Trust Board Paper J

To:	**Trust Board**
From:	**Chief Executive**
Date:	**28th August 2014**
CQC regulation:	**All applicable**

Title:	**Activity and Financial Assumptions related to the Emergency Floor (EF) Developed Outline Business Case (OBC)**

Author/Responsible Director:
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Purpose of the Report:
To seek approval to submit the Developed Emergency Floor OBC to the NHS Trust Development Authority (NTDA) in August 2014 and to the Clinical Commissioning Groups (CCG) Boards in September, noting the updated approach being taken to activity and financial assumptions

The Report is provided to the Board for:

Decision	x	Discussion	X
Assurance		Endorsement	

Recommendations:
The Trust Board is asked to:

- Support the submission of the OBC to the NTDA and CCGs
- Support the approval of the case in the knowledge that further activity and financial validation will be the Better Care Together Programme to align planning assumptions. This to include confirmation regarding transitional funding.

Summary / Key Points:

- The original OBC was approved by the Trust Board in November 2013 and then submitted to the NTDA.
- The NTDA responded with a number of queries, which included the need to tie the activity modelling of the business case into the LLR wide activity and capacity plan and to ensure the financial assumptions are aligned to the Trust's LTFM.
- This OBC has therefore been updated in light of this to create a 'Developed OBC".
- The enabling projects have been removed from the capital costs since they are being funded separately. The capital cost for the preferred option is £41.34m.
- Since the NTDA have stipulated that they require an LTFM which aligns with the Better Care Together financial and activity model, we have agreed with the NTDA that this OBC will reflect two scenarios.
- Although this situation is unusual, it is unavoidable due to the state of development of health economy planning assumptions. We have discussed this with the NTDA and it is their suggestion to present two difference sets of assumptions in this OBC. Both scenarios deliver an affordable business case

(subject to transitional funding.

Previously considered at another corporate UHL Committee?

- Finance & Performance Committee - 26 August 2014. This paper has been updated to reflect discussion at F&PC.

Board Assurance Framework:	**Performance KPIs year to date:**
Failure to deliver effective emergency care	4 Hour performance below 95% target.

Resource Implications (eg Financial, HR):
Detailed within the OBC

Assurance Implications:

Patient and Public Involvement (PPI) Implications:
Full patient and public involvement in the design solution has been undertaken

Stakeholder Engagement Implications:
On-going discussion with CCGs and NTDA

Equality Impact:
Due regard considered as part of the design development

Information exempt from Disclosure: None

Requirement for further review?
Trust Board update reports at key milestones

Approval of the key activity assumptions and submission of the Emergency Floor (EF) Developed Outline Business Case (OBC)

Background

1. The original OBC was approved by the Trust Board in November 2013 and then submitted to the NHS Trust Development Authority (NTDA) who responded with a number of queries. These included the need to align the activity and capacity models of the Trust's LTFM and the Better Care Together finance and activity plan the OBC has therefore been updated in light of this to create a 'Developed OBC'.

2. There is mismatch in timing with the LTFM submitted to the NTDA in July 2014 and the Better Care Together five year plan being submitted in September 2014. Therefore, to avoid delay, the NTDA have requested this OBC reflects the two scenarios.

3. The enabling projects have been removed from the capital costs since they are being funded separately. The capital cost for the preferred option is £41.34m.

Activity scenarios

4. In light of the feedback from the NTDA, two scenarios have been modelled based on the following assumptions:

Scenario 1 – Better Care Together assumptions

1. **Activity**
   In Scenario 1 ED attendance activity is projected to reduce by 7.8% over years 1-5, and then in year 6 through to year 20 activity will grow in line with demographic growth. Assessment unit activity is projected to reduce by 3.6% and then in year 6 through to year 20 activity will grow in line with demographic growth. It should be noted that in both scenarios no urgent care activity is included, neither are the operational revenue costs. This is because urgent care activity is currently contracted to George Elliot NHS Trust. Nevertheless, the revenue costs (e.g. capital charges) associated with the capital investment associated with the new Urgent Care Centre are included in the costings as they form an integral part of the Emergency Floor development.

2. **Income**
   In Scenario 1 income is directly linked to activity as above, therefore a reduction in years 1-5 and an increase in years 6-20.

3. **Workforce**
   In both Scenarios the Emergency Floor development generates workforce efficiency gains both within the Emergency Department and within the onward patient journey. At present the changes in workforce costs are the same in both scenarios as the level of service change is unlikely to materially affect the staffing requirement. This will be further reviewed as the final activity model is agreed and further workforce efficiency opportunities may arise at that time.

Scenario 2 – LTFM Assumptions

1. **Activity**
   In Scenario 2 activity is projected to remain constant at 14/15 levels through to year 6 and then increase in line with demographic growth from year 7 through to 20. The same assumptions have been applied to emergency assessment admissions. It should be noted that the first year of these assumptions is the current year and at present both ED attendances and admissions are rising rather than remaining static (or indeed falling). Nevertheless, it is not felt that these trends are likely to fundamentally affect the sizing of the facility. There may be a staffing impact, staffing levels being more readily adjustable than physical capacity. This issue will be further reviewed at FBC stage.

2. **Income**
   In Scenario 2 income is directly linked to activity as above, therefore constant in years 1-6 and an increase in years 7-20.

3. **Workforce**
   In both Scenarios the Emergency Floor development generates workforce efficiency gains both within the Emergency Department and within the onward patient journey.

Financial Models

5. The table below identifies that both scenarios are affordable over a five year time line.

6. Both scenarios show that the increase in costs associated with the move can be supported by savings, although these will need to be greater under the Better Care Together assumptions to offset the reduction in income with Better Care Together assumptions income starts to reduce from 2014/15; efficiencies cannot be made until the emergency floor is opened, transition funding is required. It should be noted that such transitional funding has not yet been agreed through the BCT programme. This is a subset of a wider piece of work related to transitional funding which is being undertaken by the programme team (facilitated by Ernst Young) over the next two months. This issue will therefore have been resolved prior to final approval of this OBC by the NTDA.

Better Care Together

	2014/15	2015/16	2016/17	2017/18	2018/19
Income change	(1,600)	(1,331)	(1,386)	(1,349)	(1,246)
Agency	0	0	738	738	738
Workforce efficiencies	0	0	828	828	828
Other efficiencies	0	0	900	1,600	1,600
Pay and non pay increases from additional activity	0	(40)	(32)	(38)	(53)
Facilities	0	0	(165)	(165)	(165)
Depreciation	0	85	(559)	(774)	(774)
Rate of return	0	45	(957)	(945)	(921)
Transformation funds	1,600	1,250	650	100	0
Total change	**(0)**	**8**	**17**	**(4)**	**8**

LTFM

	2014/15	2015/16	2016/17	2017/18	2018/19
Income change	0	0	0	0	0
Agency	0	0	738	738	738
Workforce efficiencies	0	0	828	828	828
Other efficiencies	0	0	100	350	350
Pay and non pay increases from additional activity	0	0	0	0	0
Facilities	0	0	(165)	(165)	(165)
Depreciation	0	85	(559)	(774)	(774)
Rate of return	0	45	(957)	(945)	(921)
Transformation funds	0	0	0	0	0
Total change	**0**	**130**	**(14)**	**33**	**57**

Key actions required as part of developing the Full Business Case

7. Update the LTFM to reflect the Better Care Together assumptions

8. Agree a single finance and activity model with all stakeholders for inclusion in the FBC

9. Test the impact of any planning assumption on the whole care pathway

Recommendations:

10. The Trust Board is asked to:

- Note that in agreement with the NTDA, two scenarios have been modelled to reflect the Trust's existing LTFM and the projections emerging subsequently from the BCT programme
- Note that the disparity in the scenarios will not materially affect the sizing of the required facility and design planning can therefore continue
- Note that there have been no other material changes to the OBC approved by the Board in November 2013
- Support the submission of the developed OBC to the NTDA and CCGs
- Support the approval of the case in the knowledge a reconciliation process will be undertaken to come to an agreed activity and financial model.

University Hospitals of Leicester NHS
NHS Trust

property and infrastructure | health

Developed Outline Business Case – Executive Summary

Emergency Floor

August 2014

Version **FINAL**

Issue date **August 2014**

In Partnership with CAPITA Interserve

1 | Executive Summary

1.1 Introduction

This Outline Business Case (OBC) is for the redevelopment of the Emergency Department (ED), creating a new Emergency Floor on the Leicester Royal Infirmary site of University Hospitals of Leicester NHS Trust (hereafter referred to as 'UHL' or 'the Trust'). It proposes to develop an Emergency Floor concept that will address the demand challenges faced by both ED and medical assessment services, with the intention of developing a future proofed solution that will flexibly meet future demand over the next 20 years.

