The Walsgrave Hospitals PFI development

A report to the Coventry and Warwickshire Health Authorities

by

Dr Allyson Pollock
Department of Public Health Sciences, St. George's Hospital Medical School

Dr Jean Shaoul
Department of Accounting and Finance, University of Manchester

Declan Gaffney
Department of Public Health Sciences, St George's Hospital Medical School

July 1998

The Walsgrave Hospitals PFI development

A report to the Coventry and Warwickshire Health Authorities

by

Dr Allyson Pollock
Department of Public Health Sciences, St. George's Hospital Medical School

Dr Jean Shaoul
Department of Accounting and Finance, University of Manchester

Declan Gaffney
Department of Public Health Sciences, St George's Hospital Medical School

Contents

Summary 1

1 What are the options? 3

2 The proposed scheme: caseload and bed modelling 6

3 The proposed scheme: capital and revenue costs 11

4 Sources of funding 18

5 Financial viability 22

Conclusion 24

Summary

Our work on the SOC for the proposed development and on earlier planning documents, together with lessons from other PFI schemes in England and Scotland, leads to the following conclusions :

with regard to the project:

- there is no evidence to suggest that the scale of the project is justified by service need
- the project is adapted from the earlier unsuccessful PFI scheme, and there is no evidence that the financial problems associated with the earlier scheme have been resolved
- although the general shape and scope of the PFI is derived from the FBC, the payment system has been fundamentally altered in a way which will demand increased transfers from pay to non-pay budgets
- options involving modest and realistic amounts of public funding have not been explored
- the three options in the SOC are not comparable, as they all contain different components, and therefore offer different casemixes
- the work done for the earlier Full Business Case is no longer relevant and should be discarded as a 'sunk cost'

with regard to the trust:

- on current estimates, the scheme is not affordable to the trust without the loss of approximately 600 clinical WTE positions
- the trust will need to expand its income base in order to finance the investment

with regard to the purchasers:

- projected capacity has been further reduced since the Full Business Case
- this has failed to release any more funding for investment in substitute services, although the caseload modelling assumes shifts of caseload from acute to community and primary care
- there is a lack of clarity about the funding of both the city centre facility and the Mental Health Unit
- the need for 600 staff reductions in order to make the scheme affordable will lead to increased costs in other sectors
- the city centre facility will be vulnerable to affordability pressures
- the sources of funding for the PFI scheme remain obscure
- the combination of the revenue of the acute and the community trusts in the 'affordability envelope' is a cause of concern

1: What are the options?

'a privately financed option must be demonstrated as the preferred option and the preferred option must be demonstrated to be a viable PFI project'.

Walsgrave Hospitals Trust Board meeting, November 1995, quoted in *Walsgrave Hospitals NHS Trust Full Business Case* (August 1996) p.46.

The scope and scale of the Walsgrave project has been fundamentally determined by the fact that it was decided to pursue privately financed development. The most important ways in which the scheme has been progressively tailored to fit the needs of private investors are:

(1) The rejection of a partial new build in favour of a total new build.

(2) The incorporation of the mental health unit in the scheme.

Two factors were important in shaping the development in this way: the need (in order to finance a deal) to release as much land as possible for development on the Walsgrave site, and thus to demolish the existing MHU and other buildings; and the low capital cost of a partial new build, which would not have allowed a sufficient scale of investment to justify the exercise from the private sector's point of view. As the trust cheerfully acknowledges in the SOC, 'there is considerable evidence that very large schemes are more attractive to the private sector.'

1.1

The option appraisal in the SOC is derived from that in the FBC. Both have in common the fact that they exclude from detailed consideration options which would involve considerably lower outlays of capital.

For example, the 'non-financial' appraisal of options in the SOC considers only the three major investment options, without comparing them with a 'do nothing' or 'do minimum' option. Moreover, this appraisal actually includes 'PFI-ability' as a criterion - one which carries the maximum points and weighting available. This is hardly a 'non-financial' appraisal. (If the PFI criterion was not included, the ranking would have been switched, with option 1 being the preferred option.).

