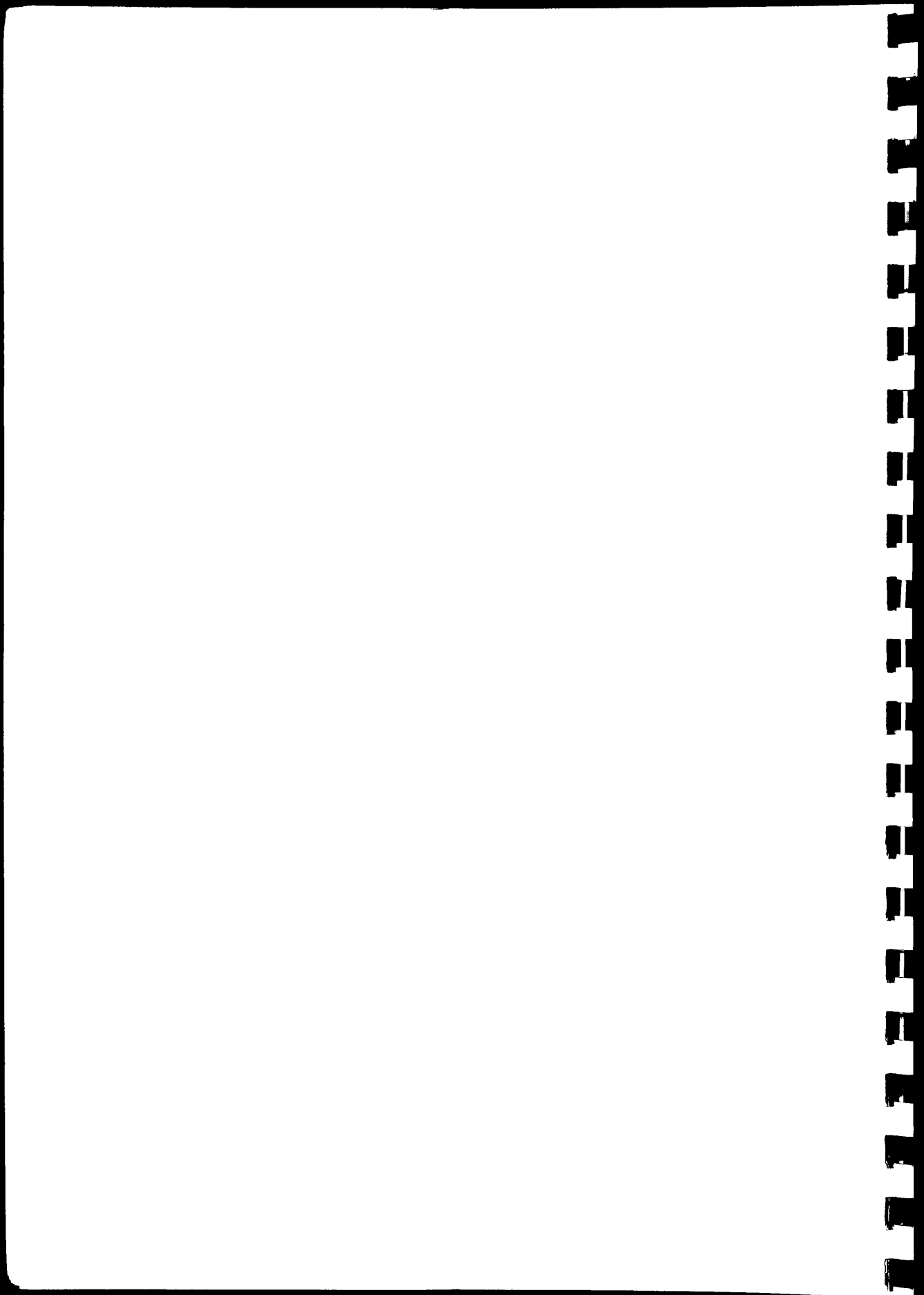
Characteristics of practice / population

Some of the factors to be selected under each of these headings are suggested in table 2. In each case, our ability to control for more than three or four characteristics may be severely limited. For a number of studies, ie mental health, community care, A&E and maternity, the major change being examined is an alteration of the configuration of services from secondary care or social services providers. It is therefore important that the reference practices should be chosen who use the same provider, eg mental health services, maternity hospital, social services department etc. A second important factor to consider may be rurality, as within one district, urban practices may have very different access to services compared with rural practices. A third factor is the social class mix of the practice population. This may be important if total purchasers start to purchase some types of care from the private sector, and is highly likely to be related to use of social services and A&E.

	Mental health	Community care	Maternity services	A&E
Provider market	Existence of community mental health team, or psychiatrist as main route of referral	Pre-existing high/low residential care provision	Single large maternity hospital / existence of local GP delivery facilities / type of midwifery care	Community hospital / other minor injury provision
Practice/ population	Social class Rurality	Social class Age structure of population	Social class Rurality Age structure of population	Social class Rurality

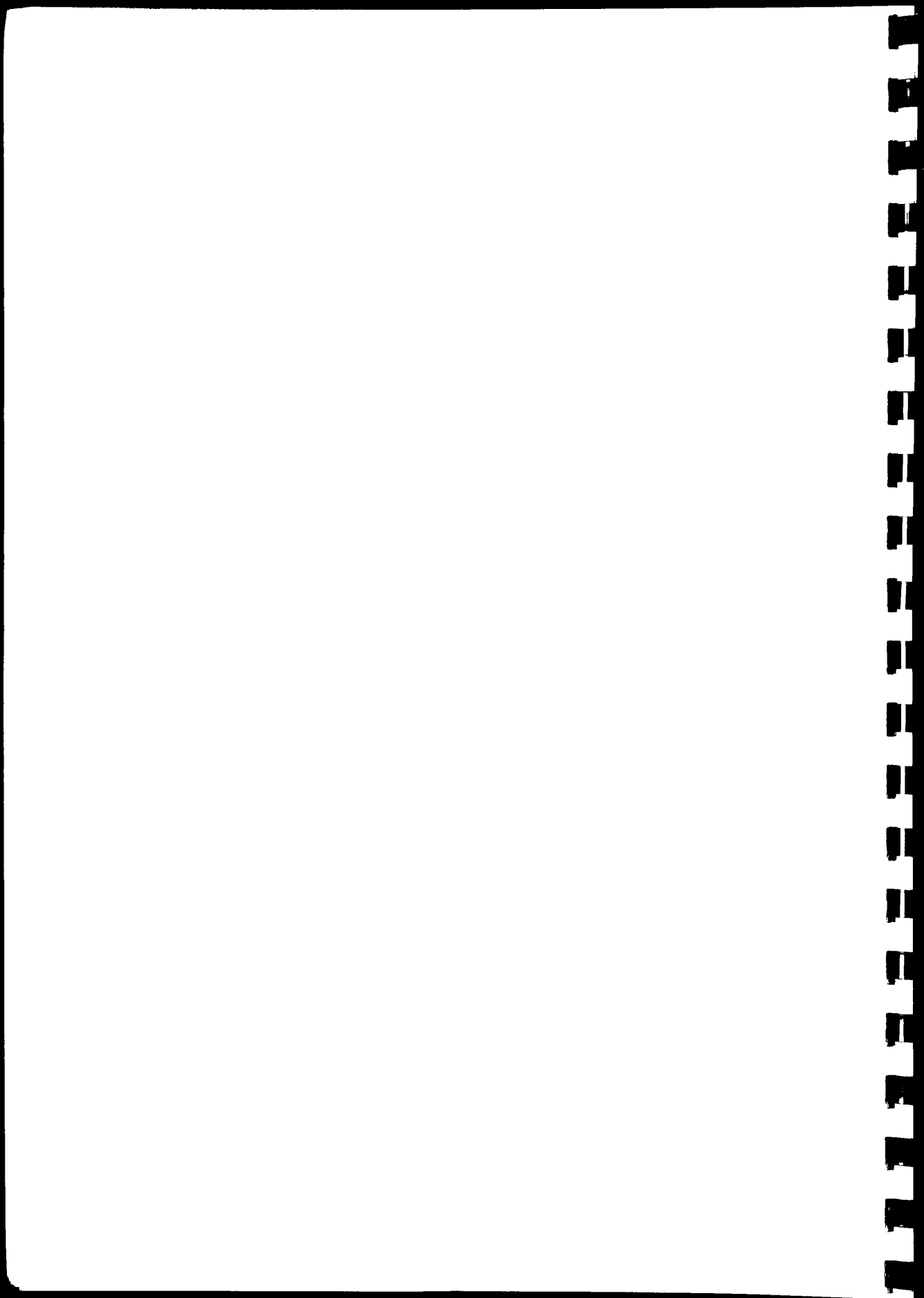
Table 2. Factors to be controlled for in selection of reference practices

These notes have contributed to the development of the evaluation protocol on the impact of purchasing models on mental health services. They are included to indicate the issues which have been considered in deciding how most effectively to mount the evaluation described in the accompanying proposal.



**NATIONAL EVALUATION OF TOTAL
PURCHASING PILOT SCHEMES
1995-1997**

**SERVICE PROVISION, OUTCOMES AND
COSTS FOR PEOPLE WITH COMPLEX
NEEDS FOR COMMUNITY AND
CONTINUING CARE**



7.4

TOTAL PURCHASING EVALUATION TRACER STUDY

SERVICE PROVISION, OUTCOMES AND COSTS FOR PEOPLE WITH COMPLEX NEEDS FOR COMMUNITY AND CONTINUING CARE

January 1996

Lead: J Popay, NPCR&DC at Salford

Research team: J Popay, J Girling, NPCR&DC (Salford & Manchester), Andrea Campbell, Sefton HA, Julian Le Grand, Kings Fund Policy Institute & LSE (Cost/benefit study).

