

**NHS BLOOD AND TRANSPLANT
ORGAN DONATION AND TRANSPLANTATION DIRECTORATE**

LIVER ADVISORY GROUP

LIVER NATIONAL OFFERING SCHEME
– PERFORMANCE MONITORING AND SURVEILLANCE

BACKGROUND

- 1 Liver offering is currently on the basis of centre prioritisation except for super-urgent, hepatoblastoma or combined liver and intestinal patients, where offering is on a named patient basis.
- 2 The Liver Advisory Group (LAG) have agreed on new proposals that will see patient based liver offering extended to the majority of patients. The principle behind the new scheme is that elective adult patients will be prioritised on the basis of their expected benefit from receiving the particular liver graft on offer. This ‘transplant benefit’ is determined by the difference between expected survival with this graft and the expected survival if the patient remains on the list. The patient expected to gain most benefit will be offered the liver.
- 3 The transplant benefit will be applied to offers of livers from donors after brainstem death (DBD) to adult, small adults and large paediatrics on the elective waiting list with an indication from transplantation in the chronic liver disease or hepatocellular carcinoma groups. The Core-Group-agreed liver donor and recipient age groups are presented at **Appendix A** while the high-level detail of the agreed principles for the offering of all deceased liver donors to all liver and all intestinal recipients are shown at **Appendix B**.
- 4 The LAG agreed that offering of donors after circulatory death (DCD) should remain unchanged for the first several months of the new scheme, to understand fully the implications and put in place any arrangements that are deemed necessary for effective and efficient DCD offering.
- 5 This paper presents an outline proposal to monitor the new liver offering scheme after its introduction.

PERFORMANCE MONITORING AND SURVEILLANCE PROPOSAL

Purpose

- 6 Need for enhanced monitoring following introduction of the National Liver Offering Scheme for DBD adult liver allografts.
- 7 Monitoring of process, outcome and balancing measures. Correct unintended consequences.

Frequency and dissemination

- 8 A report will be produced by NHSBT Statistics and Clinical Studies on a regular basis and presented to LAG members. Initially, a report will be generated at 3 month intervals, then at 6 and, once the Group deems it appropriate, on a yearly basis.
- 9 The report will be produced for the Monitoring Committee, which will be responsible to the Associate Medical Director, ODT. It needs to be agreed how to disseminate monitoring data to both clinicians, patients and the wider public.

Composition of the Monitoring Committee

- 10 Transplant hepatologist, general hepatologist, transplant surgeon, professional society representative, recipient co-ordinator, lay member, patient representative, LAG Core Group liaison, external observer.
- 11 In addition, the Committee will have support from NHSBT Statistics and Clinical Studies and ODT Hub.

Contents

- 12 The report will be split into four main sections; (1) waiting list, (2) offering, (3) transplant activity and (4) patient outcomes. Charts will be preferred over text or tables.
- 13 Mostly national data will be presented; there will be no centre-specific break down of data except in some cases. Monitoring of individual centre trends will continue to be done through the CUSUM, dashboard and NHSBT Annual Reports.
- 14 Recipients aged between 17 and 25 y.o. will be monitored separately to ascertain whether this age group is getting transplanted in a timely manner.

(1) Waiting list

- Elective liver transplant registrations
 - Chronic liver disease
 - HCC
 - Variant
- Wait list mortality
 - Aetiology, inc. those undergoing re-transplantation
- Waiting time
 - Aetiology, inc. those undergoing re-transplantation
- Variation in Transplant Benefit Score for individuals
- Sequential data form completion rate

(2) Offering

- Donor utilisation
 - Decline rates
 - Primary offer decline rate
 - Reasons for decline
 - Non-utilisation of retrieved livers

- Number of calls per donor per centre
- Offering time per donor
- Acceptance rate for variant syndrome offering
- Surges in number of offers to the same transplant centre
- Rate of fast track

(3) Transplant activity

- Number of donors
- Number of transplants
 - Age group
 - Aetiology
- Travel times and cold ischaemic times
 - Centre
- DCD transplant activity – changes in utilisation rate
- Re-transplant cases – changes in type of graft pre- and post-new-scheme

(4) Patient and graft outcomes

- Risk-adjusted survival from registration
- Risk-adjusted survival post-transplant

