

5. FORMULATION AND SHORT - LISTING OF OPTIONS

5.1 INTRODUCTION

This Chapter of the OBC details the process and outcome of the formulation and assessment of the long-list of options. The option appraisal has been undertaken using an iterative process involving representatives from the PCTs and the Hospital Trust. The short-listed options have been assessed in accordance with the Capital Investment Manual^{viii} and the NHS Executive PFI guidance^x.

The development of the short-list options has been undertaken to ensure the preferred option can be developed as a Public Sector Comparator that is fully compliant with the requirements of the Preliminary and Final Invitations to Negotiate. Full details of the Long-List options, assessment process and Short-list options are included in Appendices 7 and 8.

5.2 LONG LIST OF OPTIONS

The long list of options was developed from the opportunities created by the current health estate, the need to consider a do nothing, a do minimum and a non-capital solution. The options all relate to the provision of acute services. The development of intermediate care services were undertaken by the two Peterborough PCTs as a separate exercise. All the long list options, with the exception of the do nothing option, are required to deliver the same activity levels, range of services and quality.

Acute Hospital Options

- **Do Nothing** – This option involves completing the backlog maintenance and the upgrading work necessary to improve the functional suitability on both sites that the Trust would undertake as part of its normal upgrading programme.
- **Do Minimum** – The minimum development required to meet the criteria set out in the NHS Executive good practice guidance for private finance projects. This option creates a 'hot' hospital on the PDH site and a 'cold' hospital on the ECH site that would include a DTC.
- **Do Minimum Site Swap** – This is the same as the previous option, except the two sites are swapped to give 'hot' hospital on the ECH site and a 'cold' hospital on the PDH site that would include a DTC.
- **Do Minimum Non Capital** – This option considered whether the criteria for the Do Minimum could be achieved with no capital investment other than backlog maintenance and the upgrading work necessary to improve the functional suitability of the existing estate (the Do Nothing Option).
- **Distributed Multi-site Service** – This option is based on providing sufficient elective and sub-acute capacity in the community to allow the existing hospital facilities at PDH and ECH to manage the growth in emergency and major elective workload. This option includes a dedicated DTC on a third site and the two local care centres.
- **Greenfield Hub** – This option involves the development of an entirely new acute hospital on a Greenfield site within the City of Peterborough that would include a DTC.
- **ECH Hub** – This option involves the expansion and redevelopment of the existing Edith Cavell Hospital that would include a DTC.
- **PDH Hub** – This option involves the expansion and redevelopment of the existing Peterborough District Hospital that would include a DTC.
- **Hub with Offsite DTC** – This is a sub option of the three single site options. The DTC would be a self-contained facility undertaking routine elective work located on a separate site within the city.

Integrated Care Centre and Children's Community Services

The appraisal of intermediate care and children's community services identified the need for a development providing a range of primary and intermediate care services, plus those sub-acute services that do not need to be located on the acute hospital site. The most appropriate location for this integrated care facility is considered to be near the city centre. For the Do Minimum and

PDH options this would entail the purchase of approximately 5 acres of land. For the ECH option the centre would be located on the site currently occupied by the vacant Fenland Wing.

5.3 ASSESSMENT CRITERIA FOR THE LONG LIST OF OPTIONS

The assessment criteria for the long list of options have been taken from the NHS Executive PFI guidance for the development of a Do Minimum option. It is assumed that all short-listed options must meet or exceed these minimum requirements. The criteria are:

- Clinically Safe – Based on published standards, including the Royal Colleges, Local Delivery Plans, NHS Plan, etc.
- Operationally Viable – Must be a practical solution and useable by patients, GPs, staff, etc.
- Acceptability – Must be supported by the stakeholders.
- Macro-economic Stability – Based on planned changes in referral patterns only. There should be no destabilisation of the wider health system.
- Sustainability – Must be a flexible solution that can sustain growth and change for 5 years beyond the development period.

5.4 ASSESSMENT OF LONG LIST OF OPTIONS

Each of the options on the long list was assessed against the criteria for the Do Minimum option. Only those long list options that met or exceeded all the Do Minimum criteria were selected for the detail option appraisal. A commentary on each of the long-list options and the assessment process is provided in Appendix 7. The results of the pass/fail test are given in Table 35.

