

DOWNSIZING FOR THE 21ST CENTURY

Second Edition

A report to
UNISON
Northern Region
on the
North Durham
Acute Hospitals
PFI scheme

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The UNISON logo features a stylized green wave above the word "UNISON" in a bold, blue, sans-serif font. Below "UNISON" is the tagline "the public service union" in a smaller, blue, lowercase sans-serif font.

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Abbreviations

FBC	North Durham Acute Hospitals NHS Trust 'New DGH for North Durham: Full Business Case'
OBC	North Durham Acute Hospitals NHS Trust 'A hospital for the 21st century: Outline Business Case to support the development of a new DGH for North Durham
'Addendum'	North Durham Acute Hospitals NHS Trust 'Material changes since Full Business Case'
Please Note:	See p.17 for details of how these documents relate to the planning and procurement process.

Preface

This analysis of the Full Business Case for the building of the new Dryburn Hospital in Durham was commissioned by UNISON's Northern Regional Council Private Finance Working Group.

It is the first ever full study and analysis of a Full Business Case - the key documentation required for the approval by Government of any Private Finance Project.

The project to build the new Dryburn Hospital in Durham by the North Durham Health Care Trust was one of the earliest major Private Finance Initiatives in the NHS to receive approval. UNISON Northern Region views this study to be a major contribution to the debate on the Private Finance Initiative and a devastating indictment of the process, both generally and in terms of the effect on future health care provision to the people of North Durham.

It has been decided to issue this 2nd edition of this study both because of the enormous interest, public, professional and political that it generated — and because the Government took the surprising step of issuing a 31-page rebuttal of the report. The authors of the original report have in turn prepared a response to this document which is attached together with a summary of the Government's rebuttal.

We wish to thank Declan Gaffney and Allyson Pollock of University College London's School of Public Research for all the co-operation, expertise and hard work they have devoted to the project, which was financed by UNISON's General Political Fund.

Foreword

The new District General Hospital at Dryburn is to be designed, built, financed and owned by a private sector consortium, Consort Healthcare. In return for the use of the hospital, the North Durham Acute Hospitals Trust will make annual payments to the consortium of £7m for a period of 30 years. Consort Healthcare will also provide most of the ancillary services at the hospital, for an annual fee of £5m. Ancillary staff currently employed by the NHS will be transferred to the private sector. Staff classed as clinical will remain in the employment of the trust. All in-patient services currently provided by the trust will be centralised on the Dryburn site, and the trust's other hospital at Shotley Bridge will be downgraded to a community hospital with no inpatient facilities.

The policy of inviting the private sector to take over the ownership and provision of public sector infrastructure is known as the Private Finance Initiative. It was introduced by the Conservative government in 1992 and was taken up enthusiastically by the Labour government after the 1997 general election. In the health service it has meant that all hospitals seeking investment have to invite private sector bids. It was made clear by both governments that the availability of public sector (exchequer) capital would be limited. If an NHS trust is unable to make a deal with a private sector partner, it is unlikely to receive funding from the Exchequer. As the former health minister Alan Milburn stated, frequently, after the 1997 election, the PFI is 'the only show in town'.

Under the previous government PFI developments were notoriously secretive. The main procurement documents—the Outline Business Case (OBC) and the Full Business Case (FBC)—were kept from the public on the grounds of commercial confidentiality (the very fact that this could be used as an excuse is an indication of how far business values had invaded the NHS). A new policy of openness, under which these documents would have to be made publicly available was announced at UNISON's Health Group Conference by Alan Milburn in April 1998. The Dryburn development, which was one of the first PFI schemes to reach contract signature, and one of the first to begin construction, has now released its PFI documents. This report is based on an examination of those documents by researchers at the School of Public Policy, University College London.

UNISON has long argued that the PFI is an inappropriate way of funding public services. We argued that on any fair comparison of costs with public sector provision, it would be obvious that PFI was more expensive, and that the extra cost of using private capital would mean that services would have to be drastically cut. The release of the business cases for the Dryburn development allows these arguments to be tested against the evidence.

Description of work

We have examined the Full and Outline Business Cases for the North Durham Acute Hospitals Trust PFI development. The issues we were concerned to explore were 1) the financial implications of the development for the trust and the health authority 2) the planning of future service levels and whether this was influenced by the costs of the development 3) the comparison of costs between the privately financed scheme and the public sector option, and whether this comparison supported the trust's claim that the PFI option 'represents better "value for money" than the Public Sector Option'.

Main points

1. The North Durham PFI development has its immediate origin in a plan (dating from 1991) to centralise hospital services in 798*-bed district general hospital. Since 1991, every stage in the procurement process has been associated with a progressive reduction in the proposed bed numbers. The hospital now being built will have a maximum of 454 beds. However the costs of the PFI payments has forced a reduction in clinical staffing budgets which means that of those 454 beds only 350 will be staffed. The trust recognises that this will be insufficient to meet anticipated demand for hospital services.

2. The PFI development can therefore be expected to have an impact on both the quantity and the quality of care provided. In order for the trust to manage with a lower number of beds and reduced staffing budgets, the health authority has been obliged to accept that fewer cases would be dealt with at the new hospital than had been forecast. Far from releasing funding for patient care, the PFI investment has had the effect of freezing future hospital services at 1996/7 levels. Moreover, while the total forecast caseload of the hospital is based on the 1996/7 level, the inpatient caseload is set to fall by 7%: the reason the total caseload appears to remain stable is that the number of daycase treatments is projected to rise. There is thus a disguised reduction in in-patient services, in an area with a rapidly ageing population.

**The 900-bed district general hospital referred to in the first edition included mental health beds which are no longer part of the planned development. (See Department of Health, Response to UNISON Report on North Durham PFI FBC, p.35.)*

3. The service reductions associated with the development have not led to cost savings for either the trust or the health authority. The trust's savings on staff costs have been largely absorbed by the PFI consortium charges, while the health authority has been obliged to increase its funding by £1,500,000. This is despite the fact that government subsidy to the value of £23,700,000 has been provided in order to 'make the scheme affordable'.

4: The PFI development will not resolve the long term financial problems of the trust as it ties the trust into greatly increased capital costs, thus compounding the problem. However, the Department of Health is now effectively tied to maintaining the trust however serious its difficulties, as the annual payments to the PFI consortium are already committed for the next 30 years.

5: Government policy remains that PFI schemes will only be allowed to go forward if they demonstrate value for money in comparison with public sector procurement. This is done by producing an 'economic appraisal' comparing the total costs of the PFI option with an equivalent public sector option. The economic appraisal included in the Durham Full Business Case shows that over the 30 years of the PFI contract, the public sector option would have cost less by a discounted value of £22m. The trust extended the appraisal to a period of 60 years and produced values for the two options which were identical. The implausibility of this result robs the economic appraisal of any credibility. The update of the appraisal produced in 1998, which the trust claims demonstrates that the private sector option shows better value over 60 years, is derived from the earlier appraisal and has no more credibility than its source. Government approval of the North Durham scheme does not therefore seem to have been based on convincing evidence that PFI represented better value for money than public sector procurement.

CHAPTER 1

Meeting the cost of PFI

1.1 The annual cost

- 1.10 The North Durham acute hospitals PFI scheme involves replacing the existing Dryburn Hospital with a new 454 bed hospital on the same site, from which all North Durham acute services will be centralised. Shotley Bridge, the other acute site in the north of the county, will be converted into a community hospital without in-patient services, but this will be funded through a separate PFI scheme. The cost of converting Shotley Bridge is, therefore, not included in the annual payments to be made by the hospital trust to Consort Healthcare, its private sector partner in the main PFI.
- 1.11 In return for the use of the new hospital, the North Durham NHS Trust will make an annual 'unitary payment' to Consort Healthcare of some £12m a year for 30 years¹. Part of this annual sum will pay for 'non-clinical' services at the hospital, such as portering, catering and laundry. However, the bulk of it, £7m. a year, will be going to meet the cost of the PFI debt and returns to the shareholders². This element of the PFI payment, which is effectively a lease charge for the use of the buildings, is known as the 'availability payment'.
- 1.12 What sources does the trust have to fund these payments? In order to meet the cost of the PFI, like its other costs, the trust has to rely on the annual income it receives from health service purchasers for providing hospital services. In 1996/7 the trust projected its income as £59m, and it did not expect this to change by the time the PFI hospital was completed³. The PFI availability payment thus comes to 12% of the trust's projected future income.

1 The 'Addendum' published in June 1998, detailing changes to the scheme since the Full Business Case, gives a figure of £12.88m. for the unitary fee, a reduction from the FBC estimate of £13.745m. Figures recently supplied by the Department of Health (Memorandum to Health Select Committee, November 1998) give a figure of £13m.. Except where otherwise signalled we have used the figure of £12m. as this is the lowest estimate.

2 The 'Addendum' states that the availability payment is 58% of the value of the annual unitary payment. This has also shifted since the Full Business Case, where availability was only 51%. We have used £7m, derived from the ratio given in the 'Addendum', except where otherwise signalled.

3 In fact the trust anticipated reductions in income in the years leading up to the hospital's opening, which would then be reversed, bringing income back to (real terms) 1996/7 levels. The savings accumulated in the previous years were to contribute to the PFI costs. FBC p.103.