INTRODUCTION

The aim of this proposal is to evaluate the extent to which TPP sites can deliver demonstrable improvements in the planning and provision of community and continuing care services for elderly people with complex needs. 'Complex needs' in this context are defined as the needs of those people who are assessed as eligible for packages of health and social care with the aim of enabling them to live 'independently' in their own homes. This will include a focus on the provision of NHS continuing care within this context. The study will compare the performance of Total Purchasing Pilot (TPP) sites with HA responsibility for Community and continuing Care in the context of Standard Fundholding (SFH) sites.

The study has a focus on: (i) strategic developments; (ii) organisational arrangements; (iii) contracting activity; (iv) service delivery; and (v) the costs and benefits of services. The study is divided into three stages. Stage 1, identifying planned activity in relation to community & continuing care on TPP sites, is underway at present. Stage two has a primary focus on strategic development, organisational arrangement, contracting and patterns of service delivery in relation to community and continuing care on a sub-sample of TPP sites. During this stage, which would take place between April 1996 and March 1997, patients and carers experience will be explored using qualitative methods. A third stage involving a more formal cost benefit analysis is also proposed for 12 months beginning in April 1997.

This design has been strongly influenced by constraints on time and resources. The proposed work with patients and carers during the second stage would provide important qualitative insights in their experiences. However, without the third stage, the proposed evaluation would not provide any quantitative information on the costs and benefits of TPP in the areas of community and continuing care. The cost-benefit analysis proposed in the third stage of this study would also be limited. To obtain the detailed information on health status impact required for a full-scale cost-benefit study would require a complex and extensive study design with considerable resource implications. However, the modest proposal outlined here would provide an important indication of any relative gain achieved by TPP sites over SFH/HA purchasing of community and continuing care.

BACKGROUND

The NHS and Community Care Act (1990) introduced a new system for the planning and provision of community care. It made local authorities responsible for co-ordinating community care provision to 'enable people affected by ageing or disability to live as independently as possible'. The Act placed primary responsibility for planning, much of the provision and, therefore the funding, with local authorities. However, the legislation also specified that at both strategic and operational levels local authorities should work closely with health authorities.

Since the introduction of the legislation, health authorities have been involved with local authorities in a wide range of strategic work on community care. This has included the production of annual community care plans, market management and financial planning as well as policy development in relation to particular population groups. Operationally, health authorities have also worked with local authorities on a wide range of issues including the development of the assessment process and monitoring and improving discharge procedures, as well as jointly commissioning specific services. Whilst it is not possible to give figures, it would appear that health authorities are allocating proportions of their HCHS resources to community care beyond those traditionally allocated to community health services. In partnership with local authorities, health authorities are also gaining access to a wide range of non-mainstream sources of funding to support developments in community care provision.

Primary and community health services (including but not restricted to community nursing) make an important contribution to community care beyond the direct provision of services. In particular, they act as gatekeepers to the community care assessment process, as advocates for patients within this process and they are variously involved in the assessment process itself.

The NHS is also involved in the commissioning and provision of long term care for some groups of patients, clearly an area with close links to community care. NHS continuing care has been the focus of considerable discussion since the 1990 Act was implemented, and as long stay beds have been closed. The recently published guidance on NHS continuing care (Circular HSG(95)) is aimed at clarifying areas of responsibilities between the NHS and local authorities. Health authorities have been charged with establishing and agreeing eligibility criteria for NHS continuing care with local authority and GP involvement by April 1996.

TOTAL PURCHASING AND COMMUNITY CARE

Given this background, it is clear that Total Purchasing could involve greater powers and responsibilities for the commissioning of community care services than are made available to SFH. Within the overall framework of the joint commissioning arrangements between the health authority and the local authority, TPP sites can assume a significant role in the planning and purchasing of community care for their patients. TPP sites will also have new responsibilities for long stay/continuing care provision. Although this has to date been viewed in terms of the provision of NHS hospital beds, discussions about this area - particularly following the continuing care circular - are increasingly recognising that much continuing care may be appropriately provided outside hospitals within residential/nursing homes and within a domiciliary context.

Not all of the TPP sites will chose to focus attention on the community/continuing care area in the first year. However, there are some sites which have expressed an intention to give priority to work on services for frail elderly people and/or work with local authority social services. Detailed study of a sample of these sites will allow the evaluation team to consider the potential of TP to improve the cost-effectiveness and appropriateness of the NHS contribution to community and continuing care services.

It is also important to note that there are other (non TPP) models of commissioning throughout the UK (e.g. Locality Commissioning) through which primary care providers are actively involved in the commissioning of community care. These parallel developments provide an important context for the work described here. Many of the problems associated with the engagement of general practice with community care are not necessarily related to whether or not a practice is a fundholder. The NPCR&D Centre is presently considering what work it will undertake in relation to these alternative models of commissioning and the study proposed here would be conducted in close association with any related research at the National Centre and opportunities for comparative work would be explored.

It is not possible at this stage to describe in detail the range of potential TPP initiatives in the area of community/continuing care. There may well be incentives for TPP sites to get patients out of hospitals or to avert admissions by investing in domiciliary support to maintain people in the community. TPP sites may also be prepared to make greater use of private and voluntary sector services. There is also the possibility that TPP sites will attempt to shift costs onto the local authority, making their involvement in the discussions on the criteria for NHS continuing care and their implementation very important. At present HA are consulting on their guidelines/criteria for providing continuing NHS care. It will be important to explore the nature and extent of TPP sites involvement in this process and the subsequent implementation and operation of agreed guidelines.

Whilst the analysis of routine activity data at all TPP sites (see section 5.2. of main evaluation proposal) will enable some monitoring of the use of long term care by TPP sites compared to other purchasers, many of the potential changes in care options will not be captured fully by routine systems and will require data collection at the site or practice level. A further reason for detailed research on community and continuing care in a small number of TPP sites is the fact that the choices made by TPP sites are likely to be sensitive to the relative costs of care packages. In the case of elderly people with complex health and social care needs, community domiciliary care can often be more costly than nursing or residential care with hospital care more costly still. However, there are substantial local variations in these relative costs which are best explored in detailed case-study work.

OBJECTIVES

The objectives of this part of the nation-wide consortium evaluation of TPP is to compare strategic and operational developments around community and continuing care and to consider patient and carers experience at a sample of TPP sites with the situation in SFH sites in the Health Authorities within which the TPP sites are based. The comparison would be in five key areas.

- (i) the nature and extent of involvement in strategic development of policy in relation to community and continuing care policy;
- (ii) organisational developments to plan, manage and deliver continuing/community care.
- (iii) commissioning activities (including contracting) in relation to continuing/community care.
- (iv) patients' and carers' experience of and satisfaction with the services received; and
- (v) the cost-effectiveness of packages of care.

The study consists of three stages. The first stage - which is already underway - is designed to provide a broader context for this evaluation and to identify and describe a sub-sample of TPP sites for this study. This stage is funded by the National Primary Care R&D Centre. The second stage will consist of an evaluation of strategic/organisational developments and commissioning activities in relation to continuing and community care compared to related activities in the wider HA/LA area in which the study TPPs are located. This stage will also involve qualitative work on the experience of patients and carers. A third stage will involve a cost/benefit analysis of packages of care and will depend on the extension of the core evaluation into a third year.

STAGE 1: MAPPING THE TERRAIN

An initial exploratory stage, supported by the NPCR&D Centre has already begun and will be completed in January 1996. This is building on the initial contact visits and first round of interviews conducted by the core evaluation team in Autumn/Winter 1995. During these contacts and interviews information is being collected on plans for work with community/continuing care and/or local authorities.

The exploratory stage of this study has the following specific objectives:

- (a) to confirm the identification of TPP sites expressing a special interest in community/continuing care issues and summarise what they are planning to do and what progress has already been made
- (b) to collect information on the key characteristics of these sites (e.g. demographic characteristics of the population, nature of local community care 'market', etc.).
- (c) to describe the relationship between these Special interest TPP sites and their HA/LA in relation to community/continuing care.
- (d) to summarise the nature of the relationship between SFHs and the same HA/LA in relation to community/continuing care.

In addition this work will identify locality commissioning groups with a special interest in community/continuing care and describe their activities and the relationship between these groups and HA/LA activities in this field. This information will inform the development of the NPCR&D Centre's research programme.

For the purpose of the study described here, this stage of the project will identify the special interest TPP sites for inclusion in the community/continuing care evaluation and help to clarify some of the outstanding detailed questions with regard to the design of this study.

STAGE 2: THE FORMAL EVALUATION: STRATEGIC/ORGANISATIONAL DEVELOPMENT, COMMISSIONING ACTIVITIES AND QUALITATIVE ASSESSMENT OF PATIENT AND CARERS EXPERIENCE

Following the exploratory stage, stage 2 of this evaluation will focus on a sub-sample of TPP sites expressing a special interest in community care/continuing care/elderly people (that is sites which have included reference to the reconfiguration of services in this area in their business plan or are involved in an identifiable commissioning initiative). On the basis of current knowledge, it would appear that around 10 of the TPP sites intend to concentrate on continuing/community care in the first year - referred to as 'special interest TPP sites'. The proposed work would involve four case-study sites. Castlefields, the Runcorn first-wave TPP site, is also focusing on issues to do with continuing and community care. This site is being independently evaluated by Professor Maggie Pearson and the study proposed here would be developed in close collaboration with Professor Pearson's team.

