

Developments

Pump-Priming the PFI: Why are Privately Financed Hospital Schemes Being Subsidized?

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The authors explain how the Private Finance Initiative (PFI) has raised the costs of infrastructure development in the health service. They demonstrate that the assumption that higher capital costs would be offset by savings resulting from the involvement of the private sector is wrong—rather, NHS trusts and health authorities have been obliged to make savings on other budgets in order to make the high costs of investment affordable. There is no reason to believe that these problems will disappear as the volume of PFI investment increases.

There are now 35 major hospital developments (defined as schemes with a capital value in excess of £25M) at various stages of progress in the NHS. Most of these will be funded through the Private Finance Initiative (PFI) under design, build, finance and operate (DBFO) agreements between NHS trusts and private sector consortia (see box). By way of contrast, between 1980 and 1997 only seven major schemes were completed.

In principle, the costs of privately financed developments in the NHS are met at a local level, through the annual revenue budgets of health authorities and NHS trusts. Funding for other services is thus vulnerable when PFI developments turn out to be more expensive than planned (Gaffney and Pollock, 1997). The long period of capital 'drought' in the NHS, and continuing real terms reductions in the NHS capital budget, have led to concern that, with no recourse to public capital, the NHS will enter into financial obligations in the pursuit of private investment which may undermine future revenue for the provision of services (Price, 1997). In July 1998, the Annual Representative Meeting of the British Medical

Association (BMA) passed a resolution calling for the abandonment of the PFI in the health service on the grounds that it was 'not an affordable long-term strategy for increasing capital investment in the NHS'.

The response to concerns about the potentially high costs of capital funding under the PFI has been that introducing private sector disciplines would lead to original and economically superior approaches to hospital building, which would easily offset any increase in financing costs. The former Secretary of State for Health, Stephen Dorrell, told the House of Commons Treasury Select Committee (1996) 'it is the overwhelming lesson of history that if you give people the profit incentive and allow them the relative freedom of private sector management, that the savings they are able to generate offset the high cost of capital'. This thinking was reflected in health service guidance on PFI procurement, which stressed that the specifications given to private sector bidders should not be over-prescriptive, for fear of constraining innovation: 'The specification should...allow the maximum opportunity for innovation and improvement in value for money for the NHS' (NHS Executive, 1995).

The PFI Context

The major PFI developments in the NHS are all DBFO schemes, under which the NHS makes annual payments for the use of privately owned facilities over a 'primary concession period' of 25–40 years. The health service bodies which enter into these arrangements are NHS trusts.

The costs of trusts' payments to the private sector are passed on to NHS purchasers (health authorities and GP fundholders) in the prices charged by trusts for clinical services. As part of

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Health Service Major PFI Projects

- Of the 30 schemes with capital values over £25M, included in two waves of 'prioritization' since the 1997 general election, four are financed in the 'traditional' manner with Exchequer capital funding (Royal Berkshire and Battle Hospital, Sheffield Stonegrove, Hull Royal Infirmary, Gloucestershire Royal NHS Trust).
- There are four schemes in progress in Scotland, of which one (Western General Hospital) is publicly funded.
- One privately financed scheme is in progress in Wales.

the procurement process, it is necessary for a trust and purchaser to agree the future income level of the trust over the period of the PFI contract: health authorities are obliged to provide 'letters of purchaser support', guaranteeing sufficient income to allow the trust to meet its PFI obligations. (However, health authorities are *not* parties to the concession agreements between NHS trusts and consortia.) In most cases, health authorities have demanded that PFI hospital developments place no additional strain on their existing budgets and in some cases they have demanded reductions in annual costs.

The PFI procurement process in the NHS is structured by the preparation and approval of two main documents. The first stage involves the preparation, and submission to the Department of Health (DoH) of an Outline Business Case (OBC). In this document, the NHS trust makes the case for the proposed investment and gives an estimate of the capital cost based on standard NHS costings. The OBC thus provides a benchmark for the capital cost based on what the scheme would cost under traditional procurement. If the proposal is approved by the Department, the trust is required to seek a private finance partner. This is the beginning of PFI procurement proper. The Full Business Case (FBC), which has to be approved by both the DoH and the Treasury, presents the design offered by the private sector and compares its costs with those of traditional procurement, based on the estimates in the OBC.