1.2

Two 'Do Minimum' options are considered in the SOC only to be rejected for further exploration:

DM A: centralisation of A&E on the Walsgrave site with two storey extension, with all other service remaining at C&W site. Estimated capital cost £6m. and 'annual revenue costs' of £550,000.

DM B: closure of C&W with a four storey extension to Walsgrave and adaptations to St. Cross Hospital to take on C&W caseload. Estimated capital cost of £18.7m. (net of land sales) and annual revenue savings of £2.6m.

DM B was chosen as the preferred do minimum option on the grounds that it was 'clearly economically more advantageous'.

Both DM options are derived from the original 'long list' of options in the PFI procurement process (see Option Appraisal in FBC).

1.3

Neither of the do minimum options was worked up as a realistic option in either the FBC or the OBC. This is a cause for concern, as the rationale for the major investments (and their immense associated revenue costs) turns on the costs associated with the do minimum options. The cursory exploration of these options in the SOC results in the impossibility of a meaningful comparison with other options. For example, taking the economically less preferable option involving extending the Walsgrave while retaining inpatient services on the C&W site (option DM A):

- The 'annual revenue costs' associated with DM A in the SOC are simply the capital charges consequences of the £6m. investment.
- No savings through the integration of A&E services are factored in: we can contrast this with the way in which (unexplained) savings are used to offset the immense annual costs of the PFI investment. Leaving aside labour cost savings, surely there would be savings on the transport of patients between sites, in equipment etc.?
- The higher revenue costs that are assumed are still less than the £1.745m. additional funding agreed for the PFI scheme in the FBC, to say nothing of the reductions in the wages bill it will demand
- the capital cost is less than a third of the *public sector* capital cost of the PFI development (the PFI assumes a £20m. public sector capital injection)

1.4

The option which would keep the Coventry and Warwick site open as an acute hospital and integrate A&E across both sites would have a lower capital cost than the PFI option, its revenue costs have not been assessed and it has been rejected from consideration. There is also no evidence that the other DM option has been developed.

Although other service reasons may dictate that neither of these options is appropriate, the failure to develop realistic estimates of their economic implications indicates that their function is to back up the case for a larger investment. It hardly needs to be said that from that perspective, an inappropriate do minimum option offers certain advantages. Neither the FBC nor the SOC offer worked up and properly costed models of what could be done by maximising the use of existing resources and applying minimum investment. Lack of public capital is not an issue, as the preferred PFI option involves more public capital than either of the two Do Minimum options. The reasons for pursuing the larger scale investment have nothing to do with proven economic advantages.

2: The proposed scheme: caseload and bed modelling

The current Strategic Outline Case derives from the Full Business Case which was turned down for prioritisation in July 1997. It is worth considering the changes that have since been made to the envisaged scheme.

The most notable differences are:

a further reduction in bed numbers from those projected in the FBC
a significant increase in both capital costs and annual payments: the increase in capital costs is unexplained (it is of the order of £58m.)
a striking change in the configuration of the annual payments i.e. the ratio of lease payments to service charges
a different schedule of repayments, with much faster payback for investors
an increase in the annual 'affordability' sum available to fund the development

2.1

In the SOC 'general inpatient beds' i.e. other than those for regional specialities are projected to fall by 233, from 928 to 695. (SOC 'Formulation of options' Table 2), while regional specialties/ITU/SCBU will lose 22 beds, from 226 - 204, mainly reflecting the shift of plastic surgery caseload to George Eliot Hospital Nuneaton. The overall reduction will be 1245 - 1067, 178 beds or 14%. However, the reduction in *non-specialist* inpatient beds will be 25%.