The Trust is one of the largest teaching Trusts in the country and operates across three main sites; Leicester Royal Infirmary, Leicester General Hospital and the Glenfield Hospital, and is the only acute Trust serving the diverse local population of Leicester, Leicestershire and Rutland (LLR); equating to approximately 1 million residents.

Glenfield Hospital | Leicester General Hospital | Leicester Royal Infirmary

Figure 1.A University Hospitals of Leicester NHS Trust Sites

Leicester Royal Infirmary provides Leicestershire's only Emergency Department (ED), as well as being the base for the Trust's Children's Hospital and Urgent Care Centre (UCC).

In 2012 the Trust identified a number of services requiring redevelopment/ development across their three sites to ensure ongoing enhancement and maintenance of essential health services to the local community. As a consequence, the Trust has updated its 5 year estates strategy to provide an integrated and strategic approach to developing its estate and infrastructure; aligned to and reflecting the Clinical Strategy and Integrated Business Plan, and is consistent with the LLR system wide strategic plans.

This business case focuses on the Emergency Floor Reconfiguration project; the first of the main reconfiguration projects for the Trust. It highlights that current arrangements do not meet the current activity demands or the projected requirements over the next 20 years.

In line with the national concern about the ability of emergency services to cope with demand, UHL has experienced a rise in attendances to its Emergency Department (ED). This has resulted in many patients waiting for excessive periods and performance being well below the national standard of 95%; this reflects poor quality of care for patients, reduced clinical effectiveness, an unacceptable delay in treatment, increased clinical risk and compromised patient safety.

In partnership with local commissioners, UHL has instigated a number of short term measures to improve performance, such as the addition of adult assessment beds to alleviate current pressures. A full and detailed process review has been carried out and redesign is being undertaken within the existing footprint and built environment, but there is still an issue with the size of the current ED and associated assessment areas in its entirety. It is deemed totally inadequate to cope with demand by the Emergency Care Intensive Support Team (ECIST). Their findings (review undertaken in March 2013) identified that 12,600 patients are seen annually in a 6 bedded resuscitation area where 10 beds is deemed more appropriate, and 52,000 ambulance patients pass through a 16 cubicled majors area. Inadequate space results in patients being lined up in trolleys in the open floor space in majors and doubled up in cubicles. Size and poor adjacencies therefore inhibit the Trust's ability to smoothly move patients through the department to associated floors and assessment areas. In addition, the Medical Assessment Unit (MAU) is currently on the 5th floor of the Balmoral building and there is no access to X-ray or CT services within the ED, all of which further hinders efficiency.

This OBC highlights the urgent need for change to the physical estate to create an Emergency Floor in order to improve patient flows, staff efficiencies, capacity issues and adjacencies.

1.2 Strategic Case

1.2.1 The Strategic Context

The Trust has seven organisational objectives which are:

- Provide safe, high quality, patient-centred healthcare
- Provide joined up emergency care
- To be the provider of choice
- Integrated care closer to home
- Enhanced reputation in research, innovation and clinical education
- To be a professional, passionate and valued workforce
- Sustainable, high performing NHS Foundation Trust

These objectives are underpinned by the following Investment objectives of this project:

- To provide the Trust with increased capacity for emergency services to meet the demands of population growth, changing service models and improved efficiency targets.
- To increase the productivity of emergency care at the LRI.
- To develop a centre of excellence, enhancing the Trust's reputation for training, service delivery and treatment, through the provision of a centralised service in modern accommodation.
- To ensure that the changing needs and expectations of a growing population are met in line with Trust clinical strategy and national guidance standards.

- To provide an Emergency Floor that where practical, is compliant with NHS building guidance standards. Where the design is constrained then any derogation should be approved and signed off by the appropriate project lead.
- To improve the clinical effectiveness and safety of urgent and emergency care service across Leicester.
- To improve the clinical adjacencies of services to optimise clinical safety and reduce clinical risk.
- To facilitate the modernisation of services, including streamlining patient pathways and efficient working practices providing an Emergency Floor that ensures adequate infrastructure and capacity for supporting services that are conducive to the needs of a modern workforce.
- To equip the Emergency Floor to respond effectively to existing and known commissioning requirements, as well as to respond flexibly to future changes in service direction and demand.
- To improve the environment and the experience of users (patients, visitors and staff) of Leicester Royal Infirmary Hospital's Emergency Department.
- To provide a solution that is aligned to the Trust 5 Year Estates Strategy DCP plan and Trust organisation as a whole.
- The development will be delivered on time with minimal disruption to current service delivery.

Each of the project objectives has been formulated based upon the drivers for change and national, regional and local strategic directions, promoting efficiencies in practice and ensuring statutory and national targets are achieved.

National, Regional and Local Strategies, Programmes and Guidance

National and Regional strategies and programmes affecting the provision of Emergency care services at LRI site are set out in Section 2 and include:

National

- Health and Social Care Act 2012
- Quality, Innovation, Productivity and Prevention (QIPP) Programme
- Department of Health Emergency Department Clinical Quality Indicators
- NHS Operating Framework
- Care Quality Commission: Five Domains of Quality
- Transforming Urgent and Emergency Care services in England: Urgent and Emergency Care Review, End of Phase 1 Report, NHS England November 2013
- High Quality Care for all, Now and for Future Generations: Transforming Urgent and Emergency Care Services in England June 2013
- Future Hospital: Caring For Medical Patients, Royal College of Physicians (September 2013)
- HBN 15-01 Planning and Design Guidance: Accident and Emergency Departments (April 2013)
- Royal College of Paediatric and Child Health 'Standards for Children and Young People in Emergency Care Settings' [third edition] 2012[1]

[1] www.rcpch.ac.uk/system/files/protected/page/Intercollegiate%20Emegency%20Standards%202012%20FINAL%20WEB.pdf

- The Silver book – National Guidance 'Quality Care For Older People With Urgent and Emergency Care Needs, June 2012
- Guidance for Commissioning Integrated Urgent and Emergency Care A 'whole system' approach, July 2013[2]

Regional

- CCG Out of Hospital Strategies
- Joint Strategic Needs Assessment (JSNA)
- Emergency Care Network

Local

- Better Care Together: A Blueprint for Health & Social Care in LLR 2014 – 2019
- LLR Health Community Estate
- Trust Clinical Strategy
- Trust 5 Year Integrated Business Plan 2014 - 2019
- Trust 5 Year Estate Strategy 2014 – 2019

1.2.2 The Case for Change

Emergency Medicine is a secondary care specialty which provides immediate care for patients of all ages presenting with illness and injury of all severities[3].

Utilising the Better Care Together Case for Change Framework, the case for change for the Emergency Floor has been summarised in Figure 1B below:

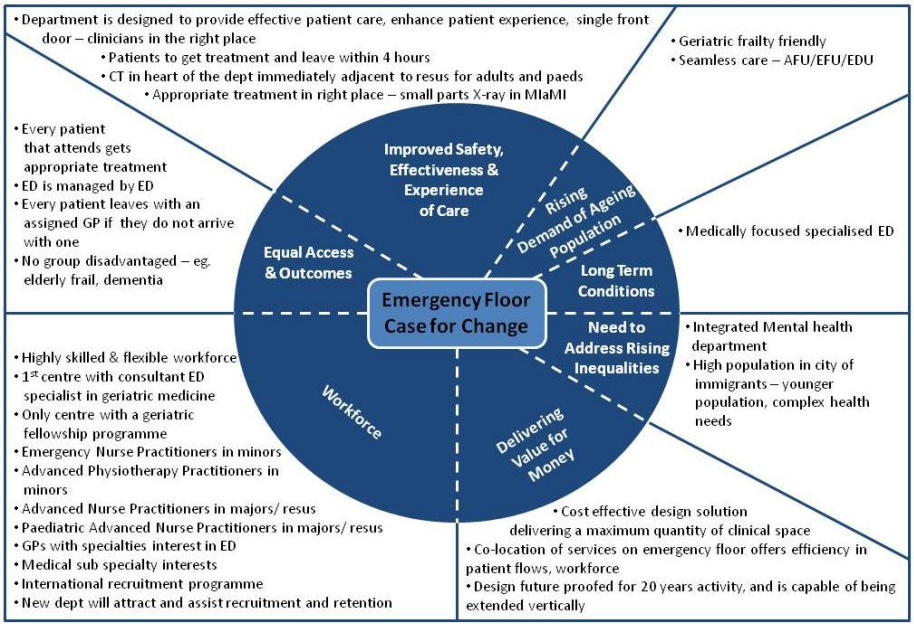

Figure 1.B Emergency Floor Case for Change

2 http://www.rcgp.org.uk/news/2013/july/~/media/Files/Policy/A-Z-policy/Urgent-emergency-care-whole-system-approach.ashx

[3] The College of Emergency (2011, February). What is Emergency Medicine? A guide.