The funding of annual PFI payments comes (in principle) from the annual budgets and the disposal of existing assets of the NHS trusts concerned. Annual PFI payments have two principal components: an 'availability payment' which covers the repayment of debt incurred by the private sector and returns on the investment, and a 'service charge' which covers the facilities management side of the operation of the hospital. In general, all staff other than those directly providing NHS clinical services are transferred to the private sector.

The main budgetary element available to trusts to service PFI debt (availability payments) is the funding currently used to meet NHS capital charges (see below). After existing capital charges and the value realized by disposal of assets are taken account of, any further funding must come either from external sources (through increased health authority funding or from the Department of Health) or through reductions in the hospitals' other costs (in effect, staff costs).

The assumption that efficiencies on the part of PFI consortia would offset the higher cost of capital looks increasingly unconvincing as details of the costs of the first hospital PFIs enter the public domain.

This article seeks to:

- Examine the capital costs associated with PFI, and the role of private finance in the escalation of capital costs associated with the first wave of

PFI schemes in the NHS.

- Explore the actions taken—at local, regional and national levels—to deal with the annual cost of PFI debt within the NHS.

Capital Charging

The PFI payment system is intended to fit seamlessly into the existing capital charging regime in the NHS, under which returns on capital are made to the Treasury (Shaoul, 1998). NHS trusts have a financial duty to make an operating surplus of 6% of relevant assets after inflation, as well as making a straight-line depreciation charge over the lifetime of the assets. These charges are passed on to purchasers in the prices charged by trusts, while purchasers' funding in turn includes a component equivalent to average capital charges, creating a closed loop.

The mechanisms of the capital charging regime are crucial to an understanding of PFI procurement in the NHS (Pollock and Gaffney, 1998). The capital charge was never intended to reflect the cost of capital to the public sector: 'The practical choice of 6%...for the cost of capital...is an operational judgement, reflecting for example, concern to ensure that there is no inefficient bias against private sector supply' (HM Treasury, 1997). In other words, the capital charging regime was designed to reflect the cost of capital to the private sector rather than, for example, the rate of interest on government debt.

The theory was summed up by the former Secretary of State for Health, Stephen Dorrell, in evidence to the Treasury Select Committee (1996): 'every trust in the Health Service pays a capital charge which reflects the amount of capital which is employed within the trust and that, broadly speaking, reflects the cost of capital to the private sector as well. That allows the trust to make a comparison between buying the service from the private sector and doing the thing itself directly, including meeting the cost of capital which would be employed'.

Apart from providing a comparative benchmark for private sector bids the circulating funding for existing capital charges also provides the major source of funding for PFI investment. This leads to two problems:

- It creates a leak of funding—from what was previously a closed system.
- Any gap between what is available, from current combined operating surpluses and depreciation charges and the future annual costs of PFI investment, will need to be met either from trusts' other budgets, from within the local health authority budget or from regional or national budgets.

Sources of Data

For the purposes of the research described here, estimated capital costs of hospital PFI schemes at the OBC stage were taken from publicly available sources and confirmed by regional offices of the

Table 1. Outline business case and current capital cost estimates for 'first wave' NHS PFI schemes.

<i>Trust</i>	<i>OBC capital cost</i>	<i>Current cost £(M)</i>	<i>Change (%)</i>
Bishop Auckland	26,000,000	52,000,000	100
Bromley	80,000,000	120,000,000	50
Calderdale	55,000,000	77,000,000	40
Carlisle	48,000,000	63,000,000	31
Dartford	97,000,000	117,000,000	21
Hereford	50,000,000	63,000,000	26
Norfolk	110,000,000	214,000,000	94
North Durham	60,000,000	86,000,000	43
South Manchester	40,000,000	89,000,000	123
South Bucks	35,000,000	38,000,000	9
South Tees	65,000,000	106,000,000	63
Swindon	45,000,000	148,000,000	229
Wellhouse	30,000,000	40,000,000	33
Worcester	45,000,000	91,000,000	102

NHS Executive (in those cases where OBCs were not in the public domain). Other financial information on NHS trusts is published annually in the *Fitzhugh Directory of NHS Trusts*. At the time of writing, only five trusts had signed final contracts and only the FBCs for the North Durham and Dartford schemes had been placed in the public domain and were available to the study. Availability payments on three other schemes were also in the public domain. Available bed numbers for the past two years, taken from DoH publications, were compared with projected bed numbers under PFI development, taken from a ministerial reply to a written parliamentary question. Interviews were also undertaken with officers of regional offices of the NHS Executive and the NHS Private Finance Unit to establish how the affordability gap was being bridged and the nature of the subsidies being used.

