



Blood and Transplant

**ANNUAL REPORT ON
THE NATIONAL ORGAN RETRIEVAL SERVICE
(NORS)**

**REPORT FOR 2024/25
(1 APRIL 2024 - 31 MARCH 2025)**

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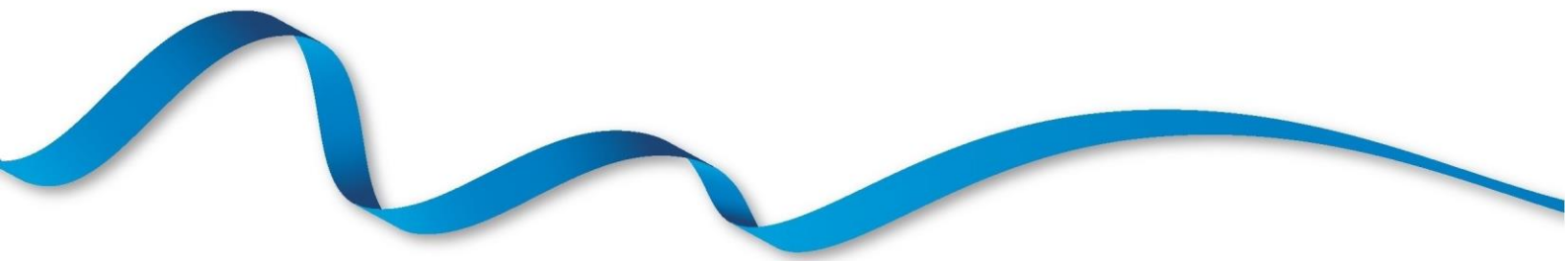


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EXECUTIVE SUMMARY



Executive Summary

The National Organ Retrieval Service (NORS) was introduced on 1 April 2010, comprised of 16 NORS teams; 10 abdominal and 6 cardiothoracic surgical teams available to retrieve organs for transplantation from deceased donors in the UK. This report presents organ retrieval data from the most recent financial year, 1 April 2024 to 31 March 2025. Data were extracted from the UK Transplant Registry on 04 July 2025.

Key findings:

- From 1 April 2024 to 31 March 2025, 1,599 potential organ donors were attended by a retrieval team. 1398 (87%) of these proceeded to abdominal organ donation and 318 (57% of the 559 attended by a cardiothoracic team) proceeded to cardiothoracic organ donation.
- There was a 9% decrease in the number of donors attended in this financial year compared to the previous year (from 1,761 to 1,599).
- On average, 4.4 potential donors were attended by a retrieval team per day, which is a decrease from the previous year (4.9).
- On average, abdominal teams attended at least one donor on 49% of on-call days in the year (51% the previous year), while cardiothoracic teams attended at least one donor on 41% of on-call days (40% the previous year).
- There were statistically significant differences in the mean number of DCD abdominal organs transplanted across abdominal NORS teams.
- The transplantation rates for retrieved organs were variable across organs, from 45% for DCD pancreases, up to 99% for DBD hearts. Additionally, 61 DCD hearts were retrieved, 57 of which were transplanted.
- There were 211 A-NRP attendances, with 187 proceeding to organ donation.

Use of the contents of this report should be acknowledged as follows: *Annual Report on The National Organ Retrieval Service 2024/25, NHS Blood and Transplant*

INTRODUCTION



Introduction

The National Organ Retrieval Service (NORS) was introduced on 1 April 2010, comprised of 16 NORS teams; 10 abdominal and 6 cardiothoracic surgical teams available to retrieve organs for transplantation from deceased donors in the UK.

This report presents organ retrieval activity from the latest full financial year, 1 April 2024 to 31 March 2025. Data were provided by retrieval teams and Specialist Nurses for Organ Donation (SN-ODs) via the Retrieval Team Information (RTI) and Organ Retrieval Information (ORI) forms. None of the forms were missing at time of data extraction, 04 July 2025.

The abdominal service is made up of four full-time teams (52 weeks on-call per annum) and six part-time teams (varying between 15 and 37 weeks on-call per annum), making eight abdominal teams on-call at any time. Since April 2016, following the NORS review, all six teams in the cardiothoracic service are part-time (26 weeks on-call per annum) making three teams on-call at any time. Prior to the NORS review all six cardiothoracic teams were on-call full-time.

Some potential donors are attended by both an abdominal retrieval team and a cardiothoracic retrieval team, but many are only attended by an abdominal retrieval team. Statistics in this report are often presented separately for abdominal and cardiothoracic organ retrieval teams and also for donors after brain death (DBD) and donors after circulatory death (DCD).

Some potential donors are attended by a retrieval team but do not proceed to donation, i.e. no organs are retrieved. Non-proceeding donors are more common in the pool of potential DCD donors as prolonged time to circulatory arrest and death after treatment withdrawal can cause unsuitability of organs for transplantation. Note that a donor may be a non-proceeding cardiothoracic donor but proceed to abdominal organ donation, or vice-versa. Some of the information presented in this report is not relevant for non-proceeding donors and related only to actual donors. We cannot be sure that we have full reporting on all non-proceeding donors attended by retrieval teams as it is only possible to identify these through receipt of an RTI or ORI form.

Since February 2019 NORS teams have been mobilised using a sequence, the first and second teams in the sequence are defined for each UK hospital (largely based on travel times but adjusted to give a more even workload across NORS teams), while subsequent teams in the sequence are ordered based on travel time and availability, known as 'closest available'. If a team is first in sequence for a particular donor hospital, they are required to attend possible donors at that hospital within an agreed timescale if at least one organ has been accepted for transplantation. If the team is already retrieving when they are called to attend, then a second team is called in to retrieve and so on.

ACTIVITY



Donor Attendances

The number of DBD and DCD donors that were attended by each retrieval team between 1 April 2024 and 31 March 2025 is shown in **Table 1a**. The number of donors attended varies due to the geographical distribution of donors and the on-call arrangements, where on-call arrangements for part-time NORS teams are always in a block of seven consecutive days (Monday to Monday).

Table 1a Number of donor attendances (proceeding and non-proceeding) per retrieval team, 1 April 2024 - 31 March 2025, by donor type (DBD/DCD)							
Attending retrieval team (Weeks on-call per annum)	DBD		DCD		Total	% of all donors attended	(% attended in 2023/24)
	N	%	N	%			
Abdominal							
Birmingham (38w)	62	35.4	113	64.6	175	11.0	(11.5)
Cambridge (52w)	81	37.2	137	62.8	218	13.7	(13.4)
Cardiff (15w)	30	42.9	40	57.1	70	4.4	(3.4)
Edinburgh (52w)	49	38.9	77	61.1	126	7.9	(9.4)
King's College (52w)	120	47.6	132	52.4	252	15.8	(15.0)
Leeds (38w)	69	45.1	84	54.9	153	9.6	(9.7)
Manchester (38w)	62	41.1	89	58.9	151	9.5	(8.9)
Newcastle (52w)	68	52.7	61	47.3	129	8.1	(9.3)
Oxford (38w)	76	47.8	83	52.2	159	10.0	(10.1)
Royal Free (38w)	69	43.1	91	56.9	160	10.0	(9.2)
Abdominal total	686	43.1	907	56.9	1593	-	(-)
Cardiothoracic							
Birmingham (26w)	77	78.6	21	21.4	98	17.5	(17.2)
Glasgow (26w)	28	47.5	31	52.5	59	10.6	(11.8)
Harefield (26w)	74	60.7	48	39.3	122	21.8	(19.1)
Manchester (26w)	71	71.0	29	29.0	100	17.9	(14.7)
Newcastle (26w)	39	72.2	15	27.8	54	9.7	(15.7)
Papworth (26w)	50	39.7	76	60.3	126	22.5	(21.5)
Cardiothoracic total	339	60.6	220	39.4	559	-	(-)
Total no. attendances	1025	47.6	1127	52.4	2152	100.0	(100.0)
Total no. donors attended	688	43.0	911	57.0	1599	100.0	(100.0)
There were 3 abdominal retrievals reported as attended by more than one retrieval team. These donors have been allocated to the team which was highest in the attendance sequence. Included in this table are 3 potential donors attended by an off-duty abdominal NORS team (1 from Birmingham, 1 from Manchester, and 1 from Royal Free) and 12 by an off-duty cardiothoracic NORS team (8 from Papworth, 2 from Glasgow, 1 from Newcastle, 1 from Harefield).							

These figures are broken down by whether the donor proceeded to organ donation (actual donors) or not in **Table 1b**. In total in the last financial year there were 1599 donors attended by a retrieval team. Of these 688 (43%) were potential DBD donors and 911 (57%) were potential DCD donors. 674 of the potential DBD donors attended by an abdominal retrieval team (98%) proceeded to abdominal organ donation, while 205 (60%) of the potential DBD donors attended by a cardiothoracic team proceeded to cardiothoracic donation. For potential DCD donors, 724 (80%) of those attended by an abdominal team proceeded to abdominal donation, while 113 (51%) of those attended by a cardiothoracic team proceeded to cardiothoracic organ donation.

Table 1b Number of donor attendances per retrieval team, 1 April 2024 - 31 March 2025 by donor type (DBD/DCD) and proceeding/non-proceeding						
Attending retrieval team (Weeks on-call per annum)	DBD			DCD		
	Actual	Non- proceeding	% non-proc	Actual	Non- proceeding	% non-proc
Abdominal						
Birmingham (38w)	62	0	0.0	92	21	18.6
Cambridge (52w)	79	2	2.5	111	26	19.0
Cardiff (15w)	30	0	0.0	36	4	10.0
Edinburgh (52w)	47	2	4.1	67	10	13.0
King's College (52w)	119	1	0.8	103	29	22.0
Leeds (38w)	67	2	2.9	65	19	22.6
Manchester (38w)	61	1	1.6	69	20	22.5
Newcastle (52w)	65	3	4.4	47	14	23.0
Oxford (38w)	76	0	0.0	59	24	28.9
Royal Free (38w)	68	1	1.4	75	16	17.6
Abdominal total	674	12	1.7	724	183	20.2
Cardiothoracic						
Birmingham (26w)	52	25	32.5	10	11	52.4
Glasgow (26w)	14	14	50.0	15	16	51.6
Harefield (26w)	34	40	54.1	28	20	41.7
Manchester (26w)	50	21	29.6	7	22	75.9
Newcastle (26w)	26	13	33.3	6	9	60.0
Papworth (26w)	29	21	42.0	47	29	38.2
Cardiothoracic total	205	134	39.5	113	107	48.6
Total donors (abdominal and/or cardiothoracic)	676	12	1.7	727	184	20.2
<p>There were 3 abdominal retrievals reported as attended by more than one retrieval team. These donors have been allocated to the team which was highest in the attendance sequence.</p> <p>Included in this table are 3 potential donors attended by an off-duty abdominal NORS team (1 from Birmingham, 1 from Manchester, and 1 from Royal Free) and 12 by an off-duty cardiothoracic NORS team (8 from Papworth, 2 from Glasgow, 1 from Newcastle, 1 from Harefield).</p>						

Figure 1a shows the proportion of donors attended by any abdominal retrieval team. In the last financial year, King's College attended the highest proportion of abdominal donors (16%) and Cardiff attended the lowest proportion (4%), as teams on call for less than 52 weeks a year will naturally attend fewer donors. **Figure 3b** reflects donors per day when on call, which gives a more balanced metric.

Figure 1a Proportion of donors attended by an abdominal team between 1 April 2020 - 31 March 2025

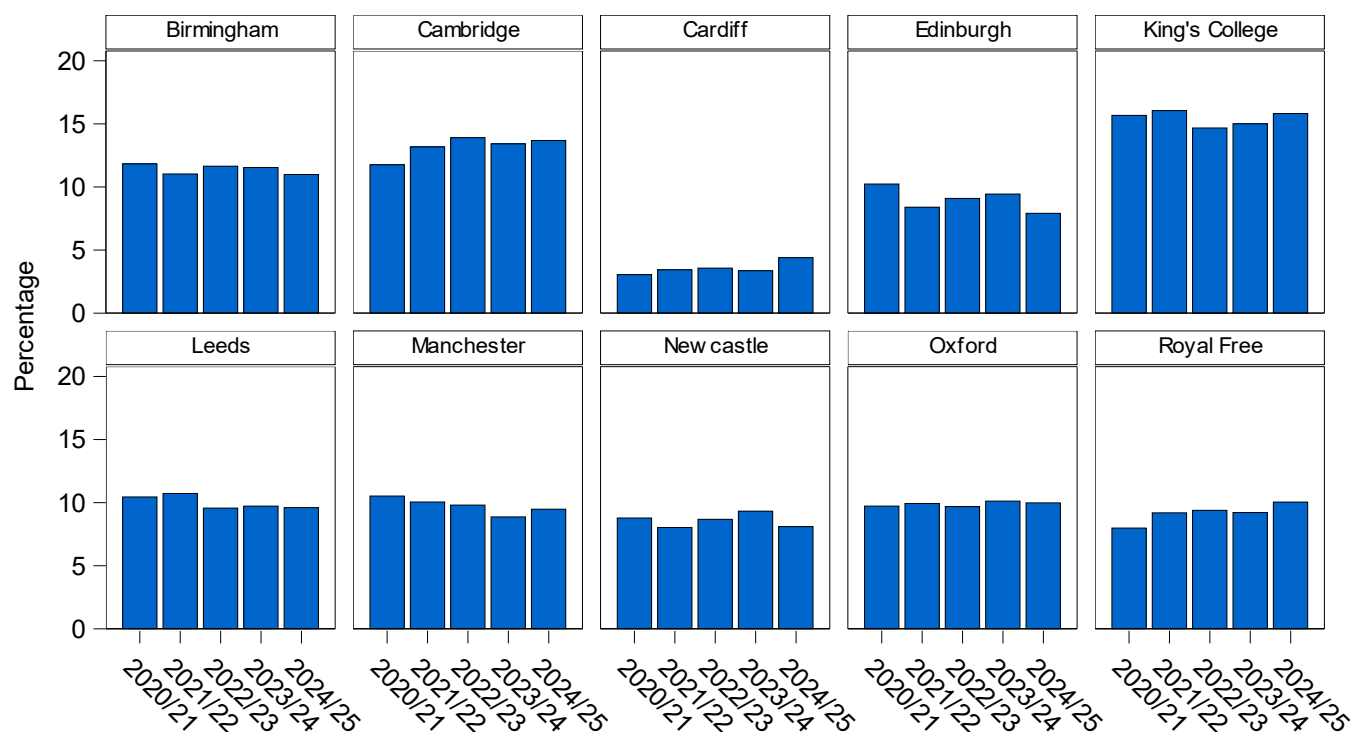


Figure 1b shows the proportion of donors attended by any cardiothoracic retrieval team. In the last financial year, Papworth attended the highest proportion of cardiothoracic donors (23%) and Newcastle attended the lowest proportion (10%).