- 1.13 Most of the income of a hospital trust is committed to providing clinical services, paying for labour and supplies. However, since 1992, trusts have been required to run an annual surplus of income over expenditure, which is used to pay ‘capital charges’ to the Treasury. This surplus is the first source of funding for PFI availability payments. Under the capital charging policy, NHS trusts are obliged to operate in such a way as to produce annual surpluses equivalent to 6% of their existing capital assets i.e. buildings, land and equipment. When a trust signs a PFI contract and transfers its assets to the private sector, it is no longer obliged to pay charges to the Treasury, and can use its annual surplus in order to pay the PFI debt and returns to shareholders. There is thus a source of funding which can be used to service PFI debt without affecting budgets for patient services.
- 1.14 Of course, problems arise if the annual PFI costs are greater than the existing surplus. In that case, the trust will have to find some way of making up the shortfall, and as most of its budget is needed to provide clinical services, any further demands on it will almost inevitably have an impact on patients.
- 1.15 The accounts of the North Durham trust show that in 1996/7 it produced an operating surplus of £2.64m. Depreciation charges came to £1.78m. Together, these sums—£4.42m—represent the amount of money the trust had available to pay for capital at that time. As a percentage of the trust’s income, this came to 7.2%. (Table 1)
- 1.16 The annual cost of the PFI capital, as we have seen, is over £7m. This comes to 12% of the trust’s projected income. There is thus a gap of £2.7m. between the available funding and the PFI payments. (This is without taking account of the other component of the PFI payments, the charges for non-clinical services.)⁴

Table 1a

PFI availability payment compared with current (1996/7) capital costs

96/7 surplus and depreciation	% income	PFI capital costs	% income
£4.4m.	7.2%	£7.3m.	12.3%

- 1.17 This however would be to assume that all of the existing surplus is available to fund the PFI payments. This is in fact not the case, as the trust will be retaining some of its current assets

⁴ Figures taken from Fitzhugh Directory of NHS Trusts 1998; FBC Appendix 4 projected income and expenditure accounts.

(such as equipment and the downgraded Shotley Bridge site), and it will have to continue to pay capital charges on these. £2.4m of the existing surplus is therefore already committed.

- 1.18 The result is that the combined (Treasury and private sector) capital costs the trust will have to meet under the PFI development will come to £9.7m, or 16.4% of income (Table 1b).

Table 1b:

Total annual capital costs under PFI development compared with current capital costs (1996/7)

96/7 annual capital costs	% income	2000/1 annual capital costs	% income
£4.4m.	7.2%	£7.3m + 2.4m = £9.7m	16.4%

- 1.19 There is thus a gap of more than £5m. between current and projected capital costs. However, the cost of the PFI payments comes on top of the trust's already severe financial problems, many of which originate in the trust's aggressive rationalisation policy over the last five years (of which the PFI deal is the culmination - see chapter 2 below). This has left the trust with a crippling debt burden and a question mark over its financial viability. The 'affordability gap' for this PFI scheme is therefore considerably greater than £5m.

- 1.110 In a report prepared in November 1996, the NHS Executive commented that there had been 'poor business and financial control at the trust' and that... 'activities have taken place...without proper consideration of the financial implications such as additional income or capital funding'. At the time the trust had a revenue deficit of £3.8m, and debts to the regional office of a further £3.5m In order to balance its finances, the trust adopted a five-year recovery plan involving year-on-year cost reductions, with the aim of reducing annual costs by 15.4% by 2000/1. Even though the role of the NHS Executive was to provide as much support as possible for PFI, it was pessimistic about the prospects of the trust managing the further drain on its finances due to PFI costs. 'Although it is hoped that negotiations can reduce the charge from the consortium, there will undoubtedly be pressure on the trust to help close the gap with further savings. On top of the aggressive cost reductions needed to achieve financial balance, any further revenue savings will be virtually impossible to achieve'⁵.

⁵ FBC Appendix 4, Review of financial position and recovery plan in the context of the PFI scheme (5 November 1996).

1.2 Capital costs: from £60m to £86m

- 1.20 An important factor in explaining how a trust which was already burdened with long term financial problems which threatened its viability could nonetheless get involved in a very expensive deal with the private sector is the way in which the North Durham trust, in common with most of the other 'first wave' PFI trusts, seriously underestimated the cost of the development.
- 1.21 In 1994 the trust estimated the cost of building the new DGH at £60m, based on standard NHS costings. The construction cost of the new PFI hospital is £67.4m according to the Full Business Case, but in order to know the size of the debt the trust will be taking on when it moves into the new hospital, the total capital costs — a very different matter — need to be considered. These contain an item referred to rather mysteriously in the business case as 'capitalised interest, fees and other costs' which add some £18.2m to the capital cost, or 27% of the construction cost.
- 1.22 No breakdown or explanation is offered for this element in the costs. While it is possible that 'fees' includes payments to architects and surveyors, these costs would be unlikely to account for a large proportion of the total⁶. A significant proportion of the trusts total PFI debt seems therefore to arise from what the business case describes as 'capitalised interest'. The cost of this has to be met through the trust's annual availability payments over the 30 years of the PFI contract. Needless to say, these are not costs which would have arisen under public sector procurement.
- 1.23 There is a question as to what exactly 'capitalised interest' represents. The explanation offered by the NHS Private Finance Unit was that the consortium would incur interest costs on its own bank debt during the construction period, while it would receive no payment from the trust until after the hospital was completed. However, the consortium's financial model shows that it is not due to make any interest or principal payments until the hospital opens⁷. Why interest payments which are not being made should be 'rolled up' and added to the capital cost of the scheme in this manner is unclear.
- 1.24 What does seem clear is that the consortium will be raising more money on the capital market than is needed to meet the construction costs, and it will be doing this on the basis of a guaranteed stream of future income from the PFI payments,

⁶ In a comparable case, the fees associated with construction were 8.4% of construction costs at the Dartford and Gravesham PFI scheme, amounting to £6m. The combined 'capitalised interest and fees' item in the capital costs however came to £18m or 20% of construction costs. See Dartford & Gravesham NHS Trusts, Full Business Case, p. 60 and Appendix 7-8, cost form FB4.

⁷ FBC Appendix 4, Consortium Financial Model, Consort cashflow summary.

backed up by very solid government guarantees⁸. Like other PFI consortia Consort Healthcare has secured very low interest rates reflecting the lack of risk attached to the project. In June of this year the trust reported that the consortium had negotiated a guaranteed interest rate of 6.5% for the contract period⁹. This is very near to the government's own borrowing rate.

- 1.25 The increase in capital cost from the trust's earlier estimate is thus not due to any increase in construction costs but to additional borrowing for ill-defined purposes by the private sector on a line of very cheap credit. The use to which this borrowing will be put by the consortium would be its own business were it not that it has been raised on the basis of, and will be repaid through, committed NHS expenditure of £12m a year for 30 years. As the same item occurs in the capital cost breakdowns for other PFI schemes this would appear to be a generalised phenomenon with PFI procurement which has not, to our knowledge, yet been addressed in public debate and which is in need of clarification.

Figure 1

Capital costs of North Durham PFI scheme, including 'capitalised interest' ¹⁰

Construction	£67.4m
Insurance	£ 1m
Capitalised interest, fees, etc.	£18.2m
Total	£86.6m

1.3 Impact on clinical staff

- 1.30 Inevitably, given these cost pressures, the trust has aimed to make savings on the main item in its expenditure, labour. We concentrate here on clinical staff costs, which are far and away the largest component of staff costs. (As 'ancillary' staff will be transferred to the PFI consortium, the business case unfortunately gives no details on staffing levels for this group.)
- 1.31 The business case shows that clinical staff expenditure will be falling dramatically, both in absolute terms (Table 2) and as a

⁸ Including a piece of legislation, the NHS (Residual Liabilities) Act 1996, which guarantees PFI payments in the event of an NHS trust going bankrupt.

⁹ 'Addendum' paragraph 4.

¹⁰ FBC p. 58,9. We give here the figures for the private sector's capital costs; private sector non-capital costs during the construction period come to £5.454m. To this need to be added public sector capital costs of £4.503m for equipment, bringing the total costs to £96,569,000. We presume the latter is the source for the figure of £96m publicised by the Department of Health in its press release of 1 April 1998 (DoH 98/123).

proportion of the trust's total income (Table 3): in other words, funding will be shifting from clinical staffing budgets to other uses. In 1994/5 clinical staff costs at the North Durham trust came to £36m, which was 64% of the trust's income. As part of its ongoing cost cutting exercise (which will release savings partly for reinvestment in the PFI scheme), the trust projected that it would reduce the budget by £5m in 1996/7. In the FBC, the trust estimated that clinical staff costs would be reduced to £28m under the PFI development. Over the six-year period, the budget would be reduced by 22%¹¹.

- 1.32 This is a fundamental change to the cost base of the trust. The proportion of its income spent on clinical staff will have declined from 64%—which is close to the average for a trust of this size—to 47%.

