‘The only game in town?’
A report on the Cumberland Infirmary
Carlisle PFI
by UNISON Northern Region

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UNISON
the public service union
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PREFACE

This study of the full business case for the building of the new Cumberland Infirmary in Carlisle was commissioned by UNISON’s East Cumbria Health Branch in conjunction with UNISON’s Northern Regional Council Private Finance Working Group and with financial assistance from UNISON’s General Political Fund.

The new hospital in Carlisle will be almost the first major hospital building project in the country to be completed under the Private Finance Initiative. As with the Dryburn scheme in Durham, the analysis of the full business case (only made available after approval for the scheme had been given) demonstrates a powerful and devastating demolition of the case for building major NHS hospitals with private money under the Private Finance Initiative. It also raises major questions about the effect of PFI schemes on the provision of both hospital services and health services generally to the people of East Cumbria.

We wish to thank David Price, Declan Gaffney and Allyson Pollock for their work and cooperation in producing this study and the UNISON East Cumbria Branch and the UNISON General Political Fund for financing it.

Robin Moss, Senior Regional Officer
Northern Region, UNISON
SUMMARY AND MAIN POINTS

The new Cumberland Infirmary being built in Carlisle is both financed and owned by the private sector. The NHS will become a tenant paying an annual fee for the use of the hospital for 30 years. This arrangement is known as the Private Finance Initiative, a policy which the Labour Government took over from the Conservatives when it came to power in 1997 and which it now calls “a huge success story.”

The Government promotes the belief that PFI brings new money into the NHS. This is not the case. The cost of the £3 billion hospital investment programme under the PFI will have to be met wholly from NHS budgets and through the sale of NHS property.

The private sector consortium, Health Management Group (Carlisle), which will own and operate the new Cumberland Infirmary will be paid from money released from the development of the existing tower block and from the £6 million, 30 year annual charge it makes to the NHS. Carlisle Trust currently pays the Government £3.45 million annually in rent, charges for capital, and depreciation. When the new hospital opens the total charge for capital will rise to £7 million (including payments which will still have to be made to government). Thus, the Trust will have to find an extra £3.55 million each year to use the new facilities although they are smaller than those they replace. That is an extra £105 million (at constant prices) over the life of the contract. This means less money for patients and less money for care.

If the new hospital is smaller, why should it cost more when one of the key justifications for the PFI is its alleged efficiency? There are three main reasons for the price increase. First, cost changes during the procurement process increased the total costs by 93% from £45.4 million in 1994 to £87.7 million in 1997. Cost escalation in publicly owned hospitals is only 6-8%.

Second, PFI arrangements involve ‘financing’ costs which traditional public investment avoids. Financing costs have added £17 million to the cost of constructing the new hospital, increasing total costs from £67 million (the cost of construction) to £85 million (construction costs plus financing costs, but excluding public capital). The annual fee is set so that both costs will be repaid in the contract period.

Third, under the PFI the cost of capital to the Trust is higher than it would otherwise be. Because of the low risk, the private
sector can borrow at very low rates for hospital projects but it does not pass these low rates on. The Carlisle consortium has raised money at a 7% rate of interest. Nevertheless its capital charges to the Trust are around 9%. This is half as much again as the government charges the Trust.

Like one third of trusts and health authorities in England and Wales, the Carlisle Trust is already in deficit under existing funding arrangements. In other words the Trust currently has insufficient income to balance the books. How has the Trust made the savings to meet the extra costs of capital from its existing budget?

First, the Trust has committed itself to make savings on its revenue budget. The Trust has already diverted £3.55 million annually from savings in operating budgets. This includes a 13% cut in the clinical staffing budget between 1994 and 2000. (These planned savings were originally earmarked for the Health Authority to spend on other services such as primary care).

Second, the Trust plans to generate income by increasing the prices it charges to local NHS purchasers (North Cumbria Health Authority and general practices). When the new infirmary proposals were drawn up in the mid-nineties, they were promoted as offering efficiency savings to purchasers of £1.7 million a year. By the time PFI negotiations were completed, purchasers were being charged an extra £0.4 million, a swing of £2.1 million against them.

Third, the Trust also recognised it would have to generate income from non-NHS sources like private patients and charitable funds. The Trust has set up a charitable appeal known as the Frontline Appeal to raise money for NHS equipment, some of which may be essential rather than optional. The Trust has already met its increased income target from patients and cannot generate more income without increasing the number of private patient beds. Given the large decrease in NHS capacity (both beds and staff) that is already taking place in the Trust, the doctors are resisting a further transfer of beds to the private sector, in the interests of NHS care.

Finally, the Trust had to call on extra help from the Government, which came up with a new subsidy worth about £0.3 million a year. This subsidy is funded by top-slicing the total NHS budget and so is at the expense of the NHS as a whole.

Thus, the scheme is only made affordable by selling land, cutting capacity (beds and services), cutting the services budget, and diverting income from other NHS services.

The Carlisle PFI was approved by the Government because the Trust calculated that it offered better value for money than providing the hospital in the traditional way. Our study shows that the Trust’s figures were out by more than £11 million and that the public scheme should have been preferred on economic grounds.
grounds. The Government and the Trust have to explain why fundamental mistakes were made in these figures.

The new infirmary is intended to meet the healthcare needs of the local population. How it fares on this score is impossible to tell. The new PFI hospital will open with around 15% fewer beds than it had in 1996 and with fewer than the 474 staffed beds agreed for the PFI hospital. It will also open with at least 87 fewer qualified and trained staff than it had in 1996. PFI documents do not disclose how many patients will be treated in each specialty, on what basis, nor how quickly they will have to be pushed through the system. The Trust acknowledges that older people will definitely have reduced access to care and hospital services. Thus, an £88 million investment, paid for out of public money and set to control the pattern of local health services for the foreseeable future, has been undertaken without specifying how the acute healthcare needs of the local population will be met.

We conclude that the Carlisle PFI has worsened the financial situation of the hospital Trust and has required money to be diverted from the hospital's operating budget to pay the profits and charges of the private sector. Claims that the PFI will deliver a more efficient service are not borne out by the analysis. The government has given approval to an uneconomic scheme with an ill-defined capacity. According to the Government's own rules Carlisle's new hospital should not have been a PFI.
Description of the work

The aim of the present study is to examine the Cumberland Infirmary PFI business case in order to explore

1) the financial implications for the Trust and Health Authority of using the private finance initiative

2) the basis of the trust’s claim that the development represents value for money to the public sector, and

3) the adequacy of the new hospital in relation to the health care needs of the local population.

Specifically, the study examines the cost and affordability implications of the scheme; it assesses the government prescribed appraisal system as applied to the Carlisle scheme; and it assesses the role of population healthcare needs in the formulation of the investment plan. The report is based on PFI business cases, additional documentation supplied by the Carlisle Hospitals NHS Trust and on discussions with personnel from the trust, North Cumbria Health Authority, and Northern and Yorkshire Regional Management Executive.
SECTION ONE

The context

Main points:

• PFI is a method of financing; it is not an additional source of funding for the NHS
• the costs of the PFI must be met from NHS budgets
• the annual costs of PFI buildings are far higher than the replacement costs of the existing buildings
• the extra cost is met by new subsidies and by reductions in spending on clinical services, involving bed reductions averaging 31%.

