UNIVERSITY HOSPITALS BIRMINGHAM NHS FOUNDATION TRUST
BOARD OF DIRECTORS
THURSDAY 24 JULY 2014

Title:	**EXPANSION OF RENAL TRANSPLANT SURGERY**
Responsible Director:	Andrew McKirgan, Chief Operating Officer
Contact:	Dr Nick Murphy, Divisional Director, Division B

Purpose:	To request Board of Directors approval to investment in renal transplantation.
Confidentiality Level & Reason:	N/A
Annual Plan Plan Ref:	• Always put the needs and care of patients first • Advance our reputation and position at the leading edge of performance and quality. • Enhance our reputation for excellent financial management and efficiency. • Educate and train the healthcare workforce of the future.
Key Issues Summary:	• Risks evaluated and preferred option described.
Recommendations:	The Board of Directors is requested to: **Approve** the proposed strategy for the expansion of renal transplant surgery.

Approved by	Andrew McKirgan	**Date:**	15 July 2014

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PRESENTED BY CHIEF OPERATING OFFICER

1. **Purpose of the Paper**

The purpose of this paper is to seek Board of Directors approval to investment in renal transplantation.

2. **Current Position**

Chronic kidney disease requiring dialysis is a life limiting condition. It dramatically impacts upon life quality as well as life expectancy. In patients considered suitable for renal transplantation, this is the therapy of choice. The Renal Surgical Unit at UHB is one of the largest in the UK. It provides renal transplantation to a population of 4.5 million and provides surgical support to one of the largest renal failure programmes in Europe. The demographic features of the West Midlands mean that the demand for renal transplantation is disproportionately high compared to the UK as a whole.

UHB is currently commissioned to perform 171 transplants per year. In 2012-13, 149 kidney transplants were performed (66 live and 83 deceased donor) with a further 14 paediatric transplants. In 2013/14 180 transplants were performed. The Unit has 622 patients on its waiting list, making it one of the largest in the UK. As well as having a large waiting list, the average waiting time is longer than the national average: 1,845 days at UHB compared with the national average of 1,197 days.

3. **Drivers for Change**

There are a number of drivers for change that need to be considered:

3.1 <u>National Commissioning Standards in Adult Renal Transplantation 2013/14 (A07/S/a)</u>

A key principle within the national commissioning standards recently issued relates to timely access to operating theatres to ensure optimal cold ischaemic time. This will minimise the risk of delayed graft function and optimise graft survival.

3.2 <u>Recommendations from NHSBT</u>

In February 2013 NHS Blood & Transplant (NHSBT) raised concerns about the significant variation in turn down rates between centres. This

identified UHB as an outlier. NHSBT visited the Unit in November 2013 to discuss this issue further. They expressed their concerns that patients who are listed at QEHB may be disadvantaged as there is only one other centre in the UK with a longer waiting time.

3.3 Reducing the waiting list

UHB has amongst the largest waiting lists and longest waiting times (lowest turnovers) in the UK. This needs to be reduced to ensure:

- equity of access to renal transplantation for the West Midlands population
- optimisation of donated organs by minimising late decisions not to proceed to transplantation because the recipient is considered unfit
- optimisation of the beneficial effects of transplantation

4. Divisional Proposal

4.1 In order to reduce the waiting list and bring activity up to the expected national level, major change is required. This is of such a degree that to be realistic and achievable we propose implementation over two phases:

- Phase One = 225 transplants per year
- Phase Two = 275 transplants per year

4.2 Access to theatres

At present renal surgery have 9 elective theatre sessions per week which are utilised for living donor transplantation, deceased donor transplantation and other elective cases including vascular access. If a deceased donor kidney needs to be scheduled outside of this time, the operation has to be accommodated on the general emergency list.

4.2.1 Out Of Hours

Operating outside of normal hours has an adverse impact on the clinical outcome of kidney function: local audits have shown that operations performed out of hours have a delayed graft function of 39%, compared to 20% when operations are performed in hours.