2.2

Affordability pressures are clearly an influencing factor in these further reductions in bed numbers from what was envisaged in the FBC, although it is hard to tell whether the aim was to limit capital cost by keeping bed numbers down - in which case it has hardly been a great success -or to limit future staff numbers in order to transfer funding from wages to capital costs. The planning rationale for bed reductions derives essentially from two documents, the CHA review of acute services, using data supplied by CHKS, and work done by Gill Potts in the interval between the failure of the FBC to achieve prioritisation in July 1997 and the preparation of the SOC. The relationship between the two exercises is important.

Work commissioned from CHKS for the CHA Strategic Review showed that there was 'little scope for significant reduction in bed numbers from reducing length of stay'. As there are no available geriatric facilities 'the achievement of the upper

quartile targets is more challenging than for hospitals with these other options.' (Geriatric medicine is integrated with general medicine at Walsgrave, leading to higher general medicine ALOS).

The work undertaken on behalf of the Walsgrave trust by Gill Pott seems therefore to have been concerned with finding ways of significantly reducing bed numbers by means other than the usual technique of matching length of stay to peer group performance.

The method used was to choose favoured values for a range of factors influencing both the numbers of cases to be treated and length of stay. The focus is on occupied bed days rather than FCEs, leading to some confusion as to what information is being presented. The basis on which 'favoured assumptions ' were chosen is not stated, nor is the nature of those assumptions. All that is provided is a percentage change derived from the application of the assumption. This is used to form a matrix which seems to deal with changes in both numbers of FCEs and lengths of stay.

At the same time there are references to a model of care involving increased availability of diagnostic services, an enlarged assessment/observation area, and a clinical investigation unit to support one-stop clinics: however it is not clear is who will be providing these services and how they are to be funded.

2.3: Coventry Health Authority Strategic Review (1997-2002): acute services

Caseload modelling and forecast planning

The health authority uses demographic projections to forecasts future admissions. It acknowledges that these projections (which predict a fall in the population) are far from robust and not the main drivers of change in caseload (p7). The choice of demographic projections rather than trends in admissions would appear to turn on the ability of the former to reduce caseload by 2.8 % and a 4.4% respectively for all admissions (day case, emergency and elective) by the year 2001 and 2006 respectively.

Nonetheless, emergency admissions are continuing to rise by 3% per annum for medical, surgical and paediatric specialities (p.21- 22). Failure to take account of rises in emergency admissions has led to severe problems at a number of current hospital developments, notably the Norfolk & Norwich scheme, where 100 beds had to be added back on to the new hospital in order to accommodate caseload which was continuing to rise in defiance of the health authority's favoured projections. There is a clear association between the need to drastically revise caseload projections and the use of baseline year data rather than trend analysis, for fairly clear reasons. The former approach involves adjusting baselines in accordance with a very few objective factors (i.e. demographic projections) and great deal of desired service changes. Placing hard data, shots in the dark and wish lists on the same level in this manner is not likely to yield accurate predictions or informed decision making.

There is thus a high chance of the caseload modelling being proved wrong and for this reason the health authority would be well advised to carry out analysis by specialty of changes in numbers of admissions by type over time. (Such an analysis could then be used to explore the marginal costs of extra emergency caseload etc.). If the authority is worried about FCE inflation it could undertake a trend analysis reviewing 1st FCEs or linked FCEs.

Bed Numbers

The health authority has applied three performance values (day case rates, length of stay and longstay outliers) to judge the performance of the trust currently against the CHKS database and quantify future bed numbers. Future numbers of occupied bed days have been derived by applying the top quartile of performing hospitals in CHKS data base and comparing to casemix analysis and length of stay and day cases. It is not clear whether the final bed reductions are the result of combining demographic caseload projections with performance targets.

The review leaves a number of questions unanswered:

a) how peer groups were chosen, what was the case-mix across hospitals and what if any special factors were taken into account? Data would be needed on the eight peer groups and their populations, neighbouring providers and support services.

b) how case-mix was adjusted for by specialty . How was disease staging and severity measurement undertaken, since it is not recorded in the CMDS?

c) how was complexity measured over time?

d) how was analysis of multi-episode spells undertaken?