Privately financing public services

1.1 The current wave of new hospital construction in the NHS hospital sector is almost entirely financed through the Private Finance Initiative, or PFI. This means that, rather than government providing the capital for investment in public services, capital is raised by the private sector which then carries out the required construction. This is not a charitable donation: PFI schemes are profit-making ventures for the private sector financial, construction and facilities management sectors. Over the period of the PFI contract, the public sector pays for the use of the facilities and the private sector makes its returns on the investment out of these payments.

1.2 The PFI is central to Government’s plans for the modernisation of public services. Over the three years covered by the Chancellor of the Exchequer’s Comprehensive Spending Review, net investment by the public sector is projected to be £22.6 billion, while investment under the PFI and other forms of public-private partnership is projected to be £10.9 billion. In other words, nearly a third of all investment in the public sector between 1999 and 2002 will be privately financed.

1.3 Under the PFI, consortia of construction companies, bankers and service providers contract to finance, design, build and operate new hospital facilities which they then lease to the NHS, usually for periods of 25 to 35 years. Until recently, services classed as ‘non-clinical’, along with the employees providing those services, have usually been transferred to the consortia.

1.4 NHS trusts make annual payments to the private sector for the use of the new facilities. Although these fees are referred to as ‘unitary payments’, they consist of two annual bills clearly distinguished in the contracts between NHS trusts, PFI consortia, and funders. One bill, usually referred to as the ‘availability payment’, covers the PFI consortium’s debt service obligations.

(hospital PFI schemes are overwhelmingly financed by debt) and provision for capital expenditure that may be required over the contract period. This is in all cases the major part of the 'unitary fee'. The other bill, the services fee, pays for those services provided by the PFI contractor: at Carlisle these will include portering, catering, estates and maintenance and non-emergency transport. In many cases, including Carlisle, there is a third, minor payment stream known as a 'usage fee' which varies with the number of patients treated each year.

1.5 The main feature of PFI is that future NHS revenue is committed in advance to funding private sector debt service and profits over extended contract periods. The cost of PFI capital to taxpayers is therefore a central issue. In general, the availability payment represents the cost of capital for PFI projects: 'This fee comprises the primary source of revenue enabling [HMC] to pay principal and interest'. The other element covered by PFI payments, the cost of services provided by PFI partners, is of less importance because there is no inherent reason why these costs should be higher or lower than those that would be required under any development, however financed. It is therefore important to separate out capital and services costs in looking at PFI developments.

Subsidising the cost of private finance

1.6 The evidence from the first wave of PFI suggests that the investments require radical changes not just in the hospital trusts undertaking the schemes, but among providers throughout the catchment area they serve.

1.7 The Department of Health had originally hoped that PFI investments would be funded through the disposal and sale of existing sites and diversion of NHS 'capital charges'. Capital charges are annual payments which NHS trusts make to the Treasury in exchange for the use of buildings and equipment, or 'assets'. The charge, which was introduced in 1992, is levied at the rate of 6% of current replacement cost of land and buildings and is paid out of hospitals' annual revenue budget. It commits trusts to diverting part of their annual income to pay for capital. However, the annual cost of PFI is far greater than capital charge payments.

1.8 The extra cost of capital has to be met out of hospital revenue budgets and this has created acute problems of affordability. Government has sought to soften the blow in several ways. In the first place, it has directly subsidised schemes through the NHS capital budget. Subsidy to a value of £230 million was allocated to selected PFI schemes in the last year of the Conservative Government and continued by Labour after the 1997 election victory. This took the form of a top-sliced allocation from the national capital budget.

4 Summary of contract documents 20
5 Nat West Markets/Schroders Preliminary offering circular dated 23 October 1997
1.9 Apart from the top-slicing, PFI schemes have also benefited from regional NHS capital allocations switched to PFI purposes. This means that NHS capital spending is being redirected to assets which are neither owned by nor under the control of the NHS.

1.10 However, these measures have proved insufficient to make PFI schemes affordable within existing hospital budgets. The result is that health authorities have had to increase the revenue of PFI hospitals at the expense of other providers, while trusts have redirected expenditure on clinical care to meet the costs of private finance. Reductions in clinical services budgets are a general feature of PFI schemes.

1.11 All of the first wave of PFI hospitals, for which figures are available, involve reductions in the number of beds. Bed complement changes associated with the first wave PFI hospital schemes represent an average reduction of 31% of current (1995-6) capacity (table 1). In Hereford and Worcester reductions have exceeded 50%.

**Table 1**

<table>
<thead>
<tr>
<th>Trust</th>
<th>1995-6</th>
<th>1996-7</th>
<th>Planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bromley Hospitals</td>
<td>610</td>
<td>625</td>
<td>507</td>
</tr>
<tr>
<td>Calderdale Hospitals</td>
<td>797</td>
<td>772</td>
<td>553</td>
</tr>
<tr>
<td>Dartford and Gravesham</td>
<td>524</td>
<td>506</td>
<td>400</td>
</tr>
<tr>
<td>North Durham Acute Hospitals</td>
<td>665</td>
<td>597</td>
<td>454</td>
</tr>
<tr>
<td>Norfolk and Norwich</td>
<td>1120</td>
<td>1008</td>
<td>809</td>
</tr>
<tr>
<td>South Manchester</td>
<td>1342</td>
<td>1238</td>
<td>736</td>
</tr>
<tr>
<td>Worcester Royal Infirmary</td>
<td>697</td>
<td>699</td>
<td>390</td>
</tr>
<tr>
<td>South Buckinghamshire</td>
<td>745</td>
<td>732</td>
<td>535</td>
</tr>
<tr>
<td>Hereford Hospitals</td>
<td>397</td>
<td>384</td>
<td>250</td>
</tr>
<tr>
<td>Carlisle</td>
<td>506</td>
<td>507</td>
<td>440</td>
</tr>
<tr>
<td>Greenwich</td>
<td>660</td>
<td>566</td>
<td>484</td>
</tr>
<tr>
<td>Total</td>
<td>8063</td>
<td>7634</td>
<td>5558</td>
</tr>
<tr>
<td>Change from 1995-6</td>
<td>-</td>
<td>429</td>
<td>2567</td>
</tr>
<tr>
<td>(percentage change)</td>
<td>-5.2%</td>
<td>-31.8%</td>
<td></td>
</tr>
</tbody>
</table>

1.12 In addition, inroads have had to be made into other NHS budgets, including operational budgets for clinical services, in order to make schemes 'affordable' and this has affected the proposed number and proportion of trained clinical staff in PFI hospitals. When the new Edinburgh Royal Infirmary opens in 2003 the projected staff budget will be 23% less than 1996, and there will be almost 25% fewer staff, a greater proportion of whom will be untrained and unskilled. There is a similar picture in Durham6.

1.13 The policy of substituting capital for clinical labour is fundamental to PFI. Newchurch, a consultancy firm which advises government and NHS trusts on PFI has estimated that:

"every £200 million spent might require productivity improvements leading to perhaps 1,000 job losses, which might be significantly greater than 25% of the workforce and is probably only achieved by reducing the numbers of doctors and nurses, although often these job losses will not be realised within the hospital undertaking the development but in the local healthcare market".7

The ‘biggest building programme in the history of the NHS’

1.14 The PFI in health is regularly cited by Government as a major success story. In three successive waves of ‘prioritisations’ 32 major hospital PFI schemes have been given the go-ahead by the Government in England alone. 18 of these, including Carlisle Hospitals NHS Trust, have signed contracts. The cost of building these hospitals is estimated at £2.8 billion. The wave of new investment is routinely referred to in government propaganda as the ‘biggest hospital building programme in the history of the NHS.’ But the programme is based on large-scale closures.