Table 2

Percentage change in clinical staffing budgets 1994/5 to 2000/1

Year	Clinical staffing budget	% Change from 1994/5
1994/5	36m	0%
1996/7	31m	-14%
2000/1	28m	-22%

Table 3

Changes in Clinical Staff Expenditure as a Proportion of Total Income 1994/5 to 2000/1¹²

Year	Income	Clinical staff costs	Clinical staff costs as % income
1994/5	£56m	£36m	64%
1996/7	£59m	£31m	53%
2000/1	59m	£28m	47%

- 1.33 These cuts will fall disproportionately on nursing budgets. To a large extent the reductions are being achieved by replacing qualified nurses with unqualified healthcare assistants, rather than by reducing the workforce (Table 4, Figure 2). De-skilling of the nursing workforce in this way is hardly compatible with the role the trust expects the new hospital to play in the local health service: 'The dependency levels of patients will increase

¹¹ See FBC, Appendix 4: workforce plan and projected income and expenditure accounts.

¹² FBC, Appendix 4: projected income and expenditure account.

with the commensurate increase in technology and with lower dependency care being provided in community hospitals, primary healthcare settings and at home'¹³. The trust appears to be planning to reduce the skill base of the nursing workforce in order to provide for patients who will be on average sicker than its current caseload, while less serious cases will be dealt with in other settings (perhaps by some of the qualified nurses shed under the PFI plans?).

- 1.34 These reductions in staffing budgets will, of course, also have an effect on the number of cases the hospital will be able to deal with. The effect of these reductions in staffing budgets on services is explored in the next chapter. The planned service levels at the new hospital (measured in terms of future caseload and occupied bed days) have been reduced to the point where the trust will not be making full use even of the reduced bed complement provided under the PFI scheme.
- 1.35 Finally, the financial models in the business case do not include redundancy costs. In its report the NHS Executive noted 'Part of the cost of getting back into financial balance will be redundancy payments. The recovery plan requires support from outside the trust for this element of costs'¹⁴. There is no mention in the business case of any external funding of redundancy costs, and it would be interesting to know whether any subsidy has been provided for that purpose.

¹³ OBC, p.5

¹⁴ FBC, Appendix 4, 'Review of financial position and recovery plan in the context of the PFI scheme' para. 7.1. The point was reiterated in the NHS Executive's subsequent 'Benchmarking report'.

Table 4

Nursing staffing complement for all trust hospitals in 1996/7 and under PFI development - whole time equivalent staff members

Grade	1996	2000	Change	% change
Nurse manager	4.68	3.0	- 1.68	-35
Sister/CN (FGH)	159.58	147.28	- 22.30	-14%
Staff nurse (CDE)	493.4	430.27	- 63.13	-13%
Team assistant	216.97	260.21	+ 43.24	+20%
Team housekeeper	0.00	81.49	+81.49	N/A
Total	874.63	922.25	+47.38	+5.3%
Total qualified	657.66	580.55	-87.11	-13.2%

Figure 2

Changing ratio of qualified and unqualified nursing staff

Year	Qualified nurses (% nursing staff)
1996/7	75%
2000/1	63%

1.4 Bailing out the PFI

1.40 As we have seen, the view of the NHS Executive in November 1996 was that the combination of PFI costs and the trust's existing financial problems placed a question mark over the financial viability of the scheme. The 'affordability gap' problem was not confined to Durham, but affected all NHS PFI schemes. It was apparent that no deals whatsoever would be signed in the health service without external funding support. The North Durham trust, along with nine others, benefited from the political imperative to make a success of PFI.

1.41 Various attempts were made in 1996 to come up with acceptable ways of providing more funding to the PFI consortia: at Carlisle,

for example, the trust proposed to start making lease payments to the consortium before the new hospital was even built¹⁵. This and other attempts to subsidise PFI deals ran up against Treasury opposition, but by December 1996 a solution was found, either because the Treasury had relaxed its position or because the DoH had found a rationale for subsidy which met the Treasury's exacting requirements¹⁶.

1.42 The effect of the subsidy was to increase the annual payments to the PFI consortia in order to allow investors to see a quicker return on their investment. The value of the subsidy (known as the 'smoothing mechanism') to North Durham is £757,000 a year in real terms over the 30 years of the contract, or £22.71m. The source is the NHS capital budget. In other words, nearly £23m of public sector capital has been allocated to fund a hospital which will be the property of the private sector¹⁷. It should be remembered here that PFI was intended to be an alternative to investment funded through the NHS capital budget: it is still frequently argued that the advantage of PFI is that it releases public sector capital for other developments¹⁸. Experience so far has tended to suggest the contrary, that securing PFI contracts leads to increasing demands on the capital budget.

1.43 Another example of this is the way in which equipment costs have been handled in the first wave PFI schemes. It was originally intended that the PFI contract should be for a fully equipped new hospital: in the course of negotiations it became apparent that the private sector was not prepared to provide equipment within the available funding. Rather than providing further subsidy to the consortium, the decision was taken to remove equipment from the deal. As a result, 60% of the equipment for the new hospital will now have to be recycled from the trust's existing stock, where plans had originally been for 70% of equipment to be bought new¹⁹.

15 The Treasury refused to approve this strategy. See Carlisle Hospitals NHS Trust Full Business Case Addendum, section 1, *passim*.

16 See Gaffney, D. and Pollock, A.M. Can the NHS afford the Private Finance Initiative?, British Medical Association, 1997, p.13-14.

17 The total value of the 'smoothing mechanism' subsidy is arrived at by simple multiplication of the annual value in the first year, as this represents the real terms discounted value of the subsidy for every year of the contract period.

18 For example, by the Secretary of State for Health speaking to the Commons Health Select Committee, 22 July 1998.

19 FBC p.58-9. The cost of the equipment 'will be funded by additional proceeds arising from the development land [to be made over to the consortium), or if these are not realised, from the Regional Capital Programme'. The publicly funded model assumed 70% of equipment would be new (FBC p.53).

1.5 A double bind for NHS purchasers?

- 1.50 We have seen that despite the downsizing of the acute hospital sector and a substantial government subsidy, the PFI scheme for North Durham will actually raise the cost of acute hospital services. North Durham will be spending more for a reduced level of service. This must be seen as a perverse outcome, as the rationale for the reduction in acute beds was that savings on hospital costs would allow substitute services to be funded in community and primary care settings: in turn, the greatly increased throughput of patients at the new hospital depends on those services being available to support patients discharged from hospital early. The impact of PFI capital costs thus leads to the risk that the local health service will be caught in a double bind. Failure to move resources to the community sector threatens the clinical viability of the new hospital, as it will be unable to handle its caseload at the projected throughput rates without community sector support; reducing expenditure on the acute sector, on the other hand, would threaten the financial viability of the trust.

CHAPTER 2

Capacity and planning

2.1 Planning hospital services

- 2.10 The number of beds proposed for the new hospital has been reduced by 43% over the entire course of procurement, dating back to 1991. The function of the hospital has also changed: originally intended to provide district general hospital services, the new hospital will now be an acute hospital dealing only with the most serious cases. These changes to the plans reflect financial strategies rather than service need.
- 2.11 The planning of hospital services depends on two factors: the number and type of cases to be treated at the hospital (caseload), and the speed at which inpatient cases pass through the system (efficiency). Decisions on such matters as the number of beds to be provided and the staffing levels required turn ultimately on estimates of these factors. In this respect, the hospital sector is like any industry seeking to produce a certain quantity of outputs (treatments) as efficiently as possible. However, the analogy with other industries should not be pressed too far.
- 2.12 The difference is that whereas private firms decide the quantity of outputs they will produce on the basis of market demand - what customers are prepared to buy and at what price- the NHS has to decide the outputs required to meet the need for hospital services without reference to any market conditions. (In other words, NHS services are universally available and free at the point of delivery.) This means that planning in the health service is significantly different to planning in commercial industries, involving estimates of the need for services among the population, rather than interpreting signals given by a market.
- 2.13 However, the current wave of mainly privately financed investment in hospitals involves a factor new to NHS: the requirement to fund returns to shareholders and bankers. This means that fundamental decisions about hospital capacity can not be made solely on the basis of forecast caseload and efficiency: returns to capital have to be factored in as well.
- 2.14 The relative importance attached to these different factors in the planning process can be gauged by a glance at any set of PFI procurement documents. In the North Durham Business case discussion of future hospital capacity takes up less than one page

of the 145-page document, most of which is devoted to the financing of the scheme. In the appendices to the FBC, the bed model - which gives the fullest details available on how the greatly reduced capacity of the new hospital was arrived at - actually forms part of the financial model for the PFI scheme.

- 2.15 The implication, that service planning is subordinate to the need to secure a deal with the private sector, is supported by the way in which the other determining factors in the planning process - caseload and efficiency - have been progressively adjusted in the course of procurement. Under the PFI investment the hospital described in the FBC will have to deal with fewer cases at greater speed and at a greater cost than originally planned.

The planning process for the new North Durham hospital

The planning process falls into three main stages, marked by the production of three documents.

1992 AIP document: Between 1989 and 1991, the County Durham Health Commission and the then North Durham Acute Hospitals Unit carried out work on the various options for future development of hospital services. The outcome was a project to centralise all acute services on one greenfield site. This 'option appraisal' formed part of the 'Approval in Principle' (AIP) document submitted to the Northern Regional Health Authority in March 1992²⁰.

1994 Outline Business Case: The process of option appraisal continued with the production of the Outline Business Case (OBC). The Dryburn site, which had been excluded from the AIP appraisal, was reintroduced at this stage and became the preferred option. Bed numbers were considerably reduced from those envisaged in the AIP document. The OBC expanded on the option appraisal in the AIP document by taking account of a financial assessment of the various options.