In order to provide the level of high quality emergency care and assessment services that comply with regulatory standards, it is essential that the Trust ensures that its patients can receive treatment and staff can work in a safe environment, and that patient treatment is efficient and timely in its delivery.

The following are key drivers for change:

- The increasing demand for emergency services is greater than the current capacity can provide. Historic trends in growth suggest a 5% annual growth in ED activity and 3.5% annual growth in assessment unit activity
- Requirement for single floor Emergency and Assessment Department that incorporates key adjacencies and presence of diagnostics and assessment unit services on the same floor. This enables implementation of the developed model of care for both adults and children accessing emergency services
- Changes in the local and national demographics combined with the Trust's plan to remain an Emergency Care Centre for Leicester is impacting on increased emergency care demand
- The Trust requires additional capacity to reflect NHS national guidance. The Emergency Floor project reduces the risk of compromising compliance of other standards of care such as quality, infection control, emergency and urgent care standards and commissioning standards
- The Trust needs to be in a position to be named as a 'Major Emergency Centre' as outlined in the Urgent and Emergency Care Review November 2013 – End of Phase 1 Report (Keogh)
- The requirement to address the 4 hour target and ambulance to trolley transfer times will have a significant impact on Trust financial performance if capacity issues are not resolved
- Redevelopment and increased capacity will provide opportunities for the Trust to fulfil its strategic redevelopment programme

1.2.3 Capacity and Demand

Activity

Feedback on the original Outline Business Case (OBC) from the NTDA, included the need to tie the activity modelling into the LLR wide activity and capacity plan as progressed through the Better Care Together Programme, and to ensure the financial assumptions were aligned to the trust's Long Term Financial Model (LTFM).

The BCT activity modelling is at a high level e.g. the 7.8% reduction in ED attendances over the next 5 years is applied to every category of the department – i.e. resus, majors and minors. This will need clinical validation and further discussion with the BCT programme for the Full Business case (FBC).

The Trust's LTFM was submitted to the NTDA in July 2014 before the BCT planning assumptions were available. Thus at this point in time, the BCT activity model and the LTFM are not synchronised.

Since the NTDA have stipulated that they require an LTFM compliant model, and the CCGs require that the case ties into the BCT assumptions, we have agreed with the NTDA that this OBC will reflect 2 scenarios.

Scenario 1 – BCT assumptions

- Uses the current forecast outturn for 14/15 as the baseline. This is a deficit position of £12,248k. Each year is measured compared to this and the deficit should get no worse with the EF
- This assumes a decrease in income and activity (average reduction of 7.8% over 5 years) as per the BCT assumptions. Years 6 to 20 reflect a growth based on demographic growth
- This shows reductions in agency costs, and workforce efficiencies due to the EF and wider efficiencies outside the EF to make affordable upon opening. (It is assumed that the workforce efficiencies will be met across the whole emergency pathway and not just in the EF)
- These efficiencies cannot be made until the floor opens, therefore, if BCT the assumptions come to fruition, the finances are worse in 15/16 than now. Arguably, this would be a problem anyway even without the floor.
- Once the floor is open, efficiencies can be made to make the project affordable.

Scenario 2 – LTFM Assumptions

- Our LTFM assumed that activity and income would remain at 2014/15 planned levels over the next 5 +1 years. Any increases would be managed through the CCG Quality Innovation Productivity & Prevention (QIPP). Years 7-20 reflect a demographic growth.
- There is an assumption in the LTFM that ambulatory care sensitive conditions will reduce activity, income and beds across UHL.
- For the purposes of the OBC, it is assumed that any changes in income and beds will be outside of the EF, i.e. the whole pathway becomes more efficient and so ward beds are removed not assessment beds. There are the same number of assessment beds in the design as current
- Therefore income has remained level until year 6 (end of our LTFM modelling so far) and then demographic growth from that point
- This assumption needs considerable work for the FBC, and does link to the BCT assumptions.
- Again this requires cost reductions to support the additional capital charges.

Capacity Assessment

Original OBC Assumptions

The development of the brief for the new emergency floor has responded to both changing baseline assumptions and a recognition of the operational constraints associated with emergency care and the physical limitations imposed by a tight, inner-city site being redeveloped partially on a refurbishment basis.

The original briefing exercise underpinning the functional content of the new facilities and its design reflected a number of assumptions:

- 10-year planning horizon;
- activity projections based on an analysis of demographic growth and historic trend growth;
- use of 95th percentile hourly arrivals for ED streams, at 100% occupancy;
- a one-off left shift of activity from the acute site to other settings, impacting on the UCC.

To inform that exercise, an analysis was undertaken of recent emergency activity growth and the following key points were noted:

- in ED, recent trend growth had been on average 5% per annum, whilst demographic growth projected by the ONS for the ED population was approx. 1% (age-adjusted);
- For non-elective emergency admissions these figures were 3.5% and 1.5%.

To chart a mid-point between historic trend growth and ONS projected demographic growth, the following annual growth rates were used for the 10-year planning horizon:

- ED: average 3% per annum
- NEL/assessment: average 2.5% per annum

The above parameters formed what was termed the Medium Scenario in the original business case, and informed the capacity calculations used to scope the functional content of the scheme. Low and High Scenarios were also developed to reflect ONS-only and historic trend growth rates (ie, 1% & 5% for ED activity, 1.5% and 3.5% for assessment activity).
The scheme was subsequently briefed and designed to reflect the functional content generated from the Medium Scenario assumptions, involving widespread consultation with clinical, managerial and support staff within and beyond the Trust, [as well as patient representatives].

Revised Assumptions – Scenario 1

The revised activity assumptions are denoted as the **New BCT Baseline**, and are:

- use of 20-year planning horizon instead of 10-years
- use of Better Care Together growth profile for years 1-5 of the projections
- use of Office of National Statistics (ONS) population growth (1% as before) for years 6-20 of the model
- use of 85th percentile hourly arrivals for ED streams, at 85% occupancy, as per ECIST model

The New BCT Baseline assumptions impose a reduction in activity in the early years of the model due to the Better Care Together programme, and then a shallower, but longer, period of growth (i.e. to year 20, not to year 10). As a result of these two factors, the functional content determined by the new BCT demand & capacity model is marginally smaller than that scoped on the basis of the Medium Scenario parameters in the original business case.

Revised Assumptions – Scenario 2

The revised activity assumptions are denoted as the **New LTFM Baseline**, and are:

- use of 20-year planning horizon instead of 10-years
- use of LTFM nil growth profile for years 1-6 of the projections
- use of Office of National Statistics (ONS) population growth (1% as before) for years 7-20 of the model
- use of 85th percentile hourly arrivals for ED streams, at 85% occupancy, as per ECIST model

The new LTFM Baseline assumptions impose nil growth in activity in the early years of the model due to the QIPP, and then a shallower, but longer, period of growth (i.e. to year 20, not to year 10). As a result of these two factors, the functional content determined by the new LTFM demand & capacity model is still marginally smaller than that scoped on the basis of the Medium Scenario parameters in the original business case.

Impact of Revised Scenarios

- the original functional content of the proposed scheme, based on a 10-year planning horizon, remains sufficient to meet the activity projected at year 20 under the new BCT and LTFM baseline assumptions, with a small amount of spare capacity spread across a number of zones
- the original functional content has sufficient capacity to meet around 2% annual growth from years 6-20, should historic trends continue to be realised above the demographic growth of 1%

This confirms that the originally proposed content and the design developed by the project team remain robust in the light of the New BCT and LTFM Baseline assumptions. The slight capacity surplus in the proposed scheme is distributed across the project and its removal from the project would not warrant the cost, time and risk penalties associated with a full-scale redesign.

