

ANNUAL REPORT ON ORGAN UTILISATION

REPORT FOR 2024/2025 (1 APRIL 2015 – 31 MARCH 2025)

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Foreword

We are delighted to present the second NHS Blood and Transplant (NHSBT) Annual Organ Utilisation Report. This report covers the 2024-2025 financial year and presents data around how organs offered from DBD and DCD donors within the UK are utilised.

Our data shows that over the last financial year we have experienced a reduction in the number of organs offered from both DBD and DCD donors. Fortunately, there has been a consistent increase in the utilisation rate of kidneys offered from DCD donors, and a steady trend towards an increased utilisation of livers and lungs from DCD donors (Figures 3.4 and 5.4). The ongoing centre variation in offer decline rates for organs which were eventually transplanted (especially for DCD livers) still needs further evaluation and support for units to improve on.

There has also been an addition to the data presented in last year's report, with the inclusion of offer decline rates for DCD lungs (Figure 3.16).

We hope that this report will be a valuable resource for transplant clinicians involved in the development of Trust organ utilisation strategies, as well as being an important resource for patients and all those working within organ donation and transplantation pathways. It represents an ongoing commitment on behalf of NHSBT to emphasise the importance of efficient and effective usage of precious organs offered from deceased donors. The outcome of transplanted organs, and more data on waiting lists, can be found in other NHSBT reports (https://www.odt.nhs.uk/statistics-and-reports/).

If you feel that there are important measurements of organ utilisation that are not shown here, please contact the relevant Lead CLU (https://www.odt.nhs.uk/transplantation/organ-utilisation-development-team/), or NHSBT statistical enquiries (email statistical.enquiries@nhsbt.nhs.uk with 'OU Annual Report' in the Subject).

Lastly, we would like to thank all those involved in the production of this report, including the many groups of colleagues who collect, collate and analyse these data. It is essential to remember that each piece of information represents a life-changing event for a deceased donor and all those waiting for an organ transplant. This report is dedicated to all of those patients, their families, and the teams working tirelessly across the UK to care for and support them.

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Executive Summary

This report presents key figures about deceased donor organ utilisation in the UK. The period reported covers 10 years of data, from 1 April 2015. The report presents information on the number of deceased donor organs offered and their outcomes. Data are presented separately for DBD donors and DCD donors, and for each of the following organs separately:

- Kidney
- Liver
- Pancreas
- Heart
- Lung

Key findings

Kidney

- In 2024/25, 1,375 DBD donor kidneys were offered, of which 86.0% were transplanted. 62.6% of the 1,899 offered DCD donor kidneys were transplanted.
- The number of organs offered dipped in 2020/21 due to the Covid-19 pandemic.
 The number of offered organs in the proceeding years have not yet managed to
 reach pre-Covid-19 numbers, and for DBD donors there has been an additional
 drop in 2024/25.
- The reported reasons for declining offered kidneys often fell into one of the following categories: 'organ unsuitable', 'donor unsuitable', 'recipient reasons'.
- In 2024/25, 1,289 DBD donor kidneys were retrieved but 8.2% of these organs were not transplanted. Although the number of DBD donor kidneys retrieved has decreased from 1,438 in 2023/24, the percentage that were not transplanted has decreased in the past year, from 11.3% in 2023/24.
- 15.3% of the 1,403 retrieved DCD donor kidneys in 2024/25 were not transplanted. The percentage of retrieved DCD donor kidneys that were not transplanted in 2024/25 remains similar to that in 2015/16 (14.8%).
- The reported reasons for not transplanting kidneys that had been retrieved often fell into one of the following categories: 'donor unsuitable – medical', 'organ unsuitable – clinical'.
- In 2024/25, 381 (27.7%) of the 1,375 offered DBD kidneys were classed as Higher Quality Donor (HQD) organs. 94.8% of these 381 offered HQD kidneys were transplanted.
- In 2024/25, 370 (19.5%) of the 1,899 offered DCD kidneys were classed as HQD organs. 79.7% of these 370 offered HQD kidneys were transplanted.
- The percentage of retrieved kidneys that were not transplanted generally increased in line with the calculated Donor Risk Index (DRI); 8.1% of retrieved kidneys in 2024/25 were not transplanted for DCD donors with lower DRI values compared with 35.4% for DCD donors with higher DRI values.

