8 AFFORDABILITY

8.1 INTRODUCTION

This chapter of the OBC details the revenue consequences of the preferred option and its impact on local health service finances. Results of the financial appraisal show the revenue implications of the preferred option (including capital charges and net effect on prices). This estimate includes an allowance for the cost of risk and the full whole life costs of the scheme over 60 years. It also takes account the IM&T and equipment requirements.

8.2 FINANCIAL APPRAISAL METHODOLOGY

The affordability assessment has been undertaken on the basis of the new funding arrangements between PCTs and Trusts to be progressively implemented between 2003/04 and 2005/06[xii]. Under this arrangement the service provider (the Trust) will receive income from the commissioner (the PCTs) on the basis of actual patient activity undertaken, paid at the national tariff for each HRG.

Therefore the PCTs can only approve and commit to the forecast activity levels and the funding of them at the national tariff. The Hospital Trust has undertaken an assessment to determine whether the expected growth in income from the PCTs will be sufficient to fund the cost of implementing the preferred option in the OBC.

The assessment process has been conducted in two stages:

- Identify the additional cost of the OBC and any other planned developments
- Identify the expected growth in income through the change to the new funding mechanism and any other funding commitments for specific initiatives or service developments.

The affordability assessment is the balance between these two values.

8.3 KEY ASSUMPTIONS

The assumptions used to forecast the revenue costs are detailed in Chapter 5 and Appendix 11. In addition the assessment of affordability has taken into account the following:

- Risk costs have been assumed at 12.5% of the capital costs.
- Cost of V.A.T has been included where applicable.
- Equipment and IT costs have been included.
- Capital charges have been calculated on the opening book value of the new assets with no impairments and in accordance with the NHS capital accounting manual.
- The pre-commitments of the PCTs have been included in the future cost estimates for the health system.
- Current clinical costs are on average 8% below the national tariff.
- No income has been included from the sale of residual estate or new income generation schemes.
- Inflation is assumed to be fully funded and therefore has been ignored.

8.4 LIFE CYCLE COSTS

The revenue cost estimates include the cost of all routine and planned maintenance for the building and engineering services. The major periodic investment in lifecycle maintenance work will be funded, as now, from the annual capital allowance (£3.73m in 2002/03). The average annual lifecycle cost, over the 60 year life of the facility, is estimated at £2.22m and entirely affordable within the forecast capital allowance.

As the capital charges are based on the opening book value at the start of the operational period, no allowance has been made for the capital charges associated with investment in major life cycle maintenance.

8.5 ADDITIONAL COST OF THE OBC

Details of the revenue cost for all options and how they have been determined are provided in Chapter 5 and Appendix 11. A summary of the costs for the preferred option are provided in Table 58.

Table 58 – Summary of the Revenue Costs for the Preferred Option

Additional costs (£,000)	**ECH Option**
Achieving Targets and Population Growth	£10,401
Integrated Care Centre	£1,446
Facilities Costs	£1,034
Capital Charges	£19,882
Total	**£32,763**
Current Cost Base	£105,670
New Cost Base	**£138,433**
Percentage Increase on cost base	23.67%

8.5.1 OBC COSTS BY PCT

These costs have been apportioned to the four main PCTs based on their current level of expenditure with the Trust. The cost of the integrated care centre has only been apportioned to the two Peterborough PCTs. Table 59 shows a breakdown of these apportionments.

Table 59 – Apportionment of Costs by PCT

PCT Revenue Costs (£,000s)	**North Peterborough PCT**	**South Peterborough PCT**	**Lincolnshire SW PCT**	**East Cambs. & Fenland PCT**	**Other**	**Total**
Cost Base (2002/03)	**(35,467)**	**(25,988)**	**(15,712)**	**(6,396)**	**(22,107)**	**(105,670)**
Capital Charges	**8,436**	**6,116**	**3,299**	**1,342**	**689**	**19,882**
Facilities Costs	**535**	**369**	**81**	**33**	**17**	**1,034**
Integrated Care Centre	**868**	**578**				**1,446**
Achieving targets & population growth	**4,511**	**3,250**	**1,634**	**665**	**341**	**10,401**
Total	**14,350**	**10,313**	**5,013**	**2,040**	**1,048**	**32,763**
Total Revenue Costs (2010)	**49,817**	**36,301**	**20,725**	**8,436**	**23,155**	**138,433**
Percentage Increase	**28.81%**	**28.41%**	**24.19%**	**24.18%**	**4.52%**	**23.67%**

8.5.2 IMPACT ON TRUST BALANCE SHEET

The new capital assets created for the GPHIP will be placed onto the balance sheet of the Trust that will manage the asset. The hospital development, £249.02 million, will be brought on to the Peterborough Hospital's balance sheet.