Key Findings

OBC capital cost estimates for the 'first wave' PFI hospital schemes were compared with DoH estimates from July 1997, and where possible with costs given in publicly available FBCs. The rises in estimated capital costs of 'first wave' NHS PFI schemes are shown in table 1.

The structure of PFI capital costs was analysed using the two publicly available FBCs, and the reasons for the cost increases were explored. The structure of PFI capital costs, including financing costs is shown in figure 1.

In both these cases, the difference in capital cost estimates between OBC and FBC is largely accounted for by the incorporation of financing costs to the private sector, which amount to 25% and 15% of the overall cost respectively. (The lower percentage of financing costs to capital costs at the Dartford scheme may reflect a land deal of significantly higher value than at Durham.)

The annual revenue costs of five schemes were analysed, both as a proportion of capital cost and as a proportion of trust income for the financial year 1996/97. Financing costs were excluded. Availability

payments were compared with current operating surpluses and depreciation charges to quantify the gap between existing capital charges funding and the annual cost of PFI. Table 2 summarizes availability payments as a proportion of capital cost (excluding financing costs), while table 3 shows income, surpluses, depreciation and projected PFI availability payments for 1996/97.

With depreciation over 60 years and the 6% financial target return, capital charges would approximate to 7.7% of the original investment, in contrast to the 10.6% and 10.8% availability payments for these two schemes.

Comparing the current surplus and depreciation charges with the availability payment gives an indication of the way the cost structure of hospitals is changed by PFI development.

Subsidies

The means by which affordability problems of the 'first wave' schemes are being managed were explored at local and national level: switching of funding from locally available (trust and health authority) budgets and subsidies from DoH regional and national budgets. The problems were analysed under four headings:

Figure 1. Structure of PFI capital costs (including financing costs): two examples.

<i>North Durham Acute Hospitals Trust</i>	<i>FBC</i>	<i>OBC</i>
Construction	£67,400,000	£60,000,000
Insurance	£1,000,000	
Capitalized interest, fees and other costs	£18,200,000	
<i>Total</i>	£86,600,000	
<i>Dartford and Gravesham NHS Trust</i>	<i>FBC</i>	<i>OBC</i>
Construction	£89,200,000	£86,000,000
Equipment	£5,600,000	
Capitalized interest and fees	£17,800,000	
'Other'	£3,300,000	
<i>Total</i>	£116,900,000	

Table 2. Availability payments as a proportion of capital cost (including non-financial services fees and non-works costs, but excluding financing costs).

<i>Trust excluding financing costs</i>	<i>Capital cost</i>	<i>Availability</i>	<i>Availability as % of capital cost</i>	<i>Unitary payment</i>
North Durham	£67,423,000	£7,010,000	10.5	£12,088,000
Dartford & Gravesham	£98,100,000	£10,551,000	10.8	£16,600,000

Sources: North Durham Acute Hospitals NHS Trust (1997), Addendum to the Full Business Case (1998), p. 3 and Full Business Case, p. 52; Dartford and Gravesham NHS Trust (1998), Addendum to the Full Business Case, p. 51.

Table 3. Income, surpluses, depreciation and projected PFI availability payments, 1996/97.

<i>Trust</i>	<i>Income 96/97</i>	<i>Operating surplus (M)</i>	<i>Depn 96/97 (M)</i>	<i>OS plus depn %</i>	<i>PFI available charge (M)</i>	<i>Available charge % 96/97 income</i>
Bromley	£74,430,000	£3,560,000	£2,890,000	8.7	£10,740,000	14.5
Calderdale	£77,730,000	£1,670,000	£1,570,000	4.15	£8,740,000	11.3
North Durham	£61,410,000	£2,640,000	£1,780,000	7.2	£7,010,000	11.4
Edinburgh	£157,780,000	£6,020,000	£6,060,000	7.6	£25,590,000	16.2

Sources: FBCs, *The Fitzhugh Directory*, and press reports.

Table 4. Changes in bed numbers in NHS trusts under PFI development: selected sites (mental health beds excluded).

