Developing intermediate care provided by general practitioners with a special interest: the economic perspective

David P Kernick

SUMMARY

The concept of intermediate care is part of the National Health Service (NHS) modernisation agenda to make services more flexible and accessible. One objective is for the general practitioner with a special interest (GPwSI) to provide a variety of extended services in a primary care setting that have been traditionally provided in secondary care. This development is underpinned by the hope that primary care organisations (PCOs) will provide more effective and efficient care in local settings, but, as with other skill-mix changes, the process has developed ahead of an evidence base of effectiveness or cost-effectiveness.

This paper considers intermediate care from an economic perspective and provides healthcare commissioners with a background that can facilitate resource allocation decisions. It cautions that, unless the economic issues are carefully considered, there is a danger that services may be introduced that are thought to be efficient, when in fact they may not be so.

Keywords: *general practitioners with special interests; skill-mix; cost-effectiveness; resource allocation.*

D P Kernick, BSc, MD, FRCGP, general practitioner, Exeter Research Practices Consortium, Exeter.

Address for correspondence

Dr David P Kernick, Exeter Research Practices Consortium, St Thomas' Medical Group, Cowick Street, Exeter EX4 1HJ. E-mail: su1838@eclipse.co.uk

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Introduction

BY 2004, primary care organisations (PCOs) will be responsible for assessing local needs and allocating resources, with an emphasis on developing integrated services for patients.

While accepting the paucity of evidence of effectiveness and cost-effectiveness,[1] the government has called for radical changes in the healthcare workforce in order to reduce waiting times and deliver 'modern, patient-centred services'.[2,3] One option outlined in the NHS (National Health Service) Plan is for PCOs to commission clinical services led by general practitioners (GPs) with special interests that have historically been delivered in secondary care (www.doh.gov.uk/pricare/gp-specialinterest).[4]

Guidelines covering suitable services are being developed by the Royal College of General Practitioners in consultation with other key stakeholders, defining the competencies required and governance arrangements. However, against a background of increasing demands on limited healthcare budgets, there is also a need to ensure that resources are used efficiently.

This paper considers the development of the general practitioner with a special interest (GPwSI) from an economic perspective. The application of a number of economic principles can facilitate decisions in this area and guard against the introduction of changes that are thought to be efficient, but which are not.

The development of specialist services in primary care

Incentives to shift the balance of care towards the primary sector were first introduced in the 1990 GP Contract.[5] This identified core services that were to be directed by financial incentive, with an emphasis on minor surgery, health promotion, and chronic disease management. However, the cost-effectiveness of these shifts remained unproven. There was concern that these reforms were a 'shot in the dark' and that, without proper evaluation, GPs could have been induced to practice inefficiently.[6]

General practice fundholding provided additional incentives to increase the range of practice-based services, but measurable changes were small.[7] However, despite a limited evidence base, and methodological shortcomings in available studies,[8] the government remained committed to an expansion of primary care and to the general practice specialist.[9]

A GPwSI is a general practitioner who has developed enhanced skills in order to provide a variety of extended services in a primary or intermediate tier care setting that has

traditionally been provided in secondary care. Box 1 shows a more comprehensive definition, although there has been considerable debate over this concept.[10] General practitioners are already specialists in family medicine, and it has been argued that this development would undermine the essence of general practice.

Some advantages claimed for intermediate care are:[11] an increased patient throughput and clinical capacity; services that are more accessible to patients; encouragement of professional development; possible facilitation of retention of medical staff by offering a broader range of interests; and the release of resources from secondary care that could be used more appropriately. The development is underpinned by the hope that PCOs will provide more effective and efficient care in local settings. However, these developments are occurring ahead of an evidence base. Evidence of effectiveness is limited, indirect, and confined to a small number of disease areas. There is no evidence of cost-effectiveness.

- They supplement their important generalist role by delivering high quality improved access services to meet the needs of a single PCT or group of PCOs.
- They may deliver a clinical service beyond the normal scope of general practice, undertake advanced procedures, or develop services.
- They will work as partners in a managed service, not under direct supervision, and keeping within their competencies.
- They do not offer a full consultant service and will not replace local consultants or interfere with access to consultants by local GPs.