1.15 The scale of PFI investment in the NHS reinforces concerns about the implications of the policy. If the planned schemes all go ahead, there will be a major new PFI hospital in over a third of health authority areas. This will have knock-on effects for the healthcare system not just in the areas with new hospitals but in neighbouring areas. At the same time the PFI is to be actively promoted in primary and community care, and the DoH’s Capital Investment Strategy (May 1999) even raises the possibility of a single PFI contract to cover a ‘whole local health economy’, taking in primary, community and acute care.8 The PFI in the NHS is thus a system-wide change rather than a set of individual construction projects, and the replacement of government investment by private finance is likely to have implications for the NHS as a whole.

1.16 Why is this happening? PFI objectives are confused. Under the Conservatives, the PFI was explicitly related to a general commitment ‘to reduce the size of the public sector through privatisation and contracting out’.9 Under Labour, this is no longer an explicit aim (although it is still the effect) and stress has been laid on two other justifications for the policy: the reputed lack of public capital and the (potential) efficiency of transferring risks to the private sector.

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8 Capital Investment Strategy, Department of Health (May 1999) p. 28.
However, PFI is not a source of new resources: the costs of private finance have to be met from precisely the same sources as other NHS expenditure, namely, taxation. Nor is it a substitute for government borrowing: the contract for the Carlisle scheme indicates that the Government is accepting responsibility for all the debts of the PFI consortium undertaking the scheme; the Government is thus effectively borrowing through an intermediary. Finally, the main risks present in PFI deals could have been transferred out of the public sector without the radical policy of privately-provided hospitals.

The policy is therefore not clear cut and if the Government wishes to call it a success it has still to show on what grounds it bases that claim.
SECTION TWO

Total cost

Main points:

- total redevelopment costs doubled between 1993 and 1997 from £41 million to £88 million
- the PFI element of the scheme will cost £84 million of which
  - £17 million is the cost of getting PFI finance and £67 million is the cost of construction
- the £17 million bill would not have been paid if the hospital had been built in the public sector
- the PFI company refused to include all hospital equipment in the deal and at least £4 million extra public investment is required, bringing the total cost of the scheme to a minimum of £88 million
- construction costs were pushed up during PFI negotiations from £46.5 million to £67 million in order to create a more profitable project
- all these costs plus interest and profits will be paid out of the Trust’s budget.

The components of total capital cost

2.1 The Carlisle Hospital NHS Trust PFI scheme involves replacing Cumberland Infirmary, the City General, and the City Maternity Hospital with a new, purpose-built facility on the Infirmary site. The PFI consortium is Health Management Group (Carlisle), or HMC, the founding shareholders of which were AMEC (the construction company contracted to build the new hospital), London Electricity, and Building and Property Facilities Management Limited (BPFM). BPFM will run the new hospital. The new building is due to open in April 2000 when it could become the first PFI-built hospital in the UK to be up and running.

2.2 What distinguishes PFI from other forms of public sector procurement is the fact that the capital for the investment is raised by the private sector rather than government. PFI consortia borrow on the financial markets (from banks, or through bond issues) in order to fund the construction costs of the new hospitals. They also invest a certain amount of their own capital (equity and loan stock), on which they expect to make a return. The NHS pays for this capital through the annual ‘availability’ payments it makes to the PFI consortium in return for the use of the hospital. The cost of capital to the NHS represents whatever borrowing costs the PFI consortium has
incurred (debt interest and principal repayments) and the
consortium’s return on its investment.

2.3 The capital for the Carlisle scheme has been raised in the
financial market through a bond issue (85%), equity from
shareholders (10%) and loan stock (5%). This was the first
occasion on which a bond issue was used to finance a PFI
development in the NHS.

2.4 The financial implications of PFI schemes – for NHS trusts and
for the taxpayer – depend on the amount of capital raised by the
private sector, the cost of that capital to the NHS, and the
resources available to meet that cost.

2.5 The capital raised by the private sector tends to be considerably
greater than the construction costs of the new hospital. This is
because part of the capital raised goes to meet various financing
costs. In other words, capital is raised in order to meet the cost
of raising capital (table 2).

2.6 PFI charges are funded out of hospital trust’s annual revenue
budgets. The total capital cost of a PFI hospital determines its
annual cost to an NHS trust because all private finance has to be
repaid by the trust in annual instalments within the life of the
contract. In the case of Carlisle, the contract period is 30 years.
Total capital cost is made up of construction costs and financing
costs. Construction costs consist mainly of the cost of building.
Financing costs are the costs incurred in procuring private
finance.

2.7 The total capital raised by the private sector for the Cumberland
Infirmary PFI scheme was £83.72 million.11 The bond issue
raised £75.7 million and shareholders (loan stock and pure
equity) contributed £7.92 million. Of the total capital raised,
£67.01 million (80%) was in respect of construction period costs
and the balance, £17.71 million (20%), was in respect of
financing costs (table 2). (Financing costs are essentially costs
which arise from using the PFI mechanism. They would not be
incurred in a public scheme).

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11 In May 1999, Carlisle NHS Trust gave a figure of £85.42m. However, the general manager of HMC subsequently
amended this figure. Robert Marsden, General Manager HMC, personal communication, 21 June 1999. The HMC
total has been used for this report.
Table 2

Components of capital cost and source of capital, Carlisle NHS Trust

<table>
<thead>
<tr>
<th>COST COMPONENT</th>
<th>£m</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>construction period costs</td>
<td>67.01</td>
<td>80</td>
</tr>
<tr>
<td>financing costs:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>debt service during construction period</td>
<td>13.83</td>
<td>17</td>
</tr>
<tr>
<td>underwriters, bond guarantors, etc</td>
<td>2.88</td>
<td>3</td>
</tr>
<tr>
<td>total financing costs</td>
<td>16.71</td>
<td>20</td>
</tr>
<tr>
<td>total PFI capital costs</td>
<td>83.72</td>
<td>100</td>
</tr>
<tr>
<td>non-PFI equipment</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>total (public and private) capital cost</td>
<td>87.72</td>
<td></td>
</tr>
<tr>
<td>source of capital:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>loan stock and equity</td>
<td>7.92</td>
<td></td>
</tr>
<tr>
<td>bond</td>
<td>75.70</td>
<td></td>
</tr>
<tr>
<td>total private capital</td>
<td>83.72</td>
<td></td>
</tr>
<tr>
<td>public capital</td>
<td>4.00</td>
<td></td>
</tr>
<tr>
<td>total (public and private) capital raised</td>
<td>87.72</td>
<td></td>
</tr>
</tbody>
</table>

Source: Robert Marsden, General Manager HMC, personal communication, 21 June 1999

2.8 However, the total cost of the new hospital does not correspond to the amount of capital raised by the private sector because most hospital equipment is excluded from the PFI deal. According to the regional office, an estimated £4 million of public capital should be added to the private finance. This produces a total capital cost of £87.72 million (table 2).