The experience of patients and carers would be explored in particular practices within two of these case study special interest TPP sites. It would be limited to the experiences of people aged over 75 and would involve qualitative research methods with a small sample of elderly people and their carers.

Data on strategic developments and the management and delivery of services will also be sought from two reference SFH practices where continuing and community care commissioning is undertaken by the same health authority covering the TPP site and where the same local authority is involved.

Finally, the evaluation team is considering the possibility of comparing key indicators of change relevant to continuing and community services (for example, admission and re-admission rates among the elderly, lost bed days, length of stay etc) for all of the TPP sites and reference SFH sites as part of the analysis of routine activity data (see section 5.2 of main proposal)

The choice of sites and practices within sites is obviously important. This is being addressed across the evaluation as a whole in a systematic way (as discussed in section 3 of the main proposal, especially Tables 3.1 and 3.2). In terms of this component, when choosing the 4 case-study sites it will be necessary to take account of variations between TPP sites in the policies and assessment procedures used by local authorities, in the historical relationship between the local authority and the NHS in general and with the general practices in particular; and, in the local community care market, particularly the scale of provision of residential/nursing homes. The research would also need to take account of variations in the socio-demographic characteristics of practice populations.

This stage of the evaluation is concerned with: strategic and organisational developments and management arrangements; contracting activities; the delivery of services and patients and carers experience.

(i) Strategic and Organisational Developments, Management Arrangements and Contracting Activities.

This aspect of the proposed study would be concerned to answer the following questions comparing TPP sites with a special interest in community/continuing care with reference SFHs/HA commissioning.

- Are organisational arrangements and relationships between health and social services for the purposes of community and continuing care planning different in special interest TPP sites compared to SFH/health authority commissioning? If they are, in what ways are they different and what are the implications for community and continuing care planning?
- Are the processes of assessment and care management organised any differently in TPP sites with a special interest compared to the surrounding health authority area?
- Do special interest TPP sites invest in different patterns of continuing and community care in conjunction with local social services compared to SFH/health authority commissioning? If so what are the characteristics of these patterns?

As part of the 'core' evaluation (see section 4 of main proposal), information on strategic and organisation issues, on purchasing intentions and contracting activities for all TPP sites is being collected via semi-structured interviews (with lead GPs, sites managers, HA leads and LA contacts) and collation of routine documents. This information is being collected in autumn/winter 1995 and approximately twelve months later. It will contribute to the selection of the special interest TPP sites for more in-depth work. The initial data collection during the core evaluation will also provide information for all TPP sites on the nature of strategic developments, organisational arrangements and contracting activity relevant to community/continuing care.

In addition to data collected during the 'core' evaluation, there will be data collection specifically for this component at the case study TPP sites and for the HA/LA area within which the TPP is located. This will include the following:

- Collation and analysis of documents include business plans, purchasing plans, community care plans, draft continuing care policies, annual reports and health authority/board minutes.

- A further round of semi-structured interviews focusing particularly on community continuing care with the same respondents involved in the 'core' evaluation, as well as with other respondents directly involved in strategic planning and delivery of continuing and community care on the case study sites. These would include, for example, people involved in the voluntary sector, care managers and district nursing staff. These interviews would take place in the second year of operation - April 1996-March 1997 - during an extended site visit on each of the four case-study special interest TPP sites. These can be expected to last 2-3 weeks - that is 12 weeks of fieldwork in total. During this time research staff may also be involved in participant observation of key meetings between practice and LA staff where opportunities present themselves. There is not the time on this study to conduct observation of meetings on a more systematic basis. Time constraints also limit the study to one round of data collection, in addition to those associated with the core evaluation. If the core evaluation is extended into a third year consideration will also be given to collecting some additional data perhaps through telephone interviews.

The analysis of these data would focus on:

- the arrangements put in place within TPP sites, HA and LASSDs for the development of policy for community and continuing care;
- the nature and form of contract negotiations and the contracts agreed;
- the extent to which priorities within community and continuing care are complementary across agencies;
- the degree of shared information; integrated information systems;
- the degree of shared assessment processes;
- the degree and level of joint budgeting;
- the degree of integrated service provision;
- and, use of HCCHS for continuing/community care.

This work will begin in the Spring of 1996, when the 'core' evaluation site visits are completed. If a third year is agreed for the core evaluation the work with the case-study sites could extend into the third year so that developments at the sites can be evaluated to maximum effect.

The Impact on Services

Analysis of Routine Data

An analysis of routine data on activity and prescribing (see section 5.2 and 5.3 of main proposal) is being undertaken to explore the impact of TP on the quality of care. The scope for exploring quality issues in relation to continuing and/or community care in this way will be limited. However, it may be possible to look at some key indicators using routinely collected HES data or other such data collected locally. This might include length of stay amongst key patient groups (for example, the very elderly), lost bed days, use of nursing homes, and admissions and re-admissions. The scope for undertaking special analysis of routine data collected by the sites involved in this study, the SSDs and local acute and community providers, will have to be explored once the study has begun. It might also be possible to analyse contracts collected from the special interest TPP sites and the local health authority for evidence of differences in the patterns of services purchased in relation to continuing and/or community care. This work can begin early in 1996 once the special interest TPP sites have been identified.

The Experience of the Primary Care Team

In order to explore the impact of developments in continuing and/or community care on the workload of primary care teams, interviews will also be conducted with selected members of a small number of primary care teams and related social services staff during the case-study fieldwork visits. These teams would be chosen to reflect practices within the four case-study TPP sites where considerable changes in relation to continuing and/or community care appear to be underway and those where little change is visible.

Qualitative Assessment of Patients and Carers Experience.

In order to reduce the heterogeneity within the patient sample, work on the experience of patients will be restricted to the experience of frail elderly people and their carers. This also allows consideration of the data in the light of the National Evaluation of Community Care for Elderly People being conducted by Professor Bleddyn Davies and his team at PSSRU at the University of Kent. The focus on carers is important as there is now a considerable body of research which suggests that their experience of support is a crucial factor in admissions to hospital and residential/nursing home settings.

During this stage of the proposed evaluation of TPP and continuing/community care the experience of patients and carers would be explored using a qualitative approach. In-depth interviews would be conducted with five patients and where appropriate their carers, from selected practices in two of the four case-study areas - a maximum of 20 interviews from TPP sites. These would be the same practices in which the primary care teams were interviewed. Patients would be selected as having recently undergone a community care assessment for complex health and social care needs and being in receipt of a package of services designed to support them in their own home. They would be approached through social services and the care manager would be asked to obtain consent at the time of assessment. Cases would be chosen to reflect differences in levels of dependency, route of referral and packages of services. Cases of organic mental illness would not be included and the Care Manager would be asked to exclude individuals who would be unable to complete an interview. Interviews would explore experience of the assessment process and service delivery - including issues of involvement, choice and satisfaction - and the direct and indirect costs incurred by patients and carers. Carers would be interviewed separately to explore the extent to which they feel their needs are being met. For comparison, and if access can be obtained, a similar number of people from a reference SFH practice in the same HA/LA area would be conducted - a further 20 interviews maximum.

STAGE 3: AN ANALYSIS OF COSTS AND BENEFITS

If the core evaluation is extended into a third year this will provide an opportunity to consider the cost-benefit aspects of the development of continuing/community care within TPP. Although it is not feasible to design a health status outcome study within the time and resource constraints of this study, it would be possible to collect patient information on levels of satisfaction (including involvement in the assessment process, choice, service delivery and quality) on a sample of people aged over 75 through a self-completion questionnaire - to be completed by either the elderly person themselves or a carer. Such a questionnaire could be sent by post or delivered through the general practice and/or community health professionals. At the same time information could be collected on the package of services agreed for the same sample of people as a result of a community care assessment, so allowing a limited, though non-the-less useful cost/benefit analysis to be conducted.

The sample would be constructed by taking all people referred to social services for a complex needs assessment (through whatever route) over a period of time and as a result receiving a package of health and social care services. A sample of around 200 patients of TPP sites would be needed for the analysis and a similar size comparison group of patients. The sample would be drawn from all practices at a number of case-study TPP sites. The number of TPP sites would be determined by calculating the numbers of people referred for a complex