Box 1. Definition of GPwSIs.[4]

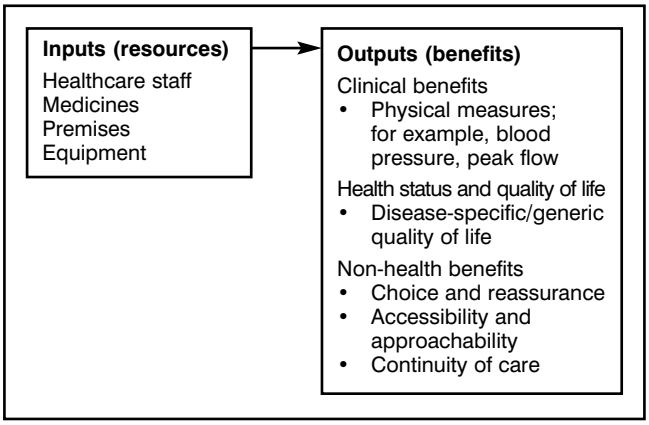

Figure 1. An economic analysis relates inputs (resources) to outputs (benefits and the values attached to them) of alternative interventions to facilitate decision making.

Applying the principles of economic evaluation to GPwSI development

There are a number of inputs into any decision-making process, but against a background of resource scarcity, economic analysis is gaining an increasing importance. An economic evaluation relates health outputs (benefits) of competing interventions to the resources that are consumed in their production (Figure 1). This exercise facilitates choice between alternative interventions from the perspective of efficiency, ensuring maximum benefits from existing resources.

There are four stages in this process when applied to intermediate care:

(a) Specifying the objectives of service developments

Decision makers must be clear about their objectives. These may include :

- secondary care service substitution. GPwSIs can substitute for secondary care doctors, either releasing specialist time to enhance care in other areas, or reducing specialist manpower requirements;
- secondary care service addition; that is, complementing or enhancing existing services;
- meeting unmet needs. An alternative and often overlooked possibility is that the use of GPwSIs may lead to additional overall activity by exposing unmet need. Patients who would not have previously consulted may then do so; and
- combinations of the above.

(b) *Clarifying the context of the proposed change*

Service shifts may arise in the context of new resources becoming available, or they may be financed by the withdrawal of existing secondary care resources, or there may be a combination of both. How an economic evaluation is undertaken will depend on the aim and context of the exercise, and different answers may be obtained for different situations.

If a GPwSI clinic is an additional service using additional resources with the aim of meeting increased demand, the aim will be to allocate these new resources efficiently; that is, maximising benefits from the available resources.

When services are being substituted, the development should be compared with the service it is replacing. However, where it is intended to release existing hospital resources, owing to the high fixed cost of secondary care, there will have to be a certain threshold size for the new service before resources can actually be released; for instance, reduction in secondary care manpower or ward closure.

Not only does the context of the service change determine the relevant comparitor for an economic evaluation, but it may also have implications for the increment in costs and benefits that need to be considered.

(c) *Undertaking an economic evaluation*

Studies have to be undertaken that relate costs to benefits of alternative options of healthcare delivery. Ideally, economic studies should be undertaken alongside controlled clinical trials, but not all questions can be addressed in this manner. In many cases, economic modelling will be used, based on evidence where it is available and expert opinion where it is not.

Measuring costs. The perspective of an economic exercise will determine which costs to include in an evaluation.[12] Different results may be obtained from the viewpoint of the Primary Care Trust (PCT), the NHS, or society. A societal perspective incorporates all costs, regardless of who incurs

them. In many cases, GPwSI studies will be undertaken from a limited PCT perspective. This may mask the fact that costs have simply been shifted to another budget, rather than reflecting a true societal saving.

Until quite recently, there was a paucity of accurate cost information across the NHS. The new *NHS Costing Manual* (www.doh.gov.uk/nhsexec/costingmanual-0203.pdf) sets out the principles and practice to be applied in the NHS, and a summary of hospital and primary care cost data is given in the *Unit Cost of Health and Social Care*.[13] Patient costs are likely to be important in the context of GPwSI clinics, but are often excluded from an economic evaluation. A range of patient cost data and a discussion of the difficulties in this area can be found in Kernick and Netten's study.[14]

Measuring outcomes. Ideally, outcomes should be described in a single measure to allow direct comparisons to be made between competing options. However, shifts in care will encompass a range of measures that will include clinical outcomes and changes in quality of life. Non-health benefits, such as improved access and waiting times, are also important. These factors will be important from both patient and political perspectives. Some of these measures may improve, some may get worse. A further complication is the relative importance that patients place on these attributes. For example, would a patient trade off a shorter waiting time for better access? Even with these broader outcomes, studies may fail to capture the implications of GPwSI shifts adequately. Other attributes, such as increased GP job satisfaction, may be overlooked.

One approach to this problem is the use of conjoint analysis. This is a technique that allows estimation of the relative importance of different aspects of care, the trade-offs between these aspects, and the total satisfaction or utility that responders derive from healthcare options.[15] However, a number of contested methodological issues remain, and this approach is yet to find widespread application.

