

Trust Board – 25 September 2013
Pathology Hot Lab Full Business Case

PURPOSE	To provide the Trust Board with the full business case for the pathology hot laboratory scheme. The capital cost of the scheme is assessed as £1,398,827. The scheme enables delivery of acute services consolidation in October 2014 and the Transforming Pathology Partnership project.
PREVIOUSLY CONSIDERED BY	OCH Programme Board and Finance & Performance Committee
Objective(s) to which issue relates *	<input checked="" type="checkbox"/> 1. To continuously improve the quality of our services in order to provide the best care and optimise health outcomes for each and every individual accessing the Trust's services <input type="checkbox"/> 2. To excel at customer service, achieving outstanding levels of communication and patient, carer and GP satisfaction <input type="checkbox"/> 3. To provide and support the best standards of integrated care for the elderly and those with long term conditions by developing key partnerships and services <input checked="" type="checkbox"/> 4. To consolidate services and enhance local access to specialist services in order to deliver high quality, safe, seamless, innovative and integrated services which are sustainable <input type="checkbox"/> 5. To support the continued development of the Mount Vernon Cancer Centre and provision of leading local and tertiary cancer services <input type="checkbox"/> 6. To improve our staff engagement and organisational culture to be amongst the best nationally
Risk Issues (Quality, safety, financial, HR, legal issues, equality issues)	As identified in the Full Business Case risks will be reviewed and managed through the project Board and the OCH Programme Board. The FBC includes a contingency to mitigate the effect of any delay to the TPP timetable as the construction is dependent on microbiology services moving off the site.
Healthcare/ National Policy (includes CQC/Monitor)	This project is consistent with national and local policy guidance including the TPP project
CRR/Board Assurance Framework *	<input checked="" type="checkbox"/> Corporate Risk Register <input type="checkbox"/> BAF
ACTION REQUIRED *	
For approval	<input checked="" type="checkbox"/>
For discussion	<input type="checkbox"/>
For decision	<input checked="" type="checkbox"/>
For information	<input type="checkbox"/>
DIRECTOR:	Director of Strategic Development
PRESENTED BY:	Director of Strategic Development
AUTHOR:	Barbara Jenkins, Associate Director Clinical Reconfiguration
DATE:	18 September 2013

Our Changing Hospitals

Pathology Hot Lab Full Business Case

Executive Summary

18 September 2013

Executive Summary

1.0 Introduction

The purpose of this Full Business Case (FBC) is to seek Trust Board approval and authorisation to invest £1,398,827 inclusive of VAT for the creation of a pathology hot laboratory on the Lister site.

This development will be an enabling scheme to achieve acute services consolidation in October 2014, it will also act as an enabler for the Transforming Pathology Partnership project, as per the case presented to the Finance and Performance Committee and Trust Board (September 2012 with an update in May 2013).

The internal rate of return for this scheme is 119%. This calculation includes an estimated saving of £1.265m from Transforming Pathology Partnership (TPP) as a direct result of reducing two hotlabs (satellites) to one at consolidation which is consistent with the Trust's LTFM.

The investment of £1,398,827 includes a £350,000 contingency which has been included to mitigate any delays occurring as a result of the TPP project timeframes which could necessitate the Trust identifying an interim solution for some of the services.

This FBC identifies the preferred option and capital investment required for the reconfiguration of pathology services in East and North Hertfordshire. It is based on the strategic objectives and development plans contained in the Phase 4 Outline Business Case (OBC) of the Trust's Our Changing Hospitals (OCH) Programme.

2.0 Strategic Context

The strategic rationale for the business case remains unchanged from the OBC and remains consistent with Phase 4 consolidation objectives. This document has been updated to reflect the changes relating to the strategy, models of care and the increased requirement for space as a result of TPP. TPP is a joint venture of seven Trusts including East and North Hertfordshire NHS Trust for the provision of acute and community Pathology services to implement the Carter Review of Pathology Services.