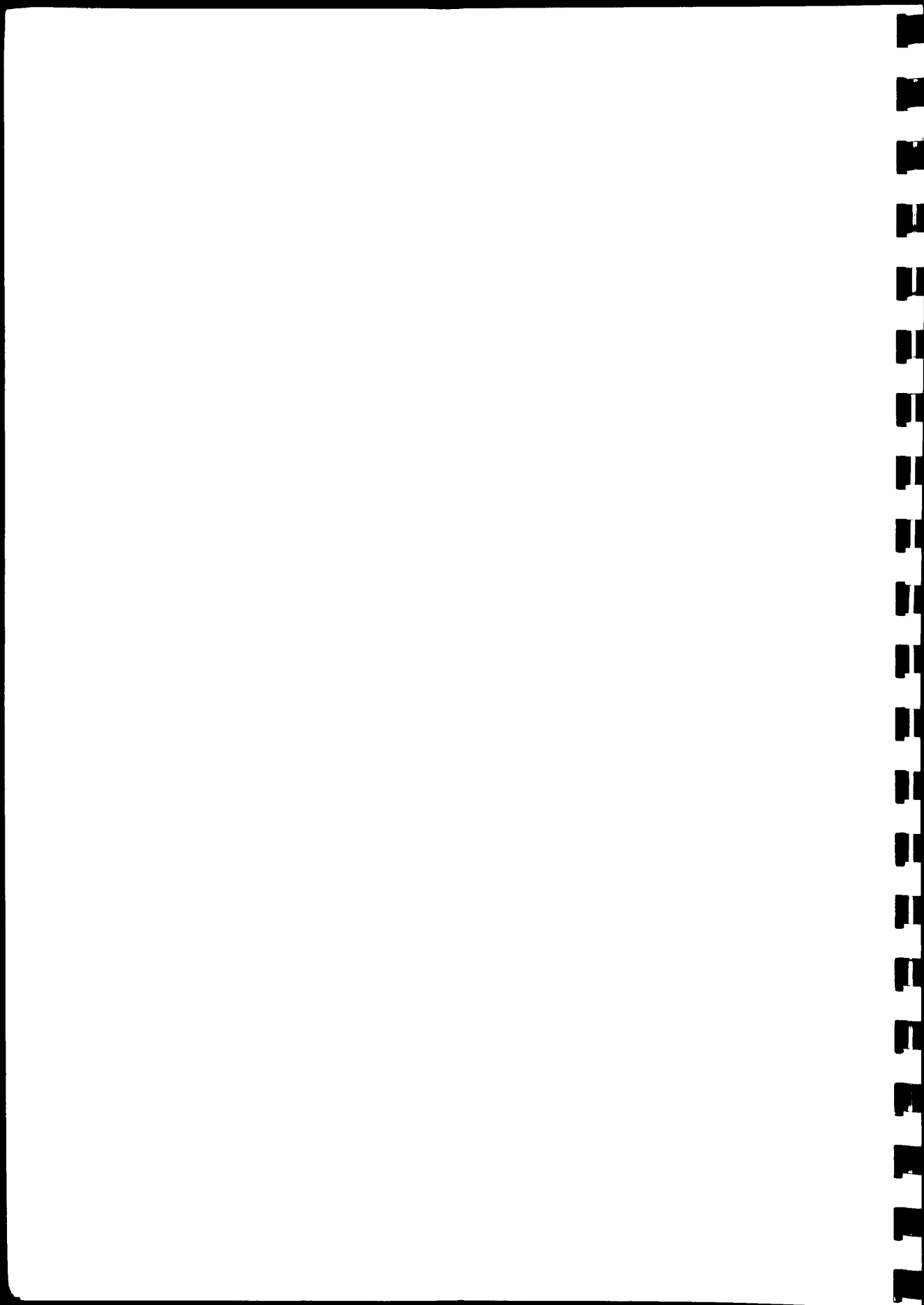
community care assessment over a period of 2 months. It should be remembered that the TPP sites vary considerably in terms of the populations involved and the populations covered by the case-study sites is not yet known. For comparison purposes a similar sized sample would be obtained from assessment referrals in the wider HA/LA area in which the case-study TPP sites are located. People would be identified, and consent obtained by the care manager at point of assessment. People judged by the care manager to be incapable of completing a questionnaire (or unable to give responses to questions verbally) would be excluded from the sample.

In order to maximise response rates, the questionnaire would be kept as short as possible. It would include simple closed questions on levels of dependency, activities of daily living, the experience of assessment and service delivery and the nature and scale of informal care received. Information on the direct and indirect costs to patients and carers will also be collected if piloting suggests this is feasible. The questionnaire will be designed to be completed by the elderly person themselves or somebody else on their behalf. This is not an ideal situation but is the only practical approach in the context of the present study. The feasibility of delivering the questionnaire through primary care and/or social service contacts would be explored. A combination of postal and hand delivery may be utilised. Past experience of postal surveys of older people within the Public Health Research and Resource Centre suggests that with careful attention to questionnaire design and two postal reminders, response rates of between 55 and 65% can be achieved. A small sample of non-responders would be followed up by telephone or face to face interview to allow exploration of differences in levels of dependency and satisfaction. As already noted, information on packages of care received by the individuals included in the sample would be collected in a standardised way through the social services and costings applied to these. The costings for this work would be taken from secondary sources, notably the detailed work undertaken at the University of Kent.

This study would be undertaken jointly with Professor Julian Le Grand at the Kings Fund Policy Institute who would take responsibility for the cost-benefit analysis. A more detailed description of the work to be undertaken can be provided if required.

**NATIONAL EVALUATION OF TOTAL
PURCHASING PILOT SCHEMES
1995-1997**

**AN EVALUATION OF GENERAL
PRACTICE BASED PURCHASING OF
MATERNITY CARE**



II.

DETAILS OF PROPOSED RESEARCH

Detailed outline of proposed research (see notes attached for further details).

..5 An Evaluation of General Practice Based Purchasing of Maternity Care

Background

The report of the Expert Maternity Group (1), and of the Scottish Office's working group on maternity services (2), emphasise that maternity care should be driven by the needs of women and not by the needs of professionals or the organisation of the service. In particular women should have choices regarding the style of care they receive, have continuity of care, and remain in control of their care at all times. Particular emphasis is placed on purchasers and providers planning and providing services which are responsive to women's needs and preferences and which are adapted to local circumstances.

In order to achieve services which operate according to these principles a number of recommendations and action points were made by the Expert Maternity Group. Purchasers were challenged to review the services available to their local population, to involve consumers in the planning, specification and monitoring of services, and to develop strategic plans which are sensitive to the social, cultural and ethnic characteristics within the populations they serve. Providers were challenged to review their philosophies of care, their current practices and their organisation to assess how well they meet the key principles. Clinicians were challenged to agree clinical guidelines and to develop effective teamwork across different professional groups. All groups were challenged to provide clear, accessible information for users about the services available to them, and to take a much more critical approach to the effectiveness of different practices and techniques. The Changing Childbirth Implementation team have the role of fostering developments, providing support and co-ordinating between local and national groups who attempt to meet these challenges.

At the time the Expert Maternity Group reported there were no plans to include maternity care in the list of services purchased by general practitioners. The Expert Group stated that "should this occur we would expect fundholders to ensure that women had a full range of options from which to choose" (section 2, 10.8. p36). Since that date, two pilot schemes have been introduced (the pilot scheme for the purchasing of maternity care by six general practice standard fundholders and the National Total Purchasing Pilot Scheme) in which general practices will purchase maternity care for the first time from April 1996. This proposal outlines the evaluation of these pilot schemes.

There is already considerable activity implementing the recommendations made by the Expert Maternity Group, with associated evaluations (including those undertaken by research team members). We propose to make full use of existing data sets in order to supplement information from women we will identify from practices in the current research. We will also make full use of existing research tools developed both by the current research team and by other researchers (particularly those developed by Beverly Fitzsimons and John Bailey at the Audit Commission).

Purpose

Aim

To investigate whether general practitioners, either as Extended Fundholders (EFHs) or as Total Purchasers (TPPs), can purchase maternity care more effectively (in terms of choice, continuity and control) or more efficiently (in terms of resource utilisation and transactions costs) than their local Health Commissions.

Objectives

1. To describe the structure, contexts, processes and effects of general practitioner led commissioning and purchasing of maternity services.
2. To investigate variations in women's experiences of care in relation to 'Changing Childbirth' indicators, and their experience of participation in the purchasing process.
3. To describe variation in contracts for maternity care (type of contracts, specification, monitoring arrangements); variation in operational policy for meeting contract specifications; and variation in the planned distribution of resources in relation to 'Changing Childbirth' indicators.
4. To investigate the variation in actual resource utilisation in relation to 'Changing Childbirth' indicators.
5. To investigate the transactions costs associated with general practice led commissioning and purchasing of maternity care in comparison to other models of purchasing.

Design

The design involves a non-randomised comparison of two models of purchasing maternity services. Comparisons will be made along two dimensions: the purchaser dimension (Health Authority purchasing compared to general practice based purchasing); and the general practice dimension (fundholders (both EFHs and standard fundholders (SFHs)), TPPs, and non-fundholding general practices (NFHs) with a special interest in maternity care.) Figure 1 illustrates the comparisons which will be made between models of purchasing and between types of general practice.

Figure 1. Models of purchasing maternity services in relation to different types of general practice.

		Type of general practice (number in group)		
		TPP	Fundholders	Non FH
Type of Purchaser	DHA		6 SFH	6 NFH
	General Practice	6 TPPs	6*EFH	

* the EFH pilot practices specified in the research brief.

The six non-fundholding practices with a special interest in maternity care are important to include, because it is possible that innovative practices may have other ways to influence the configuration of services than through fundholding. This is particularly important in the context of 'Changing Childbirth'.

The four groups of practices will be matched as far as possible by:

- the configuration of the provider market (number of potential providers, one or two trusts providing community midwifery services, models of maternity care offered etc.);
- rurality;
- socio-economic composition of the local population;
- age structure of the local population

As changes brought about in the provision of maternity care by different models of purchasing are likely to be experienced by all women receiving care from that provider unit, regardless of purchaser, it is not desirable to match practices using the same provider.

Some baseline information on the existing pattern of service provision will be provided through the first round of interviews with key informants. Further baseline information on existing contracts for maternity care for the DHAs in which EFHs and TPPs are located will be gathered to enable analysis of change in EFH and TPP based contracts in 1996/97. However, given the time-scale of the evaluation a full before and after design is not feasible.

Research Questions

Research questions asked in data collection and to guide analysis are organised around the specific objectives outlined above. The first objective relates to the identification of 'success factors' in the set up and operation of general practice based purchasing of maternity care (comparing and contrasting EFHs with TPPs). For the remainder of the objectives, explicit comparison will be made along 'the purchasing dimension' outlined in figure 1 (i.e. EFHs and TPPs will be compared to Heath Authorities in the process and outcome of purchasing maternity care).

1. Set up and operation of general practice based purchasing of maternity care

What factors are important in the successful set up and operation of general practice based purchasing of maternity care?