1997 Full Business Case: The Full Business Case (FBC) presents the outcome of the negotiations with the preferred bidder, Consort Healthcare. Bed numbers were further reduced. In accordance with PFI procurement rules, the costs of the PFI option were compared with an equivalent option under public funding, and showed the public sector option would have provided better value than the PFI over the 30 years of the PFI contract. Despite this, the FBC was approved by the Department of Health and the Treasury and contracts were signed late 1997.

2.2: The original plan (1991)

2.20 The Regional Health Authority originally agreed to fund capital investment in the North Durham hospitals in 1989²¹. Between 1989 and 1991 an option appraisal was carried out, with support from the York Health Economics Consortium, and in 1992 the results were submitted to the RHA as part of the 'Approval In Principle' document. As the current PFI hospital is the final outcome of this process, it is worth comparing the proposals which emerged from the original option appraisal with what has now happened, especially as the Full Business Case for the PFI scheme gives an account of the process²² which implies that there was far more continuity between the 1991 plans and the eventual PFI scheme than was actually the case.

Table 5

Planned beds for the new hospital at different stages of the procurement process²³

1992 (AIP document)	1994 (OBC)	1996 (FBC)
798	565	454

2.21 The result of this exercise was a proposal for a hospital of 798 beds, with 13 operating theatres, to serve a catchment population of 225,000. This would replace in-patient provision at Dryburn and Shotley Bridge. The new hospital was to be supported by 'a number of community hospitals including Dryburn, Shotley Bridge and Chester-le-Street'. The hospital would be built on a greenfield site, as 'the [Dryburn] site would become unable to support modern healthcare provision and could not be redeveloped without unacceptable disruption to ongoing service provision'²⁴. Dryburn was thus explicitly rejected as the site of the new District General Hospital.

2.22 There proved to be difficulties with the greenfield sites suggested in the option appraisal document, but in February 1992 the local MP was nonetheless assured by the chair of the Regional Health Authority that there was no question of the investment not taking place. 'You can be assured that the new hospital will be constructed. The capital funds have been set aside and the Durham hospital is top of our priority list.'²⁵

²¹ FBC, Appendix 2F, p.15

²² FBC p.33

²³ Sources : FBC Appendix 2F; OBC p.6

²⁴ FBC, Appendix 2F.

²⁵ Quoted by G. Steinberg MP, Hansard House of Commons Debates, 21 January 1997, col. 815.

- 2.23 The work done between 1989 and 1991 established the principle of a single DGH for North Durham, the 2-into-1 strategy. The motivation for this was stated to be ‘the enhancement of service quality through *increased hospital size*’²⁶. It is important to bear in mind that the factors driving the centralising approach at this stage were stated to be to do with an anticipated effect on quality of clinical service (i.e. ‘the close cooperation of different specialties in the handling of a single case’ p. 45) rather than financial pressures²⁷. However, by this stage the planning environment was already changing rapidly as the ‘internal market’ reforms began to have an effect.
- 2.24 It should be noted that in the original 1992 plan it was already intended that the new hospital be supported by community hospital provision at Shotley Bridge, Dryburn and other sites. The reductions in bed numbers since the 1992 plan therefore have nothing to do with plans for increased community hospital provision.

2.3 The Outline Business Case

- 2.30 By the time the Outline Business Case was prepared two years later, the proposals contained in the option appraisal had been altered beyond recognition. The idea of a new hospital on a greenfield site was abandoned. The preferred option now was to centralise all services on the Dryburn site. Even more striking was the reduction in proposed bed numbers: from 798 in the option appraisal to 565 in the Outline Business Case²⁸. These numbers were to be further reduced in the Full Business Case two years later.
- 2.31 The function of the new hospital had also changed: adopting the slogan ‘a hospital for the 21st century’ the trust had moved away from the aim of reproviding the full range of district general hospital services towards a quite different approach. ‘The vision for the future is that the new DGH should provide facilities for acutely ill patients which implies that the dependency levels of patients will increase with the commensurate increase in technology and with lower dependency care being provided in community hospitals, primary healthcare settings and at home’²⁹. The project of reproviding services on one site thus became one of rationalisation.

²⁶ FBC Appendix 2F, our italics.

²⁷ The York Health Economics Consortium has since adopted a position of scepticism about the improvements in quality of treatment supposedly obtainable by concentrating hospital services in larger units. See Sheldon, T. et al., Concentration and choice in the provision of hospital services (York, 1997)

²⁸ OBC p.6.

²⁹ OBC p. 5.

2.4 The internal market and the PFI

- 2.40 How did the plans come to be so fundamentally altered in the space of two years? The answer lies in the internal market reforms introduced in the 1990 NHS and Community Care Act. The effect of that Act on NHS hospitals was to re-establish them as individual business units, with a set of financial duties designed to make them adopt the behaviour and culture of private sector firms. The Act stopped just short of privatisation: hospitals would remain public sector bodies, but they would be obliged to operate as if they were commercial enterprises. At the same time, the Conservative government launched the Private Finance Initiative, and it quickly became apparent that public funding would be unavailable even for schemes which had already been given approval in principle.
- 2.41 This was a fundamental change to the conditions for investment in the hospital sector. Until 1990, capital for investment was allocated by the Regional Health Authority and did not lead to any charges on the annual budgets of hospitals. Investment decisions were justified on the basis of service need, and did not need to form part of a financial strategy. This is reflected in the 1992 AIP document for the North Durham hospitals, which was based on the work undertaken between 1989 and 1991. The case for investment in that document was based purely on service considerations, taking into account the perceived clinical benefits of centralisation of services, travel times, the management of split site working during the development etc. It failed to adequately address the new questions of financial viability arising from the internal market 'reforms' and the PFI.
- 2.42 Under the internal market, capital investment is paid for out of the annual budgets of the hospitals involved. We have described the effect of this in Chapter 1: in order to meet the increased annual charges associated with new investment, hospitals would have to either increase their income or find 'savings' on other budgets. Given that there was limited scope for increasing income, and given that most of a hospital's expenditure is on labour, this meant reducing staffing budgets, which in turn meant limiting inpatient admissions. Durham was not the only part of the country to see plans for a new District General Hospital suddenly replaced by plans for a much smaller 'Acute General Hospital'³⁰. Another first wave PFI trust stated in its business case that 'the Acute General Hospital is ... a facility which minimises the requirements for inpatient beds....',

³⁰ For example, among the 'first wave' PFI schemes both Dartford & Gravesham and Bromley moved from describing their new hospitals as 'District General Hospitals' to routinely referring to them as 'Acute General Hospitals'.

although it would be more accurate to say that it was the beds rather than the requirements that were minimised³¹.

2.43 The combination of the 1990 reforms and the PFI not only introduced quite new types of cost pressure into the NHS: they introduced a dynamic for change in which capital investment became the engine of radical reconfiguration of the service. One result of this is the apparently paradoxical association between very high levels of PFI investment and dramatic capacity reductions in the hospital sector, whether measured in terms of sites, area, staffing levels, numbers of beds, or in-patient activity.

Table 6

Projected changes in acute bed numbers at NHS trusts with PFI schemes³²

<i>Trust</i>	<i>1995/6</i>	<i>1996/7</i>	<i>Planned</i>
Bromley Hospitals	610	625	507
Calderdale Healthcare	688	654	508 ³³
Dartford & Gravesham	524	506	400
North Durham Acute Hospitals	665	597	454
Norfolk & Norwich	1,120	1,207	809
South Manchester	1,145	1,070	736 ³⁴
Worcester Royal Infirmary	524	526	390
Total	5276	5185	3795
Change from 95/6	0	-91	-1481
Percentage change from 95/6	0%	1.7%	-28%

31 Dartford & Gravesham NHS Trust, Outline Business Case

32 Sources: 95/6 and 96/7 bed numbers from Bed Availability England ; Projected bed numbers from Hansard: Commons Written Answers 18 December 1997 column 330 (Alan Millburn MP) .

33 Hansard figure corrected to exclude mental health beds.

34 Hansard figure corrected in light of published Full Business Case

2.5 The Full Business Case — projected caseload

- 2.50 Bed numbers were further reduced after the OBC had been approved. The tender notice placed in the Official Journal of the European Community was for the design, build, financing and operating of a 454-bed hospital.
- 2.51 In explaining this further drop in bed numbers the trust states that the health authority had agreed only to fund the trust's current (1996/7) caseload level into the future: rises in caseload were not incorporated in the assumptions. As a result, the new hospital was planned for 9% fewer inpatients than had been forecast in the OBC. At the same time the trust was aiming for clinical performance levels which would allow more patients to be treated with fewer beds³⁵.
- 2.52 The capacity of the new hospital is thus planned on three assumptions: 1) that there will be no rise in the number of patients to be treated 2) that those patients who are treated as in-patients will be discharged much more quickly 3) that an increased proportion of patients will be treated on a daycase basis. There must be some question as to whether any of these assumptions are realistic.
- 2.53 The assumption that patient numbers will remain stable is clearly not based on any new information suggesting a reduction in need for hospital services, and would seem to reflect financial constraints. On demographic grounds alone, caseload would be expected to rise: while the overall population total is forecast to remain stable, the age profile will shift towards the older age groups, as the trust itself notes: 'The general trend is that the population will age. In the 25 years from 1991 to 2016, both male and female populations under the age of 44 will fall ...By contrast, the male populations over the age of 70 will grow by at least 40%'. ³⁶These demographic changes have effectively been excluded from consideration in the planning: in fact, inpatient admissions for general medicine and elderly (which would be expected to increase in line with an ageing population) are predicted to fall, with no explanation offered as to why this should occur. The business case treats future patient numbers as a variable, which can be adjusted to fit the financing of the development.
- 2.54 What is most surprising about the assumption that caseload will remain stable is that it runs counter to what the trust says it expects to happen. '[T]he Trust is likely to increase its activity

³⁵ FBC p.43-4

³⁶ FBC p. 6

levels by 16- 20% by 2001'³⁷. In the Full Business Case it states that it would be able to accommodate a higher caseload with reduced bed numbers if the health authority were to fund extra staff. It should be borne in mind that the health authority is already contributing an extra £1.5m per annum to the scheme (without seeing any increase in the number of patients treated). The need to reduce staffing budgets in order to manage the costs of the investment has left the trust understaffed: as a result, the number of available (staffed) beds at the hospital will not be 454, but 350³⁸.