• The percentage of retrieved kidneys that were not transplanted generally increased with increasing donor age; 5.6% of retrieved kidneys in 2024/25 were not transplanted for DBD donors aged under 18 years compared with 19.5% for DBD donors aged 70 years and above.

Liver

- In 2024/25, 675 DBD donor livers were offered, of which 77.9% were transplanted. 34.5% of the 898 offered DCD donor livers were transplanted.
- The number of organs offered dipped in 2020/21 due to the Covid-19 pandemic.
 The number of offered organs in the proceeding years have not yet managed to
 reach pre-Covid-19 numbers, and for DBD donors there has been an additional
 drop in 2024/25.
- The reported reasons for declining offered livers often fell into one of the following categories: 'organ unsuitable', 'donor unsuitable'. For DBD donors, 'recipient reasons' were also common
- In 2024/25, 612 DBD donor livers were retrieved but 14.1% of these organs were not transplanted. This compares to 691 DBD donor livers retrieved in 2023/24, of which 18.5% were not transplanted.
- 29.2% of the 438 retrieved DCD donor livers in 2024/25 were not transplanted. The
 percentage of retrieved DCD donor livers that were not transplanted has decreased
 from 35.5% in 2023/24.
- The reported reasons for not transplanting livers that had been retrieved often fell into the following category: 'organ unsuitable clinical'. For DBD organs, 'other' reasons were also common.
- In 2024/25, 192 (28.4%) of the 675 offered DBD livers were classed as Higher Quality Donor (HQD) organs. 90.6% of these 192 offered HQD livers were transplanted.
- There were no DCD HQD livers by definition.
- The percentage of retrieved livers that were not transplanted generally increased in line with the calculated Donor Risk Index (DRI); 4.1% of retrieved livers in 2024/25 were not transplanted for DBD donors with lower DRI values compared with 23.5% for DBD donors with higher DRI values.
- The percentage of retrieved livers that were not transplanted generally increased with increasing donor age; all eight livers retrieved from DCD donors aged under 18 years were transplanted in 2024/25, whereas 33.3% of livers retrieved from DCD donors aged 70 years and above were not transplanted.

Pancreas

- In 2024/25, 416 DBD donor pancreases were offered, of which 26.2% were transplanted. 12.4% of the 372 offered DCD donor pancreases were transplanted.
- The number of organs offered dipped in 2020/21 due to the Covid-19 pandemic.
 The number of offered organs from DBD donors dropped further in 2024/25. The
 number of offered organs from DCD donors, however, have come close to preCovid-19 numbers.
- The reported reasons for declining offered pancreases often fell into one of the following categories: 'organ unsuitable', 'donor unsuitable'.
- In 2024/25, 206 DBD donor pancreases were retrieved but 47.1% of these organs were not transplanted. The percentage of retrieved DBD donor pancreases that were not transplanted has fluctuated over time but remains much higher than for all other organ groups.
- 55.3% of the 103 retrieved DCD donor pancreases in 2024/25 were not transplanted. The percentage of retrieved DCD donor pancreases that were not transplanted has fluctuated over time but remains considerably higher than for all other organ groups.
- The reported reasons for not transplanting pancreases that had been retrieved often fell into the following category: 'organ unsuitable – clinical'.
- In 2024/25, 139 (33.4%) of the 416 offered DBD pancreases were classed as Higher Quality Donor (HQD) organs. 40.3% of these 139 offered HQD pancreases were transplanted.
- In 2024/25, 89 (23.9%) of the 372 offered DCD pancreases were classed as HQD organs. 25.8% of these 89 offered HQD pancreases were transplanted.
- The percentage of retrieved pancreases that were not transplanted generally increased in line with the calculated Donor Risk Index (DRI), although in 2024/25 this pattern was less clear. 50.0% of retrieved pancreases in 2024/25 were not transplanted for DCD donors with lower DRI values compared with 58.6% for DCD donors with higher DRI values.
- The percentage of retrieved pancreases that were not transplanted generally increased with increasing donor age; 27.3% of retrieved pancreases in 2024/25 were not transplanted for DBD donors aged under 18 years compared with 60.0% for DBD donors aged between 50 and 60 years.