A number of factors are likely to influence whether EFHs and TPPs are 'successful' in purchasing maternity care, both according to their own criteria, and according to the indicators of success outlined in 'Changing Childbirth'. It should be possible to say which of the following appear to contribute to successful general practice based purchasing, in which particular circumstances:

- configuration and make-up of existing provider units;
- 'culture of care' within provider units and general practices, especially woman centredness;
- a feasible choice of providers for antenatal, intrapartum and postnatal care, including the possibility of using different providers or new ways of types of service;
- nature and clarity of objectives for purchasing maternity care;
- sound business planning arrangements (including incorporation of women's views and experiences into purchasing plans and strategies, predicting activity levels, contract setting and monitoring, mechanisms in case of over and under trading etc.);
- the level of funding for the purchase of maternity care and how the funding formula was agreed;
- availability of good data on activity and costs from local providers;
- effective strategies for the incorporation and monitoring of women's views and experiences;
- good relationships between general practitioners, trust business managers, obstetricians, directors of midwifery services, community and hospital based midwives; health authority staff;
- extent of provider and health authority support for pilot where appropriate;
- amount of managerial work necessary within general practices and distribution of work between practice staff;
- extent of review of staff training needs and possibilities to meet them;
- extent of the full use of the skills of all professional staff.

2. Women's experiences of maternity care

Do women's experience of maternity care differ according to whether care is commissioned and purchased by general practitioners or by Health Authorities?

Given the time-scale of the study, and the number of births that can be expected to accrue (see methods section below), it is not feasible to examine obstetric outcome or to ascertain women's experience of choice and continuity from service records alone. Thus women's *perceptions* of choice and control will be crucial. It will be important to establish whether women (including those from minority ethnic groups or with special needs) registered with EFHs or TPPs are more likely to feel they experienced:

- choice in the care they received (for example, choice of provider, choice of carer throughout the pregnancy and post partum period);
- **continuity** of care and carer (for example, how many different professionals were seen? Did women know the name of the lead professional responsible for planning and monitoring care? Did women know the person who cared for them during delivery? Did women receive conflicting advice?);
- **control** over the process of care (for example, did women feel fully informed about possibilities for place of birth? did they feel that every practical effort had been made to meet her wishes for place of birth? Did women carry their own case-notes and understand their content? Did women feel involved in decision about the pattern of postnatal care they received, including length of hospital stay and the number and timing of community visits?)
- **satisfaction** with the care they received (for example, were women satisfied with the quality of the information provided to them? With the quality of the communication between professionals?)

3. Women's experience of participation in the purchasing process

Do women's' experience of participation in the purchasing process differ according to whether care is commissioned and purchased by general practitioners or by Health Authorities?

Given the emphasis 'Changing Childbirth' placed on the incorporation of women's views into service plans and contracting it will be important to establish whether women registered with TPPs and EFHs, were more likely to feel:

- consulted in the development of purchasing plans and service specifications;
- their views were valued and incorporated into contracting documents.

4. Purchasing plans and contracts

Do purchasing plans and contracts differ if prepared by TPPs, EFHs and HAs?

Experience in fundholding suggests that a number of changes in the contracting process, in contract types, specification, and monitoring arrangements might be observed. The following questions will guide analysis of documents (records of consultations with women, purchasing plans and contracts):

- do TPPs and EFHs more actively seek to incorporate women's views of maternity services into their plans?;
- do EFHs and TPPs negotiate different types of contract (for example, cost per case, cost volume or cost value rather than block contracts?);

- do EFHs and TPPs make more direct specification of quality indicators (for example, specification for the ten 'Changing Childbirth' indicators?);
- do EFHs and TPPs include a more detailed services specification in their contracts. (for example, named midwives, specified screening tests?);
- do EFHs and TPPs make more women specific contracts (for example, detailed specification of services for women with complex needs?);
- do EFHs and TPPs negotiate different monitoring arrangements for services they commission and purchase?;
- do EFHs and TPPs specify more detailed activity information about the services they contract for?

5. Planned structure of services.

Do TPPs and EFHs plan different types and patterns of maternity care than HAs?

There are a number of ways in which EFHs and TPPs could attempt to reconfigure the maternity care received by women registered with them. It will be possible to establish whether EFHs and TPPs are more likely to:

- plan different types or patterns of maternity care (for example, they may be more or less likely to plan traditional shared care, midwifery led care, case load practice, traditional team midwifery, to support community midwifery units or GP led maternity units);
- shift antenatal and post partum care into the community;
- participate in, or contract for, a greater number of home births;
- give an increased role to midwives;
- take on more maternity care themselves;
- reduce the number and change the timing of antenatal visits;
- change the level and timing of tests and investigations;
- plan a decreased role for the obstetrician in low risk pregnancies;
- plan innovation to meet the needs of women with complex needs;
- plan innovation to meet the needs of women from ethnic minorities;
- plan community based 'parentcraft' classes appropriate to the needs of local women;
- plan to provide appropriate training for practice staff to meet the challenges of 'Changing Childbirth'.

6. Resource Use

Does the care provided to women registered with EFHs and TPPs consume different amounts of staff and other resources than the care provided to women whose care is purchased by HAs?

The relative levels of resource use is clearly a crucial part of the evaluation which aims to evaluate efficiency in the purchase of maternity care. Levels of resource use will be driven mainly by type or pattern of maternity care planned and experienced by women (see above).

However, in resource use analysis, case-mix needs to be taken into account. Therefore, for similar groups of women (such as low-risk women) it will be important to establish:

- extent to which general practitioners complement or substitute midwifery or obstetric care with care provided themselves or from within the practice;
- costs of each stage of maternity care (antenatal, intrapartum and postnatal care);
- hospital based costs (including intrapartum and postnatal care);
- community based staff costs (including travel);
- other resources (for example, investigations, prenatal or postnatal counselling).

7. Transactions costs

What differences exist, if any, in the transactions costs associated with EFHs, TPPs and HAs purchasing maternity care?

The transactions costs of purchasing maternity care will fall on three main parties: general practices themselves, on HAs and on providers. It will be important to establish:

- what are the likely costs to general practice teams in moving from SFH to EFH purchasing maternity care?
- what are the likely costs to general practice teams in TPPs in actively purchasing maternity care through a reconfiguration of contracts and services?
- what are the likely costs to NFHs with a special interest in maternity care attempting to influence the HAs purchasing policy?
- what are the additional costs to all parties resulting from the introduction of general practice based purchasing of maternity care?

Methods

To answer these questions, data will be collected from a variety of sources using a range of methods. Information of the set up and operation of general practice based purchasing of maternity services can only be collected from the 12 EFH and TPP sites. All other information will be collected from all sites to enable comparison across both dimensions outlined in Figure 1.

Identification of comparison practices

TPP sites with a special interest in maternity care, and who are planning to reconfigure maternity services for 1996/97 are currently being identified as part of the National Evaluation of Total Purchasing. Six NFH practices with a special interest in maternity care will be identified from professional associations such as the association for community based maternity care. Six SFH for whom the Health Commission purchases maternity care will be identified at Health Commission level. Details about the configuration of the local provider market, the nature of the providers, rurality, socio-economic status and age structure of the local population will be gained through telephone contact with Health Commission staff.

The structure, context and processes of the commissioning and purchasing of maternity care by general practitioners

Descriptive data on the configuration of local provider markets will be collected from Health Commission fundholding or contracts managers by telephone as above. This will include potential competition, the number of trusts involved in providing care for women registered with the practices, the size of the maternity units and number of consultants.

Descriptive data on the structure of the practices in terms of staff and their experience will be gathered through self-completion questionnaire to practice managers.

Semi-structured interviews with seven key informants will be undertaken as soon as possible after the study begins and staff are in place. The key informants are: 'lead' GPs; practice or fund managers; Health Commission fundholding or primary care managers; directors of midwifery at provider trusts; business managers at provider trusts; a key obstetrician working with women registered with the study practices and a key midwife working with women registered with the study practices. These will elicit a range of information including:

- motivation for GPs undertaking the purchasing of maternity care;
- what GPs hope to achieve;
- how ideas will be operationalised;
- perceived success criteria;
- perceived obstacles to success;
- local politics;
- views of other key informants as to the feasibility and desirability of general practice based purchasing of maternity care;
- availability of costs and activity data;
- business planning arrangements;
- organisational arrangements;
- relationships between Health Commission, general practice or TPP and providers;
- extent of support from Health Commissions and Trusts;
- accountability arrangements;
- level of funding;
- methods by which women's views of services will be incorporated into the purchasing process;
- initial data on non-service costs in terms of the tasks and time involved in the process of negotiation of contracts;
- training needs;
- understanding of the principles of 'Changing Childbirth' and methods by which these principles will be incorporated into practice.

Interviews with these key informants will focus on areas of direct relevance to them, building up a detailed understanding of the nature of maternity care in the study area. They will all be repeated in all 24 locations after nearly two years of purchasing to ascertain perceptions of changes taking place in the light of 'Changing Childbirth', and whether the pilot has been successful. In addition, telephone interviews with the key informants at 12 sites incorporating

general practice based purchasing will be undertaken in January-April 1997 to gain information on ongoing issues in relation to the pilot schemes.

Consultation with women,

Documents produced as records of the consultation process with local women in the planning of services will be requested in April 1997. These will be content analysed to produce a typology of approaches to consultation, which will be examined for systematic difference between general practice and HA based purchasing.