2.9 Financing costs, which are not incurred under public sector procurement, have several components (table 2). The main element (£13.83 million) is ‘debt service during construction period’. Sometimes referred to as ‘rolled-up interest’, this cost item arises because under PFI repayment arrangements an NHS trust only begins its annual PFI payments on completion of the building, while debts are incurred by the private consortium as soon as construction starts. Payments to ‘underwriters and bond guarantors’ (£2.88 million) are not separately identifiable because, despite their size, details about them have been withheld by the PFI consortium on the grounds of commercial sensitivity.

Increases in construction costs

2.10 The estimated capital costs of the Carlisle development have increased substantially since May 1993, when NHS Estates produced a hospital redevelopment plan costing at £41.2 million. A revised public sector scheme was devised in 1994 in which the capital cost of the preferred option increased to £45.4 million. Costs increased again in 1996 to £46.5 million, and reached the current £67 million in 1997 (table 3).

12 Personal communication from Regional Director of Public Health.
Table 3
Increases in construction costs, 1993-1997 (1996 prices)

<table>
<thead>
<tr>
<th>Capital scheme</th>
<th>Total cost of construction (£m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Estates scheme 1993</td>
<td>41.2*</td>
</tr>
<tr>
<td>1994 FBC</td>
<td>45.4</td>
</tr>
<tr>
<td>1996 revised FBC</td>
<td>46.5</td>
</tr>
<tr>
<td>1997 PFI FBC</td>
<td>67.0</td>
</tr>
</tbody>
</table>

Source: Carlisle Hospitals Full Business Case
*At 1993 prices

2.11 The Trust has explained that capital costs rose because the scheme became more ambitious. The three public schemes devised between 1993 and 1996 all involved refurbishment of existing buildings with the addition of the long-awaited ‘second phase’ of which the existing tower block was the first. The PFI scheme, however, involves a completely new hospital and the disposal of the tower block.

2.12 There are undoubted operational advantages in this expansion of the development proposals, not least because it avoids the complex and costly decanting arrangements which would have accompanied the partial refurbishment alternative. However, the expansion of the scheme also reflects the requirements of PFI investors. The proposal to expand the scheme came from the consortium. It is now widely recognised that schemes with low capital costs cannot be financed through the PFI. The reasons for this are not clear: part of the explanation may lie in the high bidding costs incurred by consortia, but consortia are likely to seek to maximise their profits by increasing the scale of investment as well. There are also commercial advantages to be gained from a larger scheme. According to the 1997 full business case, the Trust leases the tower block to HMC for 999 years with an option to demolish and redevelop the site. In the event of redevelopment, the proceeds will be shared 50:50 between the Trust and HMC.13

2.13 This expansion of the scheme appears to benefit all sides: the private sector receives a better return on its investment, but at the same time the NHS benefits from a new, purpose-built facility. However, the benefit to the trust depends on the revenue consequences of the scheme. The higher the capital cost, the greater will be the annual fees. Expanding the scheme in this way, whatever the commercial or clinical advantages, will have increased financial pressures on the trust. The public schemes were framed with affordability in mind. What were the revenue consequences of building bigger?
SECTION THREE
Annual cost and affordability

Main points:

- under PFI the annual cost to the Trust of its buildings and equipment will increase by £3.55 million from £3.45 million to £7 million, which is made up of a £6 million availability fee and a £1 million capital charge on publicly owned equipment
- this pushes the cost of capital up from 7.7% to 15.6% of Trust income and creates an affordability crisis
- the Government currently makes trusts pay capital charges at 6% of the value of their buildings and equipment
- this is an internal NHS transaction and does not involve a real charge to the NHS
- the PFI company makes the Carlisle Trust pay capital charges at 9% of the value of their buildings and equipment
- this is a real charge and actually takes money out of the NHS.

The affordability gap

3.1 In return for the use of the new hospital, Carlisle Hospitals NHS Trust will pay an annual fee of £10.9 million. This fee is known as the ‘unitary payment’ and is essentially a lease charge. It has two components. These are a ‘service fee’ of £4.9 million and an ‘availability fee’ of £6 million. The service fee is in respect of facilities management (catering, portering, laundry, estate management and so on). The availability fee covers debt repayment, returns to shareholders and certain maintenance payments. The availability fee or charge for capital is the most significant because it is where the main cost increases of PFI occur. The FM or service fee is set to siphon off the existing (1996) FM budget to a private operator.

3.2 The Trust has two main sources to fund these payments. The availability fee, in so far as it is mainly a charge for capital, corresponds to the interest and dividend payments the Trust already makes to government on its existing assets (NHS capital charges) and money to pay for depreciation. Under PFI arrangements, this charge and any other costs of capital like rent payments and depreciation are made over to the private sector to fund the availability fee. The services fee on the other hand corresponds to the trust’s existing budget for those services and is simply made over to the PFI partner. If the total PFI payments are higher than these existing sources of funds, affordability

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14 The capital charges paid by NHS trusts are often mistakenly taken to represent the cost to the taxpayer of the assets used in delivering healthcare. This creates the impression that the capital costs of assets are simply passed through to NHS trusts, and that capital charges are in no significant way different to PFI payments. This is far from being the case. Capital charges are paid from one part of the public sector to another, whereas PFI payments are economic transactions between the public sector and the private sector.
problems arise which can only be resolved by an increase in the trust’s revenue, by subsidising the PFI payments, or by cutting other costs.

3.3 Capital costs are central to the debate on PFI because it is the requirement to fund these costs which distinguishes PFI from earlier forms of procurement.

3.4 How do the annual PFI capital costs compare to the trust’s current expenditure on capital? In Carlisle’s case, the total annual cost of capital is the sum of rental payments on property leased from the Department of Health, depreciation, and the 6% capital charge paid to the Treasury. The Trust pays rent of £0.65 million on the Fusehill site (retained by the Department of Health when the Trust was formed), depreciation of £1.3 million a year, and capital charges of £1.5 million on the Cumberland Infirmary property. Total annual capital costs therefore amounted in 1996 to £3.45 million, or 7.7% of an income of £45 million. Under PFI, the cost of capital will increase to £6 million, or 13.3% of income (table 4).

Table 4
PFI availability fee compared with current (1996) capital costs

<table>
<thead>
<tr>
<th>1996 cost of capital (surplus + rent + depreciation)</th>
<th>% income</th>
<th>PFI capital costs</th>
<th>% income</th>
<th>2000-1 annual capital cost (availability fee + capital charges)</th>
<th>% income</th>
<th>Affordability gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>£m</td>
<td></td>
<td>£m</td>
<td></td>
<td>£m</td>
<td></td>
<td>£m</td>
</tr>
<tr>
<td>3.45</td>
<td>7.7</td>
<td>6</td>
<td>13.3</td>
<td>7</td>
<td>15.6</td>
<td>3.55</td>
</tr>
</tbody>
</table>

3.5 However, to the PFI capital cost of £6 million has to be added any capital charges which the Trust will continue to pay to the Treasury after PFI. Although the Trust will not retain any buildings under its partnership with the private sector, most medical equipment has been excluded from the deal and will have to be funded separately from PFI payments. The Trust currently estimates that this equipment will attract annual capital charges of £1 million. The total annual capital costs under PFI will therefore come to £7 million, or 15.6% of income. (Table 4)

3.6 A further increase in capital cost will arise if the Trust chooses to build a dedicated private patients unit (see below). New capital costs will inevitably attach to any dedicated private facility which is additional to existing capacity. The only way to avoid these costs would be to divert to private use beds currently allocated to NHS patients.