- 2.55 However, even if the health authority were again to increase the trust's funding in order to allow it to make good the shortfall in staff caused by its own financial strategy, it is far from clear how an increase in caseload of the order of 20% could be accommodated. This brings us to the second set of assumptions, on increased performance levels, of which the most important in this context are average inpatient length of stay and the proportion of cases treated on a daycase basis.
- 2.56 Table 7 shows the effect of variations in assumptions about caseload and performance on occupancy levels at the new hospital. Occupancy levels show the average number of beds occupied at one time as a percentage of average available beds. High average occupancy levels (over 85%) compromise the ability of hospitals to handle fluctuations in demand, notably in the winter months. (Similar points apply to public transport systems and major utilities.)
- 2.57 On the assumptions used in the business case, the trust will be running at 72% occupancy. If the caseload does increase by 20%, which the trust seems to regard as likely, occupancy rises to 86% (assuming inpatient admissions rise pro rata). However, this still assumes that average length of stay has reduced to the level forecast by the trust.
- 2.58 It is assumed in the business case that average length of stay across all specialties will be reduced by 23% (from 1996/7 levels), to 4.13 days. This is a very ambitious target: length of stay in 1996/7 was 5.1 days, which also happened to be the national average for the acute sector.
- 2.59 What are the consequences if this target is not reached? We have tested the assumption that only half the anticipated reduction is achieved, so that length of stay is 4.6 days. With the forecast 20% increase in caseload, this would bring occupancy levels up

37 FBC p.44

38 FBC, Appendix 4, Workforce plan

to 96%. If average length of stay remained at its current level of 5.1 days, average occupancy would be 106%. Both these results are, of course, absurd, but they are derived from assumptions which can hardly be held to be less plausible than those used in the planning of the new hospital, for which no evidence whatsoever is presented in the business case.

Table 7

Caseload and bed occupancy

Assumptions	Admissions	Beds	Bed occupancy
FBC estimate: current caseload; LOS = 4.13	28786	454	72%
With 20% increase in caseload; LOS = 4.13	34543	454	86%
With 20% increase in caseload; LOS = 4.6	34543	454	96%
With 20% increase in caseload; LOS = 5.1	34543	454	106%

2.60 The assumption that cases can be put through the system at ever increasing speeds is incompatible with the trust's expectation that it will be dealing with patients who will be, in general, sicker than the current caseload. This is an essential component of the trust's development strategy, which turns on redefining its role as that of an acute services provider rather than a traditional district general hospital. As the trust argues in the Outline Business Case, 'The dependency levels of patients will increase with the commensurate increase in technology and with lower dependency care being provided in community hospitals, primary healthcare settings and at home.'³⁹ What is nowhere explained is how this higher dependency of the inpatient caseload is compatible with the trust's tough performance targets.

2.61 The problem with planning hospital capacity in this way is that lengths of stay are not simply a measure of efficiency on the part of the hospital: they are influenced by such factors as the age of

³⁹ OBC p.5

patients and the presence or absence of community services which can allow patients to be discharged earlier. This much is acknowledged in the FBC: 'The Trust recognises ...that its throughput is not only dependent upon changes within the Trust itself, but on changes in community and primary care and it is envisaged that with the development of community geriatrician posts, early discharge schemes and other developments over the next few years, this will enable the Acute Trust to deliver the agreed activity levels which are defined in service contracts'⁴⁰.

- 2.62 Apart from the reference to community geriatricians, there is no indication here of what services will be available to allow for earlier discharge of patients: the allusion to unspecified 'other developments' suggests that no concrete plans exist. If alternative services are not provided or if they fail to have the intended impact on lengths of stay, the trust will be unable even to provide the lower estimate of future caseload. (It should be noted that the alternative services on which the performance targets depend will not be funded through the PFI deal, meaning that the trust is effectively externalising some of its own costs, without however reducing its prices.)⁴¹
- 2.63 Finally, the assumption on the trust's part that it can continue to increase the proportion of its caseload which is carried out on a daycase basis is central to the planning: this is why inpatient admissions are projected to fall while total caseload is projected to remain stable. Clearly, if the trust can treat more patients on a daycase basis it can increase patient numbers without needing to increase the number of beds. The question is how much further it can go in seeking to substitute daycases for inpatient admissions. While daycase FCEs have increased as a proportion of total caseload at a national level throughout the decade, Department of Health statistics indicate that this trend has levelled out.
- 2.64 As table 11 shows, whereas between 1987/8 and 1993/4, the proportion of Finished Consultant Episodes (FCEs) treated as daycases rose by 10.3%, between 1994/5 and 1997/8 the proportion changed by only 3.2%. Significantly, the rate of increase on the previous year reduced two years in a row, from 2.4% to .6% (rising to .9% in 1997/8). This does not support the widely held belief that the proportion of daycases will expand continuously over the medium to long term: if anything, it suggests that the trend has begun to level out, as it was bound to do eventually. It is thus risky for hospital trusts to plan future capacity on the assumption that daycases will replace inpatient admissions.

40 FBC Appendix 4C1: Activity and bed model

41 See paragraph 1.5 above.

Table 8*North Durham PFI scheme: 1996/7 and projected inpatient and daycase FCEs⁴²*

	1996/7	PFI	Difference
Inpatient admissions	31,048	28,786	- 2,262
Daycases	12,476	14,801	+ 2325
Total caseload	43,524	43,587	+ 63
Daycases as % total admissions	28.6%	34%	+ 6.4%

Table 9*National inpatient and daycase FCEs 1988 -1998⁴³*

Year	Total FCEs (000s)	Daycase FCE (000s)	Daycase % total FCEs	Change on previous year
1987/8	8,245	881	10.7%	N/A
1993/4	10,095	2,106	21%	N/A
1994/5	10,540	2,474	23.4%	2.4%
1995/6	11,037	2,774	25.1%	1.7%
1996/7	11,275	2,907	25.7%	.6%
1997/8	11,530	3,071	26.6%	.9%

42 Source: FBC Appendix 4 Bed model

43 Source: DoH Statistical Bulletin (1998/31): and NHS Hospital Activity Statistics: England 1987-8 to 1997/8 (both Department of Health 1998)

CHAPTER 3

Value for money?

- 3.10 All PFI schemes are required to show that they represent a good use of taxpayers' money before contracts can be signed. The method used to demonstrate 'value for money' involves comparing the costs of the scheme with what it would have cost under public sector procurement. A notional public sector scheme, called the 'Public Sector Comparator', is drawn up and costed. If the total cost of the scheme under PFI is greater than that of the PSC, then it is not a value for money deal and will not be allowed to proceed. At least, that is the theory.
- 3.11 Proving that PFI is cheaper than public sector procurement is a challenge to hospital management. The private sector has higher borrowing costs than government, and, of course, has to make returns to its shareholders. In North Durham, the rate of return to the PFI investors is 18.5% per annum⁴⁴. Demonstrating that PFI represents better value than the public sector under these circumstances is an unenviable task.
- 3.12 It is clear from the business case that the PFI option is considerably more expensive year on year than the equivalent public sector option, which the trust uses for comparative purposes. The public sector option is said to deliver overall revenue savings of over £7m a year⁴⁵, which presumably would have been reflected in lower contract prices to the health authority. As we have seen in Chapter 1, the trust intends to make dramatic savings on staff costs under the PFI deal, but these will be needed to fund the PFI payments: they will not be available for NHS use.
- 3.13 The trust will need more funding from the health authority, not less. 'The cost of the PFI option compared to the current resources available to the Trust from the County Durham Health Authority is £1.5m once the facility is operational'⁴⁶. The PFI deal will thus act as a drain on other health authority expenditure, rather than releasing funding as was intended. The financial strategy outlined in the FBC envisages this process beginning well before the hospital is completed. Between 1997/8 and 1999/2000 the trust planned to reduce its operating expenditure from £59m to £52.5m. These savings are at least in

44 See FBC Appendix 4: Consort Financial Model

45 See FBC, Financial appraisal of options, adding the additional savings outlined on page 82 to the 'base' savings on page 80.