Heart

- In 2024/25, 397 DBD donor hearts were offered, of which 36.0% were transplanted. 30.5% of the 187 offered DCD donor hearts were transplanted.
- The number of DBD organs offered dipped in 2020/21 due to the Covid-19 pandemic. The number of offered organs from DBD donors in the proceeding years have not yet managed to reach pre-Covid-19 numbers.

- The reported reasons for declining offered hearts often fell into the following category: 'organ unsuitable', 'donor unsuitable'. For DCD donors, 'centre reasons' were also common.
- In 2024/25, 144 DBD donor hearts were retrieved and 0.7% of these organs were not transplanted. In 2021/22 and 2022/23, all hearts retrieved from DBD donors were transplanted.
- 6.6% of the 61 retrieved DCD donor hearts in 2024/25 were not transplanted.
- The reported reasons for not transplanting DCD hearts that had been retrieved often fell into the following category: 'poor function'.
- In 2024/25, 31 (7.8%) of the 397 offered DBD hearts were classed as Higher Quality Donor (HQD) organs. 67.7% of these 31 offered HQD hearts were transplanted.
- In 2024/25, 27 (14.4%) of the 187 offered DCD hearts were classed as HQD organs. 55.6% of these 27 offered HQD hearts were transplanted.
- Most retrieved hearts were from donors aged between 18 and 50 years.

Lung

- In 2024/25, 396 DBD donors had lungs offered, of which 23.7% were transplanted. Of the 352 DCD donors that had lungs offered, 17.0% were transplanted.
- The number of organs offered dipped in 2020/21 due to the Covid-19 pandemic.
 The number of offered organs in the proceeding years have not yet managed to
 reach pre-Covid-19 numbers, and for DBD donors there has been an additional
 drop in 2024/25.
- The reported reasons for declining offered lungs often fell into one of the following categories: 'organ unsuitable', 'donor unsuitable', 'centre reasons'.
- In 2024/25, 98 DBD donor lungs were retrieved and 4.1% of these organs were not transplanted. The percentage of retrieved DBD donor lungs that were not transplanted has fluctuated over time, from as high as 9.2% in 2017/18 to as low as 1.5% in 2022/23.
- 11.8% of the 68 retrieved DCD donor lungs in 2024/25 were not transplanted. The percentage of retrieved DCD donor lungs that were not transplanted has fluctuated over time, from as high as 28.3% in 2019/20 to as low as 9.5% in 2017/18.
- The reported reasons for not transplanting lungs that had been retrieved often fell into one of the following categories: 'organ unsuitable – clinical', 'poor function', 'other'.

- In 2024/25, 68 (17.2%) of the 396 offered DBD lungs were classed as Higher Quality Donor (HQD) organs. 39.7% of these 68 offered HQD lungs were transplanted.
- In 2024/25, 37 (10.5%) of the 352 offered DCD lungs were classed as HQD organs. 54.1% of these 37 offered HQD lungs were transplanted.
- The percentage of retrieved DBD lungs that were not transplanted generally increased with increasing donor age; 3.8% of retrieved lungs in 2024/25 were not transplanted for DBD donors aged between 18 and 50 years compared with 5.9% for DBD donors aged between 60 and 70 years.

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

Introduction

This report presents information on organ utilisation from UK deceased donors between 1 April 2015 and 31 March 2025. Data were obtained from the UK Transplant Registry, at NHS Blood and Transplant, which holds information relating to donors, recipients and outcomes for all UK organs offered.

The pathway to organ transplantation is complex, as described in <u>Appendix A2</u>. Organ utilisation metrics can therefore focus on different aspects of the pathway. This report considers:

- Outcomes of offered organs; when an organ is offered, it can either be 1) declined and not retrieved for transplantation, 2) accepted and retrieved but not transplanted or 3) accepted, retrieved and transplanted. National summaries are presented as well as centre-specific offer decline rates.
- Retrieved not transplanted organs; organs that were retrieved from the donor for the purposes of transplantation but not transplanted.