3.7 There is thus a minimum gap of £3.55 million between current (1996) and projected annual capital costs (table 4). This shortfall needs to be seen in the light of the Trust’s current financial
difficulties. According to its annual reports, Carlisle Hospitals Trust generated a surplus of 5.2% in 1996-7, which was 0.8% (£231,000) below the financial target set by the Government. By 1997-8, it was generating a surplus of 6.2% (£38,000 above target). The Trust was only able to balance its books in 1997-8 by means of £1.2 million worth of cuts and a one-off diversion of a £600,000 capital grant from the regional NHSE to meet revenue commitments. The Trust was recently reported to have admitted that it is ‘facing another difficult year’. Under the PFI scheme its difficulties will be increased by £3.55 million per annum.

Why are the annual costs of PFI higher?

3.8 The annual capital costs of PFI are higher than the annual capital costs currently paid by the trust partly because HMC charges proportionately more for capital than the Treasury does. The annual PFI payment approximating to a capital charge is the ‘availability fee’. If the PFI availability fee is expressed as a proportion of construction costs (£67 million), Carlisle’s availability fee of £6 million translates into a capital charge of 9%. The capital charge which the Government makes is approximately 7% (a 6% capital charge plus a depreciation charge). PFI therefore leads in Carlisle’s case to a rise in the cost of capital of 2-3%.

3.9 The context of this increase is important. Because a PFI asset is privately owned, the Government is no longer in a position either to waive or defer capital payments. Under PFI, a trust is committed each year to generating by whatever means it can the required surplus on its income to cover the payments.

3.10 Costs are also higher because there will be no corresponding reduction in the annual cost of facilities management (FM), the service element of the unitary payment, to compensate for the higher interest charges. The PFI service fee is £4.9 million (1996 prices), the same sum that the Trust budgeted for FM in 1996. However, the 1996 public sector redevelopment scheme projected savings of approximately £1 million on this budget if partial redevelopment were to take place. Under the PFI scheme, which involves a higher degree of centralisation, the contract price remains at £4.9 million and the Trust seems to have accepted that all the advantages of centralisation, including energy efficiencies, will accrue to the private sector partner. In the earlier public scheme, the savings would presumably have been reflected in lower running costs.

3.11 Private sector returns will accrue in the first instance from energy efficiencies (£250,000) and staff cuts (£720,000). Projected staff savings from single-site working under the partial refurbishment 1994 were as follows:

---

Table 5
Reductions in facilities management staff whole time equivalent posts 1996-2000

<table>
<thead>
<tr>
<th>Department</th>
<th>Staff reductions (WTE posts)</th>
<th>Departmental reductions as proportion of total reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
</tr>
<tr>
<td>Domestic</td>
<td>49</td>
<td>61</td>
</tr>
<tr>
<td>Catering</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Portering</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Laundry &amp; Linen</td>
<td>8</td>
<td>10</td>
</tr>
<tr>
<td>Estates</td>
<td>9</td>
<td>11</td>
</tr>
<tr>
<td>Telephones</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total reductions</td>
<td>80</td>
<td>100</td>
</tr>
<tr>
<td>Total employed</td>
<td>274</td>
<td>-</td>
</tr>
</tbody>
</table>

Source: 1997 FBC p40; 1994 FBC Appendix V

3.12 This represents a cut of 29% in the total number of administrative and estates personnel (274) employed in 1995-96. The PFI option entails total redevelopment which may be used to justify further reductions in staffing levels. However, according to the Trust, FM details have not yet been prepared by the private sector supplier. If this is true, it means that a contract price was agreed in advance of a workforce plan and accurate costings.
SECTION FOUR
Bridging the affordability gap

Main points:

- the Trust must find an extra £3.5 million a year to pay for the PFI
- this means a reduction in spending on clinical services of £2.6 million per annum which translates into a 13% reduction in staff
- 79% of clinical cuts are among high skilled nursing staff
- the new hospital was planned to have 9% fewer available acute beds than in 1996; the number of available beds will fall below the level officially set for the PFI
- the Trust anticipated that the price of care would fall by £1.7 million due to the increased efficiency of the hospital, instead PFI has increased the cost of care by £0.4 million
- the Government is switching £0.3 million a year from other parts of the NHS to support the Carlisle PFI
- the Trust has increased its income from private patients at the expense of NHS care
- the Trust is fundraising from the general public to buy NHS equipment.

4.1 How does the Trust propose to pay the extra £3.55 million in annual capital costs associated with the PFI proposal?

4.2 The Carlisle plan involves a number of arrangements for bridging the gap between current (1996) and future expenditure on capital. The full business case drawn up for the Carlisle PFI in 1997 (and subsequently amended) shows that the Trust intends to fund the £3.55 million by spending less on staffing and by relying on extra revenue from North Cumbria Health Authority and central government.

Impact on clinical staff

4.3 Carlisle’s business case follows other PFIs in attempting to resolve cost pressures by shifting the clinical staffing budget to other uses. Clinical staff cost savings assumed for the PFI scheme are £2.6 million. These savings consist of the original public sector scheme (known as the public sector comparator or PSC), projected savings from service centralisation, a further £0.3 million ‘arising from the HMC design’, and an additional £44,000 dictated by the shortfall which arose during PFI negotiations (table 6).
### Table 6

**Percentage change in clinical staffing budgets**

<table>
<thead>
<tr>
<th>Year</th>
<th>Clinical staffing budget £m</th>
<th>Change %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994-95</td>
<td>20.6</td>
<td>-</td>
</tr>
<tr>
<td>1999-2000</td>
<td>18.0</td>
<td>-13</td>
</tr>
</tbody>
</table>


4.4 The clinical staff cuts will fall disproportionately on nursing.\(^{18}\) 88% of the posts lost are in nursing and 79% of the losses occur among the more highly qualified grades, staff nurses and sisters (table 7). This reduction in nursing complements and skill levels conforms to experience elsewhere under PFI\(^{19}\).

### Table 7

**Reductions in nursing staff complement, number and percent of all clinical staff reductions**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reduction in nursing posts</th>
<th>Reductions as percentage of all clinical staff reductions %</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No.</td>
<td></td>
</tr>
<tr>
<td>H/G/F</td>
<td>7.3</td>
<td>7</td>
</tr>
<tr>
<td>E</td>
<td>24.7</td>
<td>25</td>
</tr>
<tr>
<td>D</td>
<td>31.0</td>
<td>31</td>
</tr>
<tr>
<td>C</td>
<td>6.1</td>
<td>6</td>
</tr>
<tr>
<td>total reduction in qualified nursing staff</td>
<td>79.1</td>
<td>79</td>
</tr>
<tr>
<td>B/A *</td>
<td>18.5</td>
<td>18</td>
</tr>
<tr>
<td>total reduction in nursing staff</td>
<td>89.1</td>
<td>88</td>
</tr>
<tr>
<td>Other</td>
<td>11.8</td>
<td>12</td>
</tr>
<tr>
<td>total reduction of all clinical staff</td>
<td>100.9</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: 1997 FBC, Appendix J.

Note: Grade B/A are classified as unqualified nursing assistants

4.5 Under the PSC, these staff reductions were the main source of price reductions to health service purchasers. However, as we show below, their function changes under PFI where they become an important source of funding for returns to private sector lenders and shareholders.