46 FBC p.103

part to be set aside to provide extra funding support for the PFI scheme over and above the increased health authority funding and the subsidies from the NHS capital budget.⁴⁷

- 3.14 The task of proving value for money is made easier, however, by the government's methodology for appraising investment schemes, which NHS trusts are obliged to adopt in comparing PFI and public sector options. The explicit aim of the methodology is to create a level playing field for the private sector. One way in which this is done is by discounting a large portion of the private sector's interest payments. Managers are also able to use the notion of 'risk transfer' as a way of tilting the comparison in favour of the PFI option: the argument is that as the private sector is taking on risks which would otherwise rest with the NHS, they are entitled to compensation for this, and the price of transferring the risks should be effectively written out of the comparison. Of course, as the Department of Health and Treasury admit, costing risk is a very subjective business.
- 3.15 The comparative exercise thus involves writing off a large portion of the private sector's financing costs through the discount rate and nominating a figure for 'risk adjustment' which, if it is set high enough, will eliminate any remaining cost. One would have thought that under these generous conditions, private sector options could easily be shown to represent good deals for the taxpayer. After all, the methodology, set out in the Treasury Green Book and the DoH Capital Investment Manual was developed precisely in order to encourage PFI.
- 3.16 Nonetheless, when it comes to setting out its comparison of costs, there is an unmistakable tone of petulance on the part of the Durham trust management. 'As part of the PFI process, the Trust is required to demonstrate the value for money of the private sector solution. This has been achieved during the procurement process as the private sector solution has been subject to an open and thorough competition carried out by the Trust before selecting Consort as the Preferred Bidder. However, as required, the Trust has developed a Public Sector Comparator for the purposes of comparison with Consort's proposals.' Note the implication that competition between private sector consortia is ample proof that the deal represents value for money, and the comparative exercise is an unnecessary additional requirement. The question of whether the PFI represents a good deal in comparison with the public sector is, in the view of the trust, irrelevant, as long as there has been competition between different private sector providers⁴⁸.

⁴⁷ *ibid.*

⁴⁸ On this issue, see Gaffney, D. and Pollock, A.M. *Can the NHS afford the Private Finance Initiative?* (BMA, 1997) p.19.

- 3.17 That the trust should take this attitude is not so surprising if we turn to the detail of the economic appraisal of the options in the business case. The trust's task was to show that the PFI option was better value in a comparison between the PFI and a public sector option it has itself devised, using a methodology designed to favour the chances of the PFI option. Not only does the economic appraisal fail to do this, it fails to attain even the limited credibility that attaches to this kind of exercise.
- 3.18 The methodology used, in accordance with Treasury guidance, is a discounted cashflow analysis, which is used to derive the net present cost of the options over a period of time. The relevant period over which to compare costs would, of course, be the length of the PFI contract, 30 years. The trust admits that 'the PFI does not achieve value for money over the initial 30-year period'.
- 3.19 Unfortunately, the business case here is silent as to the actual cost over 30 years of the public sector option: just how much cheaper do they think the scheme would have been under public procurement? In order to find out, it is necessary to go to appendix 4, where the figure is revealed: £136,920,000 as opposed to £158,870,000. The difference in net present costs is nearly £22,000,000 over the 30 years.
- 3.20 This is the difference before risk transfer is taken into account. It would be expected that once the costs of risk on the private sector side are taken into account, the comparison would tilt the other way. In fact the value the trust places on its retained risks over the 30-year period is 17,630,000. The comparison still favours the public sector option.
- 3.21 These are - or should be - deeply embarrassing figures, for the trust, the Department of Health and the Treasury. They show that by the standards set out in government guidance, the hospital scheme did not represent a good deal and should not have been proceeded with. But there is worse. In order to get around the fact that the 30-year comparison clearly favoured the public sector, the period of the comparison was extended to 60 years. As Consort Healthcare will have paid off its own financing costs by year 30, there will be a lower charge to the trust in the second 30-year period

Table 10

Table comparing net present values (NPVs) of different options as presented in Full Business Case⁴⁹

	60 Year NPV (£m)	30 Year NPV (£m.)
Public sector option	£153.32	
Private sector option	£173.87	£158.87
Do minimum	£139.87	
Risk adjusted		
Public sector option	£176.91	
Private sector option	£176.91	£159.07
Do minimum	£162.42	

Table 11

The same table with the missing figures restored

	60 Year NPV (£m.)	30 Year NPV (£m.)
Public sector option	£153.32	£136.92
Private sector option	£173.87	£158.87
Do minimum	£139.87	£118.78
Risk adjusted		
Public sector option	£176.91	£154.85
Private sector option	£176.91	£159.07
Do minimum	£162.42	£137.28

- 3.22 Table 10 shows how the trust presented the outcome of the appraisal exercise in the Full Business Case (p.102 and Appendix 4). There are two things to be noted: firstly, the Net Present Values (Costs) of the public and private sector options are stated to be identical over 60 years. Secondly, the trust has, for some reason, left out the costs over 30 years for all options except the PFI.
- 3.23 Taking the latter point first, we have filled in the blanks in the trust's table with figures taken from the spreadsheets included in appendix 4. As we have said, the PFI is clearly the more expensive option over the 30-year period, and this remains the case even when the 'risk adjustment' is taken into account. If the trust has some explanation for its omitting these figures other than the wish to obscure the results of the comparison, it does not offer it here.
- 3.24 With regard to the identical values given for the 60-year costs of the public and private sector options, there is little need for comment. To put this result in perspective: in order to arrive at

these figures by the usual means (rather than by simply making them up), the trust would have had to have taken the cash flows associated with each option over the entire 60 years, discounted them at the government discount rate, assessed the risks associated with each of the options and place monetary values on them, discount the costs of those risks and add them to the totals to produce risk-adjusted Net Present Values. If such an exercise were carried at different times on the same option, it would be surprising if the results were identical. There is no possibility whatsoever that if it were carried out on two different options it would result in identical values.

- 3.25 It would seem that the figure used for 'risk adjustment' was simply chosen in order to bring the cost of the public sector comparator up to the level of the PFI option. This kind of thing is of course not unknown in the world of PFI procurement. However, in general figures have been chosen which bring the value of the public sector option to a point slightly above that of the PFI, rather than to exactly the same point.
- 3.26 The trust is reduced to stating 'The Private Finance Option is comparable with the public sector option over a 60-year period' (FBC p. 103). The point to be demonstrated was not that the option was comparable, but that in the comparison it showed better value for money than the public sector. That the trust recognises its failure to do this is apparent: 'The trust's preference is based on both the identified qualitative benefits, and the lack of public capital'. The value for money argument has been conceded: private finance was used not because it offered better value, but because a political decision to restrict the availability of public capital left no other source of funding⁵⁰.
- 3.27 It is surprising that the Department of Health gave its approval to this scheme, given the severe financial problems the trust already faced and its failure to meet the value for money criterion. We can only assume that the intense political pressure to get PFI off the ground, together with the generally low quality of most of the other PFI projects, meant that the Department felt it could not be over selective in choosing which schemes it gave the go-ahead to. This is a sobering thought: it implies that the North Durham scheme was regarded as one of the more promising PFI schemes. What can the ones that were turned down have been like?

⁵⁰ In the Addendum to the FBC, the trust presents the results of a revised value for money appraisal taking account of changes to the schemes since the Full Business Case was prepared. The value of the PSC was raised by £4m and that of the PFI by £127m. The trust states: 'The above analysis demonstrates a clear improvement in the PFI option in terms of the financial analysis and now makes it clearly preferable over the public sector option'. As the revised appraisal is simply the original appraisal with two new sums added on, it has no more credibility than its source.

CONCLUSION

- 3.28 The political case for PFI is based on the presumed greater economic efficiency of private sector supply. The high costs associated with PFI are, it is argued, more than offset by the resulting improvements in performance. This is the basis for the claim that PFI deals provide better value than the public sector. At this stage, with 10 contracts signed and 32 PFI schemes in progress in the NHS, it is time that the evidence to support this assertion was produced.
- 3.29 The evidence provided by the North Durham business case strikingly fails to support the claims made for PFI. The PFI is extremely expensive, it fails to demonstrate extra efficiency and it demands reductions in budgets for clinical services in order to make returns to shareholders of nearly 20% per annum. On the trust's own account, this does not represent value for money in comparison with public sector procurement. Despite an investment of £96m, annual payments to the private sector of over £12m a year for 30 years, subsidies from central government and the selling off of NHS property, not a single extra patient will be treated. Instead, in order to meet the PFI bill, staffing budgets are being cut back, meaning that the remaining clinical staff will have to work to heroic productivity targets just to maintain current levels of provision, while inpatient admissions will have to be reduced below the anticipated level of demand.
- 3.30 The PFI business case makes it abundantly clear that the trust did not go down the PFI route because of the advantages it offered by comparison with public procurement. Its own appraisal failed to show any economic rationale for the use of PFI. The trust chose private finance because of the withdrawal of public funding for major capital developments, a political decision by two successive governments for which, similarly, no plausible economic rationale has been offered.

Department of Health, Response to UNISON Report on North Durham's PFI FBC

Executive Summary

Introduction

Officials at the Department of Health and North Durham NHS Trust have now completed a paragraph analysis of the UNISON report on the FBC drawn up in support of its PFI scheme. This is attached: for ease of reference, the UNISON report is produced in full, on the left-hand side, with the matching response alongside.

Their work clearly shows that the main findings of the UNISON report are simply not substantiated in the body of the document. The report itself appears to be incompletely researched; ignores the benefits that new modern 21st century hospitals bring to the communities they serve; does not consider information that does not support its conclusions; the authors do not appear to understand discounted cash flow economic appraisal techniques and makes no attempt to recognise the beneficial impact of the additional funding the government has allocated to the NHS.