While it is important that these metrics are considered for all offered organs, it is also useful to take measures of donor quality into account. The final chapter of this report breaks the data down using <u>donor risk indices</u>, indicators of <u>Higher Quality Donors</u> and donor age.

Organ utilisation summaries are provided for each organ group separately (kidney, liver, pancreas, heart and lung) but these are presented side by side so that comparisons between organ groups can be made. Lung utilisation has generally been summarised on a per donor basis, such that the lung is classed as offered if at least one of the left or right lung was offered. The same principle applies to the outcome of the lungs (e.g. classed as retrieved/transplanted if at least one of the left or right was retrieved/transplanted). The exception to this rule is with Figures 2.1 and 2.2, which consider left and right lungs as separate organs, in order to retain consistency with the NHSBT Annual Activity Report. Left and right kidneys are considered as two separate organs throughout the report.

Pancreases have been classed as offered if an offer was made, irrespective of whether it was considered for whole pancreas or islet transplantation. The same principle applies to classifying pancreases that were retrieved and those that were transplanted; this covers both whole pancreas and islet transplantation.

<u>DCD</u> heart utilisation data have been presented from 1 April 2022 only, due to the introduction of the national <u>DCD</u> heart programme occurring in September 2020.

When looking at offered organs, donors that experienced <u>prolonged time to asystole</u> are included in this report. This means that some of the <u>DCD</u> organs offered (those with <u>prolonged time to asystole</u>) could not be transplanted and centres would have no choice but to decline. The exception to this is with Figures 2.1 and 2.2, where only donors where at least one organ was retrieved are considered.

If an organ was transplanted outside of the UK, this is recorded as a transplant for the purposes of this report. <u>Multi-organ transplants</u> are included, such that if multiple organs (e.g. kidney and heart) were transplanted into one recipient, each of these organs are recorded as transplanted in the individual organ group summaries. No age restrictions have been applied and so this report considers donors and recipients of all ages.

The exception to inclusion criteria mentioned above is where centre-specific <u>offer decline</u> <u>rates</u> are presented; the specific cohorts used for such analyses are described thoroughly in the centre-specific <u>offer decline rate</u> sections.

Figures 2.1 and 2.2 show the pathway for all donor organs through to transplantation. Unlike Chapter 3, only donors where at least one organ was retrieved are considered. These are referred to as 'actual' organ donors. The charts start at 100% for each organ, representing all organs from the 676 actual DBD and 727 actual DCD donors. The proportion of these organs where national donor age criteria are met is then shown, followed by the proportion with consent, the proportion offered, the proportion retrieved and finally the proportion transplanted. Table 2.1 presents the final proportion that were transplanted. For example, Figure 2.2 and Table 2.1 show that 81.8% of the kidneys from the 727 actual DCD donors were transplanted. For heart, lung and pancreas, some of the donors did not meet organ-specific criteria for donation (i.e. the second step in the pathway) so Table 2.1 also shows the proportion transplanted, of those organs that met the criteria. Transplantation rates for kidneys and livers are generally high, while for other organs, even after allowing for the agreed age criteria, the rates are generally low.

100% 90% Kidney 80% Liver 70% 60% 50% 40% 30% Heart 20% Pancreas Lung 10% ◆Bowel Organs from Organs offered Donor age Consent for Organs Organs actual DBD criteria met1 organ donation for donation retrieved for transplanted transplant donors Suitability criteria: Pancreas: donors with BMI < 40.5 and aged <= 60.

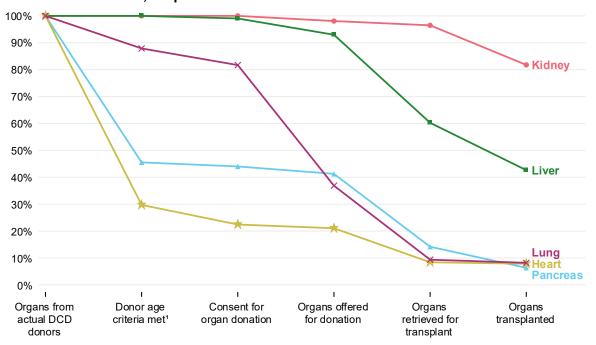
Figure 2.1 Donation and transplantation rates of organs from DBD organ donors in the UK, 1 April 2024 - 31 March 2025

Bowel: donors aged < 60 and weighing < 90 kg.