3.0 Case for Change and Objectives

The Trust's strategy to consolidate all acute inpatient services on to the Lister site formed the fundamental basis for the Phase 4 OBC, together with how associated services would deliver the anticipated level of healthcare activity.

There is a need to change the way pathology services are delivered to facilitate Trust consolidation. In addition there is a national strategy for Pathology consolidation that has been proactively progressed under the former NHS East of England's Pathology Transformation project.

The objectives of this business case are to:

- Consolidate 'hot' pathology services at Lister vacating the QEII hospital site by October 2014
- Maintain turnaround times to service users for both critical and routine samples
- Develop a flexible workforce to provide 24/7 working.
- Implement a fully skilled and sustainable workforce model

- Improve access to the service by patients via improved facilities for phlebotomy service on the Lister site.
- Maintain full accreditation across all disciplines with Medicines and Healthcare products Regulatory Agency (MHRA), The Human Tissue Authority (HTA), and Clinical Pathology Accreditation (CPA)
- Ensure long term viability of the local pathology service in light of Carter and NHS East of England review, and competition in neighbouring health economies
- Deliver an high quality, consultant led, clinically effective, user focused delivery of pathology services at Lister
- Improve flexibility to respond to new service developments across all disciplines
- Continue to provide laboratory support to the Trust's growing Research & Development (R&D) workload
- Provide a responsive service that can adjust to the needs of local priorities.

4.0 Activity Modelling

Activity modelling for the Phase 4 OBC made a number of assumptions regarding future service configurations and shifts in activity as a result of the service consolidation programme. Whilst pathology services are not specifically outlined a number of the assumptions impact on the service as follows:

- the planned new QEII will provide a range of consultant clinics and ante and post natal services, minimising the need for people to travel to the acute site at Lister
- there will be no loss of elective surgical activity for the Trust when surgery consolidates on the Lister site
- of the 35% of remaining Emergency Department (ED) activity, 15% of this activity will not be retained by the Trust when ED services consolidate on the Lister site and will be treated at other hospitals.

The following assumptions are included in this business case:

- phlebotomy services will be provided from within the new QEII hospital from spring 2015.
- the Trust will be the provider of all outpatient services including anticoagulation clinics.
- the Trust through TPP will continue to provide all other hot and cold pathology services

5.0 Workforce

There are a number of workforce issues that contribute to the case for change:

- The current inability to provide a critical mass for highly specialised services in particular non routine requests. It is recognised that this is best provided on a hub or regional basis.
- use of staff rotation between sites impacts on efficiency due to travel distances
- The need to develop new roles such as band 4 associate practitioner and advanced practitioner roles in cellular pathology.

The decision of the Trust to form a consortium with TPP with six other Trusts has also had an impact on staffing. The formation of TPP will result in the TUPE transfer of 'in scope' pathology staff to Cambridge University Hospitals and the TUPE transfer of Microbiology staff to Public Health England (PHE) with effect from 1st January 2014. The consortium will operate a hub and satellite model. The hubs, carrying out community, non-urgent and microbiology work will be based at Cambridge and Ipswich. The satellites which will carry out acute work will be based

at Stevenage, Welwyn Garden City (until consolidation onto one site), Colchester, Chelmsford, Hinchingsbrooke, and Bury St Edmunds. As a result there will be a reduced workforce at the Stevenage and Welwyn Garden City satellites, which will reduce further upon consolidation to the Stevenage satellite in October 2014.

TPP staff consultations commenced in May 2013 and as a consequence 106 staff have been put at risk of redundancy. These changes and the associated delays in the process have resulted in uncertainty within the Pathology workforce as staff are leaving the Trust and seeking alternative employment elsewhere therefore resulting in increasing staff turnover and operational pressures on the department.