<i>Trust</i>	<i>Available beds 1995/96</i>	<i>Available beds 1996/97</i>	<i>Projected beds under PFI</i>
Bromley Hospitals NHS Trust	610	625	507
Calderdale Healthcare NHS Trust	688	654	508*
Dartford & Gravesham NHS Trust	524	506	400
North Durham Acute Hospitals NHS Trust	665	597	454
Norfolk & Norwich NHS Trust	1,120	1,207	809
South Manchester University Hospitals NHS Trust	1,145	1,070	736**
Worcester Royal Infirmary NHS Trust	524	526	390

Sources: DoH, *Bed Availability for England: Financial Year 1995/96 and 1996/97*. Projected bed numbers from *Hansard: Commons Written Answers* (18 December 1997), column 330 (Alan Milburn MP). *Corrected to exclude 78 mental health beds. **Corrected in light of South Manchester University Hospitals NHS Trust, *Summary of the Full Business Case* (1997), section 3.10 and with 77 mental health beds excluded.

Acute Bed Capacity

Projected bed numbers under PFI development were compared with available acute beds in the years 1995/96 and 1996/97 for a sample of trusts in the 'first wave' of PFI. The results are shown in table 4. 'Available' bed numbers include only staffed in-patient beds, and can therefore fluctuate from year to year, as beds and wards close and reopen in reaction to changes in demand and funding. By contrast, the planned bed numbers represent the maximum number of beds that will be available. Day-case spaces have been excluded in accordance with DoH practice, as have private patient beds.

Other Service Reductions

The 'knock-on' effects of the Dartford and Gravesham hospital investment on services other

than those provided by the trust are shown in table 5. In order to increase the funding of the Dartford and Gravesham PFI scheme by £2M per annum, West Kent Health Authority reviewed the funding for a number of investments in the community sector. All of these investments were responses to the 'knock-on' effects of the PFI development, in particular the removal of services from the Joyce Green Hospital site, which was transferred to the PFI consortium.

Block Capital Allocations and Equipment

The use of regional capital allocations to subsidize PFI developments was the subject of interviews with civil servants at regional offices of the NHS Executive. 'Block' capital allocations for the first wave trusts are given (figures supplied by regional

Table 5. West Kent Health Authority: effect on funding allocations of PFI affordability gap.

A = before endorsement of FBC by West Kent Health Authority (October 1996).
 B = after endorsement of FBC by West Kent Health Authority (November 1996).

<i>Service</i>	<i>Planned Investment A</i>	<i>Planned investment B</i>
Child resource centre	£249,000	£0.00
Relocation physical disability services	£200,000	£0.00
Relocation mental health services	£85,000	£0.00
Community nursing	£600,000	To be reviewed
Community hospital services	£1,000,000	To be reviewed

Sources: West Kent Health Authority, *Report of the Director of Commissioning, North to the Meeting of the Board on 31 October 1996* and *Report of the Director of Commissioning, North and Director of Finance to the Meeting of the Board 28 November 1996*.

offices) in table 6.

The 'Smoothing' Mechanism

The annual allocation for the eleven 'first wave' schemes benefiting from this subsidy (figures provided by NHS Private Finance Unit) are given in table 7. The amounts shown represent annual sums available from the first year of the contract to reduce the PFI payments.

The Costs of the PFI

Why should PFI schemes show escalations in capital cost of the levels shown in table 1? There is no obvious reason why the construction cost of PFI hospitals should be greater than that of traditionally funded schemes: after all, publicly funded hospitals are also built by the private sector. Part of the rationale for the PFI was that the private sector was likely to propose less expensive design solutions than those produced using traditional design approaches. Contrary to what is often alleged, this level of cost escalation is *not* typical of NHS capital development. Information on cost performance of NHS capital construction projects over £1M was provided to the authors by NHS Estates. This shows that the differences between outturn and original approved tender sums reflect average cost over-runs of between 8.8% and 6.26% in the period 1990–97. Moreover, the increase in capital cost for most of these schemes is almost certainly understated due to the removal of equipment from PFI schemes (see below).

One factor which has undoubtedly influenced capital costs in certain schemes has been the need for projects to be of a certain scale in order to obtain private investment (given the time and expense of bidding for PFI contracts). The Princess Margaret Hospital scheme in Swindon, for example, was originally to have been a partial new bid and refurbishment of the existing (town centre) site, and this is reflected in the OBC capital cost of £45M. Schemes of this scale have proved unattractive to private sector investors, and the Swindon scheme has been transformed into a complete new-build on a greenfield site located outside the town (thus releasing a valuable town centre site for development by the PFI consortium).

