St George's Healthcare NHS
NHS Trust

Name and date of meeting:

Trust Board - 27 November 2014

Document Title:

Adult Critical Care Expansion

Action for the Trust Board:

Agree the Outline Business Case (OBC) in order that the development of the associated Full Business Case (FBC's) can take place in line with the proposed timescales.

Summary:

Case for Change

Activity across the trust continues to increase and therefore the requirement for critical care also continues to rise. The number of beds within the critical care service has increased over recent years. This has been possible by adding additional beds into shell space within the General ITU, which is now full, provision of the satellite unit on Holdsworth ward and the shared space on the Coronary care unit. The service is now at a point that the units are often full and therefore cannot take elective or emergency patients in a timely way. Considerable effort is required to move patients in order to have the capacity to take emergency patients and all three units are required to take emergency patients to support tertiary referral services. In order that critical care does not become a blockage for patient flow within the trust additional capacity is urgently required.

Numbers of critical care beds

SGH Specialty Desc	*2009-10*	*2010-11*	*2011-12*	*2012-13*	*2013-14*	*2014-15*
NICU	12	13	14	14	14	14
CTICU	10	12	12	15	17	18
GICU	17	17	17	18	21	21
Total	**39**	**42**	**43**	**47**	**52**	**53**
Annual % increase		7.7	2.4	9.3	10.6	1.9

The demand for critical care has been reviewed considering the increase in emergency patients, service changes and historical activity. The increase equates to a 3.4% annual increase in bed day activity which is summarised in bed numbers in the table below. An additional 13 beds is required to provide capacity for at least the next 6 years, taking the total critical care beds to 66. The number of beds required over time is shown in the table below. Any unplanned speciality expansions, currently unknown, will affect the number of beds required and any additional critical care capacity will need to be considered in any such development.

The demand for beds in 14-15 is estimated at 54 current capacity is 53, there are discussions taking place in order to provide emergency short term capacity for critical care during Q4 of this year.

	2014-15	2015-16	2016-17	2017-18	2018-19	2019-2020	2020-21	2021-2022	2022-23	2023-24
CCMDS Out Turn	21395	22122	22875	23652	24457	25288	26148	27037	27956	28907
Beds required	54	56	58	60	62	64	66	68	70	73

In addition to capacity constraints the current General Intensive Care Unit (GICU) is not in

line with current Health Building guidance (HBN 04-02), the NHS Estates guidance for the built environment for intensive care areas, which is essential in achieving other standards and efficiencies in patient pathways, clinical synergies & quality of critical care service delivery as well as efficiencies in bed management. This may be challenged by the commissioners.

GICU currently manages a significant number of immunosuppressed patients, in particular, neutropenic patients. These patients are especially vulnerable to opportunistic and nosocomial infections and as such, should be managed in positive pressure, isolation rooms, which are equipped with antechambers. GICU currently has no pressurised isolation rooms and only one room with an antechamber. As a result we are not able to provide the most appropriate environment to care adequately for these patients. As haematology, oncology and infectious diseases services continue to expand, the numbers of such patients will continue to increase. Thus there is a pressing imperative to build these facilities within the confines of GICU.

Economic Case
The long list of options was developed and consolidated into the following three short list options;

- Option 1 – Do Nothing for baseline comparator
- Option 2 – A phased option is planned delivering; first an additional four bed spaces on the neuroscience intensive care unit and then a General Intensive Care Unit roof-top extension on St James's Wing and internal refurbishment totalling 2,244 sq m – delivering an additional nine new compliant bed spaces plus an upgrade of 9 existing bed spaces to compliant standards providing a total of 66 beds.
- Option 3 – New build located adjacent to Knightsbridge Wing with maximum capacity beds numbers 10 beds taking total beds to 67 beds.

The capital costs of option 2 is £13,607k whereas the new build option is £20,735k

Commercial Case
The scheme is to be procured under traditional method (OJEU). This route has been chosen as the design work is already completed in detail due to the necessity of confirming whether the feasibility of building works.

Financial Case
The capital costs are defined in the economic section, the revenue costs are based on the pay and non-pay requirements for critical care. The staffing requirements are based on commissioning standards for clinical staff and given the type of service there is little administrative requirements. The non-pay and indirect costs have been calculated on a pro rata basis on the number of beds, this will be refined at the FBC stage.

The table below highlights the overall financial position, the EBITDA demonstrates a surplus in all years apart from 16-17 during which staff levels, particularly for nursing staff, increase as new bed capacity comes online in Q3/4. However the income benefit is not expected to be fully realised until Q1 17-18 onwards.

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Income	0	1,035	2,145	3,297	4,410	5,544
Total Operating Costs	0	-513	-2,495	-2,894	-2,810	-4,125
EBITDA	**0**	**523**	**-350**	**404**	**1,600**	**1,419**
Depreciation	0	-11	-168	-298	-304	-311
Impairments	0	-705	-2,369	0	0	0
Surplus before interest	**0**	**-193**	**-2,887**	**106**	**1,295**	**1,108**
Interest on loans	-16	-257	-473	-454	-435	-415
PDC dividend payable	0	24	269	101	66	58
Surplus/(deficit) for the year	**-16**	**-426**	**-3,092**	**-247**	**927**	**750**

Management Case
The project will be managed using PRINCE 2 compliant methodology and project management tools such as Gantt charting and critical path analysis. Project direction and management will be determined by the Project Board.

The project will be managed by the St George's Hospital Healthcare Trust. The Project Board has the responsibility to drive forward and deliver the outcomes and benefits of the project, being the provision of an expanded, modern and safe Critical Care service, compliant with NHS standards of construction and delivery.

In order to ensure successful delivery of the development, the Project Board is made up as follows:

Member	Title
Eric Munro	Director of Estates & Facilities; Chair
Sofia Colas	Divisional Director of Operations
Dr Andrew Rhodes	Divisional Chair, Women's, Children's and Critical Care
Sharon Welby	Project Manager / Deputy Director of Estates
Kevin Harbottle	Assistant Director of Finance
Anne Palmer	Senior User / Head of nursing for Adult Critical Care
Dr Mark Hamilton	Senior User / Clinical Director of Adult Critical Care
Jennifer Owen	Senior User/ General Manager Critical Care

The detailed programme for the development is dependent on the preferred option and dates may change as a result, however indicative milestones for delivery are as follows: The OBC sets out the requirements following the 5 case model, the executive summary of the OBC can be read as a synopsis for the full OBC but provides more detail than this summary document.

Milestone	Date
Preparation of Strategic Outline Case	July – August 2014
Detailed Design complete	August 2014
Strategic Outline Case & Outline Business Case Trust Board Approval	November 2014
Financial Plan complete	November 2014
Strategic Outline Case & Outline Business Case to NTDA	December 2014
Full Business Case submission to Trust Board	February 2015
Full Business Case to NTDA	March 2015
Full Business Case Approval (internal & external)	end of May 2015
Construction commences	June 2015
Handover	July 2016
Trust Commissioning Period	August 2016
Trust Operational	September 2016

Considerations for the Full Business Case

In addition to the requirements of the full business case through the 5 case model, the Executive Management Team requested that the following items be included to provide assurance on the plans;

- Detailed recruitment plan for nurses and medical staff
- Detailed construction phasing to provide assurance that the loss of beds during the build phase is risk assessed and managed accordingly to reduce the impact on clinical safety and activity.
- Refining the income and expenditure profiles in order to mitigate the small loss in financial year 2016-17

Author and Date:

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20 November 2014

Presented by:

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