NHS BLOOD AND TRANSPLANT RETRIEVAL ADVISORY GROUP BLUE LIGHT AUDIT

INTRODUCTION

- 1 This report presents usage of blue lights when transporting organs and NORS teams. Discussions have been held between NHS Blood and Transplant (NHSBT), Department of Health and Social Care (DHSC) and the Department for Transport (DfT) to clarify the current legal position and to improve the governance for the activation of blue lights while carrying organs for the purpose of transplantation.
- 2 The usage of blue lights was analysed for the transport of organs and teams for both living and deceased donors.

COHORT

3 The cohort considered was journeys for organs and NORS teams where blue lights were used between 1 October 2023 and 29 February 2024, data as at 26 March 2024. Data on the usage of blue lights were provided by the transport provider IMT and linked to the UK Transplant Registry using ODT Donor ID.

RESULTS

- 4 Table 1 shows what was being transported for the 100 blue light journeys, with 3 journeys carrying kidney and liver, 1 carrying kidney, liver and pancreas, 1 carrying kidney and pancreas, 1 carrying bowel and pancreas, 1 carrying heart and lung. 35 (35%) of the journeys involved livers, and 1 (1%) involved living kidneys. The 40 heart journeys corresponded to 37 donors, 15 were DCD donors. Table 2 shows the centre requesting the blue light use.
- For the 100 blue light journeys, there were in total 412 activations, corresponding to a mean of 4.1 activations per journey. The median duration of blue lights use was 21.4 minutes, and **Figure 1** shows the distribution of times blue light were used for, with the median represented by dashed red line.
- The day of week and time of day at which the use of blue lights first commenced is presented as a heat map in **Figure 2** and **Figure 3**. Heat maps are used here to indicate the level of activity, darker shades are used to indicate higher activity. **Figure 2** and **Figure 3** show that most blue light journeys took place during daytime between 07:00 and 200:00 with Wednesday being the most common day.

Rachel Hogg Statistics and Clinical Research April 2024

Table 1 Material being transported using blue lights, 1 October 2023 – 29 February 2024	
Material	N
NORS team	35
Liver	42
Pancreas	4
Kidney	11
Small bowel	3
Heart	40
Lung	6
Bloods	0
Equipment	0
Total	100*
* Includes 7 iournous (2 kidney	and liver 1 kidney

^{*} Includes 7 journeys (3 kidney and liver, 1 kidney, liver, pancreas, 1 kidney and pancreas, 1 bowel and pancreas, 1 heart and lung), which are all counted in each individual count

Centre	N
Kings College Hospital - London	14
Queen Elizabeth Hospital - Birmingham	13
Freeman Hospital - Newcastle	11
Royal Free Hospital - London	11
Royal Papworth Hospital	11
Harefield Hospital	7
St James University Hospital - Leeds	7
Wythenshawe Hospital - Manchester	6
Great Ormond Street Hospital For Children	5
Guys Hospital - London	4
Golden Jubilee National Hospital	3
Addenbrookes Hospital - Cambridge	2
Birmingham Childrens Hospital	1
Churchill Hospital - Oxford	1
Derriford Hospital	1
Jack Copeland Centre	1
Oeynhausen Hospital	1
Royal Infirmary Of Edinburgh	1
Total	100

Figure 1 Duration of blue light usage, 1 October 2023 – 29 February 2024

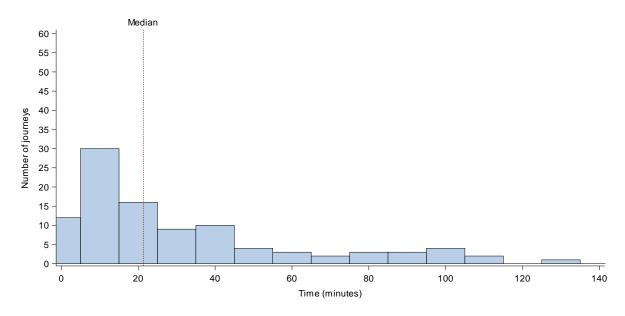


Figure 2 Heat map for day and time of blue light initial use, 1 October 2023 – 29 February 2024

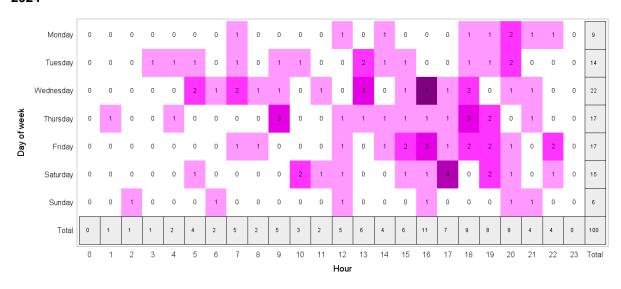


Figure 3 Heat map for time of blue light initial use, 1 October 2023 – 29 February 2024