Figure 1b Proportion of donors attended by a cardiothoracic team between 1 April 2020 - 31 March 2025

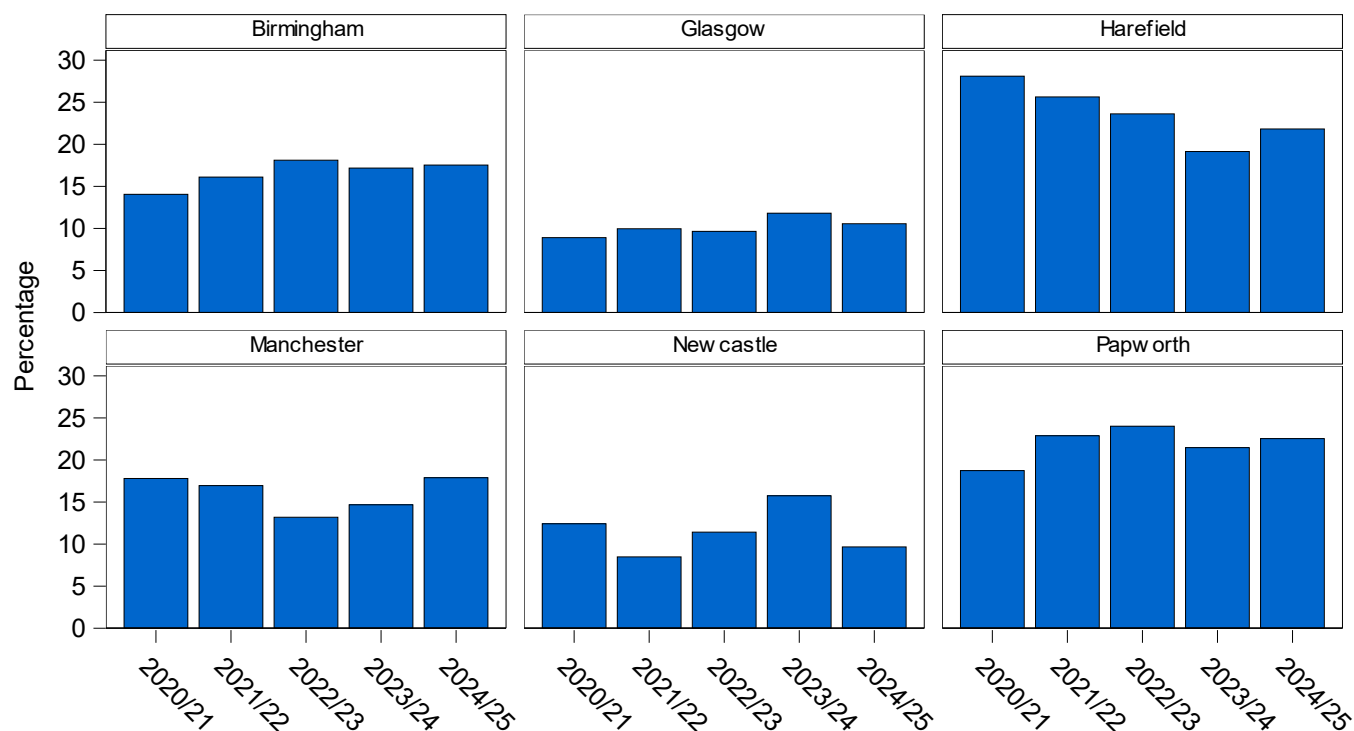


Figure 2 shows the distribution of the number of actual and non-proceeding donors attended by at least one retrieval team, per day in 2024/25. The number of donors per day ranged from 0 (2 days) to 12 (2 days). The mean number of donors per day was 4.4.

Figure 2 **Distribution of the number of actual and non-proceeding donors attended by at least one retrieval team on any one day during 1 April 2024 - 31 March 2025**

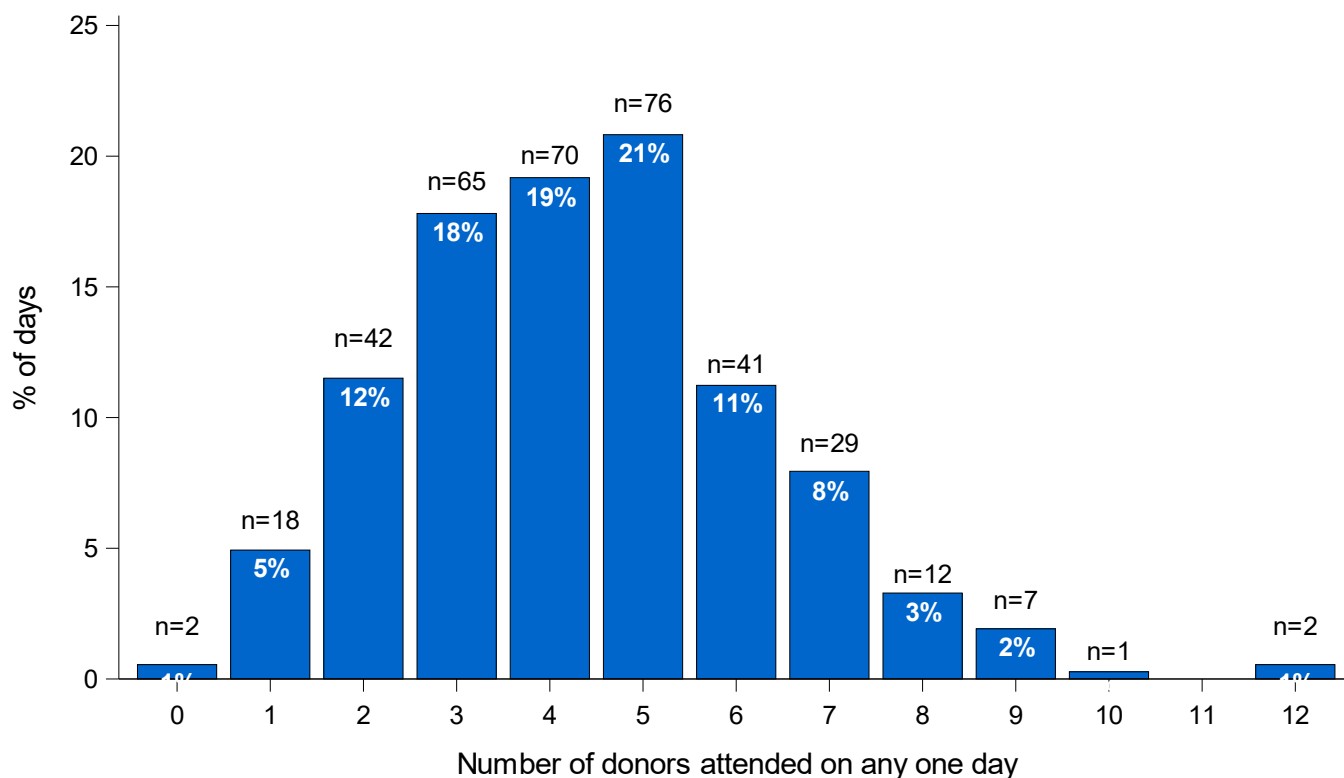


Figure 3a shows the distribution of the number of abdominal teams out on any one day during 2024/25. For example, there were 52 days in the 12-month period (14% of days) where two abdominal teams were out attending donors.

Figure 3a **Distribution of the number of abdominal retrieval teams out on any one day, between 1 April 2024 - 31 March 2025**

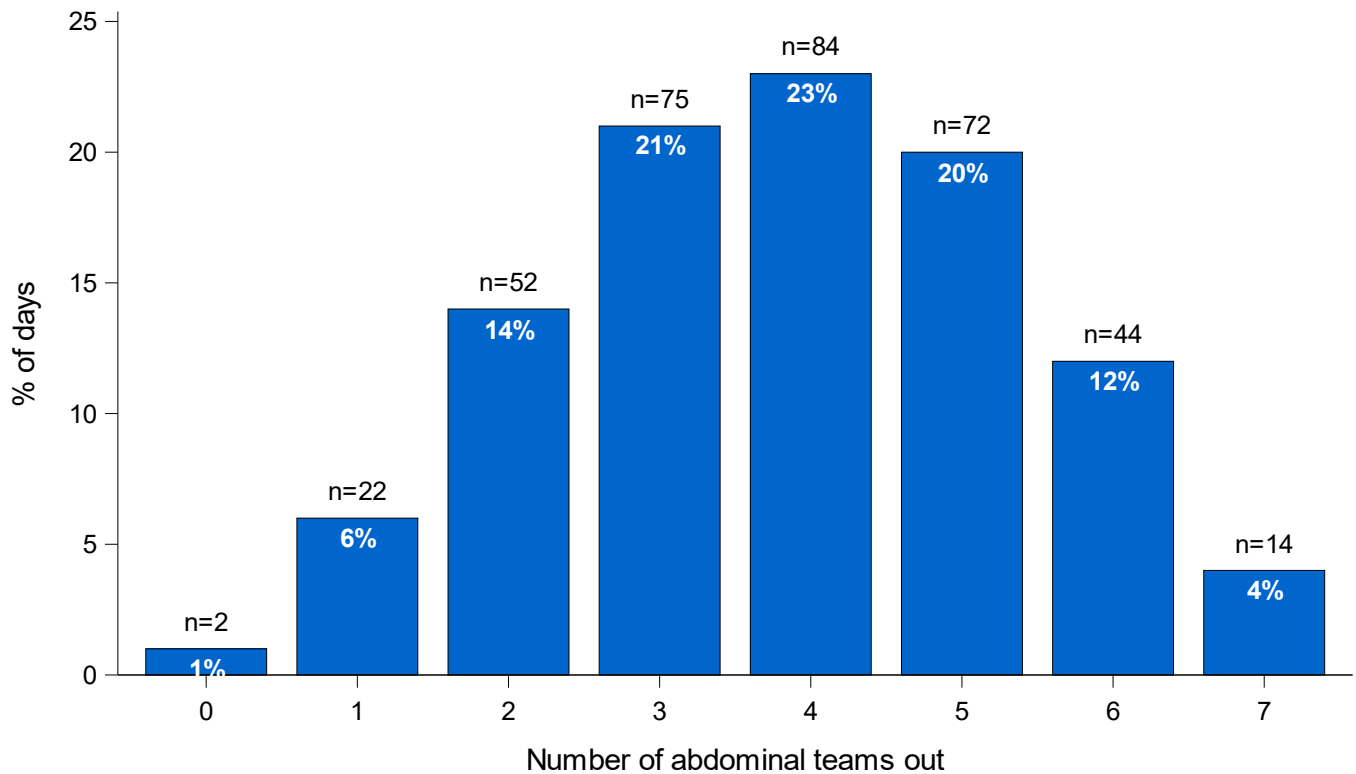


Figure 3b shows the distribution of donors attended by each abdominal team on any one day (that they were on call) during the year. On average abdominal teams did not attend any donors on 51% of the days in the year, attended one donor 42% of days, attended two donors 6% of days and attended three donors 1% of days. The 'busiest' team in 2024/25 in terms of days active was Birmingham (when on call).

Figure 3b Distribution of donors attended by each abdominal team on any one day, 1 April 2024 - 31 March 2025

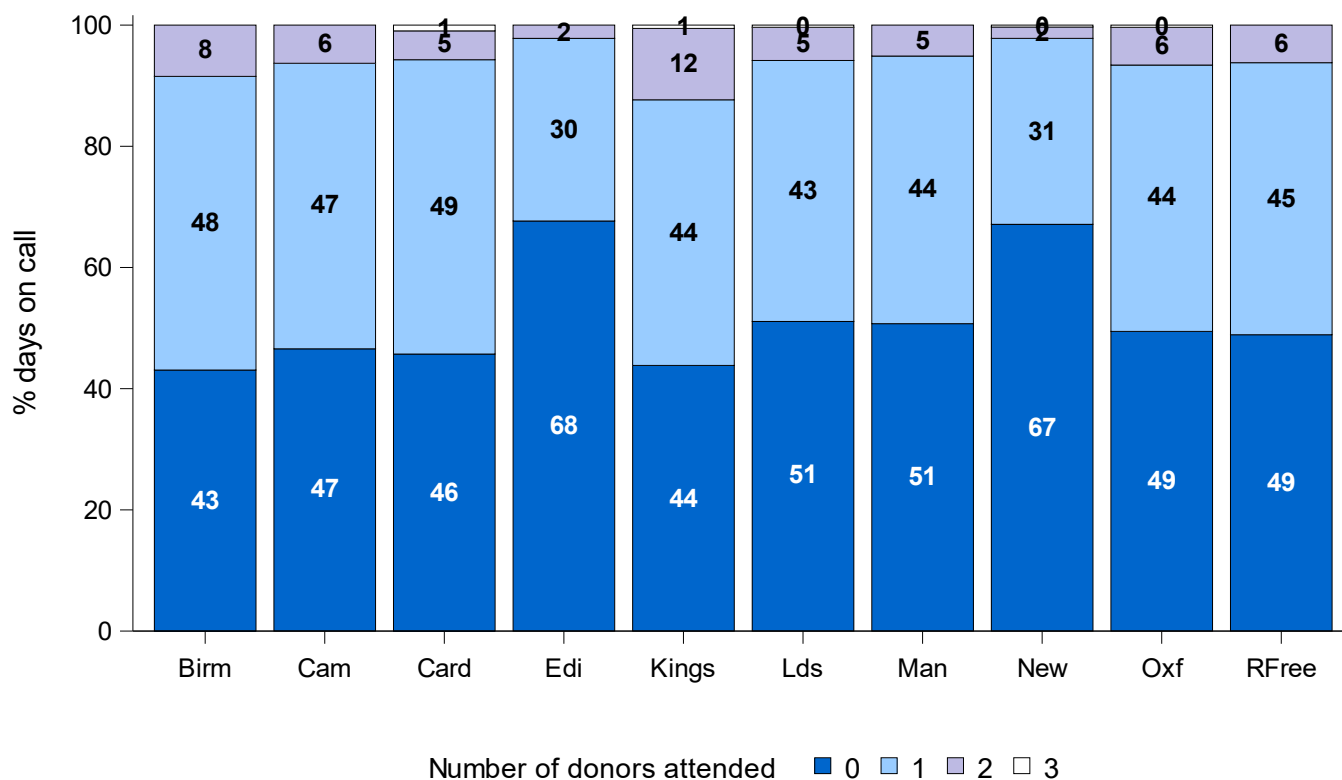


Figure 4a shows the distribution of the number of cardiothoracic teams out on any one day during 2024/25. It is most common for one cardiothoracic team to be out on any given day.