Lung: donors aged < 70.

Heart: donors aged < 65 and did not die due to myocardial infarction.

Figure 2.2 Donation and transplantation rates of organs from DCD organ donors in the UK, 1 April 2024 - 31 March 2025



¹Suitability criteria:

Pancreas: donors with BMI < 40.5 and aged <= 55.

Heart: donors aged < 50 and weighing > 50kg, and did not die due to myocardial infarction.

Lung: donors aged < 70.

Table 2.1 Transplantation rates of organs from UK organ donors, 1 April 2024 - 31 March 2025

Organ	Percentage of organs transplanted, of all donors	Percentage of organs transplanted, of donors meeting age criteria ¹
DBD		
Kidney	87.5%	87.5%
Liver	77.8%	77.8%
Pancreas	16.1%	24.7%
Bowel	2.2%	4.7%
Heart	21.2%	27.0%
Lung	13.8%	15.6%
DCD		
Kidney	81.8%	81.8%
Liver	42.6%	42.6%
Pancreas	6.3%	13.9%
Heart	7.8%	26.4%
Lung	8.2%	9.3%

Suitability criteria:

- Pancreas: donors with BMI < 40.5 and aged <= 60 (DBD) or <= 55 (DCD).
- Bowel (DBD): donors aged < 60 and weighing < 90 kg.
- Heart: donors aged < 65 (DBD) or < 50 (DCD) and weighing > 50kg (DCD), and did not die due to myocardial infarction. Lung: donors aged < 70.

Utilisation of Offered Organs

3.1 Number of offered organs per year

Figure 3.1 and Table 3.1 show the number of <u>DBD</u> donor organs offered per year, for each of the five organ groups. The number of organs offered dropped in 2021 due to the Covid-19 pandemic, and has not recovered since, with a further drop in 2024/25. The number of kidneys offered far exceeds any other organ type. For <u>DCD</u> donors, a similar dip occurred in 2021, but the numbers have come closer to recovering since, as shown in **Figure 3.2 and Table 3.2.**

Figure 3.1 Number of offered organs from DBD donors in the UK, 1 April 2015 - 31 March 2025

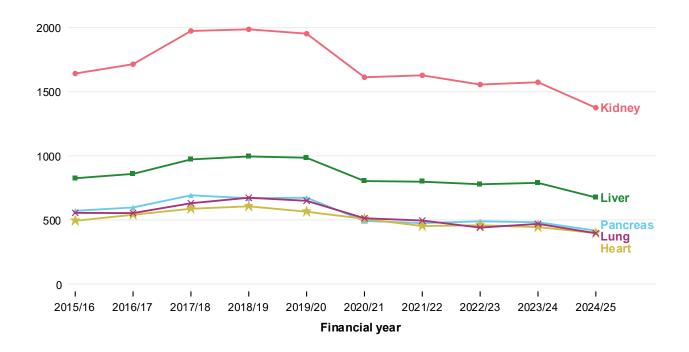
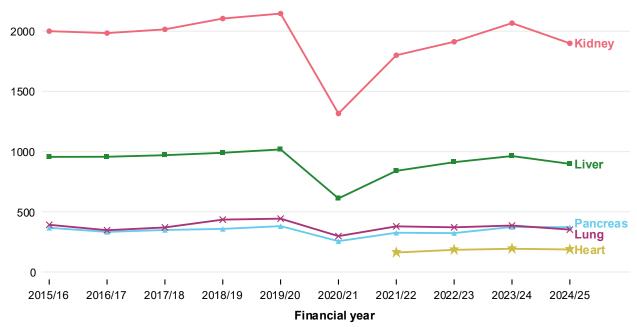


Table 3.1 Number of offered organs from DBD donors in the UK, 1 April 2015 - 31 March 2025 Total DBD offers Financial year **Kidney** Liver **Pancreas** Heart Lung 2015/16 2016/17 2017/18 2018/19 2019/20 2020/21 2021/22 2022/23 2023/24 2024/25

Figure 3.2 Number of offered organs from DCD donors in the UK, 1 April 2015 - 31 March 2025



On 7 September 2020, the UK National DCD heart programme was introduced. Therefore DCD heart data prior to 2021/22 is not shown.