Contracts, planned structure of services and planned resource distribution

Contracts will be obtained and content analysed in relation to: type of contract (cost per case, block, cost volume or cost value); details of its specification in relation to 'Changing Childbirth' indicators; monitoring arrangements. This task may be aided by the Audit Commission's research tools. Purchasing and Business Plans will also be collected to guide and inform the content analysis of contracts. This task will be undertaken on two sets of documents: those for 1996/97 and those for 1997/98. Contracts from the DHA in which each EFH or TPP is situated will also be analysed in order to help interpret changes made in general practice based contracts. This will give 36 sets of contracts in each year. It will also be necessary to obtain 1995/96 contracts from those DHAs in which EFHs and TPPs are located, to use as a baseline to measure changes in 1996/97 as a result of the change either to EFH or TPP. This will necessitate the analysis of 12 sets of contracts in early 1996.

Specific (local) changes to the planned structure of services to meet contract specifications (in terms of what patterns of service delivery are proposed) will be elicited through telephone interviews with midwifery managers in provider trusts, and with general practitioners. Particular attention will be paid to planned resource distribution (for example extent of GP involvement, midwife substitution for obstetric or GP care). These telephone interviews will be undertaken in 1996 in relation to the 96/97 contracts and in 1997 in relation to the 97/98 contracts.

Resource Utilisation

The actual utilisation of resources by women will be elicited in two ways. Hospital Episode Statistics, although known to be flawed for maternity services, will provide some information about hospital based antenatal care, length of stay, number of admissions and methods of delivery. These will be examined for changes after the introduction of new contracts as well as for differences between patients registered at the different practices. However, postal surveys of women registered in each of the study practices at 3 months post-partum will provide most information on community antenatal and postnatal care (in particular, number of visits, with whom, how long and for which procedures). Participating practices will be asked to identify all women giving birth over a period of 17 months, starting in August 1996, for women having given birth in the previous May.

Assuming that participating EFHs, SFHs and NFHs will have an average list size of 10000, and that participation TPPs will have a combined list size of 20000, and assuming a birth rate of 4 per 1000, around 1700 births could be expected to accrue over the 17 month period.

Women's experiences of care and participation in the purchasing process

Women's perceptions of choice, continuity and control in the maternity care they received, some simple postnatal morbidity outcomes, and obstetric outcomes will be elicited in two ways: the postal survey of women (see above) will include some structured questions about morbidity, satisfaction with care, and perceptions of choice, continuity and control. However, these areas are notoriously difficult to cover in structured questionnaire, so around 50 semi-structured interviews with women registered in different types of practices will be undertaken. These interviews will examine the concepts of choice and control in more depth through the use of qualitative techniques of interview and analysis.

A key issue in the 'Changing Childbirth' recommendations is that users should participate in the purchasing process. The postal survey and individual semi-structured interviews will ask women whether they had been consulted during the planning process, but this is unlikely to provide enough information to enable comparison between types of purchaser. Documents about this consultative process will have been content analysed (see above), but a sample of women who had participated in the consultation process will also be identified and sent a short postal questionnaire to ask about their experience of participation and the extent to which they felt their views had been incorporated into the purchasing plans and contracts.

Transactions Costs

The methodology to be used in evaluating differences in the transactions costs of purchasing maternity services will mirror that agreed with the Department for the study of the transactions costs of Total Purchasing, which will be led by John Posnett. The objective of this part of the work will be to estimate differences in transactions costs between different models of purchasing maternity care, and in particular to estimate the effect of adding maternity services to the range of services purchased by SFHs. Information will be collected on the additional activities (or functions) associated with purchasing by SFH on the resources devoted to those functions, and to the costs of the resources. Costs falling on general practitioners, practice managers, Health Commissions and providers will be identified. Information will be collected in the first set of semi-structured interviews to be held in 1996 from all sites. More detailed information will be collected in a sample of sites (4 sites, 16 interviews). This will be followed by a postal questionnaire to key personnel in all of the sites designed to monitor activities and resource use as the project develops.

Ethical Approval

In order to be able to conduct the postpartum survey of women's views and experiences ethical approval will have to be obtained. The ongoing discussions amongst Regional Directors of R and D may lead to procedures which help streamline this process. However, is

procedures are not in place by Spring 1996, we may have to contact 24 different local DHA ethical committees.

Milestones

February 1996	Complete identification of comparison practices Complete description of the configuration of provider markets
March 1996	Complete description of the make-up and structure of the participating practices Commence analysis of 1995/96 contracts
May 1996	Complete design of data capture tools, such as the resource use and women's experience questionnaire, including pilots where appropriate
June 1996	Achieve ethical approval for post partum postal questionnaire
August 1996	Complete first round of semi-structured interviews with key informants ('lead' GPs, practice or fund managers, Health Commission Fund or Business managers; Directors of Midwifery, Trust Business Managers, Obstetricians and Midwives) Start administration of postal questionnaires to women
September 1996	Complete content analysis of contracts, purchasing and business plans for 1995/96 and 1996/97.
December 1996	Complete telephone interviews with midwifery managers and general practitioners about planned structure of services. Complete half of the semi-structured interviews with women
February 1997	Complete interim report incorporating data on first round of semi-structured interviews with key informants, two rounds of contract and documentary analysis, and early findings from postal questionnaire concerning resource utilisation and women's experiences, and early finding from semi-structured interviews about women's experiences.

March 1997	Complete detailed interviews with 16 informants about activities and function associated with purchasing maternity care for transactions costs analysis.
	Complete telephone interviews with key informants in six EFHs and six TPPs.
April 1997	Collect and content analyse documentary records of consolation processes with women
May 1997	Complete postal questionnaire to women who had participated in the purchasing process about their experience and the extent to which their views were incorporated into the purchasing plans and contracts
September 1997	Complete semi-structured interviews with 25 women from a range of practices.
	Complete content analysis of contracts and associated documents for 1997/98.
October 1997	Complete postal questionnaire to informants for transactions costs analysis.
November 1997	Complete telephone interviews with midwifery managers and general practitioners about planned structure of services 1997/98
December 1997	Cease sending postal questionnaires to women 3 months post partum Complete semi-structured interviews with 25 women
February 1998	Complete data cleaning and preliminary analysis of ALL postal survey data
March 1998	Complete analyses of resource utilisation Complete transactions costs analysis
April 1998	Complete second round of semi-structured interviews with key informants on how the pilot scheme worked, and implementation of Changing Childbirth
June 1998	Submit final report

Project Management

There is increasing recognition in health services research of the virtue of multidisciplinary and multi-centre collaboration (see for example the MRC Health Services Research Initiative). However, a research team undertaking a complex evaluation, from a number of sites, with a great deal of fieldwork, and minimal resources, will need strong project management. Sally Wyke will undertake main responsibility for project management given her key role as a member of the National Evaluation of TPP team. In view of this, and given the strategic importance of the evaluation, not only to inform the future commissioning of maternity care, but also to further understanding of different models of primary care led commissioning, Sally Wyke's time will not be costed. Jenny Hewison's, Lesley Page's and Gavin Young's time is also not costed. Salary costs will be allocated between collaborating centres over the 30 month period of the grant. Computer costs will be covered by the Departments concerned from existing equipment and will not be charged to the Department of Health

Wyke will take day-to day responsibility for the project and will provide the main point of contact between the Department of Health as customer and the project as a whole. The Project Management Group will consist of the joint applicants on this proposal. The Group expects to meet about 24 times over the 30 months of the project, and researchers in different centres will meet about 6 times.

Likely Outputs

Other than the main report for the DoH, the study and its findings will be disseminated widely. Conference presentations and newsletter reports will be offered to consumer groups and professional organisations. Academic reports will be written for the research community

References

1. Expert Maternity Group (1993) *Changing Childbirth*. London, HMSO.
2. CRAG/SCOTMEG Working Group on Maternity Services. *Antenatal Care*. An executive Summary. The Scottish Office, NHS in Scotland. Edinburgh: HMSO. 1995.

Justification of request for staffing

We ask for 1.5 FTE research staff, university scale AR1A, point 5, for 30 months, plus 1 FTE for two months to help undertake analysis of HES data rather than subcontract out this aspect of the study. This equates with **47 months of FTE research staff time**.

This table lists the tasks involved in each component of the research project, which will be undertaken by research staff. Additional development work, supervision, analysis and writing of reports will be undertaken by grant-holders as outlined in the 'Project Management'.

Research task

1. Ethical approval

Tasks will include: identification of relevant ethical committees for each DHA area; requesting and completing ethical approval forms from each area; attending meetings of ethical committees when requested.

2. Identification of comparison practices/DHAs

Tasks will include: analysis of data from first round of interviews in the National Evaluation of Total purchasing, telephone calls to local Health Commissions to ask relevant questions about potential comparators and analysis of published material.

3. 'Structure' of the practices - postal questionnaire

Tasks will include: development of questionnaire; development of data base to administer questionnaire; administering questionnaire to 24 plus practices (the TPPs are consortia of practices); data entry; analysis.

4. The context and processes of purchasing maternity care

Tasks will include development of interview and analysis guides; undertaking two rounds of face to face interviews and one round of telephone interviews, analysis.

5. Incorporation of women's views of services into purchasing plans - 'needs assessment'

Tasks will include: requesting documents recording consultation exercises undertaken by purchasers; content analysis; production of typology of approaches to consultation

6. Women's experience of participation in the purchasing process.

Tasks will include: preparation of a brief questionnaire, identification of women, and 4 weeks to administer and analyse the questionnaire in 97/98.

7. Analysis of contracts and purchasing plans

Tasks will include content analysis of 36 sets of purchasing plans and contracts, in both 1996/97 and 1997/98; analysis according to specific research questions. Twelve sets of contracts will have to be analysed in 1995/96 to provide a baseline for the further analyses.