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18 Carlisle Hospitals 1997 FBC, Appendix J.
Increased prices to be paid by the Health Authority

4.6 Option appraisal conducted in 1994 suggested that whatever the scale of the investment, all options would ‘deliver net savings in terms of unit output prices...’ given continued improvements in medical productivity. Although the most expensive in terms of capital cost, the 1994 PFI option was said to offer the biggest savings per ‘finished consultant episode’ (FCE – the currency in which purchaser prices are expressed) to the Health Authority.

<table>
<thead>
<tr>
<th>Option</th>
<th>Reduction in price per FCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>do minimum</td>
<td>5.3</td>
</tr>
<tr>
<td>reconfigure on 2 sites</td>
<td>6.9</td>
</tr>
<tr>
<td>minimum new build</td>
<td>10.6</td>
</tr>
<tr>
<td>moderate new build</td>
<td>10.6</td>
</tr>
<tr>
<td>major new build (PFI option)</td>
<td>13.3</td>
</tr>
</tbody>
</table>

4.7 As the PFI option evolved through the various business cases, the savings promised to purchasers grew. The 1994 business case (the public sector comparator) projected annual revenue savings totalling £1.2 million. When the capital cost was increased to £45.4 million later in the year, projected revenue saving had reached £1.7 million a year, or a reduction of 13.3% in the price per FCE (table 8).

4.8 However, by the time a full business case had been negotiated with the private sector partner, the Trust has dropped the price for FCE analysis and revenue savings had become price increases. The 1997 full business case showed for the first time that the new hospital involved an annual price rise to all purchasers of £0.4 million, of which the Health Authority agreed to provide £330,000. Thus, under PFI, staff cuts fund private sector returns instead of price reductions to purchasers.

Bed reductions

4.9 According to the PFI full business case, the new hospital will have a capacity of 474 beds. However, the cost management strategy adopted by the Trust to get out of deficit has already reduced hospital capacity below this target. Total inpatient beds have fallen from 520 in 1995-6 to 465 at 1 April 1999. The more stringent financial targets of PFI (under which the annual cost of capital will increase by £3.55 million) are likely to be
associated with still fewer beds. Significantly, the Trust’s chief executive has declined to give an undertaking about the revised target and will only say that there will be ‘as many beds as needed’. Most recent press reports suggest a bed complement of 440. Nevertheless, both the government and the Management Executive continue to cite the original PFI bed complement figure.

Central government subsidy

4.10 The hospital Trust has also had to rely on a central government subsidy to overcome its affordability problems. In Carlisle, private sector participation originally involved paying what were called ‘interim fees’ to the consortium during the construction period. HMC had negotiated an arrangement under which they would be paid a total annual interim fee of £7.04 million, including an availability fee of £2.15 million for buildings which the Trust already owned and operated. The fee was set at such a level that it precisely accounted for current facilities management costs and capital charges. The arrangement, which supplied the consortium with an income stream in advance of building completion, was described by the Trust as ‘integral to the viability of the FBC’ because it reduced the annual payment by £0.5 million. The Treasury refused to sanction the arrangement and accordingly the projected annual payment to HMC was increased. A month earlier the Trust had said that it had ‘always maintained that fees above £11.3 million could not be funded.’ The payment now stood at £11.8 million.

4.11 It is a measure of the political commitment to PFI that a new public subsidy known as the ‘smoothing mechanism’ was introduced at this time. The funding shortfall created by the Treasury’s rejection of interim funding arrangements was met by a combination of further economies and a £374,000 annual subsidy from central government (table 9).

Table 9
Funding the increase in the unitary payment after the rejection of an interim fee

<table>
<thead>
<tr>
<th>Source of funding</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘Smoothing monies’</td>
<td>374,000</td>
</tr>
<tr>
<td>Trust savings</td>
<td>44,000</td>
</tr>
<tr>
<td>HMC fee reduction</td>
<td>50,000</td>
</tr>
<tr>
<td>total</td>
<td>468,000</td>
</tr>
</tbody>
</table>

22 Personal communication.
Equipment

4.12 Equipment funding is linked to another important source of financial support. According to the full business case, the consortium refused to include all equipment in the PFI deal and the Trust has allocated £1.9 million (non-recurring) for publicly funded equipment. This is recognised to be inadequate and according to Region the Carlisle Trust has been allowed to draw on £4 million of block capital for equipment purposes. (Block capital is funding generally made available to NHS hospitals to purchase equipment). The Region has said that this use of its block allocation does not impinge on other hospital trusts because it is only an advance of monies which would in any event have gone to Carlisle. However, an earlier payment to Carlisle must be at the expense of other hospitals because the Region has a fixed capital allocation.

4.13 A public charitable appeal, the ‘Frontline Appeal’, has also been launched to raise money for equipment. If the equipment supplied in this way were essential then the PFI scheme would depend on exploiting goodwill towards an NHS hospital which had been privatised. This suggestion has been firmly rejected by both the Region and the Trust and in the appeal’s ‘mission statement’, the charity’s first aim is described as follows: ‘To supplement the substantial investment in equipment to be provided by the NHS and private sector (some £11 million), by funding ‘state of the art’ equipment which is over and above the level of equipment already identified with the new hospital.’ (Emphasis in original). However, the Trust has also told us that the equipment needed for the new hospital has not yet been identified. It is therefore impossible to say at this stage what ‘over and above’ means.

Income from private patients

4.14 Variations in income from private patients is one of the Trust’s few opportunities to increase its income in order to meet cost increases. In the PFI full business case, the Trust projected an additional net income from private patients of £0.14 million per annum under the PFI scheme. This was subsequently revised to £0.17 million. However, private patient income is said to have doubled between 1996-98 from £228,000 to £456,000 (Personal communication, 29 April 1999). The projected private income target has therefore already been met in advance of the PFI-related cost increases.

4.15 The higher level of private work raises questions about the hospital’s capacity to increase income from this source in the future. Cumberland Infirmary does not have a dedicated private facility and therefore relies on switching NHS beds in and out of private use. The Trust’s capacity to switch beds in this way is likely to be diminishing as private activity increases. By April 1999, the options for private patients were being revisited in a
working group including Trust representatives and Abbey Hospitals (the local private provider), and hospital clinicians were reporting management pressure to undertake more private work.

4.16 The private patient options currently under consideration are:

- status quo (ie dispersed facilities)
- free-standing private patient unit adjacent to the new hospital, as a joint venture
- dedicated private patient unit within the new hospital, run either by the Trust or by Abbey Hospital.

4.17 Each of the options has serious implications for NHS care in Cumberland Infirmary either by increasing pressures on a reducing clinical staff, pre-empting NHS bed use, or increasing annual capital costs. Moreover, under current legislation, the NHS must give priority to NHS patients and can therefore convert private NHS beds back for NHS care; this option will no longer be available under PFI when the new facility will be controlled by the private sector. What is at present a marginal source of income is assuming growing importance in the Cumberland scheme even though financial closure on the contract was reached almost two years ago.
SECTION FIVE
The economic appraisal

Main points:

• the value for money calculation involves assumptions which favour the private sector; minor adjustments reverse the outcome
• the PFI scheme does not show value for money if political assumptions about interest rates are adjusted by only 0.5%
• £7.5 million of risk is said to have been transferred to the private sector when it has not been transferred
• the risk of cost overrun has been exaggerated by £3.5 million
• the PFI option should not have been approved on value for money grounds.