Response to the 5 Main Findings of UNISON Report

1. The PFI procurement has forced a reduction in the bed numbers in the new hospital to 454, only 350 of which are staffed.

The report attempts to attribute the reduction in bed numbers to the PFI process, ignoring the fact that all changes in bed numbers, including the finally agreed bed provision, was independently agreed by the Health Authority and the NHS Executive before it was ever envisaged the new hospital would be procured using the PFI process.

All of the 454 beds in the new hospital will be available for use on day one. For the purposes of the business case, the staffing levels, which represent a variable resource, have been set at a level that is sufficient to deliver the same level of health care currently provided by the old hospital. It has been agreed that there will be further negotiations for additional funding between the trust and the health authority should demand rise above current levels. This mirrors the normal funding arrangements between any trust and health authority.

The report also falsely concludes that the new staffing levels are driven by budget constraints. In fact, these are the correct levels, both in number and skill mix terms, to run a new hospital with the occupancy levels currently being experienced by the trust. The staffing levels have also been independently verified on no less than 6 separate occasions.

Finally, the report does not compare figures on a like for like basis. The 910 beds originally conceived included 112 mental health beds and younger disabled beds that will now be provided by another trust on other sites and are therefore excluded from the 454 figure. It also fails to note that by the time the original figure came to be validated at outline business case stage, it was already out of date as only 761 beds were in use at the time.

On a like-for-like basis, the trust currently has 522 beds in use. The further reduction to 454 will be managed by further changes to clinical practices including:

- Implementing already agreed length of stay and day case targets;
- Reducing admissions and length of stay in the acute hospital by maximising the use of community facilities such as :

Community geriatricians

Multi agency crisis intervention teams

Closer collaboration with primary care teams

Improved community hospital provision

Introducing the hospital at home concept

- Improved scheduling of work through the week and the year.

In addition to the above positive measures, the improved flexibility inherent in new hospital design will bring significant opportunities for greater efficiency.

2. Fewer beds in the new hospital will lead to a reduction in the quantity and quality care offered to the local population

The bed numbers, which have been independently validated on many separate occasions, were calculated using expected future demand and clinical performance as their basic parameters. On this basis, the HA has accepted that the new hospital has sufficient beds to meet its expected future requirements.

The report fails to understand the distinction between capacity planning of trusts' fixed costs and annual negotiations for the variable costs associated with changes in patient numbers.

3. The reductions in service levels have not led to any savings for the HA despite additional funds being made available

There are no reductions in the level and quality of service, so there cannot be savings.

New hospitals, no matter how they are funded, do initially cost more than the old, outdated facilities they replace. But step changes in the standards of care the modern NHS needs to deliver can best be achieved by building new hospitals.

The report's complaint about this additional cost is an argument for cancelling all new hospital investment, which would force it to operate from increasingly old and inadequate stock.

4. The development will not solve the trust's financial problems

A recovery plan, agreed as far back as 1994/95, is currently being implemented. By the time the new hospital is operational, it will have been fully implemented and will be affordable to the trust and the HA.

5. The economic appraisal has no credibility and shows that over 30 years a publicly funded solution is cheaper

Economical appraisal (EA) is an approach that is universally accepted as being the right way of determining the best value for money route when making investment decisions.

The Treasury's guidance on EA, containing in the publicly available "Green Book" states investment decisions should be assessed over the full economic life of the asset. For hospitals, this is 60 years.

Drawing conclusions from the results after 30 years assumes that the new hospital will not be required after that time. The report does not suggest what should be erected in its place to provide the health care needs of the people of Durham, or how it should be paid for. The old hospital has been there for 57 years.

The report also discredits the economic appraisal by dismissing the results over 60 years. Where investment decisions produce similar results, non-monetary benefits are used to determine the right way forward. In the case at Durham, the PFI option was far superior because:

- It offered a better design solution, using fewer floors;
- It offered a 3-year one phase construction period, rather than the 7-year two phase programme envisaged for a publicly funded alternative;
- It resulted in there being a greater amount of surplus land available for sale, whose proceeds could then be reinvested for the benefit of the NHS.

Conclusion

The report has shortcomings in the way it has been pulled together.

1. It appears to be inadequately researched

It does not attempt to disaggregate local and well-established national trends in such critical areas as staff changes, staff skill mixes, and the shift to day care from in-patient beds, overall bed use and numbers. All changes in bed and staff numbers in the North Durham trust are consistent with national trends.

2. It appears to dismiss concepts or figures that do not support its conclusion

- It dismisses economic appraisal as an approach adopted purely to favour PFI. The Treasury's Green Book has been in use since at least 1983, well before PFI was ever put forward.
- It appears to misunderstand the need to make fair comparisons by discounting future cash flows to a constant price base.

3. It is backward looking and ignores the substantial new funds being made available to the NHS

- Many of the points put forward actually argue that the NHS should not make any investments in new buildings.
- The reports assertions that quality and quantity of care are reduced only holds good if overall funding does not increase. During the period 1997/98 – 2000/01, NHS funding will rise by 11.4% in real terms.

4. It is biased

- It uses emotive language and was written with one purpose in mind. Its conclusions would appear to have been written first.

DRYBURN REVISITED

In 1998 we were commissioned by UNISON Northern Region to review the Full Business Case for the PFI development at what was then the North Durham Acute Hospitals Trust. The report was published as *Downsizing for the 21st century* in February 1999. A response to the report was prepared by officials at the Department of Health and officers of the trust.

We understand that this response has been used as the basis for the claim that the 'Downsizing' report was 'fundamentally flawed'. A government minister has referred in parliament to 'a number of inaccuracies and misunderstandings' supposedly contained in the report.

We have reviewed the objections raised by the Department of Health. Despite the minister's reference to a 'number of inaccuracies and misunderstandings', we could find only two criticisms raised in the response which referred to points of fact.

On the first of these, concerning mental health beds in the original 1992 plans for North Durham, the Department correctly points out that we had overlooked the presence of these beds in the earlier plans, and this skewed the comparison with later developments. On a like for like basis, 798 beds were proposed in 1992, compared with 565 in the Outline Business Case and 454 under the PFI. This correction does not, however, affect the point we were seeking to make in citing the earlier plans: 'since 1991, every stage in the procurement process has been associated with a progressive reduction in the proposed bed numbers'.

The other factual point raised in the Department's response concerns changes to the skill mix in nursing under the PFI plans: the Department states that we had miscalculated the percentage change in the proportion of qualified and unqualified nurses (figure 2 in the report). We have checked our figures and recalculated the percentage change. The figures given in the report were correct, and there was no miscalculation.

No other points of fact are raised in the response. The Department states that we misunderstood two technical points, regarding the distinction between available and occupied beds, and the use of discounted cashflow analysis. We deal with these points below. We are satisfied that there were no misunderstandings on our part. The Department's other points consist of disagreements on matters of opinion and unsupported comments on the quality of our work. We have not addressed these parts of the Department's document.

Insofar as we have replied to the substantial points raised by the Department, we stand by the content of the report and the conclusions we drew from the evidence.

1. Bed numbers

- We pointed out in the report that ‘since 1991, every stage in the procurement process[for the new hospital] has been associated with a progressive reduction in the proposed bed numbers’. We argued that the reason for the successive reductions in planned beds lay in *both* the financial pressures introduced by the NHS capital charging system and the further pressures associated with PFI. Chapter 2 of the report gives a detailed account of the planning and procurement process for the hospital, giving documentary sources and making it clear at what point decisions on the bed numbers were made. The plan produced in 1992, before the implications of the new capital charging regime were recognised, was for 798 beds plus 112 mental health beds (as the DoH has pointed out) . This was reduced to 565 in 1994 for the Outline Business Case (mental health beds were excluded from the plans at this stage), and further reduced (to 454) when the tender notice was issued. The PFI negotiations did not lead to further reductions in the total number of beds, but the planned workforce was reduced, meaning that when the Full Business Case was approved by the Department of Health the workforce plan was for staffing levels for only 350 beds.

- The Department attributes to us the following statement: ‘The PFI procurement has forced a reduction in the bed numbers in the new hospital to 454, only 350 of which are staffed’. The Department appears to have misread the report, as this sentence does not occur there and does not accurately reflect the argument we were trying to present. The Department would seem to have read the report as claiming that the PFI was the sole factor leading to reductions in planned beds, and to have sought to refute this by arguing that ‘all changes in bed numbers [were] agreed before it was ever envisaged that new hospital would be procured using the PFI process’. The report made no such claim.

- The factor the Department has failed to address is the effect of capital charging. The successive reductions in planned bed numbers at the North Durham scheme reflect the previous government’s attempt to create a level playing field between the public and private sectors by obliging NHS trusts to pay interest rates at market level on their capital (NHS capital charges). These charges were explicitly not intended to reflect government’s own borrowing costs, which are much lower. Because NHS hospitals do not receive the benefit of low government borrowing costs, new publicly funded investment can lead to higher capital charges which increase the pressure on

NHS trust's revenue, and thus to bed and staff reductions. The aim of the capital charging policy was to ensure that private sector provision would not have a noticeably different effect on services to public sector provision, because the public sector would already be operating in accordance with commercial considerations. It is therefore not surprising that plans for major hospital developments show bed reductions before PFI consortia are involved.