However, it is recognised that in the early years of occupation of the new facilities there will be considerable surplus accommodation as the BCT programme assumes a significant reduction of emergency activity at LRI in years 1-5. The scheme has been designed to be as flexible as possible through the employment, wherever practical, of generic clinical spaces. This would enable a range of services to backfill surplus accommodation in order to ensure that maximum utilisation is made of the new estate. Candidates include:

- inclusion of the Surgical Assessment Unit in the emergency floor.

Conversely, if future growth surpasses that modelled in the New BCT and LTFM Baseline (the impact of which might not manifest itself for 10-15 years), there are a number of initiatives that can be implemented in mitigation over time:

- further work to understand and resolve downstream operational issues in the acute bed stock to help improve flow out of the emergency facilities generally;
- the provision of additional critical care capacity would similarly ease pressure on the Acute Care Bay and Resus;
- the development control plan for the LRI site can include the further colonisation of adjacent space on the new emergency floor as alternative models of delivery are implemented for other clinical services;
- the relocation of lower acuity workload (UCC and minors) to alternative location would liberate capacity within the proposed unit for higher acuity workload.

The sensitivity testing of the demand and capacity modelling assumptions, and the strategies for coping with long-term upside and downside activity scenarios, have therefore confirmed the robustness of the original planning assumptions for the project. This provides assurance that the proposed investment offers the flexibility to deal with both changing levels and patterns of workload.

1.3 Economic Case

An economic appraisal of the Emergency Floor redevelopment options has been completed in accordance to the Capital Investment Manual and requirements of Her Majesty's Treasury's (HMT) Green Book (A Guide to Investment Appraisal in the Public Sector).

1.3.1 The Long List

The long list of options is described below in Table 1.1.

Table 1.1 Long List of Options

Option	Description
0	Do Minimum - Ensure critical backlog maintenance is undertaken and review clinical processes & procedures
1A	Balmoral Building – Existing 1st floor refurbishment with some assessment provision elsewhere (inc courtyard infill & extension)
1B	Balmoral Building – Existing 1st floor and ground floor refurbishment hot floor/assessment floor
1C	Balmoral Building – Existing floor refurbishment with displacement of radiology
2A	Jarvis Building – Demolition of Jarvis building and part new build/part refurbishment existing floor
2B	Jarvis Building - Demolition of Jarvis building and new build
2C	Jarvis Building - Demolition of Jarvis building and new build ED and refurbish assessment on single floor

Option	Description
3A	Victoria Building – Demolition of Victoria building and part new build/part refurbish assessment on single floor
3B	Victoria Building - Demolition of Victoria building and new build
4	Sandringham Building – refurbishment of 2 floors Sandringham building and new build extensions
5	Havelock Street Car park – New build 2 storey development on Havelock Street car park
6	Knighton Street Car park - New build 2 storey development on Knighton Street car park
7	Victoria Building Staff Car park - New build 2 storey development on Victoria Street car park

This list has been reviewed in a number of clinical forums, and has also been subjected to a technical appraisal to determine impact relating to site constraints and requirements of the building. Table 1.2 below provides the outcome of these reviews, identifying whether the option was shortlisted for detailed appraisal, or discounted. The key criterion for short listing was based on the extent to which each option met the project objectives.

Table 1.2 Results of Review of Long Listed Options

Option		Current Discounted/Shortlisted Status
0	**Do Minimum - Ensure critical backlog maintenance is undertaken and review clinical processes & procedures**	**Shortlisted** as a baseline comparator
1A	**Balmoral Building – Existing 1st floor refurbishment with some assessment provision elsewhere (inc courtyard infill & extension)**	**Shortlisted**
1B	Balmoral Building – Existing 1st floor and ground floor refurbishment hot floor/assessment floor	*Discounted – This was discounted on the basis that it does not strategically fit to the Trust's critical success factors requirement for a single floor ED*
1C	Balmoral Building – Existing floor refurbishment with displacement of radiology	*Discounted – This option was discounted on the basis of diagnostics needing to be a key adjacency requirement of the ED. This option could not deliver the Trust strategic requirements*

Option		Current Discounted/Shortlisted Status
2A	Jarvis Building – Demolition of Jarvis building and part new build/part refurbishment existing floor	*Discounted – This option does not meet the essential adjacency requirements and ED single floor concept and timing to deliver*
2B	Jarvis Building - Demolition of Jarvis building and new build	*Discounted – This option does not strategically fit with the Trust's DCP plans and timing to deliver. It also does not strategically fit to the Trusts critical success factor regarding the requirement for a single floor emergency and assessment service*
2C	**Jarvis Building - Demolition of Jarvis building and new build ED and refurbish assessment on single floor**	**Shortlisted**
3A	**Victoria Building – Demolition of Victoria building and part new build/part refurbish assessment on single floor**	**Shortlisted**
3B	Victoria Building - Demolition of Victoria building and new build	*Discounted - This option does not strategically fit with the Trust's DCP plans and timing to deliver. It also does not strategically fit to the Trusts critical success factors requirement for a single floor ED*
4	Sandringham Building – refurbishment of 2 floors Sandringham building and new build extensions	*Discounted – This was discounted on the basis that it does not strategically fit to the Trusts critical success factor regarding the requirement for a single floor emergency and assessment service*
5	Havelock Street Car park – New build 2 storey development on Havelock Street car park	*Discounted – This was discounted on the basis that it does not strategically fit to the Trusts critical success factors requirement for a single floor ED*
6	Knighton Street Car park - New build 2 storey development on Knighton Street car park	*Discounted – This was discounted on the basis that it does not strategically fit to the Trusts critical success factor regarding the requirement for a single floor emergency and assessment service*
7	Victoria Building Staff Car park - New build 2 storey development on Victoria Street car park	*Discounted– This was discounted on the basis that it does not strategically fit to the Trusts critical success factor regarding the requirement for a single floor emergency and assessment service*

1.3.2 The Short List

The shortlisted options taken forward into this OBC are therefore as follows:

- Option 0: Do Minimum - Ensure critical backlog maintenance is undertaken and review clinical processes & procedures
- Option 1A: Existing 1st floor refurbishment with some assessment provision elsewhere, (inc courtyard infill & extension)
- Option 2C: Demolition of Jarvis building & new build ED & refurbish assessment on single floor
- Option 3A: Demolition of Victoria building and part new build/part refurbish assessment on single floor

1.3.3 Qualitative Benefits – Identifying the Preferred Option

The shortlisted options were appraised against benefit criteria to establish a preferred option. The benefit criteria that would be delivered by the Emergency Floor redevelopment and their raw scores are detailed in table 1.3 below.

Table 1.3 Raw Scores

Criteria	Option			
	0	1A	2C	3A
1. To implement a design solution that provides a safe emergency care service that ensures capacity and known flexibility for current and known future demands of patients requiring emergency care	1.00	7.00	5.00	7.50
2. Improve patient pathway management reducing the clinical risk and discomfort through the emergency care pathway.	1.00	7.50	5.00	7.00
3. Support and consolidate provision of emergency floor concept at LRI	1.00	7.50	7.00	7.50
4. Ensures that the service model of care is delivered in line with National, Trust and local health economy KPIs	1.00	7.50	6.00	7.50
5. Patient safety is enhanced, and clinical risk is reduced.	1.00	6.50	7.50	7.50
6. Where possible ensures that the service is developed in line with NHS Guidance in terms of HBN, HTM, national and Trust policy and local health economy policy in terms of capacity provision	1.00	6.00	8.00	8.00
7. Quality of care is enhanced, in terms of the model of care, and seamless pathways of care and patient flows.	1.00	8.00	6.00	7.50
8. The built environment enhances clinical practice that support clinical effectiveness, improved patient outcomes and patient safety	1.00	8.00	6.00	8.00
9. Provides enhanced departmental relationships and clinical adjacencies that support clinical effectiveness and improved patient outcomes	1.00	8.00	6.00	8.00
10. Ensures facilities are future proofed and adaptable to the changing needs of the health economy	1.00	6.00	7.00	8.00
11. Improved Privacy and dignity provisions for all patients	1.00	6.00	8.00	8.00

Criteria	Option			
	0	1A	2C	3A
12. Consolidates existing services & provides clinical expertise whilst realising the Emergency Floor concept	1.00	8.00	6.00	7.50
13. Improved patient access through a single front door process	2.00	9.00	9.00	9.00
14. Enhances patient, visitor and staff safety through the built environment	1.00	7.50	8.00	8.00
15. The design solution minimises the impact of the construction process on the site and therefore delivery of the Trust core services	7.18	4.64	3.54	4.91
16. Option enables future proofing of the physical ED environment aligned to DCP future expansion needs	1.00	4.00	6.00	8.00
17. The enabling moves will facilitate the Emergency Floor programme whilst minimising delay to delivery	10.00	4.00	7.50	7.00
18. Reduces complexity and sequence dependency of enabling moves	10.00	4.00	7.50	7.00
19. Maintains blue light access throughout whole build process	8.00	6.00	5.00	7.50
Total	51.18	131.74	129.64	148.71
Rank	**4**	**2**	**3**	**1**

Agreed weightings were then applied to each benefit criteria which resulted in the final weighted rankings being the same as the raw rankings i.e.