4.2.3 Proposed Changes

Based on these clinical and statutory drivers for change, it is proposed that renal surgery have access to theatre 8am-8pm 7 days per week.

- Phase one: 8 am – 8 pm Monday to Friday; 9am-5pm Saturday and Sunday
- Phase two: 8 am - 8 pm Monday to Sunday

This provides a more cost effective service than 24 hour dedicated theatre whilst allowing most kidneys to be performed within optimal cold ischaemic times.

5. Finance

The table below summaries the income and expenditure associated with the proposal.

	14/15 £000's	15/16 £000's
Income		
Donor Nephrectomy	33	189
Cadaveric Transplant	174	1,031
Live Transplant	162	916
ARC Bed Income	30	174
OP review	14	60
Total Income	**414**	**2,370**
Expenditure		
Direct Pay		
Consultant Nephrologist	(105)	(327)
Surgeon	(52)	(126)
Less: Consultant baseline budget	152	152
Other	(258)	(1,072)
Support Services	(152)	(678)
Total Expenditure	(415)	(2,051)
Contribution	(1)	319
Rate of Contribution	-	13%

Please note that the 15/16 column relates to total income and costs incurred, and not the growth between financial years.

5.1 Non recurrent revenue

There will also be a non recurrent revenue requirement in both 2014/15 and 2015/16 for theatre trays and theatre instruments of £69k per year.

5.2 Income Assumptions

During the 2014/15 financial planning round the division was re-based at 200 renal transplants. The above table assumes that activity will increase to 213 in the current financial year, and 275 by the following year.

Phase 1 growth (which takes the transplant activity to 225) has been proposed and provisionally agreed with commissioners, phase 2 growth (275 transplants in total) will need to form part of LDP discussions in 15/16.

Income has been calculated using 14/15 prices, however it should be noted that the local prices agreed for renal transplant are subject to review by commissioners on an annual basis and thus there is the risk that they reduce in future years

5.3 Personnel

There are a number of additional personnel required to meet activity levels for phases one and two and a summary is provided below:

Staff Group	Phase One	Phase Two (additional to phase one)
Surgeon	1.00 wte	-
Nephrologist	2.00 wte	0.60 wte
Junior doctors	1.00 wte	-
Clinical Nurse Specialist	2.00 wte	0.60 wte
Donor coordinators	1.00 wte	1.00 wte
Ward nursing - trained	0.74wte	1.49wte
Ward nursing - untrained	0.43wte	0.86wte

6. Risks and Benefits

It is evident locally, regionally and nationally that QEHB has been unable to provide sufficient renal transplantation activity for its constituency. The West Midlands requires more renal transplant activity. This was clearly stated in the recent NHSBT visit to review turn down rates.

6.1 Risk

6.1.1 Unsustainable activity levels

There has been a sustained increase in the number of patients being added to the transplant waiting list and there are no indications that this will stop. The End Stage Renal Failure population is expected to plateau so it is not anticipated that the numbers will grow as in previous years, but a steady stream of additions each year is still expected.

6.1.2 Transfer of work within the West Midlands

If QEHB cannot effect positive change then there is the real possibility that the Unit may have to look to transfer patients to other Centres within the West Midlands area to prevent patients

waiting unacceptable times for their operation. This would have a detrimental impact on both the renal transplant unit and the Trust as a whole.

6.2 Benefits

- Further improve the reputation of the department and the organisation within the transplant community at a local, national and international level
- Ability to make inroads against the transplant waiting list. The sustained growth of the waiting list means that we have to take positive action in order to have any effect on this.
- It is expected that the tariff for dialysis will be driven down further by commissioners; therefore by increasing the number of patients who have transplants provides some mitigation against this.
- Delivery against the National Commissioning Standard

7. Conclusion

UHB has a successful renal transplant service but it is now important to further develop the unit to ensure it can compete with other large units in the UK. This paper shows the necessary investment the unit requires to make the necessary changes to ensure it offers a high quality, multi-disciplinary service to our patients.

8. Recommendation

The Board of Directors is requested to:

Approve the proposed strategy for the expansion of renal transplant surgery.