Economic theory requires that outcomes of alternative service options should be presented to decision makers in a single measure to determine whether benefits gained (outcomes) outweigh benefits foregone (costs). Owing to the difficulties of measuring outcomes described above, this is rarely practical, and a pragmatic option is a cost consequence analysis.[16] Using this method, available information is presented in a disaggregated form, allowing decision makers to make the necessary value judgements (weighing the relative importance of the outcomes), and the trade-offs that must be made between them to arrive at a decision. Box 2 shows how a study of the transfer of gastroscopy services to intermediate care might look.

(d) *Making the decision*

In practice, most decisions will not be about whether services should be totally delegated or not, but about the degree to which existing services should change. A marginal analysis[17] recognises the importance of how benefits and costs change as programmes expand or contract. In principle, the relationship between costs and benefits should be determined across a number of options, in order to identify the optimum pattern of resource allocation. In practice, a pragmatic estimate will have to be made as to the best combination of services to consider.

Where there is uncertainty over data accuracy, a sensitivity analysis allows the outcome of an analysis to be tested over a range of situations likely to be found in practice. This exercise determines the robustness of analysis to potential changes in key variables.

An accessible account of economic evaluation and its application to health care can be found in Kernick.[18]

Box 3 shows some questions to ask when decision makers are considering intermediate care developments.

Problems with applying the results of economic evaluation

This final section briefly considers some of the problems of applying the results of intermediate care economic studies.

Problems with generalisability

Economic data may not be as generalisable as clinical studies,[19] and different geographical areas will have their unique local histories, interests, and contingencies. For example, a review of near patient testing in primary care found that many new diagnostic technologies were disappointing in practice owing to a failure to address setting-specific issues that were not apparent during their evaluation.[20]

Difficulties in releasing resources in secondary care.

Efficiency is not the only criterion that directs health service activity. Other institutional factors may be relevant, and these can include responding to organisational reward structures, the maximisation of personal wellbeing, and the pursuit of a 'quiet life'.[21] In a review of the practical use of economic techniques to inform resource allocation decisions across the secondary–primary care interface, McIver[22] noted the strength of established interests. Opportunities to make changes were mainly at the margins. Other disinvestment barriers arose from the relatively high proportion of fixed costs in secondary care and the difficulties in tracking down how much money had been saved following the introduction of service change.

Conclusion

The development of intermediate care has been considered from an economic perspective, outlining the difficulties of obtaining and applying economic information. Although the development of GPwSI services is being encompassed within formal governance and professional development frameworks, and 16% of GPs are already providing services outside their core commitments,[23] there is currently no evidence to support these changes from the perspectives of effectiveness or cost-effectiveness. In many areas, GPwSI development will build on existing historical services that may have actually encouraged inefficient use of resources. For example, the development of minor surgery in primary care may have encouraged treatment of patients who would not have otherwise been treated and who would have made only a minor impact on hospital workload.[24]

Developing GPwSI services is one of a range of options

Costs
- General practitioners and nurses (activities that are given up by these practitioners in order to undertake the new service)
- Saving in hospital resources (what is being released and how it is being utilised)
- Capital costs; for example, new buildings, equipment
- Implications for costs incurred by patients
- Costs of administering primary care services, including governance arrangements

Consequences
- Diagnostic accuracy
- Health state or final clinical outcome
- Patient satisfaction (better access, shorter waiting times, understanding of conditions)
- Patient dissatisfaction (lack of expert care)
- Loss of opportunities for secondary care training
- Retention of GP workforce owing to expanded role

Box 2. Some factors to be considered when deciding whether gastroscopy services are to be transferred to primary care. An example of a cost-consequence study where costs and consequences are presented in a disaggregated format.

- What is the aim of the service change?
- Is the shift acceptable to all stakeholders?
- Is there an evidence base for the proposed shift, which captures relevant costs and outcomes?
- What are the local cost implications?
- What are the local values placed on the potential changes in outcome (clinical and non-clinical)?
- What seems the best increment in service development to undertake?
- Are new resources available, or is disinvestment required from secondary care?
- If disinvestment is to be undertaken from secondary care, is this a practical option, and can the released resources be identified?
- What are the benefits foregone in the services from which the resources are being disinvested?
- Are there implications for other services that may have been overlooked?

Box 3. Some questions to ask when considering GPwSI developments.

open to PCOs for developing the NHS modernisation agenda. This initiative forms part of an overall process of healthcare integration that sees the patient at the centre of a pathway of care. Although the move towards unified PCO budgets may facilitate this development, GPwSI service shifts may have a better chance of success when additional resources are available, rather than financing them from the removal of existing resources.

Although the difficulties of establishing an evidence base in this area are recognised,[25] the application of basic economic principles will guard against services being introduced that are thought to be efficient when, in fact, they are not.

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