The following staff will remain with the Trust:

- Medical Staff (with the exception of Clinical Scientists)
- Mortuary
- Anticoagulation
- Point of Care
- Blood Transfusion Practitioners
- Order Communications Team
- Administration staff where the majority of their role is Trust related

Staff who are not transferring to TPP e.g. medical staff may still provide a service to TPP and mechanisms are being put in place so that the Trust can be reimbursed for this time.

This FBC aspires to meet a number of workforce objectives. These include to:

Develop a flexible workforce to provide 24/7 working.

- Maintain viable 24/7 rotas for all services and support 7-day working across the Trust
- Ensure staff are trained to provide the new models of care

Implement a fully skilled and sustainable workforce model

- Identify opportunities for development and enhancement of staff roles to improve staff satisfaction and provide sustainable careers
- Improve ability to attract and retain high quality staff
- Continue to support employee's professional and personal development, linking these plans to succession planning
- Current and future staffing

6.0 Options Considered

The Trust Pathology Project Board, at OBC stage, considered the following when developing the options for the pathology consolidation:

- where on the Lister site the consolidated / centralised department could be situated
- availability of land around existing department for expansion
- the existing internal structure and most appropriate functional arrangements.
- the preferred option at OBC was an off site cold laboratory and on site hot lab with blood science, blood transfusion and histopathology cut-up at Lister

As a result of the formation of TPP and its service and financial and service model, the project team has explored and developed further design options for the pathology hot lab to accommodate the service model changes on the Lister hospital site.

For pathology the location is limited to use of the existing Pathology area due to the land-locked nature of the department.

The preferred option has five phases and has been split into above and below ceiling works. Phases 3, 4 and 5 are dependent on TPP timeframes.

Phase 1- Phlebotomy and part of Annex to create admin area and 4 reporting rooms

Phase 2 - Reporting room, Anticoagulation, BMS NHS shared offices and staff support areas

Phase 3 - Histopathology cut up room moves from Annex to where Microbiology faecal culture currently occupies. Blood sciences/Chemistry moves into where part of Microbiology to make way for blood transfusion to expand.

Phase 4 – Blood transfusion moves to sciences/Chemistry/ part of sample reception. IT support will occupy part of the current Microbiology and some work for admin support in Annex where Histopathology cut up currently is.

Phase 5 – Reporting rooms where current blood transfusion is.

Should there be a delay in the implementation of TPP, which is currently scheduled for the 1st January 2014, the Trust will need to develop an alternative option to move microbiology off the Lister site to enable phase 4 consolidation by October 2014. These options are being explored by the Divisional Management and project teams and a detailed paper with recommendations will be considered by the relevant Trust committees in November 2013.

A separate options appraisal was undertaken for Histopathology processing between OBC and FBC and a decision is yet to be agreed. The FBC preferred option releases part of the space occupied by Microbiology, which cannot be allocated for non-clinical activities due to the clean/dirty demarcation. This redundant clinical space can provide sufficient space to house an on-site histopathology processing facility. The cost is currently included in the project budget however not separated in the construction cost. This variant from the preferred option is strongly recommended by the clinical team.

7.0 Economic appraisal

The current design has five phases and phases 3, 4 and 5 are dependent on TPP implementation in January 2014. If there is a delay to the TPP timeframe, there will have to be a contingency for taking these options forward. The details of these options are currently being worked up. The project team has agreed with the OCH senior team that £350K is allocated for this contingency.

An economic appraisal has not been carried out as only one option has been appraised at FBC stage. This is consistent with the preferred option at OBC.

The Trust has negotiated a further discount with TPP, considered as part of the approved May 2013 Board paper, which will be triggered on consolidation of the pathology hot lab facilities on the Lister site. This discount will only be agreed on consolidation. However the work carried out by TPP and the Trust in 2012 calculated the discount to be £1.265 million per annum and £350,000 contingency has been included for any delays occurred with TPP. Using this savings figure and relating to a capital cost of £998,827 plus a contingency for microbiology of £350,000 plus lifecycle, gives an internal rate of return of 119%.