Value for money

5.1 In common with all other PFI trusts, Carlisle Trust includes an assessment of the economic benefits which will accrue to the taxpayer from redeveloping its hospital with private finance. The assessment is conducted in terms of a cost comparison between the PFI option and a hypothetical publicly financed scheme (the public sector comparator or PSC). The results of value for money (VFM) comparisons are expressed in terms of Net Present Cost (NPC), which is the aggregate of all costs over the life of the hospital discounted each year at the prescribed rate, the ‘discount rate’. The option with the lowest NPC is said to be economically preferable. According to the Trust, VFM is demonstrated because the Net Present Cost of the PFI scheme is £173.1 million over the life of the new hospital (60 years), whereas the Net Present Cost of the PSC is £174.3 million. This suggests that the PFI is marginally better value for money to the taxpayer.

5.2 We have suggested in our report on the Durham PFI that the subjective elements in VFM analyses are such that a close correspondence between Net Present Costs is deeply implausible. In the case of Carlisle, however, an unusual amount of information about the VFM calculations has been included in PFI documents and it has been possible to test the implications of some of the VFM assumptions in more depth.

The effect of the discount rate on VFM calculations

5.3 The outcome of the VFM test depends largely on the value that is ascribed to the different payment schedules in the PSC and PFI options. For publicly funded schemes, capital costs are allocated to the first few years. In a PFI they are spread evenly over the...
life of the PFI contract. The value put on this difference is controlled by a ‘discount rate’ assumption. The discount rate is a way of calculating the economic advantage of making all capital payments in the first few years or spreading them out over 30 years. The Treasury, which has set the discount rate at 6%, admits that the justification for this level of discounting is essentially that it wishes to equalise the costs of public and private finance. In other words, the discount rate is a political decision which has the effect of eliminating the advantage of lower government borrowing rates.

5.4 The discount assumption fundamentally affects the appraisal outcome. Table 10 shows that at 6% the Carlisle PFI scheme is slightly cheaper than its public sector equivalent and is thus held to be demonstrably better value for money. When the discount rate is reduced by only 0.5%, the outcome of the appraisal is reversed and the public sector option appears preferable. The economic advantage of public sector procurement continues to increase as the discount rate is reduced. Thus, economic ‘advantage’ is to a large extent a product of the discount rate used.

Table 10
Carlisle Hospitals PFI scheme - effect of varying the discount rate on results of economic appraisal

<table>
<thead>
<tr>
<th>Discount rate</th>
<th>A Public sector option (PSC) (£000’s)</th>
<th>B Private sector option (PFI) (£000’s)</th>
<th>A - B Economic advantage of PFI over PSC (£000’s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6%</td>
<td>174,337</td>
<td>172,633</td>
<td>+1704</td>
</tr>
<tr>
<td>5.5%</td>
<td>185,803</td>
<td>186,692</td>
<td>-889</td>
</tr>
<tr>
<td>5%</td>
<td>198,884</td>
<td>202,043</td>
<td>-3,159</td>
</tr>
<tr>
<td>4.5%</td>
<td>213,900</td>
<td>219,480</td>
<td>-5,580</td>
</tr>
<tr>
<td>4%</td>
<td>231,247</td>
<td>239,388</td>
<td>-8,141</td>
</tr>
<tr>
<td>3%</td>
<td>275,027</td>
<td>288,622</td>
<td>-13,595</td>
</tr>
<tr>
<td>0%</td>
<td>549,882</td>
<td>577,048</td>
<td>-27,166</td>
</tr>
</tbody>
</table>

Source: derived from Carlisle Hospitals NHS trust PFI FBC Appendices Vol. 1, Appendix B.

Risk transfer

5.5 Despite the use of a 6% discount rate, NPC comparisons in almost all PFIs have been to the advantage of public sector options. This is true of Carlisle where the so-called ‘base costs of the PSC’, the costs before any allowance is made for risk transfer, are given as £152.5 million. However, under Treasury and Department of Health guidance, all costs have to be ‘risk adjusted’. The principle of risk adjustment is that, in order to make a fair comparison of costs between PFI options and public sector comparators, account needs to be taken of risks which under public procurement the public sector carries itself but which under PFI it pays another agent, the private investor, to bear. When the cost of public sector options is adjusted to reflect
this transfer of risk, the apparent cost disadvantage of PFI options disappears. In most cases this is done through adding a lump sum representing the cost of risk to the Net Present Cost of the public sector comparator. The risk adjusted NPC comparison for the Carlisle scheme turns a £20 million public sector cost advantage into a £1 million PFI advantage (table 11).

Table 11

<table>
<thead>
<tr>
<th>Financing option</th>
<th>Net Present Cost</th>
<th>PFI advantage/ (disadvantage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public sector comparator (no risk transfer)</td>
<td>152.5</td>
<td>(20.6)</td>
</tr>
<tr>
<td>Public sector comparator adjusted for risk</td>
<td>174.3</td>
<td>1.2</td>
</tr>
<tr>
<td>PFI option</td>
<td>173.1</td>
<td>-</td>
</tr>
</tbody>
</table>

5.6 One of the main problems with this part of economic appraisal is the tendency to attribute risks to PFI consortia which they have not in fact taken on under the contract. At Carlisle, for example, some £5 million was added to the Net Present Cost of the PSC to pay for the risk of clinical saving targets not being met and a further £2.5 million was added for the risk of medical litigation. Neither risk is actually transferred under the PFI contract. By suggesting that they are transferred, the net present cost of the public sector option is inflated by £7.2 million (table 12).

Table 12

<table>
<thead>
<tr>
<th>Type of risk</th>
<th>Unadjusted NPC</th>
<th>Impact of risk</th>
<th>Risk adjusted PSC</th>
<th>Corrected risk adjusted PSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>construction</td>
<td>46.5</td>
<td>6.5</td>
<td>53.0</td>
<td>49.0</td>
</tr>
<tr>
<td>cost overrun</td>
<td>58.5</td>
<td>5.2</td>
<td>63.7</td>
<td>63.7</td>
</tr>
<tr>
<td>operational risk</td>
<td>10.8</td>
<td>1.6</td>
<td>12.4</td>
<td>12.4</td>
</tr>
<tr>
<td>lifecycle costs</td>
<td>-</td>
<td>2.5</td>
<td>2.5</td>
<td>-</td>
</tr>
<tr>
<td>medical litigation</td>
<td>-</td>
<td>5.0</td>
<td>5.0</td>
<td>-</td>
</tr>
<tr>
<td>clinical cost</td>
<td>36.7</td>
<td>-</td>
<td>36.7</td>
<td>36.7</td>
</tr>
<tr>
<td>savings</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>other</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>152.5</td>
<td>21.8</td>
<td>174.7*</td>
<td>162.8</td>
</tr>
</tbody>
</table>

Source: Carlisle Hospitals Full Business Case Addendum, Appendix 9.
Note: Figures may not add up due to rounding. *The NPC figure has been recalculated by the Trust and so differs slightly from the figures quoted in tables 10 and 11. The figure in table 12 is believed to be the most recent.
5.7 The second problem of risk transfer relates to the quantification of risk. What value is ascribed to a transferred risk? Table 12 shows that 30% of the risk (£6.5 million) in the Cumberland Infirmary scheme is the risk of construction overrun, that is, the risk of the actual costs (‘outturn costs’) of construction proving higher than the tender sum. The trust says that its assessment is based on ‘empirical data from NHS Estates’ and assumes an average overrun of 17%.26 It does not cite the evidence. However, according to the National Audit Office (NAO), the average increase in cost over approved tender sums for NHS capital projects has been between 6.3% and 8.4% in the 1990s27. In its own 1994 PSC the Trust thought that 5% was the maximum likely cost overrun. The value of the risk of cost overrun has therefore been exaggerated.

