

**Issues in Health Sector Regulation**  
**OPI Seminar Series**  
**Trinity Term 2000: Week Seven**

**The impact of financial incentives on the behaviour of GPs**  
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*The 1990 NHS reforms introduced GP fund-holding arrangements (GPFH). GPs were given budgets with which they could purchase some tertiary services on behalf of their patients. At the time there was concern that a two-tier system would be created with GPFH patients receiving priority over others in hospital waiting lists. As waiting times are the major source of rationing in a 'free-at-the-point-of-delivery' health service, waiting time management is an important indicator of the way the service is allocating its resources according to health needs. They are also a major source of public concern and one of the main reasons why patients who can afford to pay choose private provision. A study carried out by the Centre for Market and Public Organisation showed that waiting times for GPFH patients were 8 percent shorter than for others but that the GPFH scheme did not have a significant impact on waiting times overall. Waiting times of patients in GPFH practices were lower when GPFHs paid for the patient care out of their funds. But waiting times for GPFH patients were on average no shorter than those of non-GPFH patients where the fundholders did not pay for their patients' care. The conclusions drawn from the study are that both referring clinicians and receiving hospital managers were responsive to price incentives and that, in a resource-constrained tertiary care system, price signals did reduce waiting time where money followed the patient. However, there appeared to be few spill-over effects to non-fundholder patients.*

**The UK GP Fund-Holding Scheme and incentives in waiting time management**

The creation of the GPFH system gave primary healthcare providers (GPs) budgets to purchase a subset of elective tertiary services. Emergency and maternity services were excluded as were a number of elective procedures. GPs who chose not to be part of the scheme could refer their patients as before.

When an elective referral occurs, there are two waits for the patient: first to see a consultant; second for the procedure itself, if that is advised. These two waiting times, self-evidently, are cumulative. There are a number of incentives operating on both GPs and consultants to manage these two waiting times.

***Do GPs want to reduce waiting times?***

There is a substantial amount of evidence that GPs have strong incentives to reduce their patients' waits for treatment. They care about patient welfare (Scott); they become fundholders partly to reduce waiting times (Glennerster et al) and their choice of hospital is partly determined by waiting time (Earwicker & Whynes)

### *Can GPs reduce waiting times?*

Here the evidence is equivocal. GPs have good information about the waits likely for different procedures in their areas. However, elective treatments are resource constrained on the supply-side, as would be expected in a free-at-the-point-of-delivery service (Martin & Smith).

### *Do hospitals want to reduce waits?*

The GPFH arrangements resulted in additional revenue for hospitals treating GPFH patients. As a result, at the margin, there was an incentive to 'queue-jump' GPFH patients. Hospital managers have strong incentives than consultants do to reducing waiting times to meet performance norms. These incentives are strengthened if money follows patients. Consultants' incentives are weaker. Long waits for NHS treatment are the main reason for UK patients have to seek private care.

### *Can hospitals reduce waits for fundholders' patients?*

As a result, there is a complicated relationship between hospital managers and consultants in the management of waiting lists (Morga & Xavier; Frankel & Wise) reflecting the complex juxtaposition of clinical need criteria and efficiency considerations. In any particular case, special arrangements can be made that, in practice, allow GPFH patients to be moved ahead of others in the queue (Beecham).

## **The Centre for Market and Public Organisation Study**

The CMPO study covered over 100,000 admissions for elective procedures from all GPs in one Health Authority. It was designed to capture the referral behaviour of cohorts ('wave's) of GPs who became

	Elective procedures – in the fundholding scheme	Elective procedures – <u>not</u> in the fundholding scheme
Non-GP fundholders	1	2
GP fundholders	3	4

fundholders during the study. It distinguished between treatments that could be charged to the fundholders' budgets and those that could not, so that spill-over effects from services for which GPFHs paid to those they did not pay for could be examined. It allowed for differences in mean waiting time in different specialities and for differences across GP practices that were not due to fundholding.

### **Results**

Fundholder GPs achieved 8 per cent shorter waits for their patients where they paid for treatment directly for treatment, compared with non-fundholders. There was a greater reduction in waiting times in those specialities where the waits were long and for which there was public concern over the length of waiting times. Shorter waiting times were achieved partly by GPFHs referring patients to hospitals outside their immediate area. However, fundholders did not achieve shorter waits where they did not pay directly for treatment and the net effect of the scheme on waits was small.

### ***Impact of scheme on timing of referrals to hospitals***

Fundholder budgets were set on basis of elective referrals before entry into scheme. There was therefore an incentive for GPs to increase their referrals in the year before entry in order to increase their budget. Moreover, once, in the scheme, there was an incentive to shift from elective to emergency referrals, in order to save on the budget for elective referrals.

The results of the study suggest that fundholders did, indeed, increase their referrals in year before becoming a fundholder; and they declined in the following year. However, there was no evidence of a shift from elective to emergency referrals.

### **Conclusions**

The overall welfare effect of the scheme appears to have been small, although there is some evidence of a more efficient use of scarce tertiary care resources as GP's had stronger incentives to seek beds outside their normal referral areas and those hospital managers had stronger incentives to accept GPFH referrals. However, there was a significant shift in the distribution of welfare from non-GPFH patients, who had to wait longer, to GPFH patients, whose waits were reduced.

***The full methodology and results of this study may be found on the CMPO Website at: <http://www.bris.ac.uk/Depts/CMPO>***

Propper, Carol; B. Croxson & A Shearer (2000) Waiting Times for Hospital Admissions: the Impact of GP Fundholding; CMPO Working Paper 00/020

Croxson, Bronwyn; C. Propper, & A Perkins (1998) Do doctors respond to financial incentives? UK family doctors and the GP Fundholding Scheme CMPO Working Paper 98/001 and Journal of Public Economics (forthcoming)

### ***Further reading on incentives and waiting list management***

#### **Waiting time for hospital treatment**

Corney R (1999) Changes in patient satisfaction and experience in primary and secondary care: the effect of general practice fundholding. *British Journal of General Practice*. 49, 27-30.

Ellwood S (1997) Have GPs been playing the market? *The Fundholding Summary*.5-8.

Glennerster H, Matsaganis M, Owens P, and Hancock S (1994). *Implementing GP fundholding: Wild Card or Winning Hand?* Oxford University Press, Buckingham.

Dowling B, 1997. Effect of fundholding on waiting times: database study. *British Medical Journal*. 315, 290-292.

Audit Commission (1996) *What the doctor ordered. A study of GP fundholders in England and Wales*. Audit Commission, London.

### **Incentives do matter in reducing waiting times**

Brouwer WBF and Hermans HEGM (1999) Private clinics for employees as a Dutch solution for waiting lists: economic and legal arguments. *Health Policy*. 7, 1-17.

Baker LC and Brown ML (1999) Managed care consolidation among health care providers, and health care: evidence from mammography. *Rand Journal of Economics*. 30, 351-374.

### **Queues for treatment and spillover effects**

Glennerster H, Matsaganis M, Owens P, and Hancock S (1994). *Implementing GP fundholding: Wild Card or Winning Hand?* Oxford University Press, Buckingham.

Hamilton BH and Bramley-Harker RE (1999) The impact of the NHS Reforms on Queues and Surgical Outcomes in England: Evidence from Hip Fracture Patients. *The Economic Journal*. 109, 437-462.

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