Figure 4a **Distribution of the number of cardiothoracic retrieval teams out on any one day, between 1 April 2024 - 31 March 2025**

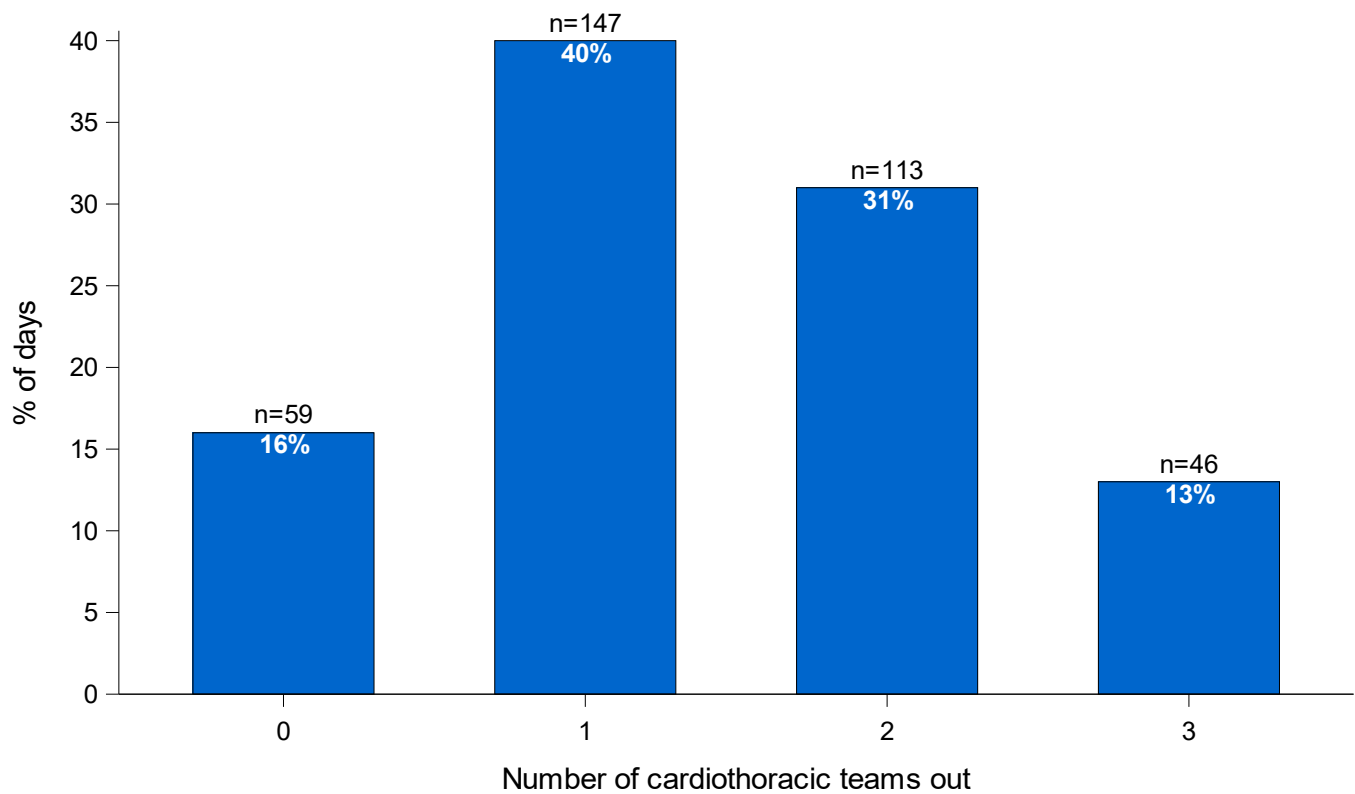
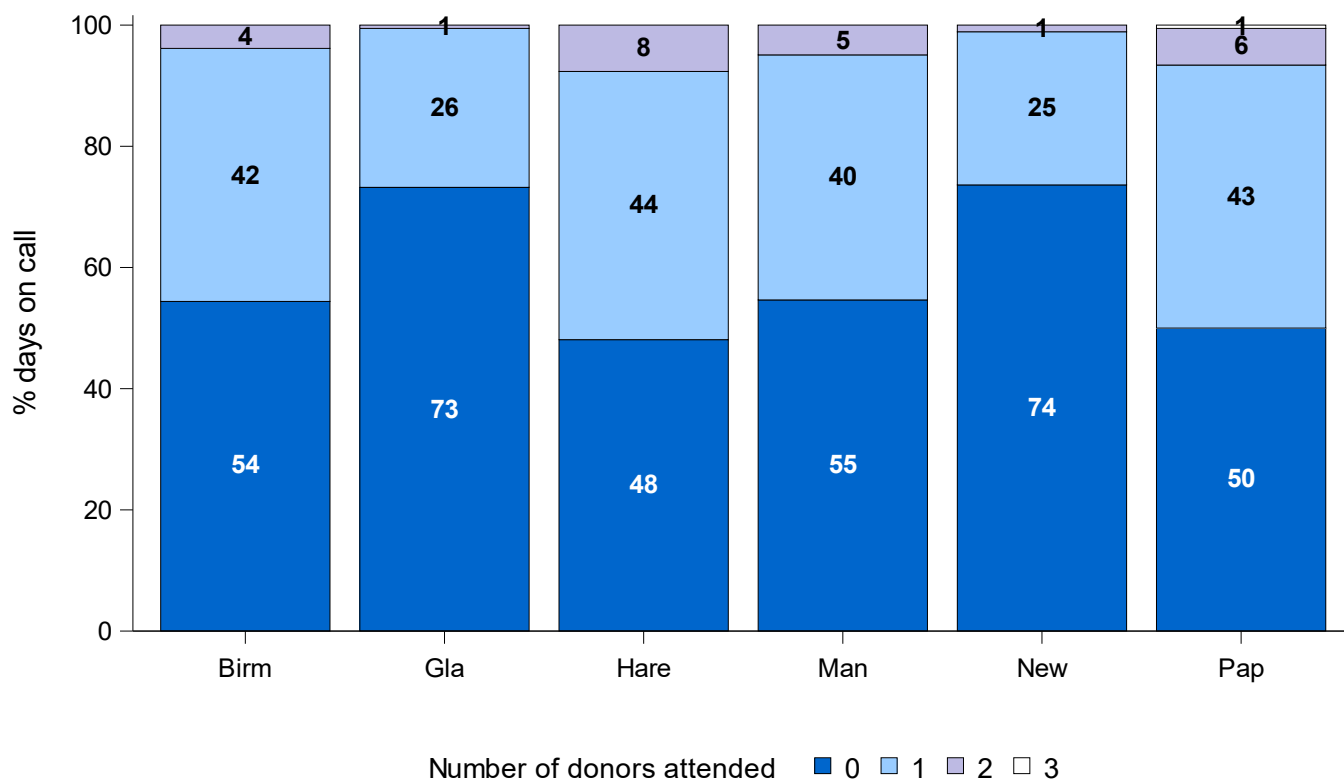


Figure 4b shows the distribution of donors attended by each cardiothoracic team on any one day (that they were on call) during the year. On average cardiothoracic teams did not attend any donors on 59% of the days in the year, attended one donor 37% of days, attended two donors 4% of days, and attended three donors 1% of days. The 'busiest' team in 2024/25 in terms of days active was Harefield (when on call).

Figure 4b **Distribution of donors attended by each cardiothoracic team on any one day, 1 April 2024 - 31 March 2025**



The time taken for teams to attend a donor is shown by team for the most recent five financial years in **Figures 5a and 5b**. The time shown is the time from the beginning of muster time (one hour prior to departure from base) to return to base, which is estimated from theatre departure times and travel times. The median is the horizontal line in the box, and the box shows the interquartile range. Cases where retrieval took more than 48 hours have been removed along with cases where not all date/time points required were reported.

Figure 5a Median (IQR) time an abdominal team is out attending a donor from departure to return to base, between 1 April 2020 - 31 March 2025

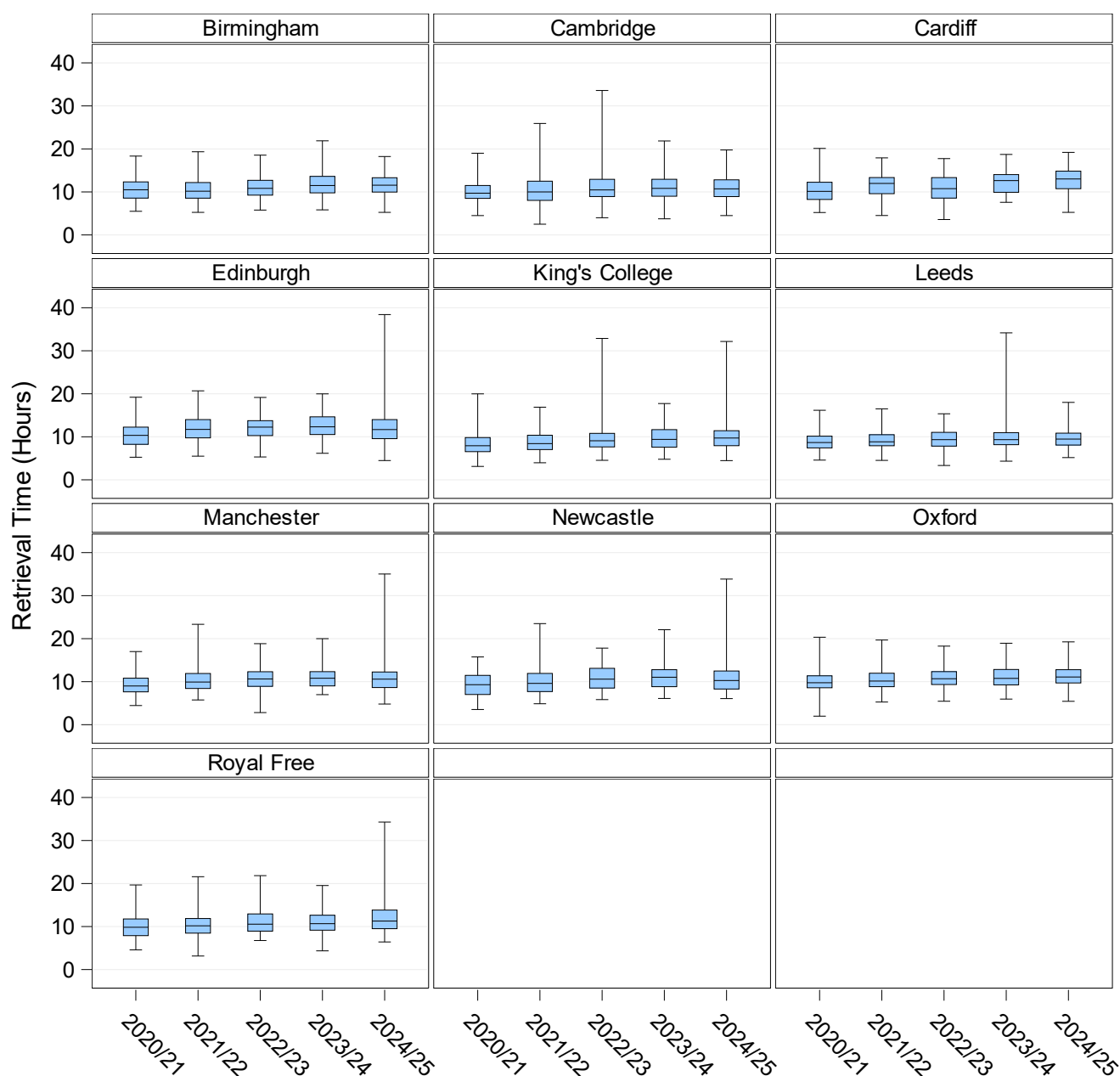
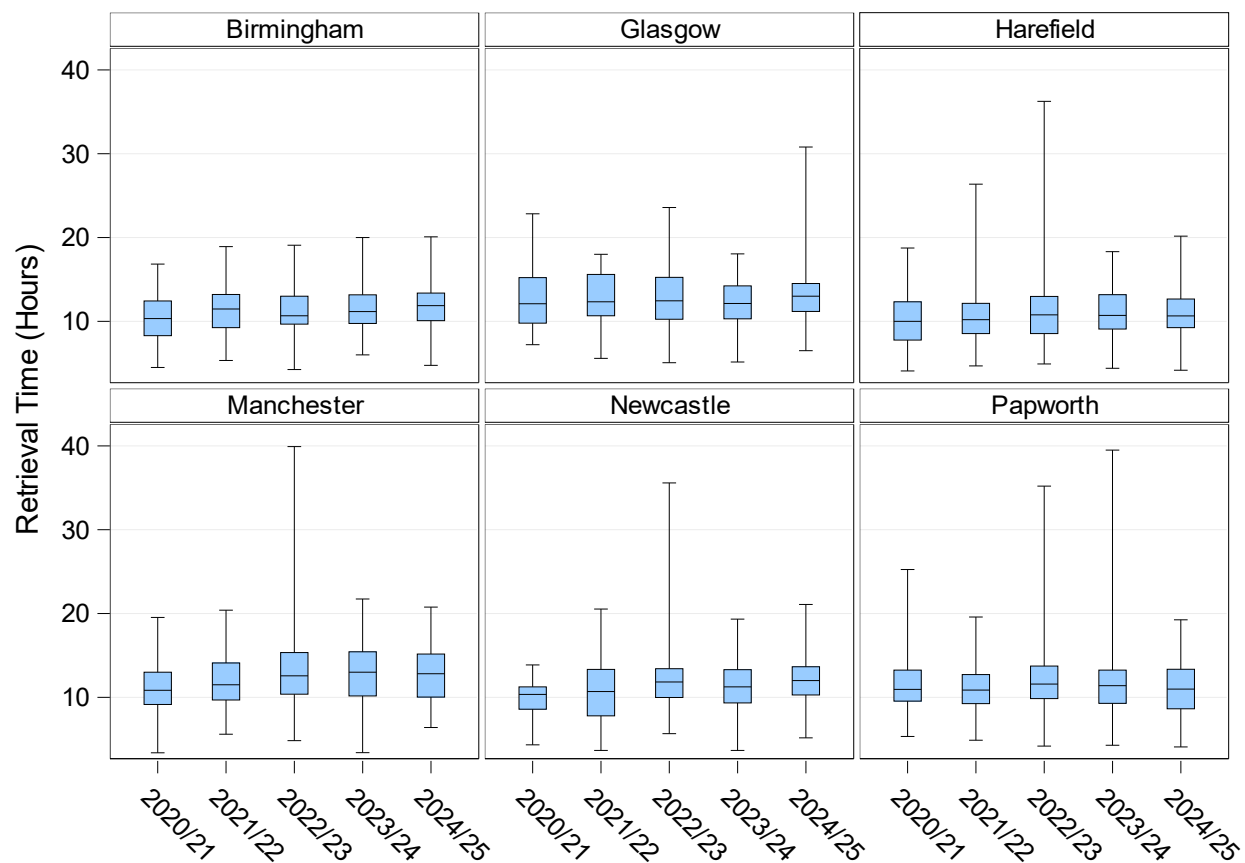


