

## NHS BLOOD AND TRANSPLANT

### LIVER ADVISORY GROUP

#### **Proposed key performance indicators (KPIs) for deceased donor liver retrieval by National Organ Retrieval Service (NORS) teams**

As part of the recent NORS review process, it was recommended that KPIs be developed for NORS teams that focus on process, quality, and outcomes (1). This issue has been considered by the NORS Review Implementation Working Group 3, co-chaired by Chris Callaghan and Emma Billingham.

After discussion by working group members, and consideration by the National Retrieval Group, it was decided to request that organ-specific KPIs should be discussed in the relevant advisory group. This recognises that implanting units are the key stakeholders for the NORS teams.

LAG is therefore asked to consider the following proposals for four possible KPI 'domains' for liver retrievals performed by NORS teams:

- 1) Organ damage and/or organs not used due to damage
- 2) Quality of communication between the retrieval surgeon and the implanting team
- 3) Graft outcome
- 4) Timeliness of retrieval, i.e. duration between key timings in retrieval surgery

LAG is asked to consider whether these domains are relevant to liver retrieval, and, if so, to determine if there are liver-specific KPIs that may be appropriate.

Each domain is considered in turn. The recommendations of Working Group 3 are also included.

- 1) Organ damage and/or organs not used due to damage

This is currently tracked using 'moderate' and 'severe' damage combined, as coded on the HTA-B form filled in at the implanting centre. 'Moderate' = organ damage requiring surgical reconstruction; 'severe' = damage leading to organ discard. Funnel plots are used to compare NORS teams.

#### **WG3 recommendation:**

**- continue with the above approach**

2) Quality of communication between the retrieval surgeon and the implanting team  
Data on this are not currently collected. Electronic forms to collect the opinions of the implanting team on communication quality can be developed, if required.

**WG3 recommendation:**

**- the retrieving surgeon should discuss any liver damage, perfusion, or anatomical issue that might affect usability or graft function, with the implanting team**

3) Graft outcome

Graft outcome by NORS retrieving team is not currently analysed, but data are collected. Any liver-specific outcome KPI would need to be validated, risk-adjusted, have a perceived strong correlation with retrieval quality, and have sufficient statistical power to identify outliers. Ideally, an outcome measure would occur early in the post-transplant period in order to enable notification of NORS teams of any emerging quality issues.

**WG3 recommendation:**

**- liver survival at 90 days**

4) Timeliness of retrieval

WG3 was keen to identify one or more KPIs that would encourage timely liver retrieval. The current distribution of times would be used to determine an appropriate target.

**WG3 recommendation:**

**- time from cold perfusion to donor hepatectomy**

The final decisions regarding how these KPIs are to be implemented, and the implications for teams that fail to meet minimum standards, will be made by the NORS Review Implementation Board.

1) [www.odt.nhs.uk/pdf/NORS\\_Review\\_report\\_2015.pdf](http://www.odt.nhs.uk/pdf/NORS_Review_report_2015.pdf). Accessed November 2015.