

CHAPTER 4 - FORMULATION AND SHORT LISTING OF THE OPTIONS

4.1 Introduction

This chapter describes how the long list of options was formulated and the criteria against which they were assessed. The resulting short-list of options is described in detail and their quantifiable and non-quantifiable benefits assessed. Details of the capital and revenue costs of the short-list options and their financial and economic assessment are also included.

4.2 Long-List of Options

A long-list of options for the re-provision of the services was developed based on the available health estate, a non-capital solution, do minimum and do nothing options. The long-list of options are:

- A) **Do Nothing** - Although this is not a true option as the Trust would not be able to meet its performance and service targets, the Do Nothing option has been retained as the base line case.
- B) **Do Minimum** - This option represents the minimum action required to meet the core clinical and statutory requirements, including gender separation. All the services would remain in their current locations with investment in refurbishment remodelling and expansion of the existing buildings.
- C) **Non-Hospital Based** - The development of non-hospital based services to replace all current In-patient services with the exception of patients detained under the Mental Health Act.
- D) **Third Party Provider** - The use of private and voluntary sector In-patient facilities.
- E) **Hub and Spoke** - As option D but with additional In-patient facilities located in the community, re-providing the current bed numbers.
- F) **Hub and Stamford** - As option D but with the additional beds located at Stamford Hospital.
- G) **Fenland Wing** - Relocation of Adult Services to Fenland Wing.
- H) **Fenland Wing and New Build** - Relocation of all services to an expanded Fenland Wing.
- I) **New Build, Greenfield/Brownfield Site** - The provision of an entirely new facility on a site within the city boundary.
- J) **New Build, ECH Site** - The provision of an entirely new facility on part of the Edith Cavell Hospital site.

4.3 Assessment Criteria

The long list of options was assessed against the criteria defined in the NHS Executive PFI Guidance for the development of the Do Minimum Option. These are:

- **Clinical Safety** - availability of services, ability of staff to supervise, observe and control, patient security and privacy.
- **Operational Viability** - how well does it work in practical terms for staff, patients, GPs.
- **Acceptability** – support from key stakeholders.
- **Macro Economic Implications** - total cost to NHS resources, impact on other NHS services.
- **Sustainability** - for growth, change in case mix, new therapies, in the longer term.

4.4 Assessment Process and Results

Full details of the assessments of the long list of options are contained in Appendix D. A number of senior Trust staff, including clinical professionals reviewed each option against the five assessment criteria. They collectively agreed whether an option passed or failed to meet each of the criteria. Only those options that met all five of the assessment criteria were selected for the short list. The only exception is the 'Do Nothing' option which has been retained as a base line for the financial and economic assessments. A matrix of the results is provided in Table 10.

Table 10: Pass/fail Assessment of the Long List of Options

Option	Clinical Safety	Operational Viability	Acceptability	Macro Economic Implications	Sustainability
A	x	x	x	x	x
B	✓	✓	✓	✓	✓
C	x	x	x	x	x
D	✓	x	x	x	x
E	✓	x	x	x	x
F	✓	x	x	✓	x
G	x	x	x	✓	✓
H	✓	✓	✓	✓	✓
I	✓	✓	✓	x	x
J	✓	✓	✓	✓	✓

4.5 The Short Listed Options

Do Nothing - This option has been retained as the base line against which the capital and revenue implications of the other options can be assessed.

- I. **Do Minimum** - This option involves upgrading the existing facilities to meet statutory requirements and resolve some of the issues relating to the suitability of the present accommodation. The services remain in their current locations.
- II. **Fenland Wing and New Build** - This option moves the majority of the services onto the PDH West site. The vacant Fenland Wing is upgraded and expanded to accommodate Adult and Older People's Mental Health Services with Learning Disabilities being located in an upgraded and significantly expanded Gables.
- III. **New Build on ECH site** - This option is based on an entirely new development located on the Edith Cavell Hospital site. The services would be located in a series of buildings adjoined to a central reception and support facility.

All the options are based on the same activity assumptions and capacity requirements. The functional content only varies where dictated by the limitations of the existing facilities and sites. The core functional content for the facility, which is reflected in the New Build Option is provided in Appendix E.