The anticipated total capital cost is £1,398,827 (incl VAT). This included £600,834 plus VAT required for construction and £350,000 for the contingency for any TPP delays. The above assumes the engineering services works are included. This remains work-in-progress and will be further developed once further survey / design information becomes available.

This FBC does not include tendered costs for the construction work, which are expected in late October 2013. There is a risk of increased construction cost due to the nature of the environment in which the construction work will need to be undertaken as well as the outcome of the Asbestos survey report. Initial indication from the asbestos survey indicates that the area has wide spread asbestos and this is likely to have a negative impact on the cost of the project. To mitigate these risks a contingency of £100,000 is included for the construction costs and £100,000 for asbestos removal, the value of which is consistent with the advice given by the quantity surveyor.

8.0 Changes from OBC to FBC

A number of changes have occurred since the Pathology OBC was approved by the Trust Board in September 2010. The most significant changes are detailed below:

- The Trust has just entered a joint venture agreement with TPP with six other Trusts. This has resulted in changes in service model and an increase in the required space to be provided for Histopathology cut up rooms and consultants reporting rooms.
- At OBC, the annex part of Pathology services was allocated to Pharmacy. However due to the additional space requirement for pathology this was deemed unworkable and has driven the decision to move Pharmacy out of the annex area. The FBC is based on Pathology having all of the existing areas for the development of Pathology hotlab and Pharmacy have identified an alternative solution, which is developed separately.
- The joint venture has also had an affect on staffing. The formation of TPP will result in the TUPE transfer of 'in scope' pathology staff to Cambridge University Hospitals and the TUPE transfer of Microbiology staff to Public Health England (PHE) with effect from 1st January 2014. The consortium will operate a hub and satellite model.
- The existing pathology area was revised to provide additional space for Chemotherapy and a permanent separation provided between both departments.
- At OBC, the agreed capital budget for Pathology hotlab was £2.2m. The construction budget has been reduced to circa £1m. The current design has five phases and phases 3, 4 and 5 are dependent on TPP implementation in January 2014. If there is a delay to the TPP timeframe a contingency will be required for taking this phasing forward. The details of the contingency options are currently being worked up. The Project Team has agreed with the OCH senior team that £400K is allocated as contingency from the original OBC budget.

9.0 Affordability

The Trust has negotiated a further discount with TPP which will be triggered on consolidation of the pathology facilities in the Lister site by reducing the number of hotlabs from two to one at Lister site. This discount will only be agreed on consolidation. However the work carried out by TPP and the Trust in 2012 calculated the discount to be £1.265 million per annum, and this saving has been assumed in the current Long Term Financial Model.

The detail of the £1.265 million savings is broken down as follows:

	2 Satellites	1 Satellite
Staffing profile by pay bands	WTE	WTE
AfC band 1	0.00	0.00
AfC band 2	29.00	23.00
AfC band 3	0.00	0.00
AfC band 4	6.00	8.00
AfC band 5	2.00	2.00
AfC band 6	36.00	19.00
AfC band 7	6.50	5.50
AfC band 8a	3.00	2.50
AfC band 8b	1.00	1.00
AfC band 8c	0.00	0.00
AfC band 8d	0.00	0.00
AfC band 9	0.00	0.00
Clinical scientist	0.00	0.00
*Consultant medical (WTE working on laborator	7.50	7.50
Medical Secretaries	8.92	8.92
TOTAL STAFF	99.92	77.42
TOTAL STAFF COSTS	£ 3,691,509	£ 2,934,460
Non-pay costs		
Logistics	27,900	-
Consumables	114,238	102,814
Reagents	955,714	907,928
Other subcontractor costs	172,662	78,190
Equipment/Maintenance	272,434	272,434
On Call Costs	464,052	261,931
Other subcontractor costs	103,079	92,771
Fixed		
Utilities	114,140	114,140
Rent	392,629	180,177
IT (licences, maintenance and support etc	293,880	293,880
Capital charges	113,782	211,930
TOTAL NON-PAY COSTS	£ 3,024,511	£ 2,516,196
TOTAL SATELLITE COSTS	£ 6,716,020	£ 5,450,656

This table has been previously discussed and submitted to TPP and therefore should present a more than indicative basis for the calculation of the discount.