Table 3.2 Number of offered organs from DCD donors in the UK, 1 April 2015 - 31 March 2025

	Total DCD offers							
Financial year	Kidney	Liver	Pancreas	Heart	Lung			
2015/16	2000	956	367		392			
2016/17	1984	957	333		347			
2017/18	2015	970	349		370			
2018/19	2105	990	358		435			
2019/20	2146	1018	381		443			
2020/21	1316	611	256		298			
2021/22	1800	840	326	162	379			
2022/23	1912	912	323	184	371			
2023/24	2067	963	374	193	386			
2024/25	1899	898	372	187	352			

3.2 Outcomes of offered organs

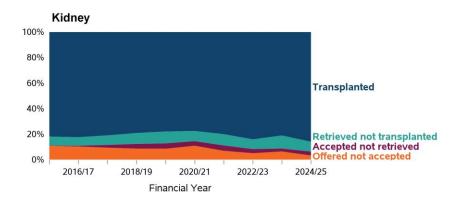
As outlined in the organ utilisation pathway presented in <u>Appendix A2</u>, when an organ is offered, it may be accepted with the intention to transplant but later not used. The decision to not use the accepted organ may come either before it is retrieved or after. **Figure 3.3**, **Table 3.3 and Table 3.4** present the outcomes of offered organs from <u>DBD</u> donors, considering whether or not they were accepted, retrieved or transplanted.

The same information is presented for <u>DCD</u> donors in **Figure 3.4**, **Table 3.5** and **Table 3.6**. For cardiothoracic organs, the proportion of offered organs that are retrieved but not transplanted is very low (more so for <u>DBD</u> donors).

Overall, the proportion of offered organs that are transplanted is much higher for kidney and liver compared to the other organ groups.

Note that <u>DCD</u> donors with <u>prolonged time to asystole</u> are included in this analysis so not all organs were able to be transplanted.

Figure 3.3. Outcomes of offered organs from DBD donors in the UK, 1 April 2015 – 31 March 2025