- However, it should also be stressed that the effect of PFI has been to further increase the pressure on revenue, because as well as interest charges, returns also have to be made to shareholders. These increased revenue pressures have been handled in different ways at different NHS trusts. In some cases, such as Calderdale, there have been further reductions in the total number of beds to be provided during PFI negotiations; at Durham on the other hand the deal was achieved by further reducing clinical staffing budgets, leading to a planned reduction in staffed beds rather than total beds. We feel that the report made these points quite clearly.

- We have argued elsewhere that capital charging should be abolished, a view also expressed by the NHS Confederation, the representative body for health authorities and trusts. This would remove the need for the trade-offs between capital and labour costs which is a feature of all current investment planning in the hospital sector. A further benefit of moving away from capital charging would be that it would be possible to make *valid* comparisons between privately and publicly financed projects.

2. Staffing levels

- Our report drew attention to the way in which increased capital costs were being managed through reductions in staffing budgets. One of the effects of this was that while the new hospital was to have 454 beds, the workforce plan included in the PFI business case is for only 350 staffed beds. On the basis of this evidence we said that of the proposed maximum of 454 beds, only 350 would be staffed, and therefore available for patient care.

- The Department states that we have misunderstood the FBC, and have confused 'available' beds with 'occupied' beds. According to the Department, the trust will have 454 'available'

beds, but will have low occupancy levels, so that only 350 will be occupied on average.

- The term 'available beds' is used in NHS data collection to refer to 'the number of beds available to be used by patients', in contrast both to the number of beds actually occupied by patients and to beds which are not available for patient care, due to lack of staff for example. Only staffed beds are available for patient care. 'Bed occupancy' is the proportion of available beds which is occupied.

- We refer the department to the attached table, from the workforce plan referred to in our report. According to this table, as far as the trust was concerned, there were to be 350 staffed beds. As only staffed beds are available for patient care, our statement that the FBC assumes 350 available beds stands.

- The problem arises from the confusion of total beds and available beds in the trust's planning documents. As noted above, bed occupancy is the proportion of available (and therefore staffed) beds which is occupied. The trust departs from normal usage by treating occupancy as the proportion of total planned beds which is occupied, regardless of whether the staffing levels are sufficient to make all those beds available.

- The Department says that 'For the purpose of the business case, the staffing levels, which represent a variable resource, have been set at a level that is sufficient to deliver the same level of health care currently provided by the old hospital'. This statement needs to be read in the light of a 7% reduction in planned in-patient episodes. The reduction in in-patient care is disguised by a forecast rise in daycase episodes, so that the total number of finished consultant episodes planned is precisely equivalent to 1996/7 caseload.

- At the same time, in order to deal with this reduced in-patient caseload with lower staffing levels, the trust will have to reduce in-patient length of stay, meaning that patients will have to be discharged from the acute hospital earlier. Rehabilitation, we are told, will be provided in community facilities, but the costs of providing this are not included in the PFI business case. There will therefore be an additional call on the health authority's revenue, over and above the £1.5m it is already committing to the PFI scheme, if the care no longer provided in the district general hospital is to be provided elsewhere. This will mean the diversion of resources from other expenditure. We therefore see

no reason to revise the conclusion 'that the scheme can be expected to have an impact on both the quality and quantity of care provided'.

- The Department states 'The bed numbers were calculated using expected future demand and clinical performance as their basic parameters'. This is precisely the process we describe in the report. The point at issue is the way in which 'expected future demand and clinical performance' were estimated. We found that in projecting the number of cases to be treated, the trust ignored both long term trends in admissions and anticipated changes in population healthcare need. This had the effect of reducing the bed requirement.

- The Department further accuses us of failing to understand the relationship between fixed and variable costs. Variable costs for items such as staff expenditure are, we are told, negotiated annually between trusts and health authorities, so by the time the new hospital opens the trust may well have secured an increase in funding which would enable it to build its staffing levels back up. Clearly, the hospital will be able to make fuller use of its capacity if the health authority contributes more funding, over and above the £1.5m. extra it is already contributing to the scheme. This does not alter the fact that the trust was obliged to shed staff, in particular nursing staff, in order to secure the PFI deal.

- We concluded that the hospital was seeing a reduction in the resources devoted to patient care due to the cost of the PFI investment, that without such a reduction the PFI charges could not be met, and that despite this the new hospital would still cost more than the two it was replacing. Nothing in the Department's response suggests that this conclusion needs to be revised.

3 Costs

- The Department insists that the increased costs faced by the health authority are nothing to do with the use of private finance. ‘The statement that the HA has had to increase its funding has as its root the basic observation that new hospitals initially cost more than old hospitals’. We find this baffling for the following reasons: (1) services previously provided by two District General Hospitals are being centralised in a single purpose-built facility (2) the trust has been paying capital charges of 6% on the current replacement cost of the assets of the two DGH’s since 1994 (3) the new hospital has considerably fewer beds and staff than the ones it is replacing (4) energy and maintenance costs should be considerably lower for a new purpose-built facility than for the out-of-date buildings that are being replaced (5) NHS assets have been disposed of to fund the development. Given these facts, why should the new hospital cost more than the ones it is replacing?

- When the Outline Business Case was agreed by the health authority, the trust estimated that the Dryburn development would make cost reductions of between 6.5% and 8.1% possible. In the Full Business Case an extra contribution of £1.5m. per annum was required from the health authority.

- The reasons for the rise in costs were set out in our report: the annual availability payment charged by the PFI consortium (out of which it will make returns to banks and shareholders) was nearly £3m. a year higher than the capital charges the trust was paying to government. The PFI availability payment comes to 12% of the trust’s income, as opposed to the 7.2% of income represented by NHS capital charges. In the Department’s view ‘12% is not a significant proportion of the Trust’s income’.

- We are confused as to why the Department specifies that new hospitals cost more *initially*. The implication seems to be that the cost of the new hospital will reduce in the future. The PFI payments are fixed in real terms for a thirty year period, at the end of which they will indeed reduce, as the consortium will have made its return on the investment by then. However, the Department can hardly be using ‘initially’ to refer to a period of thirty years.

- The Department says: ‘The report’s complaint about this additional cost is an argument for cancelling all new hospital development’. It is not; it is an argument for allowing the NHS to benefit from increased investment by removing the two burdens of capital charging and the PFI.

4 Value for money

- We said that the investment appraisal methodology, which is set out in the Treasury Green Book and the DoH Capital Investment Manual, was developed with the aim of encouraging PFI. The Department's finds this 'a strange comment' because the 'Treasury Green Book has been around since 1983'. We perhaps should have made it clear that we were not referring to the 1983 edition, which was superseded by new editions in 1991 and 1997. The PFI was introduced in the 1992 Autumn Statement. The Capital Investment Manual is from 1994 and includes a guide to PFI and guidance on discounting derived from the (1991) Green Book.
- We pointed out that over the thirty years of the contract the PFI option failed to demonstrate value for money, and that when applied over sixty years, the economic appraisal had attributed exactly equal costs over sixty years to the publicly and privately funded options. We said that this result lacked all credibility, and we detailed our reasons for saying this.
- The Department of Health's response to this is to state, without supporting arguments or explanation, that 'the fact that the figures were the same is neither significant not mysterious. The appraisals were externally validated.' Our report explained exactly why this fact was significant. 'In order to arrive at these figures by the usual means the trust would have had to have taken the cash flows associated with each option over the entire 60 years, discounted them at the government discount rate, assessed the risks associated with each of the options and place monetary values on them, discounted the costs of those risks and added them to the totals to produce risk adjusted Net Present Values'. The likelihood of such an exercise yielding exactly equivalent results for two different options is infinitesimal.
- The Department states '[The report] appears to misunderstand the need to make fair comparisons by discounting future cash flows to a constant price base', and, at a later point 'Discounting means you can assess costs on a common, real terms price base'. These statements are incorrect. Discounting, as used in investment appraisal in the NHS, has nothing to do with expressing costs in 'a common real terms price base' (which would mean that it was employed to remove the effects of inflation). It is used to introduce an interest rate, or cost of capital, assumption into appraisal, in order to create a level playing field between the public and private sectors. The costs which are discounted in the analysis are already expressed in real

terms in accordance with Treasury guidance, as a glance at the relevant section of the Durham Business Case would have shown.

- The Department says that ‘Where investment decisions produce similar results, non-monetary benefits are used to determine the right way forward.’ The investment appraisal in this case did not show similar results for the public and private sector options, it showed identical results. We see no reason to revise our conclusion that the economic appraisal lacks credibility.

**Extract from Full Business Case financial models:
 'North Durham DGH — care team workforce
 based on patient focus (Model 2)'**

	Beds	Occupancy	Staffed beds
Medical	162	75%	121.8
Admissions	27	85%	23.0
CCU	8	75%	6.0
Surgical	164	70%	112.0
HDU/ITU	8	100%	8.0
Gynae	25	70%	17.5
Paeds	33	77%	25.5
LDRP	16	85%	13.6
Natal	16	85%	13.6
SCBU	12	80%	9.6
Total	467		350.2

The trust has assumed a 1% reduction in staffing (and thus in staffed beds) for each 1% reduction in occupancy.

Figures are given as presented by the trust. In the business case, the total for staffed beds (350.2) does not precisely match the sum of the specialty beds (350.6). We have not changed this.