The health authority notes that the CHKS performance targets may be unduly optimistic given the nature of the Walsgrave service, the combination of geriatric and general medicine beds and the lack of supporting services for community and long stay care and that it is highly unlikely that the optimistic performance targets for day cases and length of stay will be achieved across all specialities. They also note that caseload will increase for the over 85s and that this group cannot be expected to achieve the length of stay reductions of other age groups. Nevertheless the health authority concludes that around 24-36 beds could be lost based on an optimistic fall in demographic projections and maximising performance targets (p 9).

Caseload analysis does not extend to regional specialist services and those services which are the lead purchasing responsibly of other health authorities. How has the health authority distinguished between regional specialist services and other more general caseload, and how are neighbouring health authorities such as Birmingham factoring in the service requirements of Coventry and Warwickshire into their plans e.g. in the context of Solihull residents where Heartland's plans to link not with the Walsgrave but with the QEH trusts.

2.4

Gill Potts' analysis of bed numbers and caseload for the Trust's revised proposes a substantial reduction in both caseload and bed numbers, but the assumptions are not evidenced and the methods are not provided. The matrix is completely unintelligible. The absence of a needs assessment to support the caseload projections is surprising and worrying. Given the heavy emphasis on changing models of care it is surprising that the trust does not provide any evidence or quantification of what elements of caseload will be shifted out and which specialties will be affected. The Trust provides no data on the alternative models of care: what they will look like and in particular how they will be resourced, staffed, and where they will be located. No data on how services are coping now has been used (e.g. bed occupancy by specialty, outliers, A and E waits, cancelled elective cases).

Caseload analysis

The trust anticipates an 11.45% reduction in emergency admissions, a 24% reduction in elective admissions and a 33% increase in day case by the year 2005. Given the enormous projected reduction in emergency and elective in-patient caseload the purchasers would need to know what caseload by specialty is to be displaced and decide what alternative models of care will be in place. If this exercise is not carried out the health authorities could end up carrying the risk for significant proportion of untreated and displaced caseload.

It is unclear whether the rise in daycases is the result of substitution or of trend projections. The drive towards daycases and the reduction in emergency admission in the absence of a firm proposal outlining costing and quantifying future models of care suggests a market based approach where the trust will change case mix by focusing on cheaper, healthier cases rather than on health care needs.

The trust has not separated out regional specialties from general acute. This is clearly important both for future income streams and bed numbers.

Total Bed numbers

The trust anticipates a 25% reduction in acute inpatient beds, an increase of 82% in five day beds and a 10% reduction in regional beds. The regional beds are not separated out from general acute beds and classified by specialty. It is critical that these changes be quantified with respect to the affected client groups and specialties. The implications for local authority social services should be identified. Clinicians should not be asked to work on any assumptions until the baseline trend data is in place.

One would also have expected in an exercise of this type to see some analysis of purchaser flows and some caseload modelling including trends in admissions by specialty over time, separating out regional specialties. The Trust has undertaken no needs assessment of the acute health care needs of the residents of their major purchasers.

2.5

The caseload analysis is critical since the reductions in bed numbers are posited on major reductions in emergency and elective in-patient caseload. No evidence is provided to support the caseload analysis and bed projections either in terms of how the services are coping now or future models of care. In particular the heavy emphasis on rapid diagnostic admissions and alternative models of care lacks weight and evidence.

The trust's final bed numbers have the feel of being driven by affordability rather than health care needs. The trust appears keen to protect its status as a regional specialty provider but the focus on changing casemix and supply is in the direction of the market oriented end of health care. We are concerned that the move away from emergency and elective in-patient admissions, in the absence of concrete proposals for alternative models of care, could be interpreted as a bias against the elderly while the move towards (one presumes) more lucrative daycase work will favour healthier younger groups.