8. Planned structure of services and planned resource distribution

Tasks will include development of interview guide for telephone interview, conducting 36 interviews in 1996/97 and in 1997/98, analysis of plans and resource implications.

9. Resource utilisation - HES data

Tasks will include: extraction of data, data verification and cleaning, and systematic analysis according to specified protocols.

10. Resource utilisation and women's experiences - postal questionnaire

Tasks will include: design of questionnaire; overseeing administration over 16 month period; overseeing data entry; data cleaning; data analysis.

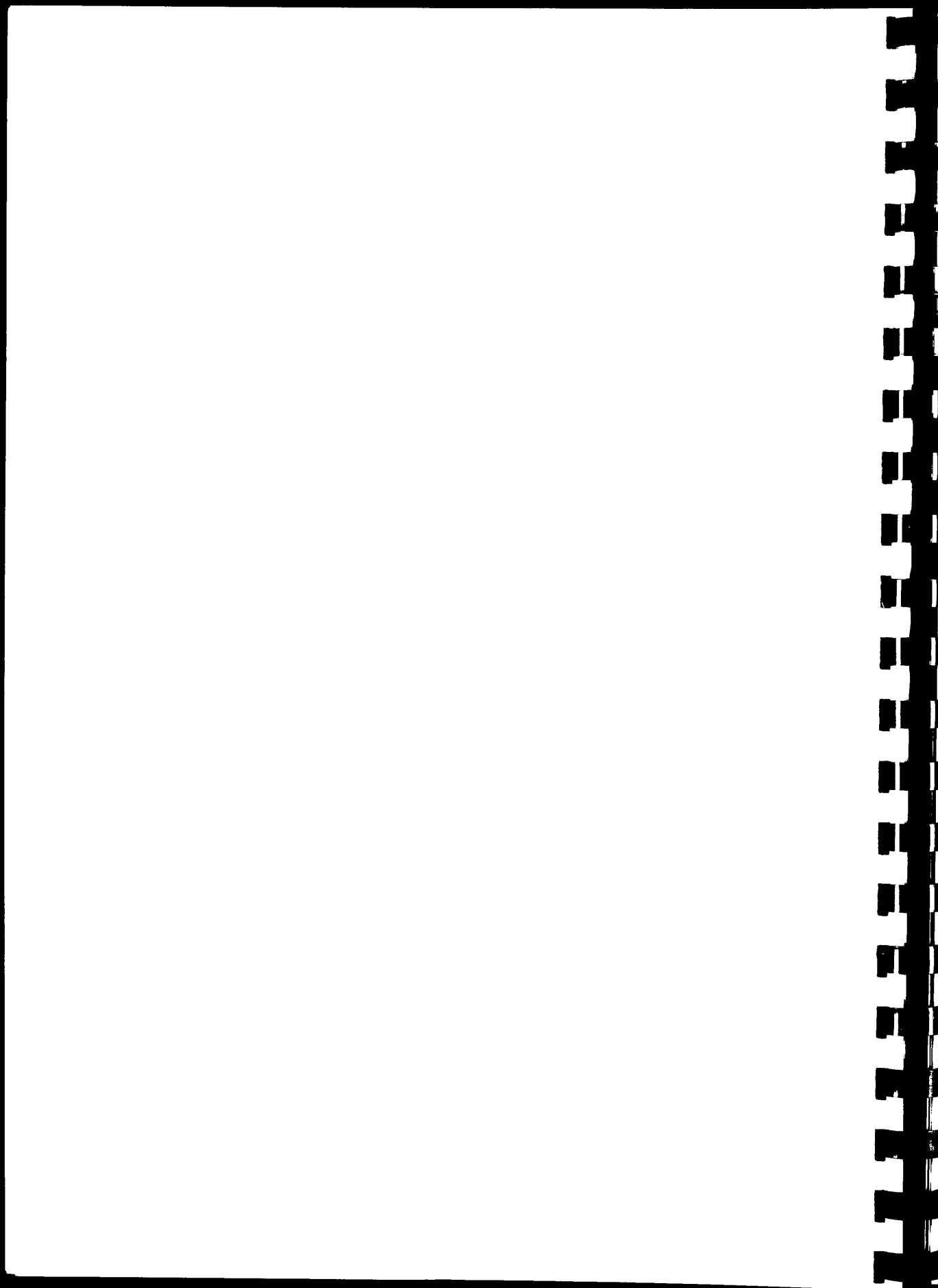
11. Women's experiences of care - semi-structured interviews

Tasks will include: development of topic guide; conducting interviews, detailed note taking and overseeing some transcription, analysis. Assuming 2 days per interview.

12. Transactions costs

Tasks will include: participation in design of interview guides; analysis of interview material; preparation of dedicated interview guide; 4 interviews in each of 4 sites (16); analysis; preparation of postal questionnaire; overseeing administration to 96 respondents; data checking and cleaning; analysis.

We also ask for 1 FTE secretary to support the research staff in the preparation and layout of research instruments and analysis protocols, to organise and schedule fieldwork when the researcher is out of the office, to administer postal questionnaires and replies, to type and prepare reports and papers.



**NATIONAL EVALUATION OF TOTAL
PURCHASING PILOT SCHEMES
1995-1997**

**OVERALL PROJECT ORGANISATION
AND MANAGEMENT**



8: ALLOCATION OF WORK BETWEEN TEAM MEMBERS

With a large and complex project and an equally large and complex team, it is vital, at the outset, to have a clear understanding of how the work to implement the different components of the project will be distributed between the team members.

The overall co-ordination of the research activities will take place from the King's Fund Institute. At the level of the collaborating research centres, the broad areas of *lead* responsibility for ensuring that the original data collection takes place will be as follows:

1. Set-up and operation of TPP sites (section 4) - King's Fund Institute (but with major input to design and fieldwork from all collaborating centres, especially Bristol and Edinburgh);
2. Activity and quality changes in seven services identified in the DH research brief (section 5.1) - Wessex Institute of Public Health;
3. Service costs and efficiency (section 5.2) - King's Fund Institute/LSE;
4. Prescribing (section 5.3) - Department of General Practice, University of Edinburgh;
5. Transactions costs of TP (section 6) - National Primary Care R&D Centre at York
6. Study of patients using A&E/emergency admissions services (section 7.2) - King's Fund Institute/LSHTM;
7. Study of patients with schizophrenia (section 7.3) - NPCRDC at Manchester;
8. Study of people with complex needs for community care services (section 7.4) - NPCRDC at Salford;
9. Study of users of maternity services (section 7.5) - Department of General Practice, University of Edinburgh.

Table 8.1 gives more detail on each of these components plus the allocation of tasks which do not involve primary data collection but which are essentially integrative and analytic, based on the raw data collected elsewhere in the project, and for other purposes (eg work on the management of risk including insurance against very high cost patients etc).

Since *all* the TPP sites and their districts/health commissions will be the subject of the fieldwork outlined in section 4 of the proposal (set-up and operation of TP sites), this work will be led by the King's Fund. However, data collection will be shared between the collaborating centres in order to maximise accessibility, as follows:

1. Wessex Institute for Public Health Medicine and Institute of Health Policy Studies, Southampton
South Thames (6 sites, 27 practices)
South and West (part) (4 sites, 9 practices)
Anglia and Oxford (part) (1 site, 6 practices)

2. King's Fund Policy Institute
North Thames (6 sites, 38 practices)
Trent (southern part) (4 sites, 10 practices)
Anglia and Oxford (part) (2 sites, 5 practices)
3. Department of Social Medicine, University of Bristol
West Midlands (6 sites, 11 practices)
South and West (part) (2 sites, 6 practices)
Anglia and Oxford (part) (1 site, 1 practice)
4. National Primary Care R&D Centre, Manchester, York and Salford
North West (8 sites, 39 practices)
North East (former Yorkshire) (4 sites, 17 practices)
Trent (northern part) (4 sites, 19 practices)
5. Department of General Practice, University of Edinburgh
Scotland (6 sites, 22 practices)
North East (2 sites, 10 practices)

The contents of the face-to-face interviews and telephone questionnaires and the specifications for requests for data and documents from these sites and controls will be drawn up based on the collective requirements of those leading those parts of the evaluation which need information from all the sites. Thus, for example, the subsequent detailed work on transactions costs and contracting by TPPs which will be led by John Posnett (York) (section 6) will depend on appropriate basic information being collected from all sites throughout the evaluation and will also require major input from Ray Robinson (Southampton) on the costs of contracting. Similarly, work on risk management and the 'insurance' aspects of TP led by Gwyn Bevan (Bristol) with James Raftery (WIPHM) will require access to data collected from all sites.