ACTIONS

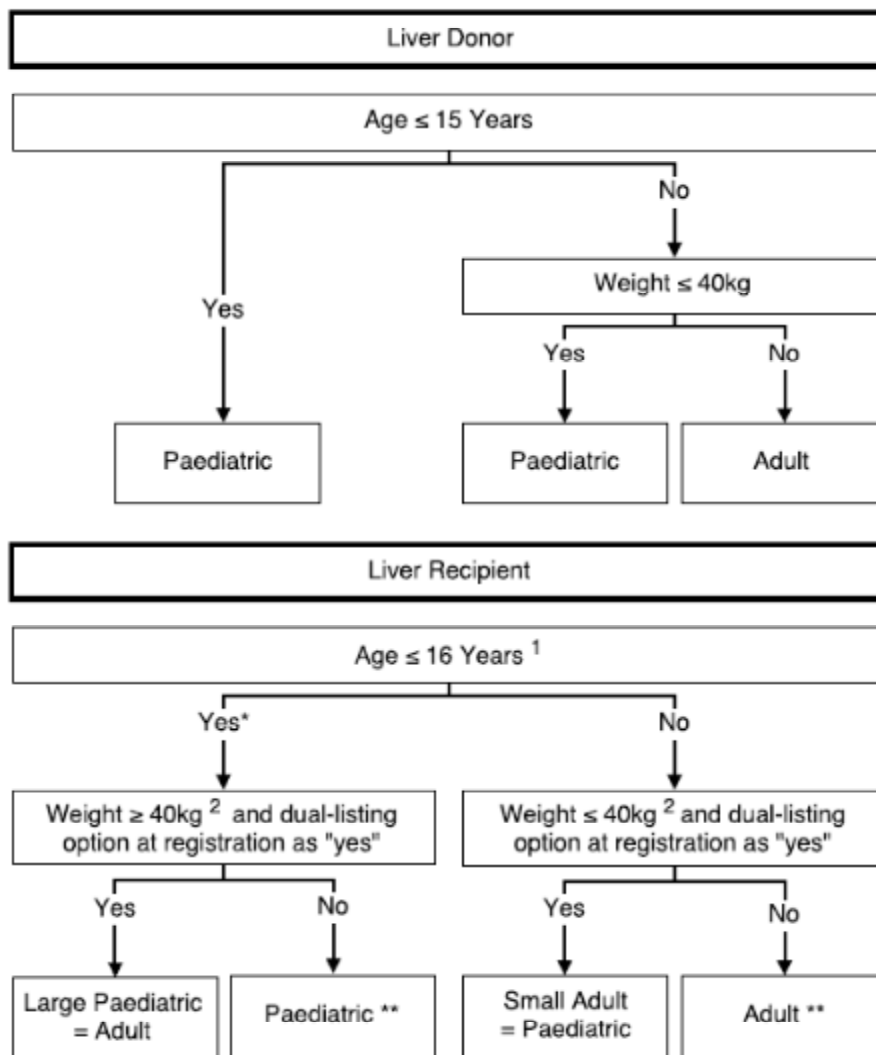
15 Members are asked to review this proposal and comment.