3: Capital and revenue costs

3.0: Capital costs

The 1996 FBC gives for the Public Sector Comparator

£56,030 (at MIPS index 275)	for the hospital
£10,064 (at MIPS index 290)	for the mental health unit
£10,232 (at MIPS index 275)	for the city centre facility
£76,326	total

This includes equipment (FBC table 22 p.39)

while the PFI costs were :

£73.7m	for the hospital
£6.2m	for the mental health unit
£7.3m	for the city centre facility
£87.2m	total

Equipment was to be provided through a preferred provider 'managed technology service' from Siemens. With equipment included this gave a total of £120,878m. (FBC p.92)

SOC gives

Option 1 £173,000,000

Option 2 £177,000,000

Option 3 £178,000,000

SOC Appendix 9

The relevant comparison is with Option 3, the only option which includes all three elements of the FBC scheme. There is also a £20m. contribution from the DoH, which either raises or reduces the capital cost: the report is unclear.

There is no breakdown of the overall figure by facility in the SOC. However, option 1, which like option 3 centralises inpatient services at Walsgrave, does not include the City Centre Facility, and is costed at £173,000,000. (SOC, appendix 9, table 17). This would imply that £5m. has been allocated to the City Centre Facility. This should be contrasted with the £7.3m. in the FBC. No explanation is offered as to why the city centre facility should cost less at this stage than it did a year ago.

3.1

KPMG estimate the annual tariff required for option 3 as £34,370,000 excluding Rugby. This compares with £29,640,000 in the FBC (the estimated cost at 2005). There is thus a rise of some £6,670,000 in the estimated annual cost to the trust.

The annual cost estimate was arrived at on the basis of (1) the current cost of providing those services likely to be provided by the PFI partner (facilities management services) (2) deriving an annual lease payment from the estimated capital cost on the basis of a number of assumptions about rates of return, interest rates, inflation, tax concessions etc.

3.2

The estimated annual charge for option 3 including Rugby in the KPMG report breaks down as follows:

SOC: Option 3 annual costs (excluding Rugby)	
Lease/debt repayment:	£19.696.000
Services:	£14.674.000
Total:	£34.370.000
	Source: KPMG PFI Feasibility Report

We can contrast the anticipated costs in the SOC with those in the FBC. It is notable that the proportions of payments going on lease and services have changed dramatically.

FBC: PFI annual costs at 2002/3	
Lease/debt repayment:	£10.799.000
Services:	£18.348.000
Total:	£29.147.000
	Source: Full Business Case

The difference in the total annual charge is £5.223m. However, the proportional increase in the lease component is much greater (+£8.897m.). This is partly offset by an unexplained reduction in the facilities management charge of £3.674m.

3.3

The striking differences in the structure of the PFI payments is, if anything, even more significant than the increase in total annual cost. It implies that the trust and its advisers have only a limited grasp of the issues they face and that they regard the allocation of funding between buildings and services as easily manipulable in order to suit financing needs: the implications for services of this are nowhere addressed.

The trust states that its original preferred partner was the victim of poor financial advice, leading to 'their need to renegotiate key elements if the agreed Heads of Terms, resulting in a significant affordability problem'. It would seem that poor advice was not confined to the consortium: the ratio of lease to service charges in the FBC is unparalleled in PFI procurement. How did the trust manage to get so far in the procurement process only to come up with a proposal so unrelated to other PFI schemes in progress at the time? As the table below shows, lease (availability) payments have consistently accounted for the bulk of total PFI payments.