- Rank 1 Preferred Option: 3A Victoria
- Rank 2: 1A Balmoral
- Rank 3: 2C Jarvis
- Rank 4: Do Nothing

1.3.4 Key Findings of the Economic Appraisal

The overall financial summaries of the three options based on the cash flows input to the Generic Economic Model (GEM) are as follows in Table 1.4:

Table 1.4 Key Results of Economic Appraisals

Option	Appraisal period	NPC £ 000	Risk Adjusted £ 000	Risk Adjusted NPC £ 000
Do Minimum	60 years	1,288,319.22	109	1,289,526.22
Option 1A Balmoral	60 years	1,252,500.35	1,207.00	1,253,707.35
Option 2C Jarvis	60 years	1,249,557.22	2,412.00	1,251,969.22
Option 3A Victoria	60 years	1,252,643.70	2,412.00	1,255,055.70

1.3.5 Economic Appraisal Conclusion

The option which offers the best value for money is the one with the lowest NPC and EAC. This is the preferred option from a purely financial perspective.

Option 2C has the lowest and is therefore the preferred option. However the difference between this and options 1A and 3A is marginal, and therefore not material to the appraisal process.

1.3.6 Overall Findings Preferred Option

As identified above the preferred option from a non financial perspective is option 3A Victoria, whilst from a financial perspective it is option 2C.

By combining the quantitative and qualitative scoring, a NPC per benefit point can be calculated. The preferred option is the one which has the lowest NPC per benefit point as this is the most effective solution based on both the financial and the non financial review.

As can be seen from Table 1.5 below the preferred option from an overall perspective is option 3A Victoria.

Analysis shows that the costs of the preferred option would need to increase by 12% before the second placed option 1A becomes the preferred option.

Table 1.5 Summary of Economic and Value for Money Appraisal

Criteria	Option			
	0	1A	2C	3A
Raw scores	51.18	131.74	129.64	148.71
Weighted Scores	2.27	6.74	6.27	7.54
Rank (non-financial)	4	2	3	1
Net present cost (NPC) (£k)	1,289,526	1,253,707	1,251,969	1,255,056
NPC per point score (£k)	568,073	186,010	199,676	166,453
Rank (VFM)	4	2	3	1
Rank	**4**	**2**	**3**	**1**

1.4 Commercial Case

1.4.1 Procurement Strategy

The scheme will be procured through UHL's framework partnership with Interserve.

Under the bespoke framework, Interserve is appointed as prime contractor for the delivery of projects; commercial arrangements and contracts are pre-agreed to cover commissioning of the business case through to final delivery of the asset using an NEC3 Option C Form of Contract (Target Contract with Activity Schedule). Cost savings and overspends are split between the Trust and the Client based on previously agreed percentages which will engender a spirit of partnering and collaboration within the Project Team. The risk of cost overrun is transferred to Interserve once the GMP has been agreed and construction stage commenced.

Project risk is dealt with openly from the outset of the project and the client; Interserve and the Design Team are encouraged to take an active role in identifying, mitigating and apportioning risk to the party best suited to deal with it. This should be a proactive process throughout the delivery of the project.

Key external advisors and construction services are as follows in Table 1.6:

Table 1.6 Supply Chain for Professional and Construction Services

Role	Organisation
Pre-construction	
Business case preparation	Capita
Mechanical and electrical consultants	Capita
Architects	Capita
Structural engineers	Capita
Cost Consultants	Capita
Project Management/ Cost Advice	RLB
GMP development	Interserve Construction
Construction	
Building contractor	Interserve Construction
Mechanical and electrical contractor	Interserve Construction

Under the framework, Interserve has:

- Taken single point responsibility to manage the design and construction process from completion of OBC through to project completion.
- Assembled a dedicated team from its supply chain of experienced health planners, designers and specialists, to successfully deliver facilities that will benefit patients and staff alike.
- Provided benefits of experience of long term partnering arrangements that will continue throughout the life of the project.

- Committed to identifying construction solutions that will assist in the implementation of improved service delivery, best practice and delivering best value.

Interserve and UHL will work together through the full business case (FBC) stage in the coming months to develop and agree a guaranteed maximum price for delivery of the scheme. This will reflect:

- Fees for professional advice such as design and cost management
- Market tested packages for construction works on an open book basis

The GMP will be assessed for overall value for money by cost consultants acting for both Interserve and UHL (Rider Levett Bucknall). This will take into account elements such as:

- Prevailing rates for similar works nationally and locally
- Published cost indices
- Knowledge of the cost of work in the hospital from other recent schemes
- Prime contractor and client retained risks as identified in the joint risk register

It is intended that the development of the GMP will be run in parallel with the development of the Works Information and this will be undertaken in a fully open book/ collaborative environment such that a minimum of three quotations will be obtained for all Works Packages making up at least 80% of the GMP.

Package responses will be assessed by Interserve Construction Ltd in conjunction with the Trust's advisors Rider Levett Bucknall (RLB) to ensure the 'Best Value' tender is included in the GMP. The assessment will not only be based on price but also programme, design/ technical proposals and likely risk. Interserve and RLB will agree a formal assessment proposal for each package. Tenders will be benchmarked appropriately.

It is the intention that key supply chain members, (e.g. demolition, mechanical, electrical) are engaged early in the process in order that they can contribute to the design process in terms of programme and buildability/ innovation.

Should the scheme not proceed, the Trust will own the design at point of termination but will be liable for Interserve costs up to that point, in line with contractual commitments made during commissioning of the project.

1.4.2 Potential for Risk Transfer

The LLR Framework has a single comprehensive risk management process, which the Trust will be using. The Emergency Floor Project Senior Responsible Officer (SRO) and IFM act as joint owners of the joint project Risk Register for this scheme, responsibility for risks identified in it are then to be allocated and identified on the associated risk register. The risk of cost overrun is transferred to IFM once the GMP has been agreed and construction stage commenced.

1.5 Financial Case

The Financial Case sets out the financial implications for the Trust in terms of capital expenditure and cash flow, income and expenditure account and borrowing.

1.5.1 Capital Costs

The capital costs have been determined by the Design Team technical advisors and are summarised below in Table 1.7.

Table 1.7 Summary of Capital Costs

Capital Costs	Option 3A Victoria (£)
Construction	30,233,828
Fees	6,781,406
Equipment	1,692,000
Decant	
Planning Contingency	2,894,644
Sub Total	41,601,878
Optimism Bias	0
Inflation	389,840
Total	41,991,719
VAT Recovery	-649,792
Grand Total	**41,341,927**

The capital expenditure profile is set out below in Table 1.8:

Table 1.8 Summary of Capital Expenditure

	2013/14 £	2014/15 £	2015/16 £	2016/17 £	2017/18 £	TOTAL £
Capital Expenditure	3,125,760	7,515,326	24,853,587	5,499,544	347,710	**41,341,927**

1.5.2 Revenue Costs

These are described in detail in the Financial Case (Section 5) but broadly comprise the pay and non-pay costs and other allocated direct costs.

Two models have been developed to identify the financial consequences of two scenarios. Scenario 1, BCT assumes reductions in line with those developed by the Better Care Together programme. These are early indications and work is ongoing

within the health economy to identify how these reductions will deliver. This could be considered a worst case scenario for the EF activity.

Scenario 2 is activity and income modelled in line with UHLs LTFM, submitted in June and assumes level income to 2019/20 then growth in line with demographics. In this model any growth is assumed to be managed by commissioner QIPP. These assumptions will be developed along with BCT programme over the coming weeks to aid development of the FBC and one likely case scenario.