Figure 5b Median (IQR) time a cardiothoracic team is out attending a donor from departure to return to base, between 1 April 2020 - 31 March 2025



The day of week and time of day at which mobilisation of NORS teams occurred throughout the year are presented as heat maps in **Figures 6a and 6b**, for abdominal and cardiothoracic teams, respectively. Mobilisation time is the time that the team actually departed from their base. Heat maps are used here to indicate the level of activity; darker shades are used to indicate high activity.

Figure 6a Mobilisation time of abdominal teams 1 April 2023 - 31 March 2025

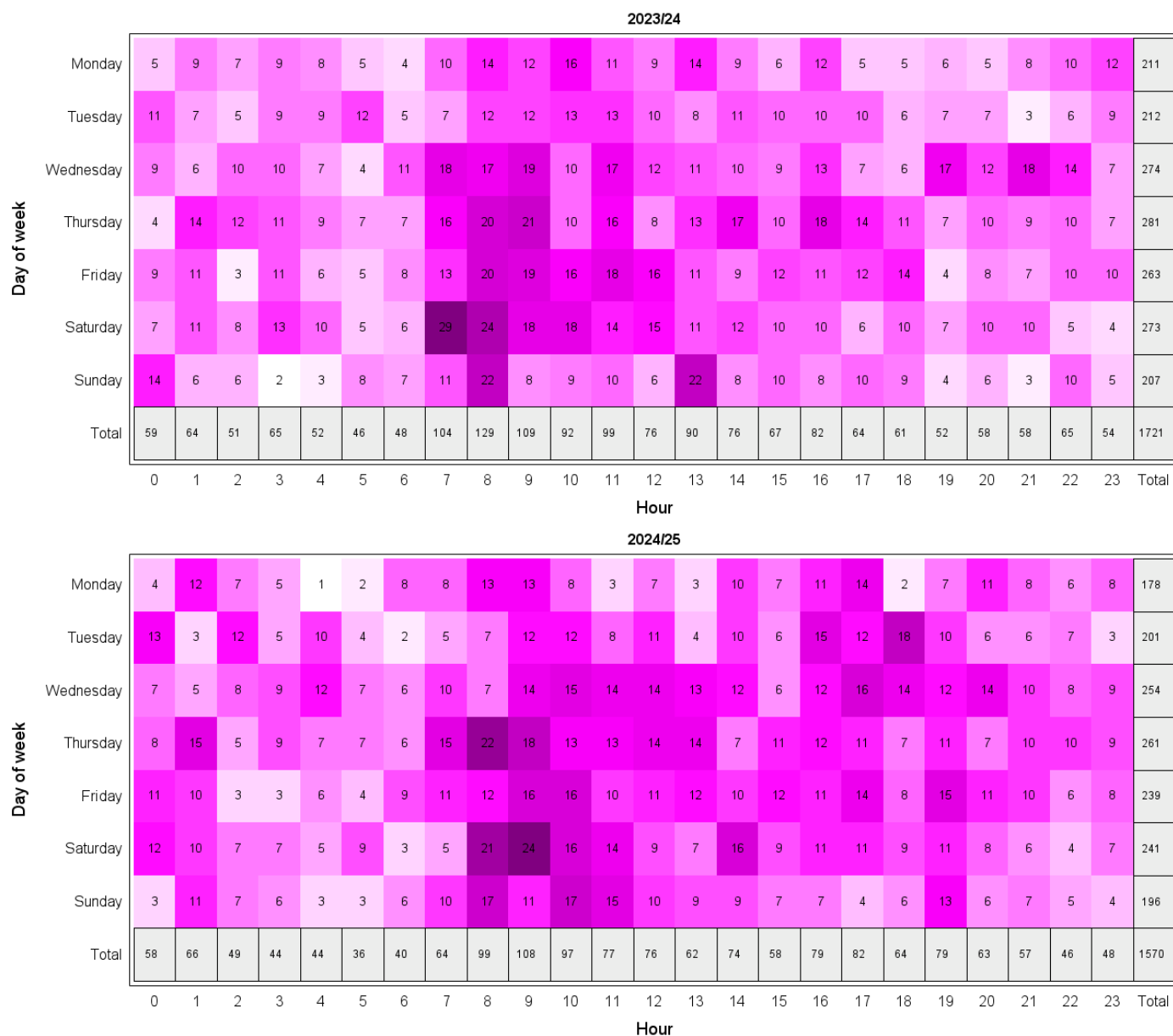
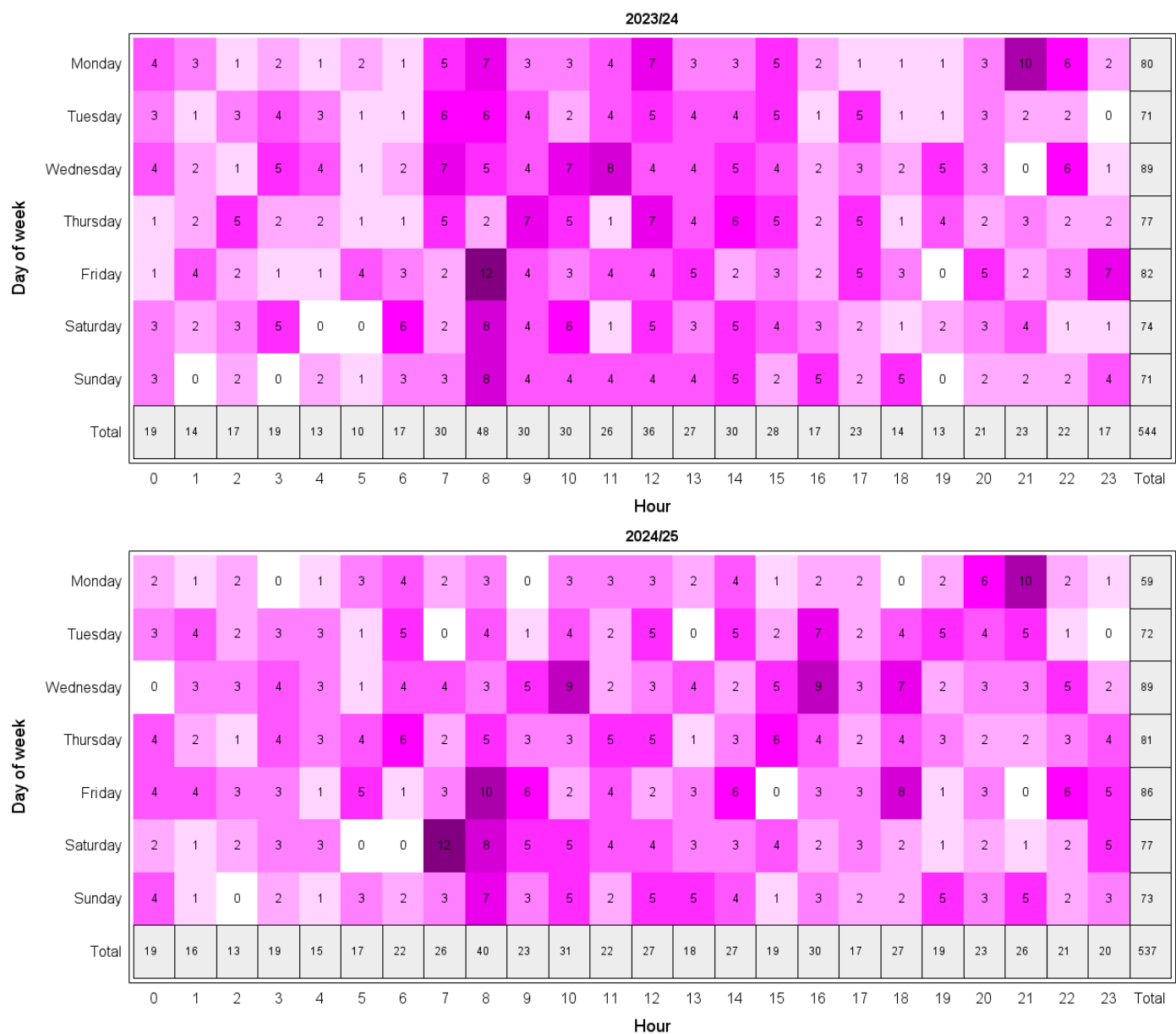


Figure 6b Mobilisation time of cardiothoracic teams 1 April 2023 - 31 March 2025



The day of week and time of day at which donor cross-clamp occurred throughout the year, and for the previous year are presented as heat maps in **Figures 7a and 7b**, for abdominal only and joint abdominal and cardiothoracic donors, respectively. Note that time of cross-clamp is not available for all cases. Heat maps are used here to indicate the level of activity, darker shades are used to indicate higher activity.