Availability and services as a proportion of PFI payments: selected schemes

Trust	Availability payment	Services payment	Total PFI payment
Calderdale	71.0%	29.0%	£12,280,000
Dartford*	63.3%	36.7%	£16,649,000
N. Durham*	58.0%	42.0%	£12,088,000
Edinburgh	81.3%	18.7%	£31,485,000
Walsgrave FBC	37.0%	63.0%	£29,147,000
Walsgrave SOC	54.5%	45.5%	£36,310,000

* contract signed

In fact the consortium was in all likelihood influenced by the fact that other groups were obtaining more attractive deals elsewhere. In particular, the payback period under the FBC was longer than is usual under this kind of deal (40 years rather than 30, as in the SOC). While the scheme as envisaged in the SOC would allow for a more attractive return to the consortium, the sheer implausibility of the financial assumptions in the FBC suggests that any other assumptions imported into the current scheme from the FBC should be treated with considerable caution.

What the FBC and SOC taken together illustrate is the way in which PFI deals are based on an available 'pot' of funding which is then divided up between services and capital in ways which are not necessarily related to what is being provided.

3.4

The KPMG report shows that the annual fee for option 3 is not affordable to the trust. The annual fees for options 1 and 2 are also not affordable, although the gap is smaller.

Affordability gaps for three options	
Option 1	£1.067
Option 2	£1.062
Option 3	£1.889
	Source: KPMG Feasibility Report

. We find it surprising that option 3 is less affordable than options 1 and 2, as the only difference between option 1 and option 3 is in the city centre facility. Is the funding for the city centre facility not a separate allocation? Does it not in fact come from the 'savings' demanded by the purchaser?

This raises the issue of what is included in the various options. Since the costs are apparently based on the desired output i.e. FCEs , does each option deliver the same case mix?

What the KPMG report makes clear is that on trust estimates the city centre facility is a potential source of affordability problems. The vulnerability of this element in the plan will be increased if the presence of a healthcare facility on the C&W site is seen as limiting its potential for development.

3.5

It should be noted that the 'affordability analysis' provided in the SOC proper departs from the KPMG report in giving different figures for the annual costs. While the assumed fee for services is still £16,514,000 the lease payments have been brought down to £18,844,000 giving a total of £35,358,000 (including St. Cross).

These differences are explained by the fact that the 'affordability' analysis is based on an assumed internal rate of return to the consortium of 16.5% rather than the 17.5% used by KPMG.

However, changing the internal rate of return in this manner does not account for the full drop in price. We assume that one of the other assumptions of the financial model has been modified to yield the lower figure, but it is impossible to tell which from the document: the purchasers should seek clarification from the trust on this point.

Comparison of the assumptions used by KPMG with those used in the financial model for a recently signed PFI contract suggest that their assumptions are realistic.

Rates of return including consortium margins

	Senior debt	Subordinated debt	Equity blended IRR
Durham	9.75%	14.00%	17.23%
Walsgrave	8.20%	13.15%	17.50%

Margins: **Durham:** senior debt 1.5% (construction phase)/1.25% (post-construction) subordinated debt 5.00%

Walsgrave: senior debt 1.25% (construction phase)/1.05% (post-construction) subordinated debt 6.00%

Source: North Durham FBC Appendix 4: 'Consort financial models'
Walsgrave SOC Appendix 8: 'PFI Feasibility Study'

It is unlikely that any reductions in borrowing costs to the private sector below the levels in the financial model will be passed on to the trust.

4.2

We give here the available amounts shown on the income and expenditure accounts as appended to the earlier Full Business Case:

Combined interest, dividend and depreciation charges, Walsgrave Hospitals Trust 1994 -1998

1994/5 (actual)	£8,424,000
1995/6 (actual)	£7,651,000
1996/7 (projected)	£7,676,000
1997/8 (projected)	£ 7,408,000
(Depreciation charge, interest payable and dividend on Public Dividend Capital from Full Business Case table T1.)	

These figures indicate that the capital charges component in the trust's annual accounts (for the current asset base) as projected in the Full Business Case would be insufficient to cover the anticipated lease payments in the SOC by roughly £11,000,000 even on the more optimistic projected rate of return of 16.5% (again, this excludes the community trust developments).