Assumptions regarding changes to income are detailed in Table 1.9 with the I&E for 20 years for both scenarios following in Table 1.10 and 1.11.

Table 1.9 Activity Assumptions

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20 - 2033/34
Better Care Together						
ED	-8.3%	1.6%	-0.2%	0.0%	0.3%	1.0%
AMUs	-3.1%	-5.4%	-6.6%	-2.1%	-1.0%	1.5%
Clinic Activity	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%
LTFM						
ED	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%
AMUs	0.0%	0.0%	0.0%	0.0%	0.0%	1.5%
Clinic Activity	0.0%	0.0%	0.0%	0.0%	0.0%	1.0%

Table 1.10 Scenario 1 - Better Care Together Assumptions Income & Expenditure

	2013/14	2014/15	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
	Out-turn	Forecast - Baseline	Forecast BCT assumptions	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K
Income																						
ED Tariff	16,717	16,001	14,673	14,907	14,877	14,877	14,922	15,071	15,222	15,374	15,528	15,683	15,840	15,999	16,158	16,320	16,483	16,648	16,815	16,983	17,153	17,324
Medical Assessment Unit	12,713	13,183	12,911	12,945	12,920	12,957	13,016	13,124	13,233	13,343	13,454	13,566	13,679	13,793	13,908	14,024	14,142	14,260	14,379	14,500	14,621	14,744
Other Income (RTA, Teaching etc)	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402
Total	**33,832**	**33,585**	**31,985**	**32,254**	**32,199**	**32,236**	**32,340**	**32,597**	**32,857**	**33,119**	**33,384**	**33,651**	**33,921**	**34,194**	**34,469**	**34,746**	**35,027**	**35,310**	**35,596**	**35,884**	**36,176**	**36,470**
Expenditure																						
Pay																						
Nursing	12,966	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517
Nursing Agency	3,828	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307
Medical Staff	14,396	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287
Medical Locums	224	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169
A&C	1,133	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068
Healthcare Assistants	709	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791
Agency reduction					(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)
Workforce Efficiencies					(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)
Additional staff costs due to activity growth	0	0	0	0	0	0	0	0	578	578	578	578	1,155	1,155	1,155	1,155	1,155	1,155	1,700	1,700	1,700	1,700
Total	**33,256**	**30,139**	**30,139**	**30,139**	**28,573**	**28,573**	**28,573**	**28,573**	**29,151**	**29,151**	**29,151**	**29,151**	**29,728**	**29,728**	**29,728**	**29,728**	**29,728**	**29,728**	**30,273**	**30,273**	**30,273**	**30,273**
Non pay																						
Clinical Supplies	1,363	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306
Drugs	891	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808
Pathology and Blood	2,041	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Other	673	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915
Changes to Non Pay costs due to activity		0	0	40	32	38	53	92	131	170	210	250	290	331	373	414	456	499	542	585	629	673
Total	**4,968**	**5,087**	**5,087**	**5,127**	**5,119**	**5,125**	**5,140**	**5,179**	**5,218**	**5,257**	**5,297**	**5,337**	**5,377**	**5,418**	**5,460**	**5,501**	**5,543**	**5,586**	**5,629**	**5,672**	**5,716**	**5,760**
Total Direct Costs	**38,224**	**35,226**	**35,226**	**35,266**	**33,692**	**33,698**	**33,713**	**33,752**	**34,369**	**34,408**	**34,448**	**34,488**	**35,105**	**35,146**	**35,188**	**35,229**	**35,271**	**35,314**	**35,902**	**35,945**	**35,989**	**36,033**

FM Costs	471	471	471	471	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636
Support Service Costs	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647
Overheads	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619
Changes to Support costs due to activity		0	0	0	0	0	0	0	0	0	0	0	67	122	177	232	288	345	402	460	518	577
Transformation funding assumed			(1,600)	(1,250)	(650)	(100)																
Reduction to costs in the emergency pathway		0	0	0	(900)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)	(1,600)
Change in depreciation		(85)	(85)	(170)	474	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689
Change in Rate of return		(45)	(45)	(89)	912	900	876	852	828	804	780	756	732	708	684	660	636	612	588	564	540	516
Total costs (baseline)	**48,961**	**45,833**	**44,233**	**44,494**	**44,430**	**44,488**	**44,580**	**44,594**	**45,187**	**45,202**	**45,218**	**45,234**	**45,894**	**45,966**	**46,038**	**46,111**	**46,185**	**46,261**	**46,882**	**46,959**	**47,037**	**47,116**
Net (deficit)	**(15,129)**	**(12,248)**	**(12,248)**	**(12,240)**	**(12,231)**	**(12,252)**	**(12,240)**	**(11,997)**	**(12,330)**	**(12,083)**	**(11,834)**	**(11,583)**	**(11,973)**	**(11,772)**	**(11,569)**	**(11,365)**	**(11,159)**	**(10,951)**	**(11,286)**	**(11,074)**	**(10,861)**	**(10,646)**

Table 1.11 Scenario 2 - Long Term Financial Model Assumptions - Income & Expenditure

	2013/14	2014/15	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34
	Out-turn	Forecast - Baseline	Forecast BCT assumptions	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K	£K
Income																						
ED Tariff	16,717	16,001	16,001	16,001	16,001	16,001	16,001	16,161	16,322	16,485	16,650	16,817	16,985	17,155	17,326	17,500	17,675	17,851	18,030	18,210	18,392	16,717
Medical Assessment Unit	12,713	13,183	13,183	13,183	13,183	13,183	13,183	13,291	13,401	13,511	13,623	13,735	13,849	13,963	14,079	14,195	14,313	14,432	14,551	14,672	14,794	12,713
Other Income (RTA, Teaching etc)	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402	4,402
Total	**33,832**	**33,585**	**33,585**	**33,585**	**33,585**	**33,585**	**33,585**	**33,854**	**34,125**	**34,399**	**34,675**	**34,954**	**35,236**	**35,520**	**35,807**	**36,097**	**36,389**	**36,685**	**36,983**	**37,284**	**37,588**	**33,832**
Expenditure																						
Pay																						
Nursing	12,966	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	13,517	12,966
Nursing Agency	3,828	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	1,307	3,828
Medical Staff	14,396	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	13,287	14,396

Medical Locums	224	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	169	224
A&C	1,133	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,068	1,133
Healthcare Assistants	709	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	791	709
Agency reduction				(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	(738)	
Workforce Efficiencies				(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	(828)	
Additional staff costs due to activity growth	0	0	0	0	0	0	0	0	578	578	578	1,155	1,155	1,155	1,155	1,155	1,155	1,700	1,700	1,700	1,700	0
Total	**33,256**	**30,139**	**30,139**	**28,573**	**28,573**	**28,573**	**28,573**	**28,573**	**29,151**	**29,151**	**29,151**	**29,728**	**29,728**	**29,728**	**29,728**	**29,728**	**29,728**	**30,273**	**30,273**	**30,273**	**30,273**	**33,256**
Non pay																						
Clinical Supplies	1,363	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,306	1,363
Drugs	891	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	808	891
Pathology and Blood	2,041	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,041
Other	673	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	915	673
Changes to Non Pay costs due to activity			0	0	0	0	0	40	81	122	163	205	248	290	333	377	421	465	510	555	600	
Total	**4,968**	**5,087**	**5,087**	**5,087**	**5,087**	**5,087**	**5,087**	**5,127**	**5,168**	**5,209**	**5,250**	**5,292**	**5,335**	**5,377**	**5,420**	**5,464**	**5,508**	**5,552**	**5,597**	**5,642**	**5,687**	**4,968**
Total Direct Costs	**38,224**	**35,226**	**35,226**	**33,660**	**33,660**	**33,660**	**33,660**	**33,700**	**34,319**	**34,360**	**34,401**	**35,020**	**35,063**	**35,105**	**35,148**	**35,192**	**35,236**	**35,825**	**35,870**	**35,915**	**35,960**	**38,224**
FM Costs	471	471	471	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	636	471
Support Service Costs	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647	3,647
Overheads	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619	6,619
Other efficiencies in support services				(100)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	(350)	
Changes to support costs due to activity									108	163	218	274	330	387	391	394	398	402	406	410	414	
Change in depreciation		(85)	(170)	474	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	689	
Change in Rate of return		(45)	(89)	912	900	876	852	828	804	780	756	732	708	684	660	636	612	588	564	540	516	
Total costs (baseline)	**48,961**	**45,833**	**45,704**	**45,848**	**45,800**	**45,776**	**45,752**	**45,768**	**46,471**	**46,543**	**46,615**	**47,266**	**47,340**	**47,416**	**47,439**	**47,462**	**47,486**	**48,055**	**48,079**	**48,105**	**48,130**	**48,961**
Net (deficit)	**(48,961)**	**(12,248)**	**(12,118)**	**(12,262)**	**(12,215)**	**(12,191)**	**(12,167)**	**(11,914)**	**(12,346)**	**(12,144)**	**(11,940)**	**(12,312)**	**(12,105)**	**(11,896)**	**(11,632)**	**(11,365)**	**(11,096)**	**(11,370)**	**(11,096)**	**(10,820)**	**(10,542)**	**(48,961)**