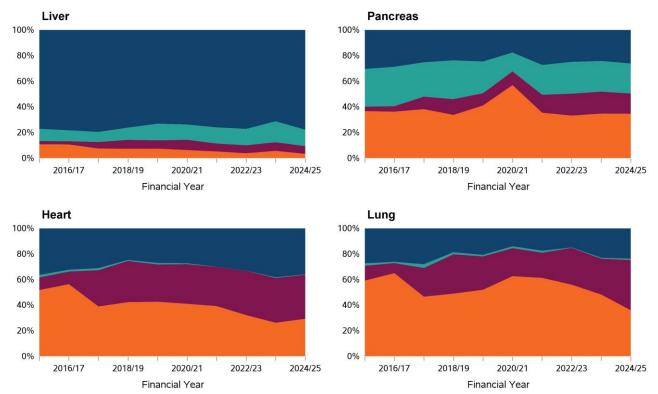


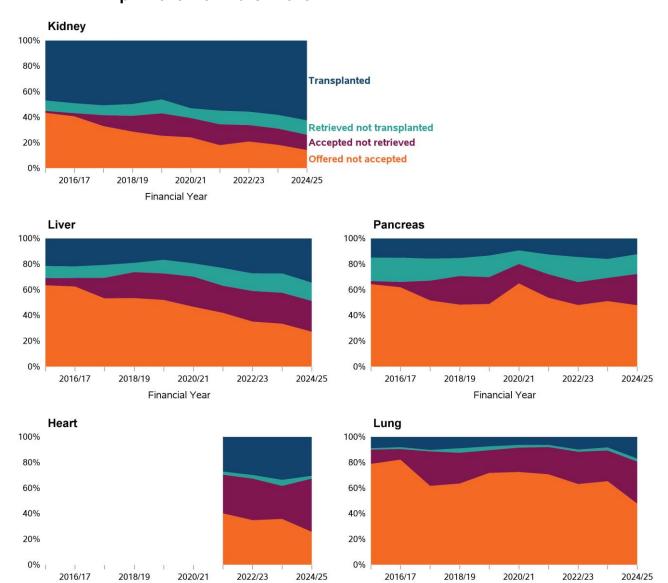
Table 3.3 Outcomes of offered abdominal organs from DBD donors in the UK, 1 April 2015 – 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Kidney					
2015/16	1642	10.8%	0.1%	7.1%	82.0%
2016/17	1715	10.3%	0.6%	6.7%	82.4%
2017/18	1974	9.3%	2.1%	7.5%	81.0%
2018/19	1987	8.6%	3.7%	8.6%	79.2%
2019/20	1953	8.5%	4.2%	9.3%	78.0%
2020/21	1613	10.8%	3.6%	8.0%	77.6%
2021/22	1628	6.9%	4.2%	8.9%	80.0%
2022/23	1556	5.0%	3.2%	7.6%	84.1%
2023/24	1574	6.4%	2.3%	10.3%	81.1%
2024/25	1375	3.2%	3.1%	7.7%	86.0%
Liver					
2015/16	825	10.8%	2.5%	9.5%	77.2%
2016/17	859	10.6%	2.6%	8.5%	78.3%
2017/18	972	7.4%	5.1%	7.8%	79.6%
2018/19	995	7.2%	7.0%	9.4%	76.3%
2019/20	985	7.3%	6.6%	12.9%	73.2%
2020/21	803	6.2%	8.1%	11.8%	73.8%
2021/22	798	5.1%	6.3%	12.5%	76.1%
2022/23	778	3.7%	6.3%	12.7%	77.2%
2023/24	789	5.6%	6.8%	16.2%	71.4%
2024/25	675	3.3%	6.1%	12.7%	77.9%
Pancreas					
2015/16	571	36.6%	3.5%	29.4%	30.5%
2016/17	597	36.2%	4.4%	30.7%	28.8%
2017/18	692	38.2%	9.8%	26.7%	25.3%
2018/19	669	33.6%	12.4%	30.2%	23.8%
2019/20	673	41.0%	9.7%	24.7%	24.7%
2020/21	492	56.9%	10.8%	14.6%	17.7%
2021/22	475	35.4%	14.1%	23.2%	27.4%
2022/23	489	33.1%	17.2%	24.7%	24.9%
2023/24	482	34.6%	17.2%	23.9%	24.3%
2024/25	416	34.6%	15.9%	23.3%	26.2%

Table 3.4 Outcomes of offered cardiothoracic organs from DBD donors in the UK, 1 April 2015 – 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Heart					
2015/16	493	51.7%	9.9%	1.8%	36.5%
2016/17	540	56.3%	10.0%	1.3%	32.4%
2017/18	587	38.8%	28.4%	1.5%	31.2%
2018/19	606	42.2%	32.3%	0.7%	24.8%
2019/20	564	42.6%	29.3%	1.1%	27.1%
2020/21	508	40.9%	31.1%	0.6%	27.4%
2021/22	452	39.2%	30.8%	0.0%	30.1%
2022/23	458	32.1%	34.7%	0.0%	33.2%
2023/24	444	26.1%	35.1%	0.5%	38.3%
2024/25	397	29.2%	34.5%	0.3%	36.0%
Lung					
2015/16	555	59.1%	11.7%	1.8%	27.4%
2016/17	553	64.9%	8.0%	0.9%	26.2%
2017/18	630	46.5%	22.5%	2.9%	28.1%
2018/19	673	48.9%	30.9%	1.5%	18.7%
2019/20	649	51.9%	26.2%	1.1%	20.8%
2020/21	513	62.6%	22.0%	1.4%	14.0%
2021/22	495	61.2%	19.8%	1.4%	17.6%
2022/23	440	55.9%	28.9%	0.2%	15.0%
2023/24	469	48.2%	28.1%	0.6%	23.0%
2024/25	396	35.9%	39.4%	1.0%	23.7%

Figure 3.4. Outcomes of offered organs from DCD donors in the UK, 1 April 2015 – 31 March 2025



1. On 7 September 2020, the UK National DCD heart programme was introduced. Therefore DCD heart data prior to 2022/23 is not shown.