10.0 Procurement

The Pathology project was included in the High Level Information Pack for the Phase 4 Procure 21+ (P21+) selection process that was undertaken in 2010, and IHP were appointed following a rigorous process, set out by the DH P21+ guidelines for the ED, Theatres and New Ward Block schemes.

Therefore, in principle the Trust Board has approved the use of P21 and P21+ as the procurement route for all Phase 4 projects. The P21+ process was considered but due to small capital costs of the preferred option and nature of the refurbishment works P21+ is not an economically viable option based on the Trust's experience with ward 7a. Works will therefore be carried out through a traditional build via a competitively tendered process to ensure the best price is obtained.

11.0 Programme and Project Management

As the project forms part of the OCH programme, the project will be managed through the governance structure established for implementation of Phase 4 within the Trust.

The Trust OCH Programme Board will be responsible for strategic leadership and authority to ensure the delivery of the consolidation of acute services onto the Lister site, of which this forms a part. It consists of the Trust's executive team, project directors, senior members of the OCH project team and the communication team.

The Pathology and Pharmacy Project Board will take responsibility for the implementation and delivery of the pathology hot lab project brief, including the management of the tendering process, any further design and procurement processes and communication. The Board consists of the project director, clinical leads, service managers, finance, human resources, staff side and the hospital project team.

The Pathology and Pharmacy Project Board will be subject to a rigorous scheme of control on the management of capital costs. Variations to contract and design plans resulting in additional capital costs will be escalated to the OCH Programme Board for decision.

12.0 Key Milestones

Date	Milestone
4 September 2013	Submission of FBC
25 September 2013	Approval of FBC
1 January 2014	Implementation of TPP services
April 2014	Phase 1 hot lab completed
May 2014	Microbiology moves off-site
May 2014	Phase 2 hot lab completed
June 2014	Phase 3 hot lab completed
July 2014	Phase 4 hot lab completed
September 2014	Phase 5 hot lab completed
October 2014	Lister services in place to support consolidated ED services
October 2014	Service transfer from QEII to Lister

13.0 Benefits Realisation

The Benefits Realisation Plan has been completed and is an initial high-level assessment of the benefits and measurable outcomes to be achieved. Further work is required to identify the specific projects to strengthen and ensure the delivery of the emergency services consolidation objectives relating to pathology. The anticipated high level benefits are as follows:

- Improve efficiency and hot lab response times for inpatient specimens, ensuring 95% of the specimens from AAU are reported within 1 hour
- Increased satisfaction for service users
- Improved job satisfaction for staff
- Improved recruitment and retention
- Comply with MHRA recommendations on transfusion space
- Maintain CPA accreditation for phlebotomy
- Achieve a risk adjusted backlog maintenance saving of £60,484

14.0 Timetable for FBC Approval process

Date	Meeting
5 September 2013	Pathology and Pharmacy Project Board
12 September 2013	Executive Committee
12 September 2013	Our Changing Hospitals Programme Board
18 September 2013	Finance and Performance Committee
25 September 2013	Trust Board

15.0 Conclusions/Recommendations

The consolidation of pathology services is an integral part of the Phase 4 programme it will facilitate the consolidation on to the Lister site and provide for much needed improvements to the existing accommodation; the introduction of new technology and contribute to ensuring that pathology services are efficiently organised and operated. This will ensure that pathology services continue to support the clinical needs of the Trust.

In conclusion, the Pathology Project Board recommend this FBC is approved to proceed to the construction stage via a traditional competitively tendered contract.