The current capital cost estimate of £148M reflects this change, which was uniquely determined by the interests of private investors.

The influence of PFI on the scope and scale of developments goes some way towards explaining the rises in capital cost in some of the 'first wave' schemes. However, examination of the structure of costs for those projects where business cases have been made public shows the influence of a more general factor: the borrowing costs of PFI consortia, which are included in the capital cost estimate (see figure 1). Capital costs quoted for PFI schemes typically include 'rolled-up' interest and financing costs incurred by consortia during construction. The rationale for this lies in the nature of PFI concession agreements. No fee is paid to the private sector consortium engaged in providing a new hospital until such time as the hospital is available to be occupied by the trust. The consortium however incurs interest charges throughout the construction period, which might be as long as five years. These are therefore capitalized and added to the construction costs, along with fees for financial services. In the two cases given in figure 1, financing costs account for the bulk of the increase in capital costs between the OBC and FBC.

The Affordability Problem

The initial planning of the first wave PFI schemes—and the support of health authorities for those schemes—was based on the costs associated with traditional public sector procurement. At the same time the revenue impact of the proposals was assessed at this stage in terms of the capital charges consequences: the need to make a 6% return and to cover depreciation, leading to revenue costs of roughly 7.5%. Any excess of annual PFI costs over the capital charges assumed in the OBC would place the viability of schemes in question. The cost estimates in OBCs (table 1), on the basis of which health authorities originally gave their support, thus proved quite unrealistic. Not only have the costs of capital escalated from outline to full business case but the annual availability payments are considerably more than the capital charges paid currently and around 3% greater than NHS capital

Table 6. Annual capital allocations for NHS trusts under PFI schemes (1996/97).

<i>Trust</i>	<i>Region</i>	<i>Annual capital allocation</i>	<i>Capital cost</i>
Bishop Auckland	Northern & Yorkshire	£96,000	£52,000,000
Bromley	South Thames	£1,075,000	£120,000,000
Calderdale	Northern & Yorkshire	£1,500,000	£77,000,000
Carlisle	Northern & Yorkshire	£1,200,000	£63,000,000
Dartford & Gravesham	South Thames	£850,000	£117,000,000
Hereford	West Midlands	£1,000,000	£63,000,000
North Durham	Northern & Yorkshire	£1,700,000	£86,000,000
South Manchester	North West	£3,700,000	£89,000,000
South Tees	Northern & Yorkshire	£3,700,000	£106,000,000
Swindon	South West	not available	£148,000,000
Worcester	West Midlands	£1,000,000	£91,000,000

Source: Regional offices of the NHS Executive.

charges would be for the same level of investment (see tables 2 and 3).

Land Transfers

DoH approval for major investments turns on their ability to deliver structural changes to the local health care system, through the reconfiguration of existing services and the centralization of acute services on single sites. This gives rise to opportunities to dispose of buildings and sites deemed surplus to requirements which can be made over to PFI consortia in exchange for lower annual availability payments. There is evidence that the need to release land for development has had a significant impact on planning at a number of schemes, leading to decisions to relocate hospitals to cheaper greenfield sites, as has happened at the developments for the Princess Margaret Hospital in Swindon and the new Royal Infirmary of Edinburgh; or failing that, reducing the area of the hospital to enable part of the existing site to be disposed of, as has happened at Carlisle, Durham and Bromley.

However, any hope that the sale of existing assets would eliminate the gap between existing capital charges funding and PFI availability

payments would be mistaken. In order to benefit from the proceeds of land deals, trusts are obliged to amortize the economic benefit gained, leading to annual revenue costs. The logic is inescapable: allowing trusts to dispose of assets in order to fund PFI deals (without facing any revenue consequences) would mean that the PFI had allowed capital to revert to being a 'free good', the very phenomenon that the capital charging policy was intended to eliminate, and one of the planks of the rationale for the PFI. The Dartford and Gravesham NHS Trust was thus obliged to introduce an amortization charge of £920,000 into its financial projections, compounding its already severe affordability problems. This was later reduced to £383,000 by increasing the amortization period to 60 years. To meet the cost, funding was diverted from the regional capital budget (see below).