5.8 As table 12 shows, if risk adjustment is amended to take account of exaggerated cost overrun risk and to eliminate risks of £2.7 million which are not actually transferred, total risk adjustment is reduced by £11.5 million to £10.3 million and the NPC of the public scheme is reduced from £174.7 million to £162.8 million, making it clearly better value for money even given a discount rate assumption which favours the PFI option.

The market’s assessment of risk

5.9 The largest single risk element in the Carlisle scheme relates to the building period, the first three to five years, rather than to the operational phase, the subsequent 25 to 30 years. Concentrating risk in the construction period means that income during the operational phase is guaranteed by the Treasury for the life of the contract and sufficient to recoup virtually risk free the whole capital cost of the hospital together with a return on the investment. This makes PFIs very safe investments.

5.10 The best indicator of the extent of risk actually transferred in the PFI contract is the interest rates paid by consortia to their lenders (as distinct from the interest rate consortia charge NHS trusts). First wave PFI schemes have achieved extremely favourable borrowing terms on bank debt and bond issues on the basis of ‘little inherent risk’.28 Market interest rates have been between 4% and 5% after inflation. In Carlisle, as we have seen, the bond issue attracted an interest rate of 7.18% (with inflation). This suggests that in the view of funders there has been very little risk transfer.
SECTION SIX
Planning hospital services

Main points:

• an £88 million investment is being undertaken without an analysis of how health care needs will be met
• the planning data in the full business case inadequately dealt with the number and type of cases to be treated, bed numbers, and occupancy rates
• the promised 474 staffed beds will not be provided
• new, tough productivity targets are being imposed on the workforce
• it will be more difficult for elderly people to get into hospital
• more people will have to go privately or be denied care.

6.1 Hospital service planning depends on three factors: the number of cases or admissions to be treated at the hospital (usually measured in terms of admissions or finished consultant episodes), the casemix (type of patient, specialty and the condition) and the speed at which inpatient cases pass through the system (throughput). Decisions on such matters as the number of beds to be provided and the staffing levels required depend ultimately on estimates of these factors.

6.2 The calculations are crucial to the Trust’s, and the Government’s, claim that whatever the new financial rigours which accompany PFI, hospital capacity is determined by realistic assessments of healthcare need rather than cost considerations. The Trust argues, for example, that when it diverts clinical income to pay for capital it is exploiting an opportunity created by more efficient hospital procedures, rather than forcing new cost limits on medical practice.

6.3 In order to support this claim the Trust would have had to base its bed capacity specification on population-based measures of utilisation and service provision adjusted to take account of sociodemographic projections, trends in utilisation, morbidity, and mortality, and estimates of changes in technology and clinical practice. It would then have been in a position to show how its projections of inpatients in each specialty and the number of beds available for them related to population health care needs.

6.4 The most striking aspect of the Carlisle scheme is that the full business case and its predecessor documents do not adequately specify either caseload, throughput, or bed numbers. It is impossible to tell from any of the PFI documents how many inpatients in each specialty will be treated in the new hospital, how many beds will be available for them, nor the relationship between this provision and the local population’s need for health care.
6.5 This omission is fundamental. It means that an NHS investment to the value of £88 million is being undertaken in Carlisle which will determine the shape of the local health system for the next 30 years but which provides an unspecified volume and type of health care. To commit the public sector to such an investment in the absence of a clearly defined output specification is plainly bad practice and a clear indication that caseload, casemix, throughput and bed numbers are not only financially determined but still apparently indeterminate.

The use of efficiency targets and the older patient

6.6 The Trust’s approach has been to project a caseload figure for 1999-2000 and derive a bed requirement figure by applying to it efficiency targets known as ‘90th percentile targets’. What this means is that for a given caseload the bed complement can be estimated by working out how efficient the hospital would be were it to achieve levels of throughput and length of stay comparable with the rates reported for the top 10% of hospitals included in a database. This procedure allows the Trust to claim that, with one important exception, caseload increases will be absorbed by more efficient use of a decreasing bed complement.

6.7 The exception is elderly care where the Trust asserts that new clinical practices will be required if the annual increases in admissions among patients aged over 65 years is to be accommodated. For elderly care, therefore, length of stay and throughput have to be changed more radically than would be the case were the 90th percentile target to be achieved. New rapid assessment facilities are to be created so that a greater proportion of elderly care can take place outside the acute sector in community hospitals.

6.8 The Trust’s approach to care of the elderly is in conflict with the Health Authority’s draft Health Improvement Programme in which the Authority calculates an 8% annual increase in hospital admissions among people aged over 75. It points out that in the past length of stay reductions have only just kept pace with this growth in activity and it concludes that ‘even if the challenging targets for reducing hospital admissions and lengths of stay are achieved, there will be little if any overall reduction in demand for acute hospital services for this group of patients.’

29 North Cumbria Health Authority Draft HImp, 8 January 1999, p40.

6.9 The approach to hospital care for the elderly is careless because the plans are imprecise. Like community care before it, the PFI acute sector is premised on a substantial shift of elderly patients from the hospital to other care settings without an adequate account of the type of care which will be available nor how it will be funded.
CONCLUSIONS

7.1 This study has examined the financial implications for the Trust and Health Authority of using the private finance initiative, the basis of the Trust’s claim that the development represents value for money to the public sector, and the adequacy of the new hospital in relation to the healthcare needs of the local population.

7.2 The deal does not make financial sense. The total cost of the new hospital almost doubled during PFI procurement (1994 to 1997) and the annual cost of capital to the Trust rose by £3.55 million to £7 million. This extra cost has been incurred when the Trust is in financial difficulty. It is being met out of a combination of clinical budget cuts, new subsidy and price increases. Even so, the financial pressures and uncertainties are such that, within a year of opening, the Trust is still evasive about the number of beds it can afford to staff, and it is exploring the income generating potential of private medicine at the same time as it is imposing even more punishing productivity targets on the workforce. The costs of this asset sweating will be felt by everyone associated with and dependent on the hospital.

7.3 Secondly, we conclude that the deal does not give the taxpayer value for money. We have shown that the interest rate assumption at the heart of economic appraisal has been deliberately set to favour the private sector, and that after only a minor adjustment the alleged advantage of the PFI option disappears. However, in Carlisle’s case, political manipulation alone was insufficient to make the economic case. Only major errors in the Trust’s economic calculations could do that. If these were rectified, the PFI option would be seen to be a bad economic option, more costly than the public alternative by £11 million. On a proper economic appraisal, Carlisle’s PFI should never have left the drawing board.

7.4 Finally, and perhaps most strikingly, we have shown that the PFI has gone ahead without a clear specification of the service it will provide. An £88 million investment is nearly completed and we still do not know the type and volume of cases the new hospital will admit nor the relationship between admissions and the growing need for hospital services. All we know with any certainty is that according to the Trust fewer older patients will be treated. And yet Carlisle like the rest of the UK will see an increase in the numbers of elderly people requiring care. The absence of a planning case and an evaluation of healthcare needs is an indication of the way in which under the PFI profit comes before care.