TABLE 8.1

DISTRIBUTION OF WORK BETWEEN TEAM MEMBERS

COMPONENTS OF THE EVALUATION AND TASKS (Numbers in brackets refer to sections of this proposal)	NO OF TPP SITES AND CONTROLS/ COMPARATORS	LEAD TEAM MEMBER, OTHERS RESPONSIBLE	TIMESCALE OF DATA COLLECTION
Factors associated with set-up and operation of TP (4)	All TPP sites and local health authorities (selected aspects)	N Mays (KFI lead, 2.5 days pw)	April 1995 - March 1997
Overall design/content		N Mays, J Dixon (KFI)	April-Sep 1995
Design of face-to-face interviews		S Wyke (Edin)	
Design of CATI		J Raftery (WIPH)	
Design and use of 'critical incident diary'		J Howie (Edin)	
Risk management, budget-setting and financial management		G Bevan (Bristol)	
Basic transactions costs		J Posnett (NPCRDC at York)	
Contracting methods		R Robinson (Soton), J Raftery	
Needs assessment, public health advice etc		G Bevan	
Strategic aims, practice objectives, relations with HAs		M Roland (NPCRDC at Manchester)	
Changes in activity in seven services (using routine data) (5.1)	All TPP sites before and after TP compared with activity of rest of non-TP population including SFH and non-SFH practices	J Raftery (lead)	April 1995 - June 1997
Additional data to validate/interpret routine data	As in 4, above	N Mays, R Robinson	April 1995 - March 1997

Service costs and purchaser efficiency (5.2)	All TPP sites versus local health authorities before and after TP	J Le Grand (lead, KFI) N Mays (KFI), R Robinson (Soton)	July 1995 - June 1997
Prescribing (using PACT/SPA) (5.3)	All TPP sites and selected SFH and non-SFH controls	J Howie (lead, Edin)	April 1995 - June 1997
Transactions costs (6)	See below	J Posnett (lead, NPCRDC at York) R Robinson (Soton) N Mays	
Direct (basic) administrative costs/transactions costs (4)	All TPP sites as in 4, above		April 1995 - March 1997
Indirect (detailed) transactions costs	Sample of TPP sites and DHAs without TPPs, to be decided		August 1995 - March 1997
Patients attending A&E and emergency admissions (7.2)	No of A&E depts to be decided based on feasibility study to compare patients of TPPs and local SFHs	C Sanderson (lead, LSHTM) J Dixon (KFI)	April 1996 - March 1997
Service provision, outcomes and costs for seriously mentally ill people (7.3)	See below	M Roland (lead, NPCRDC at Manchester)	
Work of CPNs	Sample of TPP sites and SFH practices		April 1996 - March 1997
Strategic approaches and services for mental health services	All TPP sites and local health authorities (as in 4, above)		April 1995 - June 1997
Outcomes for severely mentally ill people	Sample of TPP sites and SFH practices sufficient to yield 50 patients from each		April 1996 - March 1997
Costs of mental health services	Sample of TPP sites and SFH practices	J Le Grand (lead, KFI)	September 1995 - July 1997

Service provision, outcomes and costs for people with complex needs for community care services (7.4)	Small number of TPP sites with/without a special interest and SFH practices (total c.8)	J Popay (lead, NPCRDC, Salford)	August-December 1996
Costs of community care services	Small number of TPP sites and SFH practices (total c.9)	J Le Grand (lead, KFI)	September 1995 - July 1997
Users of maternity services (7.5)	See below	S Wyke (lead, Edin)	
Pattern of maternity care purchased	All TPP sites and local HCs		April 1995 - March 1997
Users' experiences of maternity services	Sample of TPP sites and local HCs		April 1995 - June 1997
Costs of maternity services	All TPP sites and local HCs		September 1995 - July 1997

For the remaining components of the evaluation (in Table 8.1), a specific centre and individuals within each centre will be responsible for design, analysis and reporting. However, the fieldwork and data collection will not necessarily all be undertaken from the lead centre. Thus, whereas it is the intention that all the data collection on A&E (section 7.2) will be undertaken by LSHTM, the detailed data collection on service costs and efficiency (section 5.2) will be shared between the collaborating centres with the design, analysis and reporting undertaken by King's Fund Institute staff.

PROJECT MANAGEMENT

MANAGERIAL STRUCTURE

In a project with such a wide range of topics and a high level of complexity which is virtually an evaluation of the NHS as a whole in over 50 sites in England and Scotland, strong project management is essential. In view of this and bearing in mind the strategic importance of the evaluation, the King's Fund Institute is prepared to free up half of Nicholas Mays' time over the period of the study to enable him to be the Project Manager on behalf of the research team which has been assembled. His time will not be charged to the budget, but he will have a full-time research fellow to support him who will be a charge on the budget.

Mays will take day-to-day responsibility for the project and will provide the main point of contact between the Department of Health as customer and the project as a whole. He will chair a Project Management Group which will have executive power to take all strategic decisions affecting the conduct of the project (see Figure 2). Nonetheless, Mays will be ultimately responsible for the successful completion of the project. As a result, the King's Fund will contract with the Department to undertake the project and the other collaborating centres will be sub-contractors of the Fund. The Department will, therefore, not have to liaise and negotiate with a large number of different institutions and research teams.

The Project Management Group will comprise Mays plus a nominated senior researcher from each collaborating centre. The Group will be advised by a small Advisory Group of experts in fund holding research and research methodology. The role of this Advisory Group will be particularly important in the early stages of the work. Likewise, the Project Management Group will need to meet frequently in the first 6 months of the project (weekly at certain times) and bi-monthly thereafter.

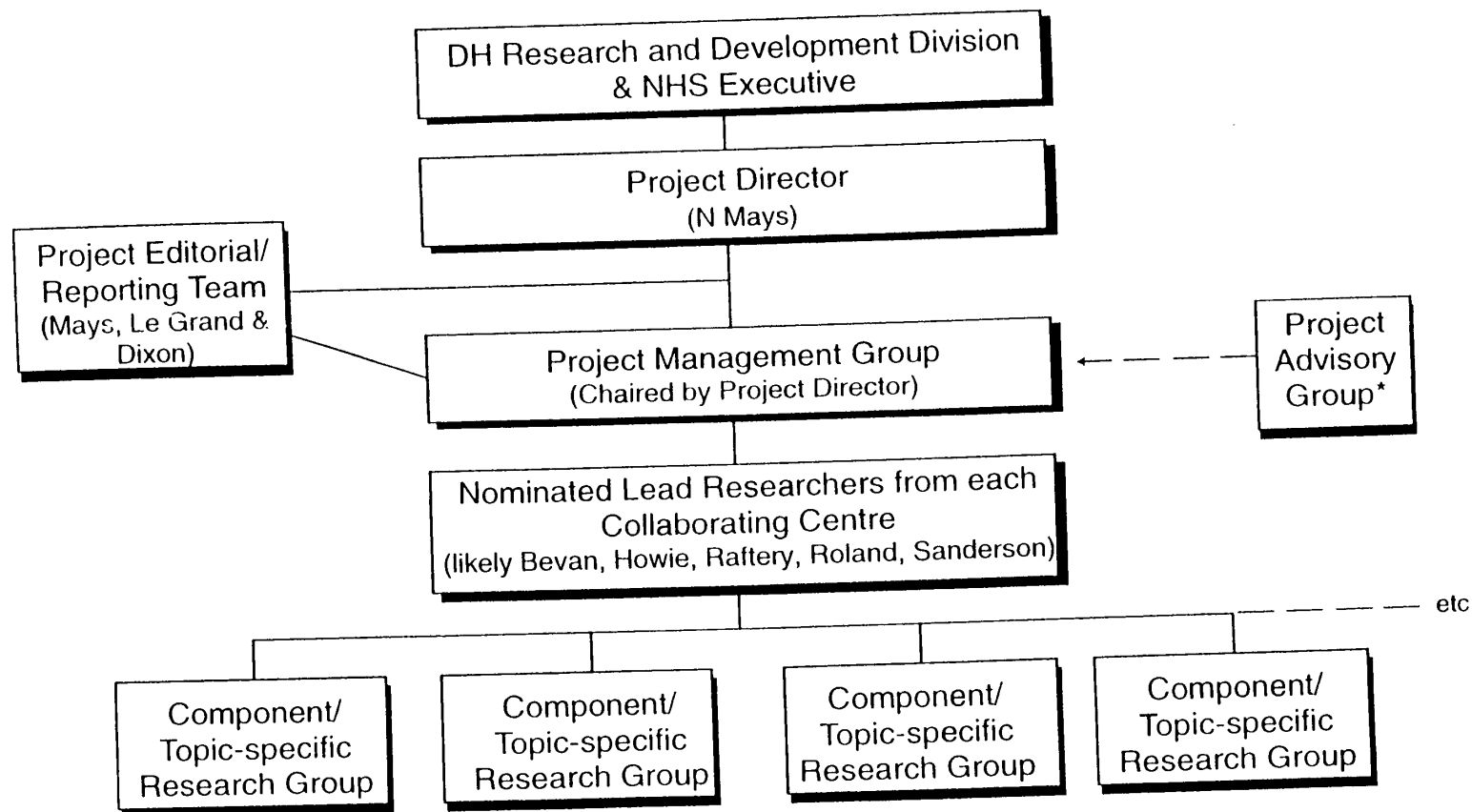
COORDINATING ANALYSIS AND REPORTING

Each of the research teams responsible for individual components and topics in the study (see section 8 and especially Table 4 for details), will have the task of analysing the data and writing up the material relevant to their specific part of the project. These responsibilities have been clearly established. However, it is recognised that the richness of a multi-faceted evaluation must be reduced to a series of clear conclusions and differences of perspective reconciled. In view of this, a Project Editorial/Reporting Team will be established to draw together the contributions from the lead researchers in each area and to edit a final report for the sponsors. This Team consisting of Mays, Le Grand and Dixon will also be responsible for interim and progress reports.

LIAISON WITH THE TPP SITES AND CONTROL PRACTICES

A member of the Project Management Group will be nominated to take the lead in developing good relations with the pilot sites and their comparators. One very simple way of avoiding over-load on individual practices will be to schedule all contacts with practices centrally so that demands on time and for data and cooperation are evenly spread through the data collection periods and do not clash.

Figure 2 National Evaluation of GP Total Purchasing:
Project Management Structure



* Angela Coulter (King's Fund Centre), Howard Glennerster (LSE) and Ian Russell (York University)

King's Fund



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