4.3

The PFI will therefore almost inevitably require a shift from pay to non-pay budgets, quite independently of the contracting out of non-clinical support services. There are no details on this in the SOC (no workforce plan, no projected expenditure etc.). The FBC gave projected income and expenditure accounts: taking into account the change in the payment profile between FBC and SOC, these paint a very worrying picture.

Projected expenditure (000)

	2000/1	2002/3	Change
Pay:	£77,274	£65,895	- £11,379
Non-pay	£37,000	£54,364	+£17,364
Depreciation	£4,612	£338	- £4,274
Operating surplus:	£4,334	£ 817	-£3,791

Source: FBC Table T1

4.4

The FBC anticipated a fall in pay expenditure of some £11,378,000 between 2000/1 and 2001/2. We assume that the bulk of this related to staff transferring under the privatisation of non-clinical services.

The transfer of 750 estates/administration staff (with lower than average wage rates) to the private sector would account for the reduction in the pay budget in the FBC. We have no comparable information for the current project, but we do know that the gap between existing capital charges and projected PFI lease payments is now considerably greater:

1997/8 capital charges + depreciation	FBC debt/lease	**FBC Gap**	SOC debt/lease	**SOC Gap**
£7.4m.	£10.8m.	**£3.4m.**	£19.7m.	**£12.3m.**

The gap between available funding and the PFI lease costs is now greater than the forecast drop in the pay budget under the FBC *before any account is taken of the transfer of staff under the PFI*. In other words, the SOC will require that the transfer from pay to non-pay budgets be more than twice as great as in the FBC. Assuming average staff costs of £20,000, this means approximately 560 job losses,

predominantly among clinical staff (as other staff will have been transferred). This would represent 20% of the clinical workforce.

As the FBC was based on a lower total annual cost and a different payment profile, the impact of staff cuts on this scale may not have been assessed by the trust. It is with some irony we note that the 'affordability statement' in the SOC refers to agreed investment of £1,000,000 in nursing staffing levels.

Walsgrave hospitals current workforce

	Number	Percentage
medical and dental	317	8.7%
admin and estates	759	20.7%
H/c assistants and other support staff	417	11.3%
Nursing, midwives, etc.	1,676	45.8%
Scientific, therapeutic and technical	489	13.4%
total	3,658	
average emp costs per employee	£20,440	
Total emp costs	£74.777m	

4.5

Apart from the questions concerning transfers from pay to non-pay budgets, there is also lack of clarity about the total figure for the affordability envelope (appendix 9). The figure of £140,839,000 for 'current costs' is some £18,000,000 greater than current trust revenue. This is partly because it includes some of the income of the Coventry Healthcare trust, but how much is not specified. It also presumably reflects income from services transferred from St. Cross.

The annual cost of services at the new mental health unit were £6.36m. in the FBC (p.226). Rugby therefore presumably accounts for around £11m. of this projected income. In looking at the lease component of the PFI tariff, Rugby costs should be excluded.

This would mean that the funding available (before approved service changes) would be around £133m. The lower lease payment proposed in the affordability statement

would be 14.1% of this funding, and on the higher tariff estimated by KPMG would be 14.7%.

Income/capital charges 1997/8	**7.4%**
Income/lease payment (PFI)	**14.7% (excluding Rugby)**

4.6

It is imperative that the black box of the affordability estimate be opened up. This is an area which the health authorities need to take particularly seriously, as reduction in staff numbers at the Walsgrave may be posited on increased staff levels in other sectors; savings on the trust's wages bill will be needed to fund the PFI, and will not be available to fund new or substitute services in community and primary care.

We conclude that (1) the affordability analysis and the KPMG report fail to specify the sources of funding for the PFI payments (2) in the light of the information included in the earlier Full Business Case, current capital charges are insufficient to cover the proposed level of PFI lease payments (3) on comparison of the FBC with the SOC, it seems likely that the PFI development will demand around 600 job losses simply in order to meet debt obligations (4) it is therefore important that the trust be asked to explain how the affordability envelope for the scheme was arrived at: that is, *not* the total annual revenue of the trusts but the revenue to be allocated to the lease and service components of the PFI development. We would suggest that looked at in these terms the affordability gap is considerably greater than that estimated in the KPMG report.