Acute Bed Capacity

A striking feature of the current hospital development programme is that dramatic increases in capital costs are combined with significant reductions in bed capacity (see table 4). Debate on the relationship between the use of private finance and bed reductions has all too often been misrepresented in terms of a dichotomy between claims that the PFI is uniquely responsible for bed reductions and claims that they result rather from policy imperatives to change 'models of care'. Some of the currently prioritized schemes show a decrease in projected in-patient bed numbers between the OBC and FBC, even though OBCs typically included large scale reductions. The OBC for North Durham Acute Hospitals NHS Trust projected a reduction of beds from 837 to 565, a reduction of 272. The FBC projected 454 beds, a reduction of 121 from the OBC projection. Moreover, the financial model used by the PFI consortium, Consort Healthcare, proposed a further reduction to 408 beds. These bed reductions go against current trends, where NHS acute beds have reopened in the past two consecutive years to accommodate rising caseload and emergency admissions (DoH, 1998). This

Table 7. Subsidies to PFI schemes under the 'smoothing mechanism'.

<i>Trust</i>	<i>Annual funding (year 1) £000s</i>
Bishop Auckland	317,000
Bromley	1,048,000
Calderdale	427,000
Carlisle	633,000
Dartford & Gravesham	1,059,000
Hereford	562,000
North Durham	757,000
Swindon	1,402,000
Wellhouse	358,000
Worcester	763,000

Source: Department of Health Private Finance Unit.

reversal in the long-term trend is reflected in the Secretary of State for Health's recently stated aim (reported in the *Financial Times*, 8 June 1998) of reopening 2,000 hospital beds.

Reductions in bed numbers increase pressures on primary care and community health services (Pollock *et al.*, 1997). The OBC for a scheme devolving activity to community facilities, produced by the Worcester Royal Infirmary NHS Trust, notes: 'the levels of devolved activity assume that the appropriate range of facilities available on the Worcester Royal Infirmary site will also be available in the community. This is unlikely to be the case'.

Table 4 shows that in the new Dartford and Gravesham PFI schemes West Kent will lose 124 beds under its investment plans: this represents nearly a quarter of its available beds. While there was no significant revision of projected beds in the course of procurement, there was an increase in projected caseload. During the procurement process, West Kent Health Authority originally allocated £1.6M (see table 5) to fund schemes 'which would need to be undertaken...as a direct result of either the withdrawal of services from Joyce Green site or the transfer of the Gravesend and North Kent Hospital to the Thameslink trust', that is, as a result of the PFI development. A report from the Director of Commissioning and the Director of Finance to a meeting of the Trust board on 1 November 1996 revealed that, in order to bridge the PFI affordability gap which emerged at the time of the FBC in October 1996, the projected funding for investment in community services was largely withdrawn. This enabled West Kent to increase its annual funding for the PFI scheme by £2M.

Regional Capital Allocations

'Block' capital allocations, disbursed by NHS regions directly to hospital trusts, are intended to cover maintenance and replacement of assets (table 6). It was originally expected that block capital funding would be released to the rest of the NHS as trusts divested themselves of their assets through PFI deals. The costs of maintenance and replacement would then be factored into the charges to be paid to the private consortium and would thus be paid out of the NHS revenue budget.

However, NHS regions have considerable discretion in allocating block grants, and as affordability problems arose, means were sought to make use of block funding in order to reduce the cost to purchasers. To address the affordability of the Dartford and Gravesham scheme, South Thames NHS Executive agreed to convert the trust's block capital allocation into an annual subsidy to the PFI payment stream. The original allocation was worth £850,000. This was later reduced to £383,000 as a change in the amortization period for assets made over to the consortium reduced the affordability gap.

A less direct way of providing subsidy is to remove equipment from a PFI scheme. This approach has been taken for all schemes in the

Northern and Yorkshire region (Bishop Auckland, Carlisle, North Durham, South Tees) and for the Bromley scheme in South Thames. It is under discussion in the West Midlands (Hereford, Worcester) and South and West (Swindon) Regions.

Cuts in NHS capital budgets have led to reductions in the amount of block capital at the disposal of NHS regions. In the South Thames region this has led to reductions of 50% in allocations, which are expected to rise again in coming years. However in two regions (Northern & Yorkshire and West Midlands) capital allocations for PFI schemes have been maintained at the normal level, leading to further withdrawal of capital funding from other trusts.