Elisa Allen
Statistics and Clinical Studies

James Powell
Royal Infirmary of Edinburgh

November 2017

Appendix A. Liver donor and recipient age group definitions

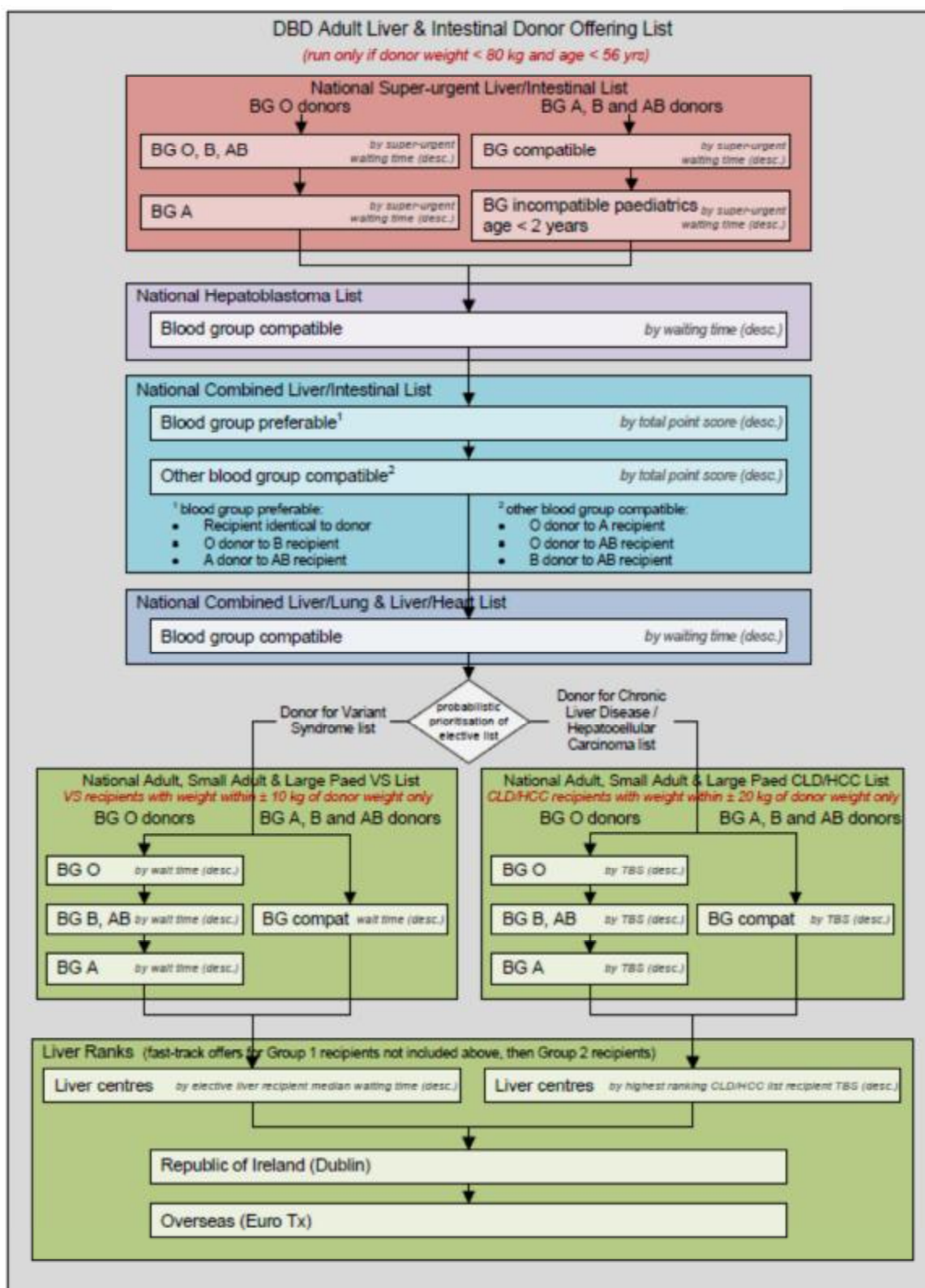


¹ At time of registration

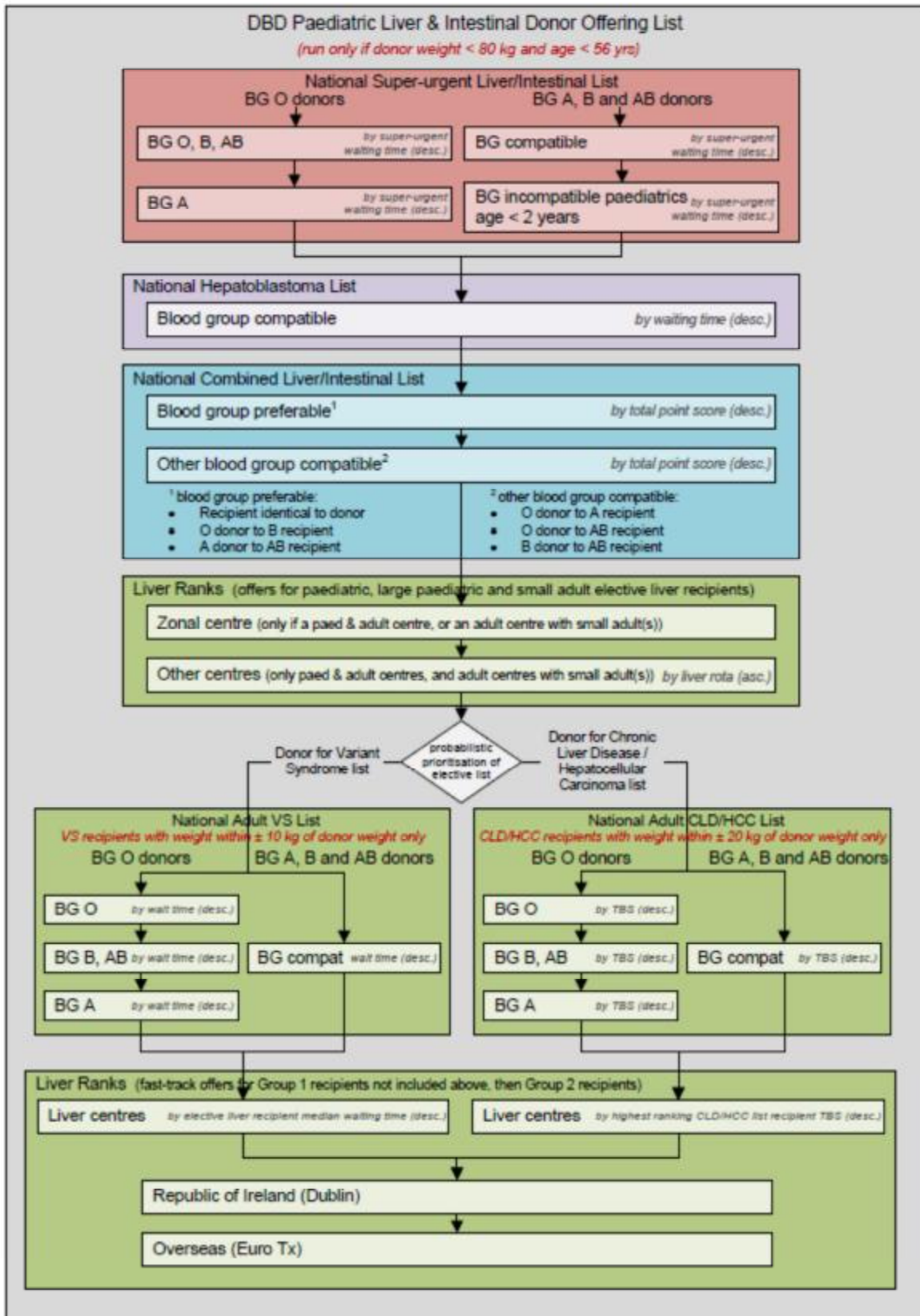
² At time of offer

* A patient registered as paediatric will retain their paediatric status while waiting

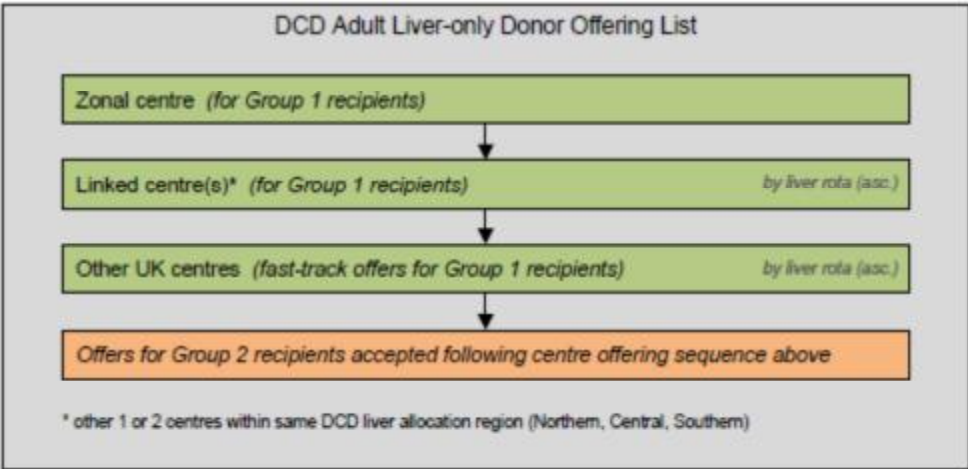
** Transitions from paediatric to large paediatric or adult to small adult will be allowed (to be determined from sequential data collection).

Appendix B. Offering flowcharts for all liver and all intestinal offers¹DBD adult donor offering⁴¹ Note that liver splitting requirements are not shown.² "Probabilistic prioritisation of elective list" in this flowchart refers to the agreed principle to distribute donors so that the proportion of donors accepted for variant-syndrome recipients equals the proportion of variant-syndrome registrations each year.

DBD paediatric donor offering



DCD adult donor offering



DCD paediatric donor offering