5 Financial viability

The effect of the PFI tariff estimated by KPMG would be to greatly increase the proportion of the trust's annual income needed to pay for capital. This raises questions as to the financial viability of the investment given the apparent lack of opportunity for the trust to increase its income.

5.1

The first point to remember is the distribution of costs : labour = 65%, purchases = 28% and capital =7% of income. The main cost to control is therefore labour. Secondly, revenues are not set to rise significantly.

(£m)	Current	PFI
Asset base	76	180
required capital charges at 12% assets	9.1	21.6
income	121	143
required capital charges as % income	7.5%	15%
actual capital charge	7.64	21.6
actual capital charges as a % income	6.3%	15%
actual income less cap charges in 1997	113.4	
income less required capital charges	111.9	121.4
income less PFI tariff		109

In short, a new build which increases the asset base for roughly the same income will be problematic for a trust under the current capital charging regime and would require cost savings to be made. The table below gives the income requirements on a £180m capital build under the public sector regime to meet the 6% FTP at different levels of 'efficiency' or operating margins.

5.2

Income necessary to make 6% returns on assets of £180m.

FTP = £10.8m	Surplus/Income Rate	Necessary Income
	3%	£360m
	4%	£270m
	5%	£216m
	6%	£180m
	7%	£154m
	8%	£135m

The trust accounts show that its ratio of cash surplus to income is around 3.5% (excluding depreciation). This needs to rise to about 14% in order to afford the PFI tariff.

PFI however aggravates the problem, irrespective of the particular features of the scheme, because rates of return are higher and there is no discretion as to whether payments are made. Unlike the existing financial target performance, the requirement to make returns and service debts will not be waived. On average, annual PFI 'availability' payments equal 11% of total capital cost (excluding financing).

As we have seen, the ratio of the PFI 'availability' charge to income is 14.7%. Currently, the ratio of capital charges to income is 7.4%. This should give an idea of the scale of change necessary to make the PFI investment feasible. If the trust were to attempt to meet the PFI charges on the basis of its current surplus to income ratio, it would need an annual income of £270m.

Some of these points apply (to differing extents) to both publicly funded and privately financed investments. However the scale of the investment at Walsgrave is the major issue here and, as we have seen, this was largely determined by the fact that private finance was sought.

Conclusion

There is a fundamental lack of clarity in the SOC about how the 'affordability' problems which led to the earlier FBC being rejected in July 1997 have been resolved. The estimated capital and revenue costs, as we have seen, are much higher, and the lease component of the annual payments has virtually doubled. The SOC gives no details on the precise means by which the scheme is to be paid for.

This leaves the purchasers with the problem that they are left with a bare statement of the revenue implications for the overall trust budgets with no indication of how spending is to be handled within those budgets, and thus of the implications for volume and quality of patient care. We have argued that only major transfers from pay to non-pay expenditure would allow the annual lease payment to be met. The effort to reduce projected bed numbers and caseload implies that the Walsgrave trust is already exploring ways of cutting staff numbers.

Given the scale of this investment, the argument that how the trust manages its spending commitments is its own affair carries little weight. The sort of radical change in the structure of spending within the trust which is demanded by the project will have consequences across the system, notably in the need to ensure funding for substitute services is available. The question for purchasers is whether they want the Walsgrave PFI to be the engine for the restructuring of the local NHS.

We would recommend that purchasers seek clarification from the trusts concerned about the service and finance issues raised in this report. Moreover, given the lack of proportion between the scale of the investment and identified service need, we also recommend that purchasers insist that a realistic option, involving relatively modest public sector investment, be fully developed: both to allow comparison with the proposed major investment, and to replace it should it be shown to provide the required service benefits at a lower cost.