Figure 7a Cross-clamp time of abdominal only donors 1 April 2023 - 31 March 2025

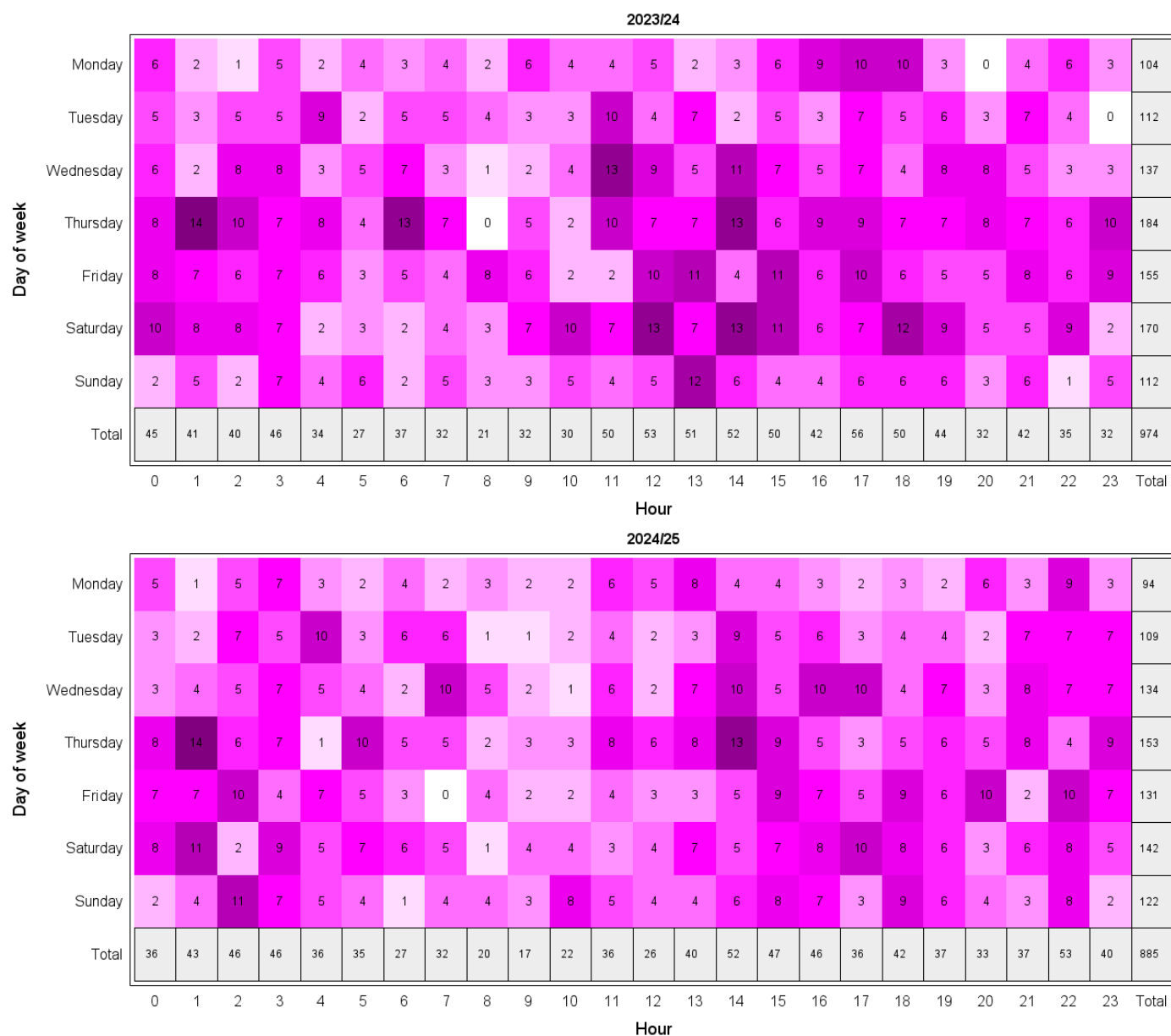
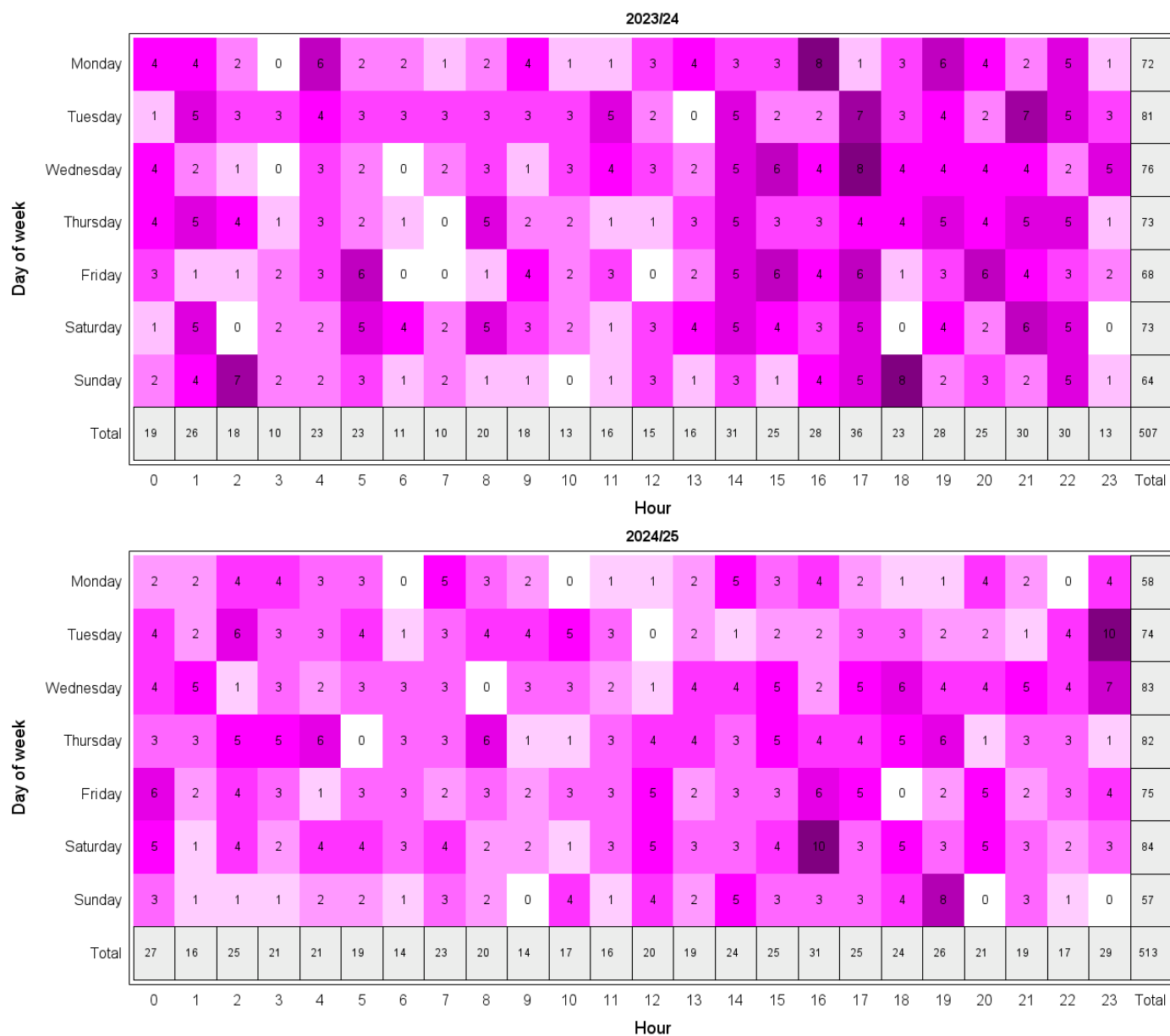


Figure 7b Cross-clamp time of abdominal and cardiothoracic donors, 1 April 2023 - 31 March 2025



The proportion of occasions where the travel time to a donor hospital is greater than three hours is shown in **Figures 8a and 8b**, for abdominal and cardiothoracic teams, respectively. Both figures include donor attendances where flights were used.

Figure 8a Proportion of donor attendances (actual and non-proceeding) outside of 3 hours travel time for each abdominal team, between 1 April 2024 - 31 March 2025

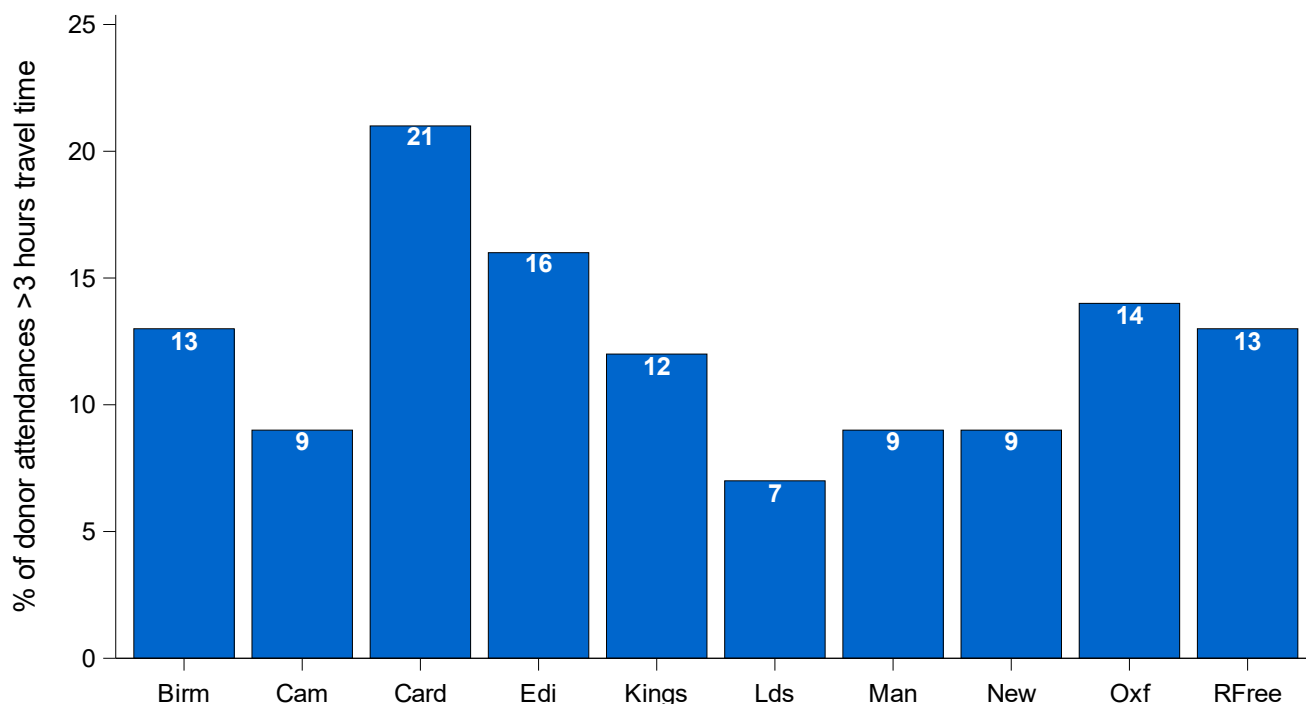
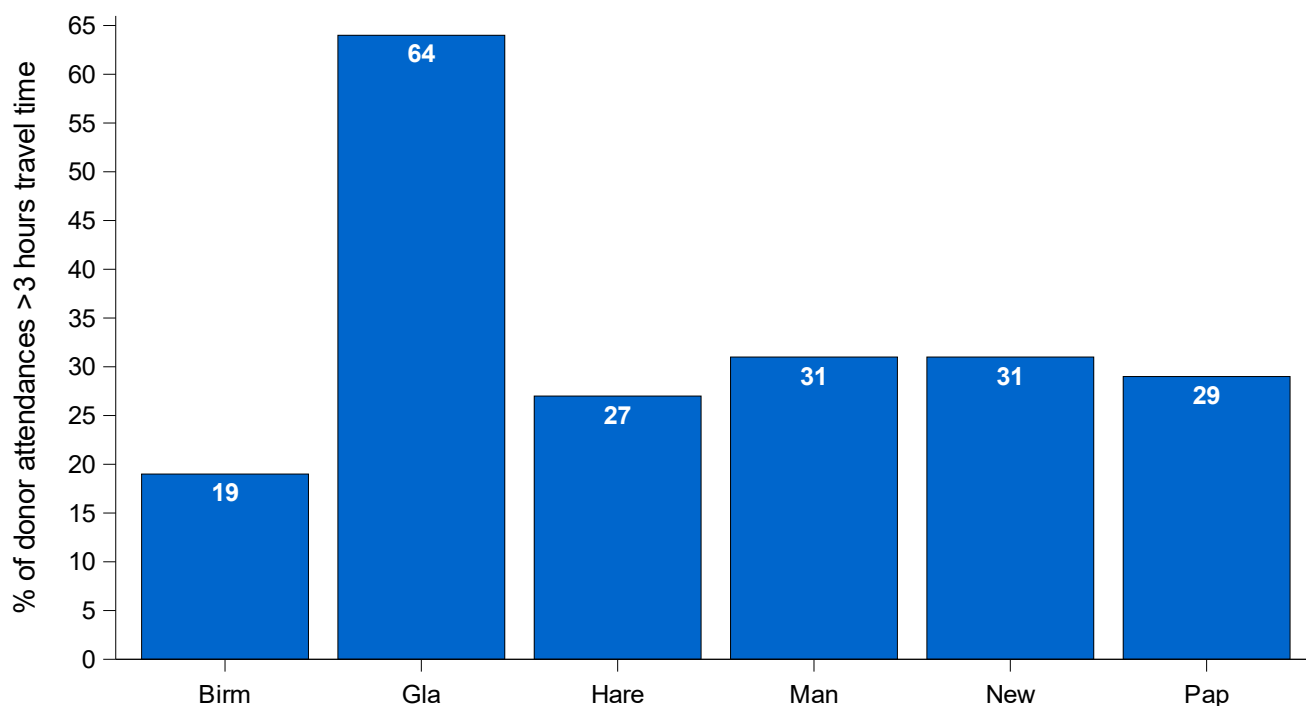


Figure 8b Proportion of donor attendances (actual and non-proceeding) outside of 3 hours travel time for each cardiothoracic team, between 1 April 2024 - 31 March 2025



The travel time to a donor hospital is shown in **Figures 9a and 9b**, for abdominal and cardiothoracic teams, respectively. Both figures include donor attendances where flights were used and are to the nearest hour.