4.6 Quantifiable Benefits

Completion of the project will deliver a wide range of quantifiable benefits to patients, carers, visitors and staff. At the time the new facility opens the following benefits will be realised:

- Full integration of In-patient services providing flexibility of resources, access to facilities that are more varied and significant clinical and social rehabilitation options.
- In-patient facilities which are appropriate in size for the functions proposed for them.

- Further support to community service developments, supporting people at home in the community by ensuring the rapid availability of good quality in-patient care when required.
- Provision of facilities that fully meet the requirements for gender separation, privacy, dignity and safety, and provide a therapeutic environment.
- Improved access to public transport services, safe walking and cycling routes.

The New Build on ECH site option also delivers the benefit of providing the “best fit” with the Greater Peterborough Health Investment Plan development of a new acute hospital on ECH site and an Integrated Care Centre development on the Fenland Wing site. This is the only option which frees up the mental health accommodation currently occupied on the ECH site which will provide decant opportunities during the construction phase of the acute hospital development and offer scope to increase capacity in the short term. Furthermore this option supports the proposed Integrated Care Centre development on the Fenland Wing site, which would not be feasible under option 2 of this OBC, develop Fenland Wing and element of New Build.

In the longer-term, the project will also deliver the following benefits:

- An ability to increase the number of patients treated through more rapid access to a wider range of facilities and therapies and therefore optimising the length of stay.
- Reduce re-admission rates.
- Lengthen the time span for patients between their episodes of in-patient care.
- Greater flexibility to meet changes in case mix and therapeutic requirements.
- Improved staff recruitment, retention and professional development opportunities.
- Following the completion and implementation of the Peterborough Health Investment Plan and the transfer of all acute hospital services to the ECH site, patients will have more direct access to a full range of diagnostic services to ensure rapid assessment.

4.7 Non-Quantifiable Benefits

A non-financial benefit analysis exercise was undertaken by three multi-disciplinary teams, involving staff, service users and carers and other interested stakeholders. Full details of the process and the results are contained in Appendix F.

The teams identified four key benefit criteria against which to undertake the assessment as :-

- Clinical Quality and Safety
- Patient Environment
- Flexibility
- Staff Support and Development

and developed a description and the key elements and attributes of each criteria as outlined in the table below:

Criteria	Key Elements
<p>1. Clinical Quality and Safety</p> <p>Care will be provided in a setting that meets the clinical needs of the patient</p>	<ol style="list-style-type: none"> 1. Patients are provided with safe clinical care that is of a high quality and appropriate to the patients needs. 2. The support services are of a high quality. 3. Services can be managed in an effective and efficient manner 4. There is ready access to clinical support services 5. Staff have the ability to control activity and access within the unit
<p>2. Patient Environment</p> <p>Care will be provided in a setting that meets the social and personal needs of the patient</p>	<ol style="list-style-type: none"> 1. Care will be provided in a high quality therapeutic environment that is warm, dry, domestic in scale and non-institutional 2. Patients will have access to private space away from the ward environment and other patients 3. Patients will feel secure and safe and free from the risk of harm by others. 4. Patients will have access to varied occupational leisure and support facilities 5. Patients can choose whether to associate with persons of the opposite gender. 6. There are facilities for visitor to meet with patients in public and private.
<p>3. Flexibility</p> <p>The services will be capable of developing inline with changes in case-mix, service provision and clinical developments.</p>	<ol style="list-style-type: none"> 1. The capacity of the service can be changed 2. The facility can accommodate changes in patient mix 3. New services can be introduced 4. New technology can be introduced 5. The accommodation can be easily re-modelled to accommodate changes in service requirements.
<p>4. Staff</p> <p>To provide every opportunity for staff to use and develop their skills.</p>	<ol style="list-style-type: none"> 1. The provision of integrated training resources and space. 2. Opportunities for formal and informal interaction between disciplines. 3. Provision of facilities that allow staff to utilise fully their skills for the benefit of patients. 4. Support for the recruitment and retention of staff.

The criteria were weighted to reflect their relative importance and scoring against each criteria for each option undertaken. Table 11 provides a summary of the results of the analysis.

Table 11 Benefit Analysis Results

	Option	Clinical Quality and Safety	Patient Environment	Flexibility	Staff	Total Weighted Score
I	Do Minimum	5.80	22.14	8.12	15.66	51.72
II	Fenland Wing & New Build	37.70	51.66	20.30	23.49	133.15

III	New Build ECH	142.10	120.54	101.50	75.69	439.83
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This shows the New Build ECH option provides significantly higher benefits than the other two options.