1.5.3 Financial Summary of Scenarios

Over the life of the project the two scenarios presented vary marginally in their overall average annual benefit to UHL:

- The BCT scenario means a reduction to income in the first five years relative to the current baseline, although an overall increase over 20 years. This reduction takes place prior to the opening of the EF. Once opened savings from within the EF workforce and the wider emergency pathway will offset the additional costs relating mainly to capital charges.
- The LTFM scenario assumes level income until 19/20, when growth is then modelled as demographics. This model gives a larger average income change over the life of the project, and therefore a reduction to the required efficiencies to support the additional costs.

Revised activity modelling has enabled the project team to understand the sensitivity of the functional content in relation to the revised assumptions that underpin the scheme, which has given comfort that the designed capacity is acceptable.

A summary of the two scenarios presented for the next 5 years can be seen in Tables 1.12 and 1.13 below. Both scenarios show that the increase in costs associated with the move can be supported by savings, although these will need to be greater under BCT assumptions than LTFM assumptions to offset the reduction in income. BCT assumptions are for a reduction to income from 2014/15, however efficiencies cannot be made until the Emergency Floor is opened. As such, transformational support funding will be needed in the interim years.

Table 1.12 5 Year Financial Summary - Better Care Together Scenario

	2014/15	2015/16	2016/17	2017/18	2018/19
Income change	(1,600)	(1,331)	(1,386)	(1,349)	(1,246)
Agency	0	0	738	738	738
Workforce efficiencies	0	0	828	828	828
Other efficiencies	0	0	900	1,600	1,600
Pay and non pay increases from additional activity	0	(40)	(32)	(38)	(53)
Facilities	0	0	(165)	(165)	(165)
Depreciation	0	85	(559)	(774)	(774)
Rate of return	0	45	(957)	(945)	(921)
Transformation funds	1,600	1,250	650	100	0
Total change	**(0)**	**8**	**17**	**(4)**	**8**

Table 1.13 5 Year Financial Summary - Long Term Financial Model Scenario

	2014/15	2015/16	2016/17	2017/18	2018/19
Income change	0	0	0	0	0
Agency	0	0	738	738	738
Workforce efficiencies	0	0	828	828	828
Other efficiencies	0	0	100	350	350
Pay and non pay increases from additional activity	0	0	0	0	0
Facilities	0	0	(165)	(165)	(165)
Depreciation	0	85	(559)	(774)	(774)
Rate of return	0	45	(957)	(945)	(921)
Transformation funds	0	0	0	0	0
Total change	**0**	**130**	**(14)**	**33**	**57**

1.5.4 Financing

The Trust will be undertaking several capital projects in the next few years and it is anticipated that the capital expenditure for this scheme will be as follows in Table 1.14:

Table 1.14 Sources and Applications of Funds

	2013/14 £	2014/15 £	2015/16 £	2016/17 £	2017/18 £	TOTAL £
Capital Expenditure	3,125,760	7,515,326	24,853,587	5,499,544	347,710	41,341,927
Funded By						
PDC/Public Loan		7,515,326	24,853,587	5,499,544	347,710	38,216,167
Trust Resources	3,125,760					3,125,760
Total Funding	3,125,760	7,515,326	24,853,587	5,499,544	347,710	**41,341,927**

1.5.5 Impact on the Balance Sheet

The proposed expenditure will have the impact on the Trust balance sheet as shown in Table 1.15 below.

Table 1.15 Impact on Trust Balance Sheet

	2013 /14	2014 /15	2015 /16	2016 /17	2017 /18
Assets Under Construction	3,125,760	7,515,326	24,853,587	5,499,544	347,710
Impairments on new building coming into use (DV likely revaluation)				-11,911,822	
Impairment on partial demolition of Victoria based m^2		-2,472,646			
Depreciation				-474,227	-688,993
Change to Fixed Assets		-2,472,646		28,608,168	28,266,885

1.6 Management Case

1.6.1 Project Management Arrangements

The project will be managed reflecting national guidance[4] and the Trust's own Capital Governance Framework, as shown in Figure 1C below:

[4] Capital Investment Manual 'Managing Capital Projects' (Department of Health); PRINCE2 (Office of Government Commerce); Managing Successful Programmes (Office of Government Commerce/ Efficiency & Reform Group)

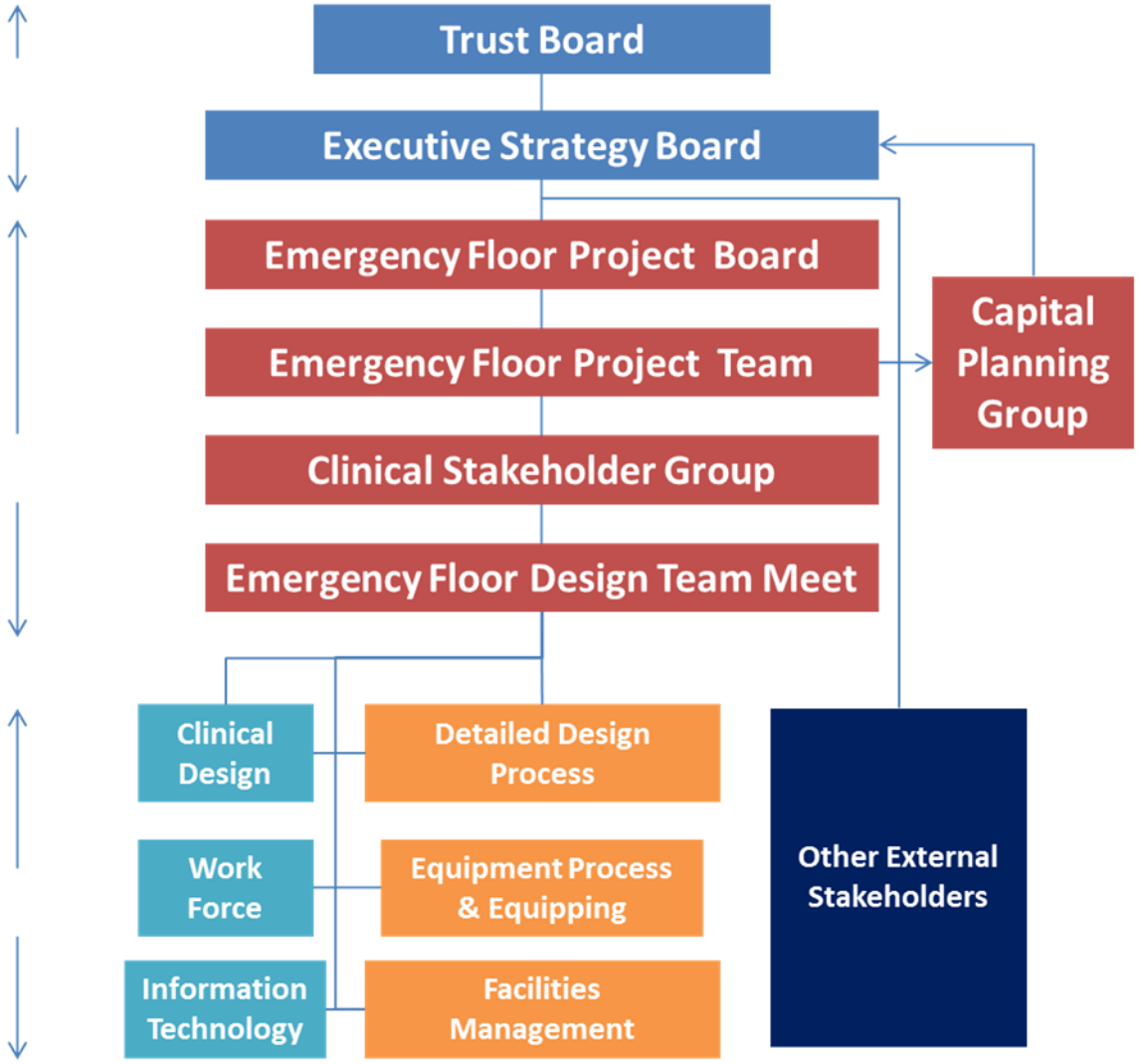

Figure 1.C UHL Capital Governance Framework

Working groups have also been set up in support of the project:

- Equipping Group
- Security and Major Incident Planning
- Hard and Soft Facilities Management
- Information Management & Technology
- Communications
- Technical and Operational Commissioning
- Site Progress

1.6.2 Project Plan

The Project Programme is established to deliver in two phases:

- Phase 1: ED – July 2016

- Phase 2: Assessment area – December 2016

The Project Programme is identified in Table 1.16 below, and is predicated on meeting key submission and approval dates to both the Trust Board and NTDA.