Figure 9a **Travel time to donor hospital for each abdominal team, between 1 April 2024 - 31 March 2025**

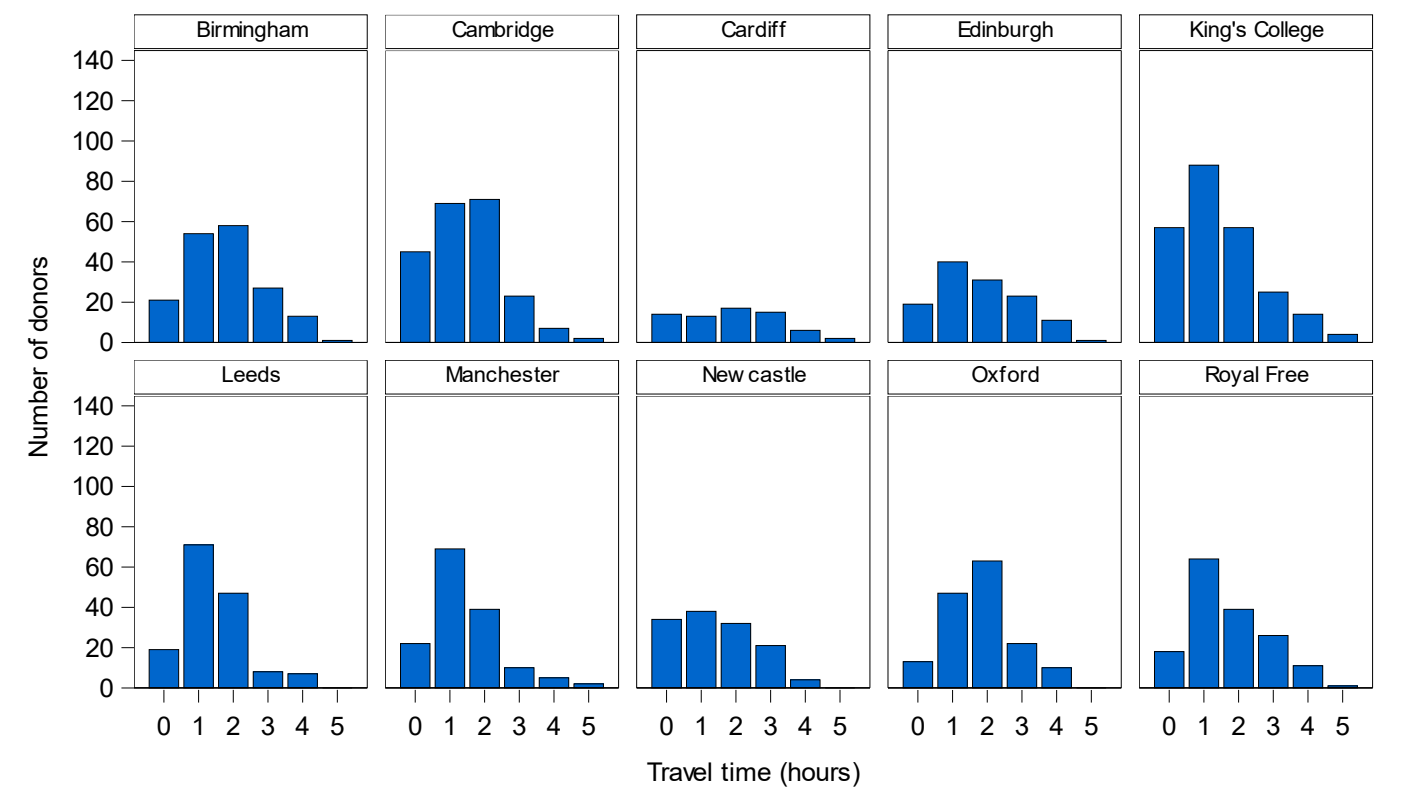
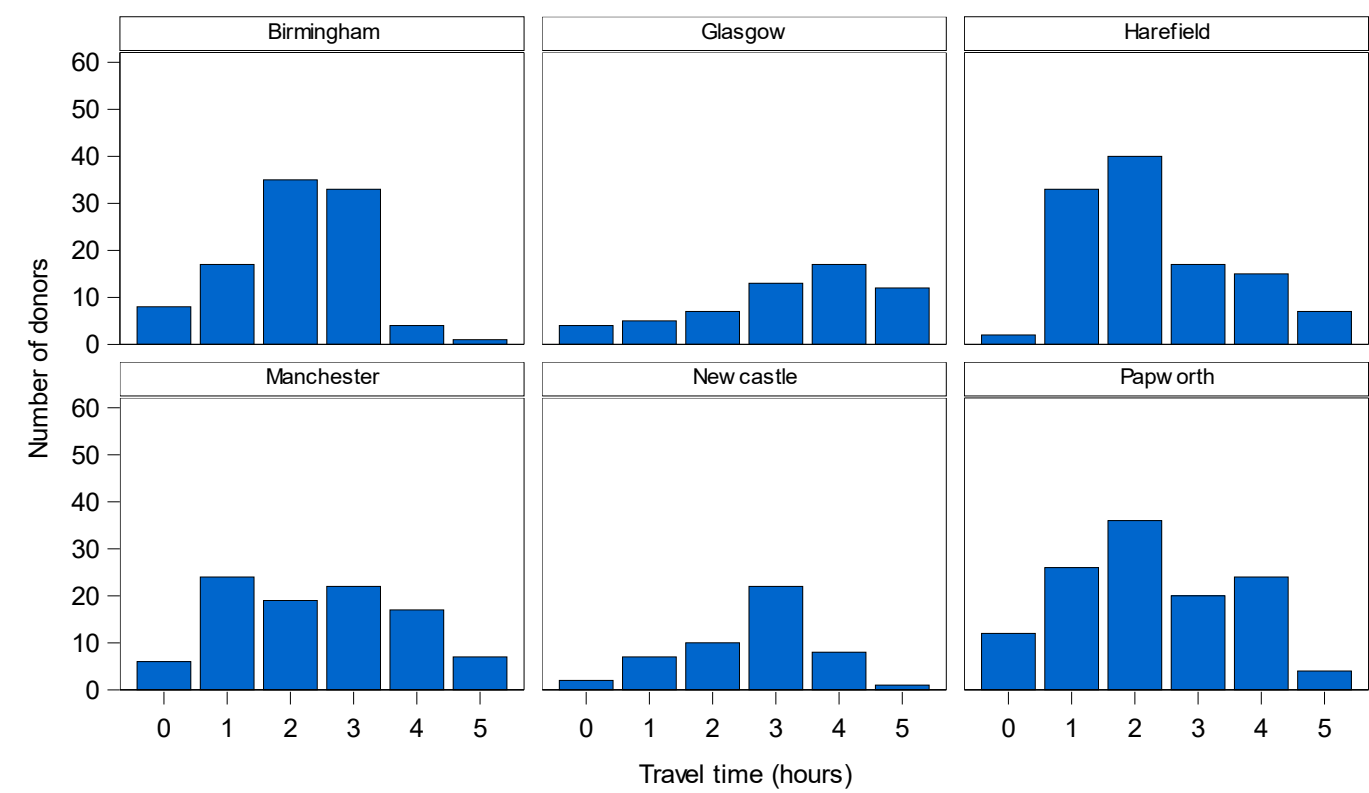


Figure 9b **Travel time to donor hospital for each cardiothoracic team, between 1 April 2024 - 31 March 2025**



Organs Retrieved

Table 2a shows the percentage of actual abdominal donors donating their kidneys, livers, pancreases and bowels by the team that attended and the donor type. Overall, 96% of actual DBD donors (donating at least one abdominal organ) donated their kidneys, 91% donated their liver, 31% donated their pancreas and 2% donated their bowel. The overall donation rates for actual DCD donors are lower for livers and pancreases and higher for kidneys, DCD donors cannot donate their small bowel.

Table 2a Organs retrieved from actual abdominal donors, 1 April 2024 - 31 March 2025, by attending retrieval team										
Attending retrieval team	No. of abdo. donors		% donors donating							
			Kidneys		Livers		Pancreases		Bowel	
	DBD	DCD	DBD	DCD	DBD	DCD	DBD	DCD	DBD	DCD
Birmingham	62	92	93.5	98.9	91.9	62.0	38.7	10.9	1.6	-
Cambridge	79	111	98.7	98.2	89.9	68.5	34.2	17.1	13.9	-
Cardiff	30	36	96.7	100.0	90.0	77.8	33.3	5.6	0.0	-
Edinburgh	47	67	100.0	98.5	91.5	73.1	27.7	16.4	0.0	-
King's College	119	103	95.0	98.1	89.1	63.1	25.2	15.5	1.7	-
Leeds	67	65	98.5	98.5	94.0	49.2	34.3	24.6	0.0	-
Manchester	61	69	93.4	100.0	93.4	47.8	18.0	13.0	1.6	-
Newcastle	65	47	95.4	93.6	92.3	59.6	24.6	14.9	0.0	-
Oxford	76	59	97.4	98.3	89.5	45.8	42.1	11.9	1.3	-
Royal Free	68	75	97.1	96.0	88.2	57.3	29.4	8.0	0.0	-
Total	674	724	96.4	98.1	90.8	60.5	30.6	14.2	2.4	-

Table 2b shows the number of abdominal donors by what organs were donated, this is broken down by donor type and the attending retrieval team.

Table 2b Abdominal organs donated, 1 April 2024 – 31 March 2025, by attending retrieval team								
Attending retrieval team	Total donors		Kidney only		Liver only		Abdominal multi-organ	
	DBD	DCD	DBD	DCD	DBD	DCD	DBD	DCD
Birmingham	62	92	5	32	4	1	53	59
Cambridge	79	111	7	32	1	2	71	77
Cardiff	30	36	3	8	1	0	26	28
Edinburgh	47	67	4	14	0	1	43	52
King's College	119	103	13	38	6	2	100	63
Leeds	67	65	4	30	1	1	62	34
Manchester	61	69	4	34	4	0	53	35
Newcastle	65	47	4	18	3	3	58	26
Oxford	76	59	7	29	2	1	67	29
Royal Free	68	75	7	31	2	3	59	41
Total	674	724	58	266	24	14	592	444

Table 2c shows the number of abdominal organs retrieved and the percentage that were transplanted, this is broken down by organ type and the attending retrieval team.

Table 2c Abdominal organs retrieved and percentage that went on to be transplanted, 1 April 2024 - 31 March 2025, by attending retrieval team								
Attending retrieval team	Kidneys		Livers		Pancreases		Bowel	
	Retrieved	% txd	Retrieved	% txd	Retrieved	% txd	Retrieved	% txd
DBD								
Birmingham	116	94.0	57	91.2	24	45.8	1	100.0
Cambridge	154	90.9	71	87.3	27	55.6	11	100.0
Cardiff	57	94.7	27	70.4	10	60.0	0	-
Edinburgh	93	90.3	43	83.7	13	69.2	0	-
King's College	225	89.3	106	86.8	30	53.3	2	100.0
Leeds	130	93.8	63	92.1	23	60.9	0	-
Manchester	113	91.2	57	82.5	11	72.7	1	100.0
Newcastle	124	88.7	60	85.0	16	43.8	0	-
Oxford	147	95.2	68	86.8	32	43.8	1	0.0
Royal Free	130	92.3	60	83.3	20	45.0	0	-
Total	1289	91.8	612	85.9	206	52.9	16	93.8
DCD								
Birmingham	178	82.0	57	70.2	10	50.0	-	-
Cambridge	215	87.0	76	82.9	19	57.9	-	-
Cardiff	71	85.9	28	75.0	2	0.0	-	-
Edinburgh	132	81.8	49	73.5	11	36.4	-	-
King's College	200	91.5	65	75.4	16	50.0	-	-
Leeds	126	85.7	32	75.0	16	43.8	-	-
Manchester	134	86.6	33	60.6	9	22.2	-	-
Newcastle	88	85.2	28	50.0	7	57.1	-	-
Oxford	116	83.6	27	63.0	7	57.1	-	-
Royal Free	143	75.5	43	60.5	6	16.7	-	-
Total	1403	84.7	438	70.8	103	44.7	-	-
Total	2692	88.1	1050	79.6	309	50.2	16	93.8

Figures 10a and 10b show the number of organs retrieved, by attending retrieval team, for DBD and DCD donors, respectively.

Figure 10a DBD abdominal organs retrieved, 1 April 2024 - 31 March 2025
by attending retrieval team

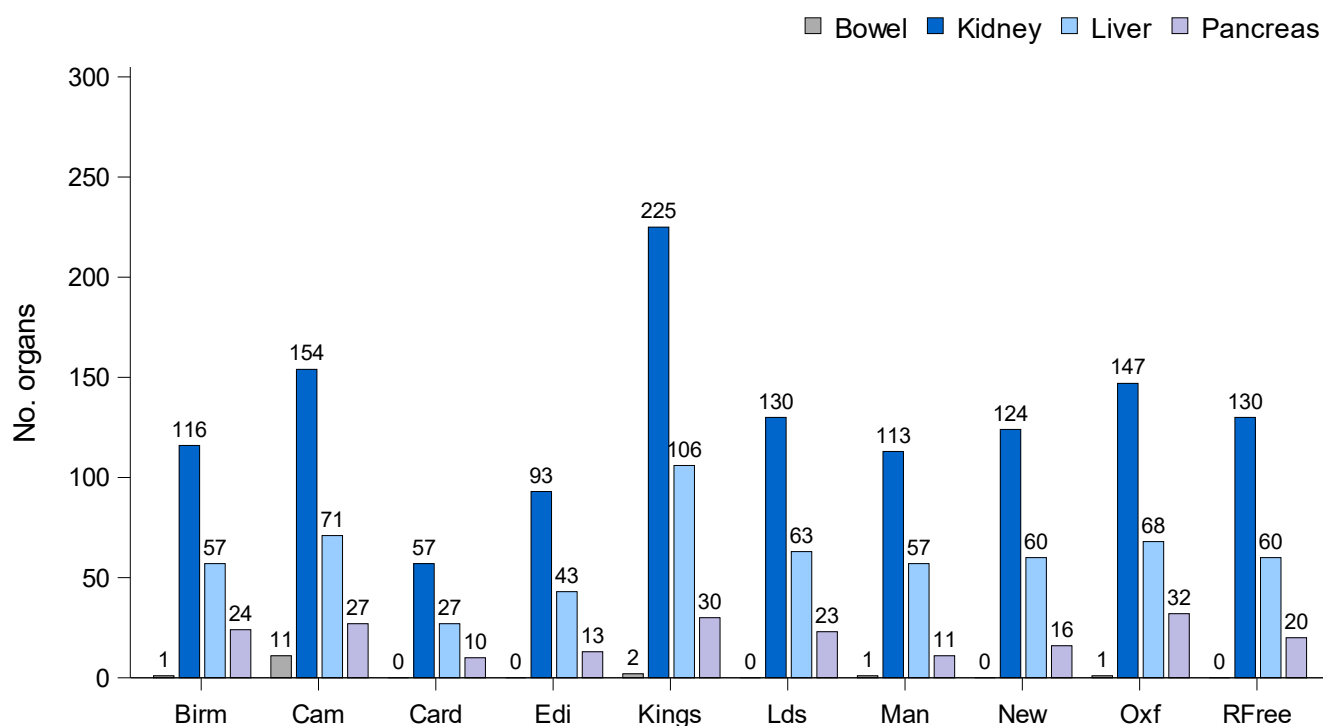


Figure 10b DCD abdominal organs retrieved, 1 April 2024 - 31 March 2025
by attending retrieval team