The New Build ECH option scored highest in all four benefit criteria and their sub-elements. Therefore the result, and the preferred option, is not sensitive to any change in the relative weightings of each benefit. By scaling all the scores to the scale of 100 the relative positions of the options, and the significant gain of the ECH New Build option over the other two, becomes clear:

- Do Minimum 10.38
- Fenland Wing & New Build 26.71
- New Build ECH 88.23

4.8 Capital and Revenue Costs

The capital and revenue cost of each option is highlighted in Table 12 below. The capital costs have been calculated based on the MIPS 360 FP indices and the revenue costs based on 2002-03 price base. Appendix G contains the OB forms for the capital costs. Appendix H contains the detailed breakdown of the revenue and lifecycle maintenance costs.

Table 12 : Capital and revenue costs

Option	Capital Cost £m	Change in Revenue Cost £m	Total Revenue Cost £m
I. Do Minimum	£ 18.2 m	£ 2.0 m	£ 7.4 m
II. Fenland Wing + New Build	£ 17.8 m	£ 1.5 m	£ 6.9 m
III. New Build ECH	£ 23.8 m	£ 1.8 m	£ 7.2 m

4.8.1 Capital Costs

The capital costs outlined are the gross capital costs for undertaking each of the options. These exclude the potential capital receipts which would arise from the disposal of land and buildings currently utilised by the Trust, which become surplus to requirements under the proposals in this case. The actual surplus land and buildings vary between the options as follows:

Option I – Do minimum : No surplus land and buildings

Option II – Fenland Wing + New Build : Gloucester Centre Site (estimated OMV £ 2 million)

Option III – New Build ECH : The Gables, The Pines, Gloucester Centre Site (estimated OMV £ 2.8m)

Under options II and III the facilities currently utilised at the Edith Cavell Hospital site would also become vacant, which fits with the Peterborough Hospitals Trust reprovion proposals under the Greater Peterborough Health Investment Plan. Furthermore option II would impact on the ability to develop an Integrated Care Centre development on the Fenland Wing site also proposed under the Greater Peterborough Health Investment Plan.

In line with national guidance, it is not planned to include surplus land and buildings in any PFI proposal. The expected realisation value has however been included in the Economic Appraisal as summarised in section 4.11 below.

4.8.2 Revenue Costs

The revenue costs have been developed using a model which takes cost information from the current service provision and applies growth factors based on defined cost drivers. Under all three options it is assumed there is a level transfer of current direct services and staffing funding. This is on the basis that any savings realised as a result of the co-location of services will be used to address the current poor investment in staffing levels in the Inpatient units. The change in revenue costs summarised in the table above relates to increases in Facilities costs as a result of the increase in size of the facilities to be supported, and to increases in capital charges following the modernisation of the estate. The table below provides a comparison of the additional costs of each option:

Additional costs	Do Minimum	Fenland Wing/ Gables	New Build ECH
	£'000s	£'000s	£'000s
Capital Charges	£ 1,743	£ 1,311	£ 1,706
Facilities Costs	£ 241	£ 217	£ 140
Total	£ 1,984	£ 1,528	£ 1,846

4.8.3 Transitional Costs

The recurring revenue costs highlighted above exclude the non-recurrent revenue costs associated with the commissioning of the new facilities, the transfer of services during the decanting stage for the affected options, or the decommissioning of vacated facilities. These costs have been included in the economic appraisal of the options and are estimated as follows:

Transitional Costs	Do Minimum	Fenland Wing/ Gables	New Build ECH
	£'000s	£'000s	£'000s
Additional Staff costs in move period	£ 15	£ 30	£ 30
Security & ID Badges	£ 2	£ 2	£ 2
Utilities Costs	£ 10	£ 10	£ 10
Decanting Costs	£ 65	-	-
Total	£ 92	£ 42	£ 42

4.9 High Level Risk Assessment

A high level assessment of the project risks has been made using the list identified in the Treasury Taskforce Technical Note No. 5, How to construct a Public Sector Comparitor. The general description of these high level risks is given in Table 13.