Table 35 – Assessment of the Long List Options against the Do Minimum Criteria

Option	Clinically Safe	Operationally Viable	Acceptability	Macro-economic Stability	Sustainability
Do Nothing	Fail	Fail	Fail	Pass	Fail
Do Minimum	Pass	Pass	Pass	Pass	Pass
Do Minimum Site Swap	Pass	Pass	Pass	Pass	Pass
Do Minimum Non-capital	Pass	Fail	Fail	Pass	Fail
Distributed Multi-site Service	Fail	Fail	Fail	Pass	Fail
Greenfield Hub	Pass	Pass	Pass	Pass	Pass
ECH Hub	Pass	Pass	Pass	Pass	Pass
PDH Hub	Pass	Pass	Pass	Pass	Pass
Hub with Off-site DTC	Pass	Fail	Fail	Pass	Fail

The Do Minimum Site Swap option is a more costly version of the Do Minimum option but provides the same level of benefit, therefore this option has been excluded from the shortlist as it would always have a lower benefit to cost ratio.

5.5 DESCRIPTIONS OF SHORT LISTED OPTIONS

There are three options that meet all the Do Minimum criteria and form a coherent service package covering the acute hospital, Integrated Care Centre and children's community services. These options have been developed in greater detail, including 1:1000 site plans, departmental space schedules and development programmes. Further information on the three short-list options is provided in Appendix 8 and drawings in Appendices 20, 21 and 22.

5.5.1 DO MINIMUM OPTION

This option involves moving all elective services to the ECH site to create an entirely 'cold' hospital. The site would also provide a 'park & ride' service to alleviate the parking and traffic congestion problems at PDH.

The PDH site would be developed as an integrated emergency and trauma centre with cancer services, pathology and outpatient rehabilitation located in Fenland Wing and a new Woman and Child unit on the Memorial Wing site.

The retained buildings would be upgraded to meet minimum standards where achievable within the existing building footprint.

The Integrated Care Centre would be located on a site that is easily accessible from the city centre.

5.5.2 ECH HUB WITH AN INTEGRATED CARE CENTRE

The Edith Cavell Hospital would be expanded and reconfigured to provide acute services based on the following key components:

- An emergency care centre.
- A DTC (Diagnostic and Treatment Centre).
- A Woman and Child Unit.
- Two inpatient ward floors.
- A cancer centre.
- An education and learning centre.

The Integrated Care Centre would be located on the vacated PDH west site. It would incorporate 40 intermediate care beds, a minor injuries unit, rehabilitation, basic diagnostics and a range of children's services.

5.5.3 PDH HUB WITH AN INTEGRATED CARE CENTRE

The Peterborough District Hospital would be expanded and reconfigured to provide services based on the same key components as the ECH option, subject to the following amendments:

- The majority of the car parking would be provided as a 'park & ride' service from the ECH site.
- Compulsory purchase of land to create a contiguous site from Aldermans Drive to the west site where the emergency care centre and the medical wards will be located.
- A subway and bridge across Aldermans Drive will link the new west site building with the main building and tower block.
- The Integrated Care Centre would be located on a site that is easily accessible from the city centre. It would incorporate 40 intermediate care beds, a minor injuries unit, rehabilitation, basic diagnostics and a range of children's services.

5.6 QUANTIFIABLE BENEFITS

There are a number of quantifiable benefits that accrue from the project. These all reflect the objectives of the project and how they are being delivered through the GPHIP. The quantifiable benefits are:

- Increase in day case capacity.
- Increase in in-patient capacity.
- NHS Standards for space allowances in bedded areas and key clinical functions.
- Reduction in visits to hospital for routine services.
- Reduction in waiting times to meet NHS Plan targets.

Some of these benefits will be realised in part during the construction phase of the project. The Integrated Care Centre would be operational from mid 2006 providing additional outpatient and inpatient capacity and moving out of hospital some elective services.