The integrated care centre, £19.84 million, will be placed on the balance sheet of North Peterborough PCT. The site on which the integrated care centre is located will be transferred from the Hospital Trust to the North Peterborough PCT.

8.5.3 CASH FLOW

Table 60 shows the cash flow for the capital expenditure on the development on the Edith Cavell Hospital site. The construction is assumed to start on 1 January 2005 and end on 1 October 2010.

Table 60 – Capital Flow for the ECH Development (Excluding planning contingency)

	Total (£000)	2003/04 (£000)	2004/05 (£000)	2005/06 (£000)	2006/07 (£000)	2007/08 (£000)	2008/09 (£000)	2009/10 (£000)	2010/11 (£000)	2011/12 (£000)

Cost	180,215	1,993	5,981	25,269	37,822	51,485	14,414	38,447	4,047	756

Table 61 shows the additional revenue cash flow for the Peterborough Hospitals Trust. It is assumed that part of the additional expenditure will be incurred at the end of phase 3 of the development when the first decant takes place and continue to ramp upwards to meet access and capacity targets.

Table 61 – Additional Revenue Flow for the Peterborough Hospitals Trust

	Total (£,000)	2003/04 (£,000)	2004/05 (£,000)	2005/06 (£,000)	2006/07 (£,000)	2007/08 (£,000)	2008/09 (£,000)	2009/10 (£,000)	2010/11 (£,000)	2011/12 (£,000)
Reoccurring	28,214						1,806	1,806	6,150	18,452
Pre-commitments	8,160	7,245	846	69						
One-off revenue	1,300							500	800	
Block capital	3,101							1,088	2,013	
Total	40,775	7,245	846	69	0	0	1,806	3,394	8,963	18,452

Table 62 shows the cash flow for the capital expenditure on the integrated care centre development on the PDH West site. The construction is assumed to start on 1 January 2005 and end on 1 April 2006.

Table 62 – Capital Flow for the Integrated Care Centre (Excluding planning contingency)

	Total (£,000)	2003/04 (£,000)	2004/05 (£,000)	2005/06 (£,000)	2006/07 (£,000)	2007/08 (£,000)	2008/09 (£,000)	2009/10 (£,000)	2010/11 (£,000)	2011/12 (£,000)
Cost	15,861	1,253	973	13,055	361	218	0	0	0	0

Table 63 shows the additional revenue cash flow for the North Peterborough PCT associated with the integrated care centre. It is assumed the new facility is built in a singe phase.

Table 63 – Additional Revenue Flow for the North Peterborough PCT

	Total (£,000)	2003/04 (£,000)	2004/05 (£,000)	2005/06 (£,000)	2006/07 (£,000)	2007/08 (£,000)	2008/09 (£,000)	2009/10 (£,000)	2010/11 (£,000)	2011/12 (£,000)
Reoccurring	5,098				3,823	1,275				
One-off revenue	119				86	33				
Block capital	105				10	55	40			
Total	5,322	0	0	0	3,919	1,363	40	0	0	0

8.6 EXPECTED GROWTH IN INCOME

The real growth in income required to fund the cost of the preferred option stems from:

- The forecast increase in activity levels between 2002/03 and 2010/11.
- The move to the national tariffs for charging which are approximately 8% above the Trusts current reference costs.
- The planned, above inflation, growth in NHS funding.