Table 13: High Level Risk Assessment

Risk	Description	Impact
Availability	Inability of the facility to provide quantum of service required under the contract.	Trust cannot meet forecast performance levels.
Construction	Failure to complete the construction on time, to cost and to quality.	Delayed savings, increase litigation risk from continued use of poor facilities.

Risk	Description	Impact
Demand	The actual level of activity is less than forecast.	Higher unit cost
Design	The facility cannot provide the service at the required standard.	Trust cannot meet its performance targets.
Inflation	Actual inflation differs from assumed inflation.	Higher operating costs
Legislative	Changes that increase costs, including changes that discriminate against PFI.	Higher operating costs and additional capital expenditure.
Maintenance	The cost of keeping the facility in good condition is higher than forecast.	Higher operating costs.
Operational	The cost of operating the facility is higher than forecast.	Higher operating costs.
Planning	The facility fails to meet planning requirements, or cost more to comply.	Higher operating costs.
Policy	Changes in policy direction not involving legislation.	Facility not suited to service changes.
Residual value	Uncertainty of the value of the facility at the end of the contract.	Cost of asset higher than forecast.
Technology	Obsolescence	Trust locked into sub-optimal technology

These risks can be classified in one of two groups:

- Risks that may have an impact during the construction phase,
 - ◇ Construction
 - ◇ Design
 - ◇ Planning
 - ◇ Inflation
 - ◇ Legislative
- Risks that may have an impact during the operational phase,
 - ◇ Availability
 - ◇ Demand
 - ◇ Inflation
 - ◇ Legislative
 - ◇ Maintenance
 - ◇ Policy
 - ◇ Operational
 - ◇ Technology
 - ◇ Residual value

The potential impact of the first group of risks has been included in the estimation of the planning contingencies included in the capital costs. The potential impact of the second group of risks on each short-listed option is summarised in Table 14. The high level analysis indicates the New Build ECH option has the least risk. Full details of the risk assessment are contained in Appendix J.

Table 14 High Level Assessment of the Project Risks

Risk	Do Minimum	Fenland Wing + New Build	New Build ECH
Contingency	6.0%	6.7%	6.0%
Availability	Highest	Medium	Lowest
Demand	Equal	Equal	Equal
Inflation	Equal Highest	Equal Highest	Lowest
Legislative	Equal highest	Equal Highest	Lowest
Maintenance	Equal highest	Equal Highest	Lowest
Policy	Equal	Equal	Equal
Operational	Equal	Equal	Equal
Technology	Equal	Equal	Equal
Residual value	Highest	Medium	Lowest

4.10 Assumptions

The key assumptions underlying the assessments of costs, benefits, risks, economic assessment and the sensitivity analysis which have been agreed with the PCT's are :

- Base date for all costs and funding is April 2002
- No change in referral patterns or cross boundary flows
- VAT excluded from the economic assessment
- Appraisal period is 60 years
- Assessments are made at discount rates of 6.0% and 3.5%

4.11 Economic Appraisal

The economic appraisal of the short listed options has been undertaken in accordance with the Treasury Guidance 'Appraisal and Evaluation in Central Government' (the Green Book) and the PFI's Generic Economic Model for OBC Option Appraisal issued in November 2000. The economic appraisal has been conducted at 3.5% and 6% in line with this guidance.

For each option an assessment has been made for the property values and opportunity costs, capital costs, revenue costs and externalities. Full details of the economic evaluation are contained in Appendix K and the Non-financial benefits analysis in Appendix F. A summary of the results are given in Table 15.

Table 15 Summary of Economic and Non-Financial Benefits Appraisal

Option	NPV at 3.5% (£m)	NPV at 6.0% (£m)	Non-financial Benefit Score
I Do Minimum	150.9	103.2	10.38
II Fenland Wing/ Gables	150.0	102.3	26.71
III New Build ECH	152.3	104.6	88.23

4.12 Impact on Local Primary Care Trusts

This OBC relates to the provision of Mental Health services to the population of Peterborough and North Cambridgeshire, which are 95% commissioned by the Greater Peterborough Primary Care Trusts and the East Cambs and Fenland Primary Care Trust. No changes have been planned in referral rates from any commissioning organisations, although the potential impact of a change in referral rates from the population in the Wisbech area has been discussed in outline with the East Cambs and Fenland PCT.