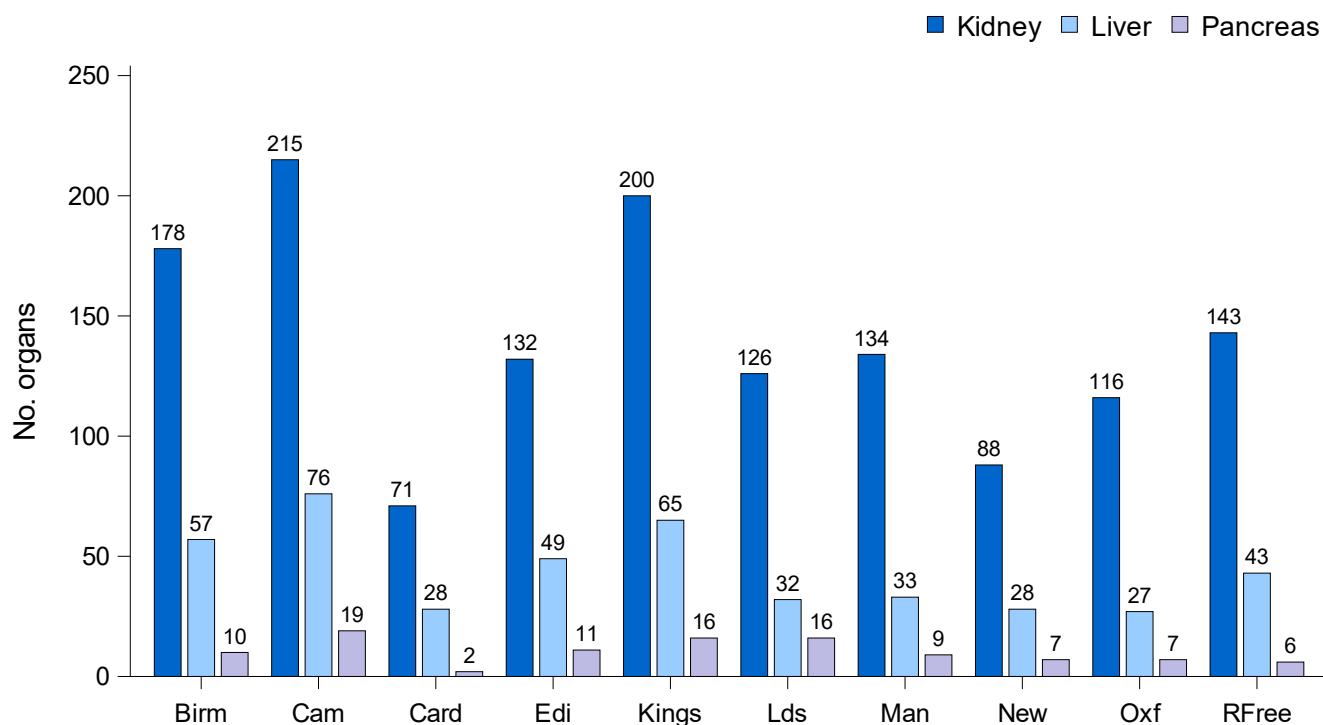


Table 2d shows the mean number of abdominal organs retrieved and transplanted for each proceeding abdominal donor, by attending retrieval team and donor type. Mean donor age is also reported.

- The mean number of organs retrieved per DBD donor ranged from 3.0 to 3.3 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.19$).
- The mean number of organs transplanted per DBD donor ranged from 2.6 to 2.9 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.35$).
- The mean number of organs retrieved per DCD donor ranged from 2.5 to 2.9 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.26$).
- The mean number of organs transplanted per DCD donor ranged from 1.9 to 2.4 across teams, analysis of variance indicated that the differences were statistically significant ($p=0.03$).

Table 2d Mean donor age, organs retrieved, and organs transplanted, per proceeding abdominal donor, 1 April 2024 - 31 March 2025, by attending retrieval team														
Attending retrieval team	Actual abdo. donors	Donor age		DBD Orgs. retrieved		Orgs. txd		Actual abdo. donors	Donor age		DCD Orgs. retrieved		Orgs. txd	
		Mean	(SD.)	Mean	(SD.)	Mean	(SD.)		Mean	(SD.)	Mean	(SD.)	Mean	(SD.)
Birmingham	62	50.1	(16.7)	3.2	(0.9)	2.8	(1.0)	92	55.8	(14.6)	2.7	(0.7)	2.1	(1.0)
Cambridge	79	52.6	(16.1)	3.3	(0.9)	2.9	(1.1)	111	52.7	(14.4)	2.8	(0.7)	2.4	(1.1)
Cardiff	30	52.9	(13.8)	3.1	(0.8)	2.6	(1.0)	36	56.0	(12.2)	2.8	(0.6)	2.3	(0.7)
Edinburgh	47	48.8	(13.8)	3.2	(0.6)	2.7	(0.9)	67	52.5	(14.7)	2.9	(0.6)	2.2	(1.0)
King's College	119	50.5	(18.0)	3.1	(0.8)	2.6	(1.0)	103	53.7	(16.2)	2.8	(1.2)	2.4	(1.3)
Leeds	67	51.7	(13.7)	3.2	(0.7)	2.9	(0.8)	65	51.3	(16.0)	2.7	(0.8)	2.1	(1.0)
Manchester	61	51.2	(16.8)	3.0	(0.8)	2.6	(0.9)	69	53.4	(15.0)	2.6	(0.7)	2.0	(0.8)
Newcastle	65	52.2	(16.2)	3.1	(0.7)	2.6	(0.9)	47	47.7	(18.2)	2.6	(0.8)	2.0	(1.0)
Oxford	76	49.2	(16.5)	3.3	(0.8)	2.8	(0.9)	59	61.0	(11.4)	2.5	(0.7)	2.0	(1.0)
Royal Free	68	50.5	(15.8)	3.1	(0.7)	2.6	(0.9)	75	57.7	(15.1)	2.7	(1.2)	1.9	(1.4)
Total	674	50.9	(16.1)	3.1	(0.8)	2.7	(1.0)	724	54.2	(15.2)	2.7	(0.8)	2.2	(1.1)

Table 3a shows the number of cardiothoracic organs retrieved and the percentage that were transplanted, this is broken down by organ type and the attending retrieval team. Overall, 52% of DBD donors (donating at least one cardiothoracic organ) donated their heart only, 30% donated their lung(s) only, and 18% donated their heart and lung(s).

DCD donors in the UK have, until recent years, been able only to donate lungs for transplant. DCD heart retrieval is a highly complex procedure which can only be undertaken using perfusion technology. The technique was developed in the UK, with activity increasing over the past few years due to a focused pilot. The retrieval of DCD hearts is undertaken by highly experienced staff within specific NORS teams, funded non recurrently in 2024/25. Despite this, 40% of actual DCD donors donated their heart only, 46% donated their lung(s) only, and 14% donated their heart and lung(s). DCD heart retrieval contributed to 28% of all heart transplants in the UK in 2024/25. Substantive funding to support commissioning of DCD heart retrieval was awarded from 2025/26 onwards. The Perfusion Technologies section of this report contains more information on DCD heart activity.

Table 3a Organs retrieved from actual cardiothoracic donors, 1 April 2024 – 31 March 2025, by attending retrieval team								
Attending retrieval team	DBD donors donating				DCD donors donating			
	N	Heart only (%)	Lung only (%)	Heart & lung (%)	N	Heart only (%)	Lung only (%)	Heart & lung (%)
Birmingham	52	44.2	32.7	23.1	10	0.0	100.0	0.0
Glasgow	14	42.9	28.6	28.6	15	46.7	40.0	13.3
Harefield	34	52.9	32.4	14.7	28	35.7	46.4	17.9
Manchester	50	60.0	28.0	12.0	7	0.0	100.0	0.0
Newcastle	26	57.7	26.9	15.4	6	0.0	100.0	0.0
Papworth	29	51.7	27.6	20.7	47	59.6	21.3	19.1
Total	205	52.2	29.8	18.0	113	39.8	46.0	14.2

Table 3b shows the number of cardiothoracic organs retrieved and the percentage that were transplanted, this is broken down by organ type and the attending retrieval team. For example, there were 196 DBD lungs retrieved and of these 95% were transplanted.

Table 3b Cardiothoracic organs retrieved and percentage that went on to be transplanted, 1 April 2024 - 31 March 2025, by attending retrieval team				
Attending retrieval team	Hearts		Lungs	
	Retrieved	% txd	Retrieved	% txd
DBD				
Birmingham	35	100.0	58	96.6
Glasgow	10	100.0	16	100.0
Harefield	23	95.7	32	87.5
Manchester	36	100.0	40	95.0
Newcastle	19	100.0	22	90.9
Papworth	21	100.0	28	100.0
Total	144	99.3	196	94.9
DCD				
Birmingham	0	-	20	80.0
Glasgow	9	100.0	16	100.0
Harefield	15	100.0	36	80.6
Manchester	0	-	14	100.0
Newcastle	0	-	12	50.0
Papworth	37	89.2	38	100.0
Total	61	93.4	136	87.5
Total	205	97.6	332	91.9

Figures 11a and 11b show the number of organs retrieved, by attending retrieval team, for DBD and DCD donors, respectively.

Figure 11a DBD cardiothoracic organs retrieved, 1 April 2024 - 31 March 2025
by attending retrieval team

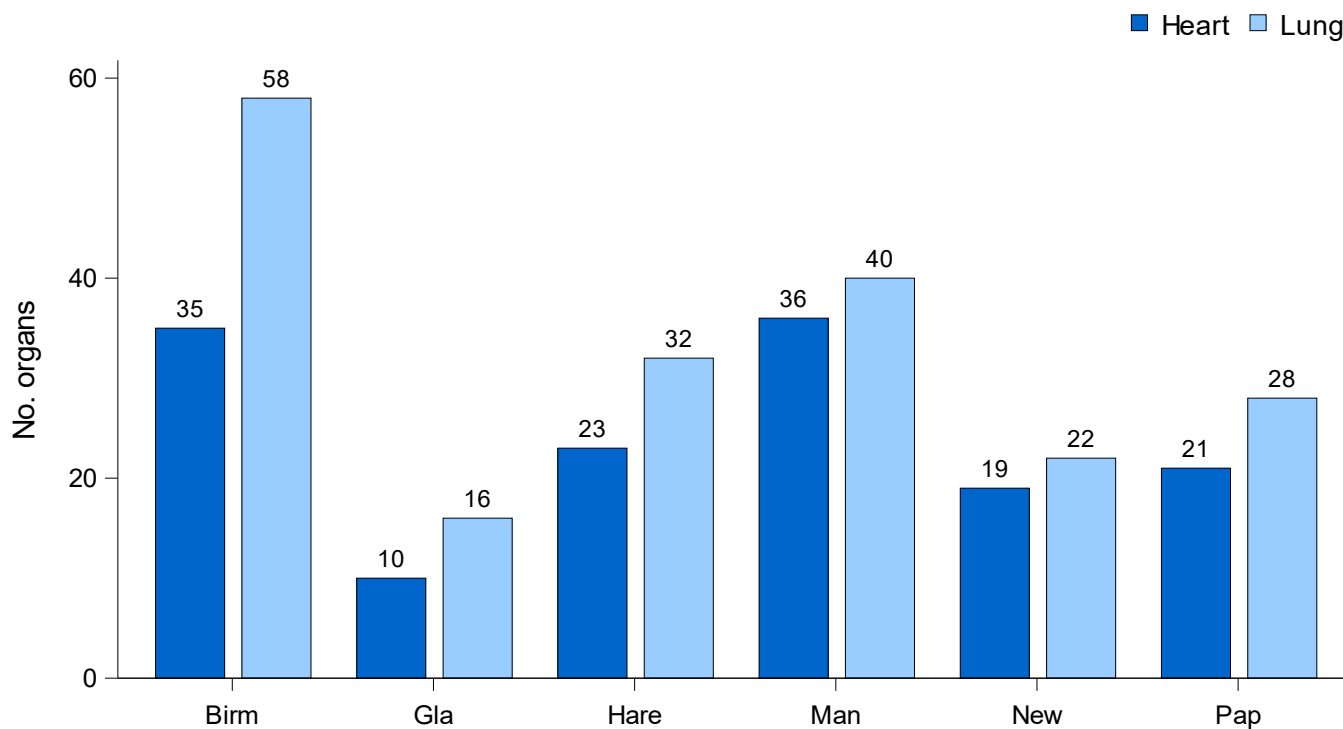


Figure 11b DCD cardiothoracic organs retrieved, 1 April 2024 - 31 March 2025
by attending retrieval team

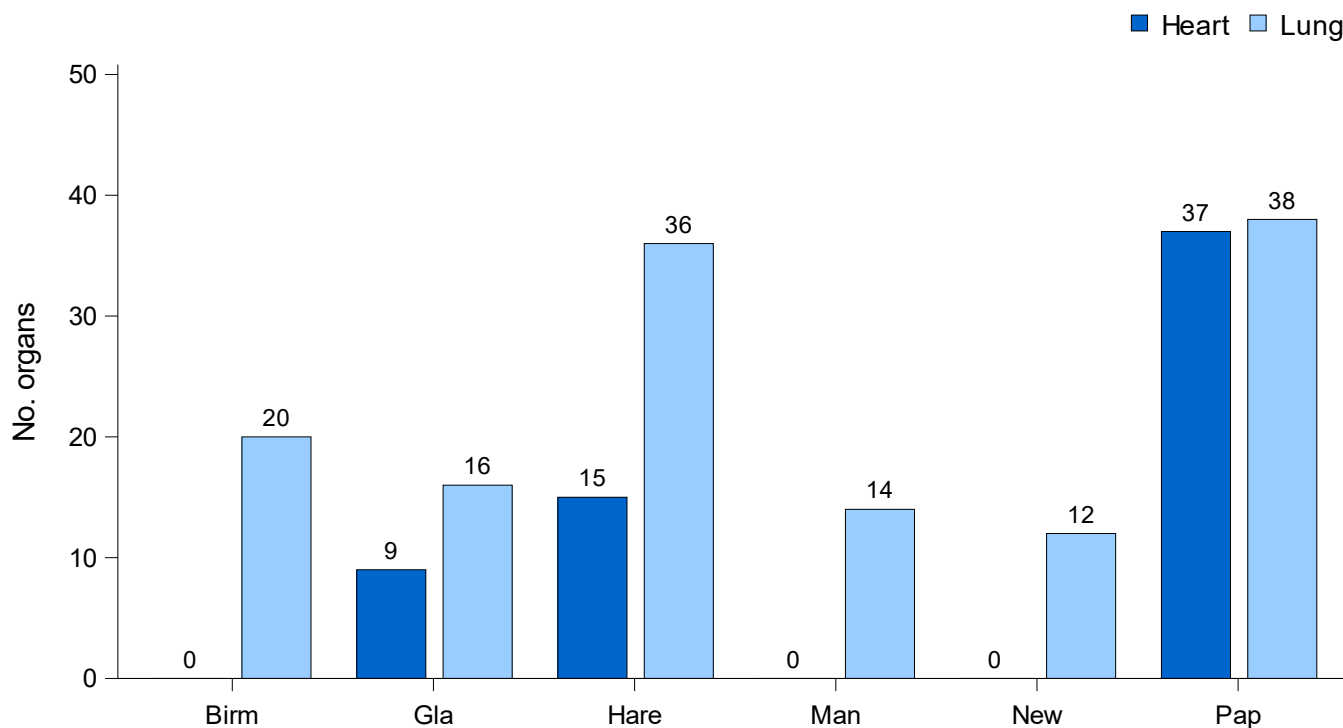


Table 3c shows the mean number of cardiothoracic organs retrieved and transplanted for each proceeding cardiothoracic donor, by attending retrieval team and donor type. Mean donor age is also reported.