The 'Smoothing Mechanism'

By 1996 it had become apparent that none of the major PFI schemes in healthcare was affordable within the annual budgets of the trusts concerned. A support scheme was arranged by the DoH and the Treasury. Eleven hospital trusts were offered access to a scheme (known as the smoothing mechanism) under which PFI payments could be subsidized. The amounts allocated are shown in table 7 and represent the annual sums available from the first year of the contract to reduce the PFI payments. It is intended that the impact on purchasers should remain constant throughout the period. Future PFI schemes are not affected.

The economic rationale for the smoothing mechanism was explained in copies of correspondence and papers made available to the authors by the NHS Executive Private Finance Unit. This correspondence, between senior officials of the NHS Executive and chief executives of relevant NHS Trusts, recognizes that 'a number of the early PFI projects are expecting to face affordability problems...despite offering good value for money'. This was attributed to the fact that the private sector would seek to recover the capital cost over the lifetime of the initial contract (25 to 40 years) 'whereas an equivalent public sector scheme would depreciate the asset over 60 years...The support scheme is designed to equalize the payment streams for privately financed and publicly procured projects by spreading the capital costs across 60 years rather than the primary concession period'.

The plausibility of this explanation is not enhanced by the way in which some NHS trusts have adopted quite different assumptions on asset lifetimes in business cases which have been approved by the NHS Management Executive. In its FBC the Dartford and Gravesham Trust had assumed a 40 year asset lifetime when comparing the costs of PFI with traditional procurement. The effect was to overstate the annual revenue impact of public sector procurement, eliminating the disadvantage on the side of the PFI option. The same approach was adopted by the Royal Infirmary of Edinburgh NHS Trust in its FBC. Despite the introduction of this bias against public procurement, the

Dartford Trust noted that the public sector option 'is cheaper in cash terms during the early years of the project by £1.7 million per annum. However, this is primarily caused by a requirement for the investment to be repaid over 25 years under PFI compared with the 40 year depreciation policy in the Public Sector Comparator [and because] the PSC ignores risk adjustment and is bound to be understated'. The Trust concluded: 'This affordability comparison, therefore, is misleading', a judgement it would be difficult to argue with. The Trust nonetheless received an annual subvention of £1,059,000 under the 'smoothing mechanism' and went on to become the first NHS trust to sign a major PFI contract.

The subsidy thus has little to do with asset lifetimes and is more convincingly explained as an attempt to manage the difference between NHS capital charges—the 6% return on relevant assets—and PFI returns on capital. In this context, it is worth noting that government Interest Bearing Debt principal is recovered over 25 years, not over the lifetime of the assets it finances. It is also worth noting the subsidy of £42.6M to the princess Margaret Hospital in Swindon, for a scheme with a total capital cost of £148M. As table 1 shows, the OBC projected cost was £45M yet the NHS will be paying almost as much in this one subsidy as it would have paid to proceed with the original publicly-funded scheme.

While the 'smoothing mechanism' has been dropped for new PFI schemes, there is no reason to assume the need for subsidy will disappear. One solution may be for the Exchequer to directly fund part of a scheme, and this has happened at South Manchester University Hospitals NHS Trust, one of the first wave schemes which did not receive a subsidy from the previous government.

Conclusion

The PFI has had the effect of raising the costs of infrastructure development in the health service. The assumption that higher capital costs would be offset by savings resulting from the involvement of the private sector has proved incorrect. Rather, NHS trusts and health authorities have been obliged to make savings on other budgets in order to make the high costs of investment affordable. The PFI has thus exacerbated

pressures to reduce the costs of clinical services, but without passing the benefit of any savings back to the NHS or the Exchequer. Although government policy seems to have moved towards keeping hospital beds open, the current wave of major investment in the NHS—the largest new hospital building programme in the history of the NHS—is premised on the further downsizing of the hospital sector (Gaffney and Pollock, 1998).

As 'affordability' problems could not be completely bridged using locally available NHS resources, schemes are being subsidized through national and regional capital budgets. PFI schemes have thus failed to deliver within the affordability limits originally set for them, and those limits have been relaxed to accommodate them. There is no reason to believe that these problems will disappear as the volume of PFI investment increases. ■

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