

Meeting 5 November 2020 – CT Coordinators

## Developing Strategies to Increase Donor Lung Utilisation in UK Pulmonary Transplantation

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### Project overview

Research question	Project	Theoretical basis linking project to organ utilisation
Can an objective measure of organ quality be developed, to be used as a tool to aid decision making in lung transplant?	<b>1. Development of the UK Lung Risk Index</b>	Objective assessment of organ quality and a tool to aid decision making will improve organ acceptance and utilisation
Why are organs declined for transplantation in UK cardiopulmonary transplant practice and can a behaviour change intervention be used to influence organ decline rates?	<b>2. Cardiothoracic Organ Offering and Utilisation Behaviours</b>	A better understanding of the reasons for organ offer decline will facilitate the design behaviour change interventions to address organ utilisation

### 1. Development of the UK lung Risk Index

#### Collection of Primary Graft dysfunction data

1. Centre-based
2. 2002 onwards
3. For each recipient – Chest x-ray findings, PaO<sub>2</sub>, FiO<sub>2</sub> at 24,28,72 hours after implantation

Previously performed in heart transplant dataset by Sanjeet Singh, NHSBT clinical research fellow

Current numbers for each centre are X

Excell spreadsheet for your centre. Permission has been agreed from CTAG and additional written permission from centre directors will be obtained prior to commencing data collection

### 2. Cardiothoracic Organ Offering, acceptance and utilisation behaviours

#### Hypothesis

Reasons for decline of cardiothoracic organs in UK cardiopulmonary transplantation are poorly understood. A better understanding of surgeon decision making in organ acceptance and the reasons

for organ decline, will facilitate the design of interventions aimed at addressing low utilisation rates in UK Cardiopulmonary transplantation.

Audit, with regular reporting of organ declines to centres, as a behaviour change intervention, will improve organ offer acceptance behaviours and utilisation.

**a. Prospective observation study of reasons for organ offer decline study**

Participating UK Cardiothoracic centres will be identified through the NHSBT Cardiothoracic Advisory Group (CTAG). A named investigator, in the role of transplant coordinator, will be identified in each centre and consent for participation will be obtained from the centre director and the investigator.

A study period of 6 months will be defined. Data will be collected on all donor heart and lung offers to the centre, which are declined, following discussion with the on call surgeon.

*Data collection*

A donor identifier for each declined lung offer will be recorded and later anonymised for data analysis. The reasons for decline of the organ will be documented contemporaneously or within 12 hours, by the nominated co-ordinator investigator. These will be documented as free text verse including the reasons given by the on-call surgeon for decline and the co-ordinators perception of the reason for decline.

*b. Audit of offer declines from organs meeting 'ideal donor' criteria, with clinical review and reporting to centres*

Participating centres will be identified through the Cardiothoracic Advisory group (CTAG). A monthly audit of data from the UKTR will be used to identify cardiothoracic organ offers that were declined by participating centres. The donor characteristics will be reviewed and offered lung donors meeting *ideal* and *extended* criteria will be highlighted. The outcome of offering for the donor organ will be identified; accepted, transplanted, not transplanted. This information will be disseminated to the centre director of the participating centre.

*Data analysis*

The centre specific utilisation rates before, during and 6-months after the audit period will be analysed. A questionnaire will be completed by the coordinators and centre transplant surgeons to rate the impact of the audit