- The mean number of organs retrieved per DBD donor ranged from 1.5 to 1.9 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.48$).
- The mean number of organs transplanted per DBD donor ranged from 1.5 to 1.9 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.27$).
- The mean number of organs retrieved per DCD donor ranged from 1.6 to 2.0 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.32$).
- The mean number of organs transplanted per DCD donor ranged from 1.0 to 2.0 across teams, analysis of variance indicated that the differences were not statistically significant ($p=0.39$).

Table 3c Mean donor age, organs retrieved, and organs transplanted, per proceeding cardiothoracic donor, 1 April 2024 - 31 March 2025, by attending retrieval team														
Attending retrieval team	Actual cardio. donors	Donor age		DBD Orgs. retrieved		Orgs. txd		Actual cardio. donors	Donor age		DCD Orgs. retrieved		Orgs. txd	
		Mean	(SD.)	Mean	(SD.)	Mean	(SD.)		Mean	(SD.)	Mean	(SD.)	Mean	(SD.)
Birmingham	52	43.4	(14.9)	1.8	(0.8)	1.8	(0.8)	10	51.9	(8.1)	2.0	(0.0)	1.6	(0.8)
Glasgow	14	41.9	(16.8)	1.9	(0.9)	1.9	(0.9)	15	37.9	(13.5)	1.7	(0.7)	1.7	(0.7)
Harefield	34	42.3	(14.4)	1.6	(0.7)	1.5	(0.8)	28	42.3	(11.7)	1.8	(0.7)	1.6	(0.8)
Manchester	50	38.2	(12.8)	1.5	(0.7)	1.5	(0.7)	7	50.7	(8.0)	2.0	(0.0)	2.0	(0.0)
Newcastle	26	43.0	(14.9)	1.6	(0.8)	1.5	(0.7)	6	45.2	(14.4)	2.0	(0.0)	1.0	(1.1)
Papworth	29	36.4	(15.1)	1.7	(0.8)	1.7	(0.8)	47	35.9	(12.0)	1.6	(0.8)	1.5	(0.9)
Total	205	40.8	(14.6)	1.7	(0.8)	1.6	(0.8)	113	40.6	(12.8)	1.7	(0.7)	1.6	(0.8)

PERFUSION TECHNOLOGIES



The term 'Perfusion Technologies' refers to the use of non-traditional techniques by which organ retrieval and organ quality is enhanced by the use of perfusion technology at the retrieval stage. Perfusion Technologies are still developing, but are already contributing to the successful expansion of clinical organ retrieval from deceased donors, in particular DCD donors. The resulting increase in the numbers of organs for transplant, and the enhanced safety and quality of these organs, contributes significantly to UK clinical transplantation.

Although Perfusion Technologies are highly successful, funding was on a non-recurrent basis for 2024/25. Retrievals utilising perfusion technology are reported here as they are undertaken by commissioned NORS teams, with additional staff and equipment. Substantive funding to support commissioning of A-NRP and DCD heart retrieval was awarded from 2025/26 onwards.

Abdominal Normothermic Regional Perfusion

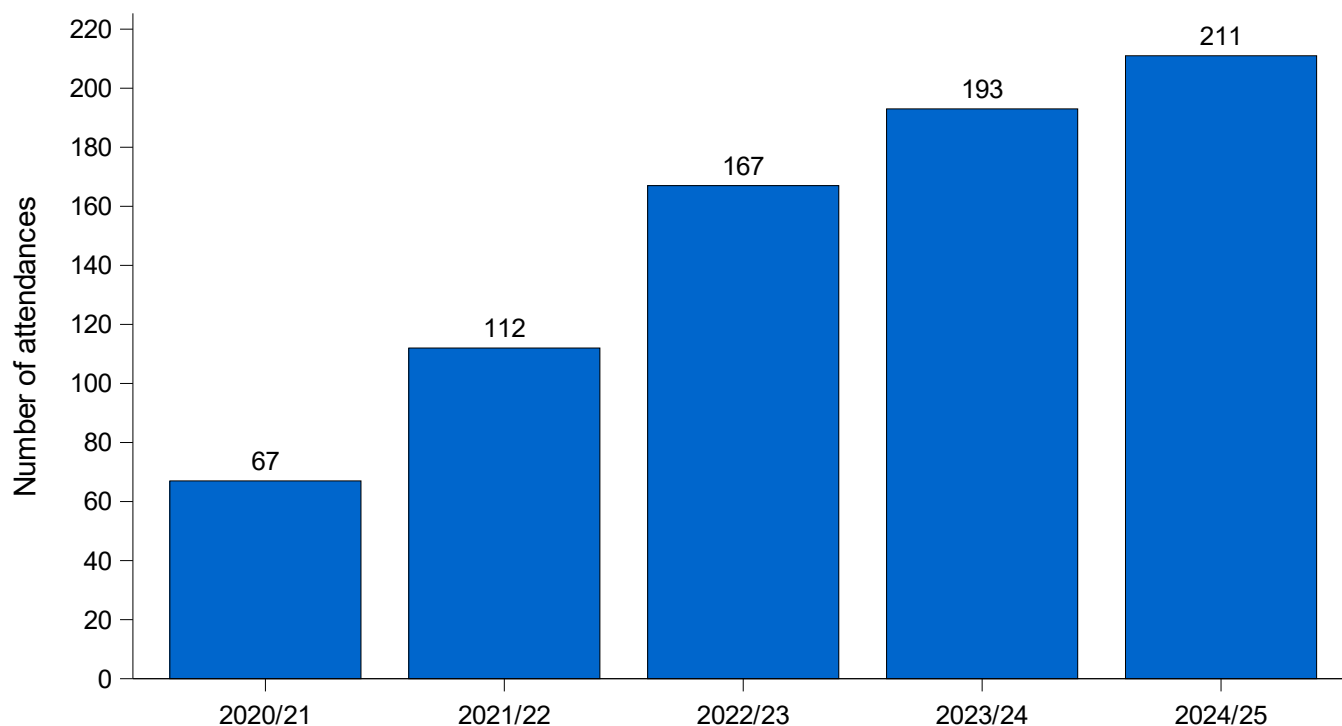
Abdominal Normothermic Regional Perfusion (A-NRP) in DCD donors does not form part of the commissioned NORS service but has been in use in the UK since 2010. This was initially performed by Edinburgh and Cambridge teams on donors where they have accepted the liver but has expanded to include a wider range of donors and teams, with 7 of the 10 abdominal NORS teams now able to perform A-NRP. A steering group was set up in November 2020 to provide oversight and governance for A-NRP and to support new teams wishing to utilise the technology.

Table 4 shows the number of DCD attendances for all abdominal teams in the last year, along with how many underwent NRP and the number of donors proceeding to donation. Of the 907 DCD attendances, 211 (23%) underwent NRP, with 187 (89%) of the NRP attendances proceeding to donate at least one organ. Note these numbers contain 6 DCD attendances where the NRP team below were not the main abdominal team in attendance, but did attend to perform NRP.

Table 4 DCD and NRP attendances by A-NRP retrieval team, 1 April 2024 - 31 March 2025				
Retrieval team	All DCD attendances	Total proceeding ¹	NRP attendances	NRP proceeding
Birmingham	113	92	32	30
Cambridge	143	117	70	63
Cardiff	40	36	28	26
Edinburgh	77	67	54	45
King's College	131	102	2	2
Leeds	83	64	-	-
Manchester	87	67	-	-
Newcastle	61	47	7	6
Oxford	81	57	-	-
Royal Free	91	75	18	15
Total	907	724	211	187
¹ Proceeded to donate at least one abdominal organ for the purpose of transplantation				

Figure 12 shows the number of A-NRP attendances for the most recent five financial years. Attendances have been increasing each year, with 2025/26 having a 9% increase in attendances compared to the previous year.

Figure 12 A-NRP donor attendances between 1 April 2020 - 31 March 2025



Organ utilisation rates for the 187 proceeding NRP donors between 1 April 2024 and 31 March 2025 is shown in **Table 5** compared to the general DCD donor population donating at least one organ, excluding A-NRP donors. Transplantation rates for Liver are higher in the NRP population when comparing to the general DCD population.

Table 5 Organ offer outcomes from 187 NRP donors, 1 April 2024 - 31 March 2025					
Outcome	Kidney ¹	Liver	Pancreas	Lungs ¹	Heart
Offered	183	186	85	69	44
Accepted	181	182	51	36	33
Retrieved	179	165	26	17	12
Transplanted	164	132	12	14	10
% Transplanted of offered	90%	71%	14%	20%	23%
% Transplanted of retrieved	92%	80%	46%	82%	83%
National DCD organ % transplanted of offered*	90%	36%	16%	23%	43%
National DCD organ % transplanted of retrieved*	91%	65%	44%	90%	96%

¹ at least one
*Based on all UK proceeding DCD donors between 1 April 2024 and 31 March 2025 where A-NRP was not intended

DCD Hearts

The DCD heart program has been funded non-recurrently with the service currently being delivered by Papworth, Harefield and Glasgow. Substantive funding to support commissioning of DCD heart retrieval was awarded from 2025/26 onwards.

Table 6 shows DCD heart activity by team between 1 April 2024 and 31 March 2025. Overall, there were 85 attendances where DCD heart retrieval was planned, with 61 (72%) proceeding to DCD heart retrieval, resulting in 57 transplants. Attendances are identified through Retrieval Team Information forms as well as DCD Heart Passports. Information on recipient outcomes following DCD heart transplantation can be found in the NHSBT Annual Report on Heart Transplantation.

Table 6 DCD heart activity by centre, 1 April 2024 - 31 March 2025			
Retrieval team	Attended ¹	Retrieved	Transplanted ²
Glasgow	14	10	9
Harefield	18	15	15
Papworth	53	36	33
Total	85	61	57
¹ Includes cases where a DCD Heart Supplementary form has not been returned but notes reported on the Retrieval Team Information form suggest that DCD heart retrieval was intended.			
² Transplanted at any UK transplant centre			

Organ utilisation rates for the 61 proceeding DCD heart donors between 1 April 2024 and 31 March 2025 is shown in **Table 7** compared to the general DCD donor population donating at least one organ. Transplantation rates for other organs are higher in the DCD heart population when comparing to the general DCD population.

Table 7 Abdominal and lung offer outcomes from 61 DCD heart donors, 1 April 2024 - 31 March 2025				
Outcome	Lungs¹	Kidney¹	Liver	Pancreas
Offered	40	60	57	58
Accepted	25	59	53	43
Retrieved	16	58	47	29
Transplanted	15	56	35	15
% Transplanted of offered	38%	93%	61%	26%
% Transplanted of retrieved	94%	97%	74%	52%
National DCD organ % transplanted of offered*	20%	90%	44%	13%
National DCD organ % transplanted of retrieved*	87%	91%	70%	42%
¹ at least one				
*Based on all UK proceeding DCD donors between 1 April 2024 and 31 March 2025 where the heart was not retrieved				

APPENDIX



Appendix 1 Retrieval data missing form rates, 1 April 2024 - 31 March 2025					
Attending retrieval team	Number of forms due	Retrieval team forms missing		SNOD forms missing	
		N	%	N	%
Abdominal					
Birmingham	175	0	0.0	0	0.0
Cambridge	218	0	0.0	0	0.0
Cardiff	70	0	0.0	1	1.4
Edinburgh	126	0	0.0	0	0.0
King's College	252	0	0.0	0	0.0
Leeds	153	0	0.0	0	0.0
Manchester	151	0	0.0	0	0.0
Newcastle	129	0	0.0	0	0.0
Oxford	159	0	0.0	0	0.0
Royal Free	160	0	0.0	0	0.0
Cardiothoracic					
Birmingham	98	0	0.0	0	0.0
Glasgow	59	0	0.0	0	0.0
Harefield	122	0	0.0	0	0.0
Manchester	100	0	0.0	0	0.0
Newcastle	54	0	0.0	0	0.0
Papworth	126	0	0.0	0	0.0
Total	2152	0	0.0	1	0.0

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