The opening of the new mental health development in 2007, also planned for the ECH site but the subject of a separate OBC, will provide approximately 2,000 sqm of floor space in the Edith Cavell Hospital. This will provide decant opportunities during the construction works on the site and scope to increase service capacity.

The timing of these interim benefits does not vary between the options as the development of the Integrated Care Centre and Mental Health Unit are independent of the main hospital development. However there is a greater risk of delay to the Integrated Care Centre with the Do Minimum and PDH options as these both involve the purchase of land for this part of the development.

5.7 NON-QUANTIFIABLE BENEFITS

The Trust undertook a non-financial benefit analysis of the project using external facilitators and a team of stakeholders that included patient representatives, carers and health professionals who work in the primary and acute sectors. A copy of the full report on the exercise is provided in Appendix 9.

The methodology used for the analysis was decision conferencing. The group worked through a process of:

- Identifying issues and problems.
- Agreeing a set of values.
- Grouping these values in a logical way to form a set of key non-financial criteria.
- Setting against each criterion a description and set of attributes.
- Weighting the criteria and attributes to reflect their relative importance.

The non-financial benefit criteria and attributes are given in Table 36

Table 36 – Non-financial Benefit Criteria

Key Non-Financial Criteria	Description	Attributes
Effectiveness/ Efficient	An effective and efficient service is defined in terms of an integrated, appropriate service, flexible to changing needs and demands with good clinical outcomes all within a quality environment.	<ul style="list-style-type: none"> • Performance • Flexibility • Integration • Appropriateness • Quality measures (Investment in people) • Built environment (quality) • Performance of whole system – meeting targets • Building flexibility • Functionality • Safety
Patient Centred	A high quality service that offers privacy, security, which minimises disruption to ongoing services and which makes provision for visitors, family and carers.	<ul style="list-style-type: none"> • Privacy • Security • Quality • Disruption • Visitor provision
Staff	The service must be provided in facilities that maintains staff retention and facilitates staff recruitment. In addition the security of staff must be included in planned changes and facilities which improve communications between staff and departments and which facilitates changing patterns of care.	<ul style="list-style-type: none"> • Access for Disabled • Recruitment/ Retention • Training and support • “Pride” • Job satisfaction • Access and safety

Key Non-Financial Criteria	Description	Attributes
Patient Focused	A physically accessible service available to all with good car parking facilities and transport links. Ease of access for emergency vehicles and the improvement of internal communications by having access to all facilities are considered to be key aspects of access.	<ul style="list-style-type: none"> • Expectation • Accessibility • Choice • Access • Safety

The evaluation criteria and attributes were checked against the objectives for the project to ensure all the objectives were represented and none of the criteria or attributes did not relate to a project objective.

The evaluation of the options was undertaken at two levels. First an assessment was undertaken based on generic site options. The purpose being to fully test the justification for the short-listed options and to evaluate the alternative approaches available for service provision. The generic site options considered were:

- Do Minimum – The do minimum option as described in chapter 4, used as the base line case.
- Split site – Retaining the current split sites but relocating services between them to give the best possible configuration.
- Single site – Locating all acute hospital services onto a single site but not stating which site that may be.

The group scored each attribute collectively, which were then entered into a computer model, designed to compute the scores and weightings in an option appraisal. The resulting scores showed the single site option as a very clear winner by a factor of over 30. A sensitivity test of the scores also showed the single site option to be very robust to any variation in weightings.

The significantly high score for the single site option supports the long-term strategy of moving all hospital services onto a single site. The results of this initial assessment are provided in Table 37.

Table 37 – Weighted Scores for the Generic Site Options

Generic Site Option	Overall Weighted Score
Do Minimum	2.66
Split Site	2.83
Single Site	89.30

Having confirmed that a single site solution would provide the best configuration for acute hospital services, the second assessment considered the three short-listed options, which are also site specific:

- Do Minimum
- ECH Single Site
- PDH Single Site

The options were scored collectively against the same benefit criteria and the results tested for sensitivity to changes in the weightings. The results proved very robust and are provided in Table 38.

Table 38 – Weighted Scored for the Short List Options

Short List Option	Overall weighted Score
Do Minimum	8.6
ECH Site	90.1
PDH Site	43.6