Activity Growth

Health system activity, measured as FCEs, for day cases and elective and emergency inpatients are forecast to grow by 20.77% over the development period. Clinical income is currently £77.839m. Therefore the increase in income due to the forecast increase in activity is estimated at:

£77.836m x 20.77% = £16.168m

Move to National Tariffs

The Trust's reference costs are approximately 8% below the average national tariff. Changing to the national tariff with increase the Trust income by:

(£77.836m + £16.168m) x 8% = £7.521m

Forecast Growth in Income

The November 2002 pre-budget statement identified spending on the NHS would increase by an average of 7.4 per cent a year in real terms over the five years to 2007-08. Although much of this additional funding will be targeted at specific developments and initiatives, some will flow through general growth in PCT funding and on to Trusts through the increase in the national tariffs.

Assuming this real growth is 1.34% year on year over the next eight years the actual growth in income would be:

$$\left(£77.835\text{m} + \left(\frac{£16.168\text{m} + £7.521\text{m}}{8}\right)\right) \times (1 + 1.34\%)^8 = £9.074\text{m}$$

8.7 AFFORDABILITY (INCOME AND EXPENDITURE)

The balance between the expected growth in income and the cost of the preferred option is provided in Table 64. The impact of the preferred option on the income and expenditure across the health system demonstrates the preferred option is affordable based on the planning assumptions used in the business case.

Table 64 – Affordability Analysis

The expected growth in income:	
Activity =	£16.168
Move to national tariffs =	£7.521
Eight years growth at 1.34% =	£9.074
Total growth =	**£32.763**
Cost of OBC	**£32,763**
Balance	**£0**

8.8 SENSITIVITY ANALYSIS AND RISK COSTS

The sensitivity analysis has focused on testing the assumptions and forecasts for the business case by the occurrence of risks that would either increase the cost of the preferred option or decrease the forecast growth in income. The scenarios are:

- An increase in the works cost of 5% (This may be due to an increase in the construction cost, a delay in the completion of the works or a combination of both.)
- An increase in the cost of achieving the local delivery plan targets of 5% (This may be due to under estimating the clinical cost of services.)
- An increase in the estate and FM costs of 2.5% (This may be due to poor estimating, an increase in the size of the facility or a combination of both.)
- An increase in clinical activity of 5% (This may be due to poor forecasting or inflows from other health systems.)
- A decrease in clinical activity of 5% (This may be due to poor forecasting, patient flow away from the health system or a failure to achieve the forecast throughput.)

The impact of each scenario on costs and income are detailed in Table 65.

Table 65 – Affordability Sensitivity Test

Scenario	Impact on Cost (£,000s)	Impact on Income (£,000s)	Balance (£,000s)
Works costs +5%	£548	£0	£548
LDP costs +5%	£520	£0	£520
FM costs +5%	£52	£0	£52
Activity +5%	£1,011	£5,140	(£4,129)
Activity -5%	(£1,011)	(£5,140)	£4,129

The most sensitive assumption relates to changes in activity. This reflects the change in the funding mechanism for trusts. If the activity forecasts are overly optimistic there would be insufficient income to cover the cost of the development. This risk can be managed in the FBC stage by undertaking more detained activity planning and ensuring system capacity is matched to forecast demand.

8.9 PCT AND TRUST SUPPORT

The Board of the Peterborough Hospital Trust confirmed on the 25 February 2003 the preferred option is affordable based on the planning assumptions used for the business case and the forecast for future income growth.

The OBC has also been presented to the boards of the four PCTs that cover the majority of the population served by the GPHIP. The North and South Peterborough and the Lincolnshire South West PCT boards approved the OBC on the 5 March 2003. The Cambridgeshire and East Fenland PCT board approved the OBC on 12 March 2003.

The boards have approved the:

- Objectives of the OBC.
- The strategic fit with the NHS Plan, local delivery plans and other local priorities.
- The assumptions for future growth in activity.
- The service models and configurations.
- The formulation and analysis of the options.
- The cost estimates for the building works and the new service models.

The boards of the PCTs have confirmed the Integrated Care Centre combined with the acute hospital development on the ECH as the preferred option. They have also committed to the forecast activity growth and the payment for this activity based on the national tariff for each HRG. The PCTs are committed to working with the trusts to deliver the Full Business Case and the modernisation of the local health system.