Table 1.16 Project Milestones

Milestone	Date
Outline Business Case presented to Trust Board Development Session	21st Nov 2013
Outline Business Case presented for Trust Board approval	28th Nov 2013
Outline Business Case sent to the NTDA	Dec 2013
Outline Business Case presented to CCGs & UCB	Dec 2013
Commence Detailed Design & Full Business Case	Feb 2014
Submission of Planning Application	2nd Jun 2014
Trust commit to place order for early procurement items	2nd Jun 2014
Trust approval of Developed Outline Business Case	28th August 2014
Trust commit to place order for early works (isolation, diversion)	5th Sept 2014
LCC Planning Committee	24th Sept 2014
Trust commit to place order for demolition works	25th Sept 2014
Commence demolition works	6th Oct 2014
NTDA approval of Developed Outline Business Case	20th Nov 2014
Trust Board approval of Full Business Case	27th Nov 2014
NTDA submission of the Full Business Case	28th Nov 2014
Demolition complete	20th Feb 2015
NTDA approval of the Full Business Case	2nd March 2015
Commence construction (Phase 1 – ED)	9th March 2015
Complete construction (Phase 1 – ED)	13th May 2016
Commence construction (Phase 2 – Assessment)	21st Jun 2016
Complete construction (Phase 2 – Assessment)	13th Dec 2016

1.6.3 Use of Special Advisors

Special advisers have been used in a timely and cost-effective manner in accordance with the Treasury Guidance, as shown in Table 1.17.

Table 1.17 External Advisors

Emergency Floor Development		
1	Interserve Construction Ltd	Building/ Construction Supervisors
2	Rider Levett Bucknall	Project Management
3	Capita	Architects
4	Capita	Cost Consultants
5	Capita	Business case / Finance analysis
6	Capita	Structural Engineers
7	Capita	Mechanical and Electrical Engineers
8	Capita	CDM

1.6.4 Outline Arrangements for Change & Contract Management

The Change Control procedures will be undertaken in accordance with the flow charts identified within the NEC3 procurement framework.

Change management associated with the project will be managed through the Project Board and executive forums that preside over it, under the chairmanship of the Senior Responsible Owner (SRO) and Trust Board respectively. Day to day change management issues will be discussed at the Emergency Floor Project Team Meeting and any resultant contract and/ or cost changes will need to be approved by the Project Board.

1.6.5 Outline Arrangements for Benefits Realisation

The delivery of benefits will be managed through the Emergency Floor Project Board. The benefits realisation plan can be found in Section 2.17 and will be expanded for the FBC submission. This articulates how the following benefits will be realised:

- To implement a design solution that provides a safe emergency care service that ensures capacity and known flexibility for current and known future demands of patients requiring emergency care
- Improve patient pathway management reducing the clinical risk and discomfort through the emergency care pathway
- Support and consolidate the provision of emergency floor concept at LRI
- Ensures that the service model of care is delivered in line with National, Trust and local health economy KPI's
- Patient safety is enhanced, and clinical risk is reduced.
- Where possible ensures that the service is developed in line with NHS Guidance in terms of HBN, HTM, national and Trust policy and local health economy policy in terms of capacity provision
- Quality of care is enhanced, in terms of the model of care, and seamless pathways of care and patient flows.

- The built environment enhances clinical practice that support clinical effectiveness, improved patient outcomes and patient safety
- Provides enhanced departmental relationships and clinical adjacencies that support clinical effectiveness and improved patient outcomes
- Ensures facilities are future proofed and adaptable to the changing needs of the health economy
- Improved Privacy and dignity provisions for all patients
- Consolidates existing services & provides clinical expertise whilst realising the Emergency Floor concept
- Improved patient access through a single front door process
- Enhances patient, visitor and staff safety through the built environment
- The design solution minimises the impact of the construction process on the site and therefore delivery of the Trust core services
- Option enables future proofing of the physical Emergency Department environment aligned to DCP future expansion needs
- The enabling moves will facilitate the Emergency Floor programme whilst minimising delay to delivery
- Reduces complexity and sequence dependency of enabling moves
- Maintains blue light access throughout whole build process

Work is ongoing within the Trust to identify and quantify the clinical benefits resulting from this project. These will include:

- Improved patient experience
- Reduced patient complaints
- Increased compliments
- Reduced institutionalisation of long term care from hospital
- Improved staff morale
- Recommendation that people work here
- Increased recruitment and retention
- Reduced staff sickness rates

1.6.6 Outline Arrangements for Risk Management

All projects are subject to risk and uncertainty. Successful project management should ensure that major foreseeable risks are identified, their effects considered and actions taken to remove, or mitigate the risks concerned.

Risks will be classified as:

- Client – these will be the responsibility of the Project Board to manage and monitor
- Contractor – a project specific risk register will be set up for the Project. These will be the responsibility of the Contractor to monitor and will form part of the GMP

The qualification of the costs of identified risks will enable the calculation of a realistic client contingency.

A pro-active risk management regime will be employed throughout the project. It is essential on any project (in particular one of this size and complexity) that the risk management process involves all key members of the project team including:

- Trust Estates
- Trust FM
- Project Consultant Team
- Contractor
- Designers

1.6.7 Post Project Evaluation Arrangements

The outline arrangements for post Project Evaluation (PPE) have been established in accordance with best practice. The Trust will ensure that a thorough post-project evaluation is undertaken at key stages in the process to ensure that positive lessons can be learnt from the project. These will be of benefit to:

- The Trust – in using this knowledge for future capital schemes
- Other key local stakeholders – to inform their approaches to future projects
- The NHS more widely – to test whether the policies and procedures used in this procurement have been used effectively
- Contractors – to understand the healthcare environment better

Formal post project evaluation reports will be compiled by project staff, and reported to the Board to ensure compliance to stated objectives.

1.6.8 Gateway Review Arrangements

Gateway reviews provide a valuable perspective on the issues facing the internal project team, and an external challenge to the robustness of plans and processes. The Gateway process provides support to SROs by helping them to ensure the following:

- The best available skills and experience are deployed on the programme or project
- All the stakeholders covered by the programme or project fully understand the current status and the issues involved
- The programme or project can progress more confidently to the next stage of development, implementation or realisation
- Achievement of more realistic time and cost targets for the programme or project

The Gateway Project Review Process looks at a project or programme at six key stages in the life of the project and considers the readiness to progress to the next phase.

The six stages or Gates are:

- Gate 0 - Strategic Assessment
- Gate 1 - Business Justification
- Gate 2 - Delivery Strategy
- Gate 3 - Investment Decision
- Gate 4 - Readiness For Service
- Gate 5 - Operations Review and Benefits Evaluation

A Health Gateway Review 2: Delivery Strategy was undertaken and associated report issued to the Project SRO on the 18th June 2014. A Delivery Confidence Assessment of AMBER was issued by the review team along with recommendations for consideration/ implementation.

The next Health Gateway Review, Gateway 3 Investment Decision is recommended once GMP is received and the Full Business Case is complete and ready for Trust Board and other approvals. The current programme indicates this will be November 2014.

1.7 Recommendation

The Trust Board is recommended to approve this business case for submission to the NTDA.

Signed: .....

Senior Responsible Owner

Date:.....

Senior Responsible Owner
Project Team