Financial Year

2. DCD donors with prolonged time to asystole are included in this analysis so not all organs were able to be transplanted.

Table 3.5 Outcomes of offered abdominal organs from DCD donors in the UK, 1 April 2015 – 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Kidney					
2015/16	2000	43.3%	1.6%	8.2%	47.0%
2016/17	1984	40.5%	2.6%	7.7%	49.2%
2017/18	2015	32.9%	8.6%	7.7%	50.8%
2018/19	2105	28.6%	12.4%	9.2%	49.8%
2019/20	2146	25.3%	17.6%	10.9%	46.2%
2020/21	1316	24.1%	15.2%	7.6%	53.1%
2021/22	1800	17.9%	16.4%	10.7%	55.0%
2022/23	1912	20.8%	12.9%	10.5%	55.8%
2023/24	2067	18.2%	12.8%	10.6%	58.3%
2024/25	1899	14.1%	12.0%	11.3%	62.6%
Liver					
2015/16	956	63.4%	5.6%	9.4%	21.5%
2016/17	957	62.5%	6.7%	9.0%	21.8%
2017/18	970	53.2%	16.1%	10.0%	20.7%
2018/19	990	53.4%	20.3%	7.2%	19.1%
2019/20	1018	52.0%	20.7%	10.6%	16.7%
2020/21	611	46.6%	23.6%	10.3%	19.5%
2021/22	840	41.9%	21.2%	13.8%	23.1%
2022/23	912	35.1%	23.9%	13.7%	27.3%
2023/24	963	33.4%	24.2%	15.1%	27.3%
2024/25	898	27.2%	24.1%	14.3%	34.5%
Pancreas					
2015/16	367	64.3%	2.5%	18.3%	15.0%
2016/17	333	61.9%	4.2%	18.9%	15.0%
2017/18	349	51.6%	15.5%	17.2%	15.8%
2018/19	358	48.3%	22.3%	14.0%	15.4%
2019/20	381	48.8%	21.0%	16.8%	13.4%
2020/21	256	64.8%	15.2%	10.5%	9.4%
2021/22	326	53.7%	18.4%	15.3%	12.6%
2022/23	323	48.0%	18.0%	19.5%	14.6%
2023/24	374	51.1%	18.2%	14.7%	16.0%
2024/25	372	47.8%	24.5%	15.3%	12.4%

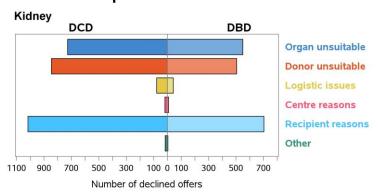
Table 3.6 Outcomes of offered cardiothoracic organs from DCD donors in the UK, 1 April 2015 – 31 March 2025

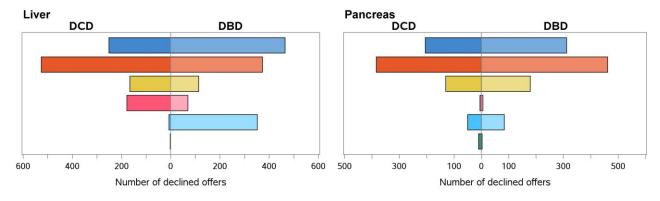
Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Heart					
2021/22	162	40.1%	30.2%	2.5%	27.2%
2022/23	184	34.8%	32.6%	2.7%	29.9%
2023/24	193	35.8%	25.9%	4.7%	33.7%
2024/25	187	25.7%	41.7%	2.1%	30.5%
Lung					
2015/16	392	78.8%	11.2%	1.0%	8.9%
2016/17	347	82.1%	8.4%	1.4%	8.1%
2017/18	370	61.6%	27.0%	1.1%	10.3%
2018/19	435	63.4%	24.1%	3.4%	9.0%
2019/20	443	71.8%	17.8%	2.9%	7.4%
2020/21	298	72.5%	19.1%	2.0%	6.4%
2021/22	379	70.7%	21.4%	1.6%	6.3%
2022/23	371	63.1%	25.3%	1.6%	10.0%
2023/24	386	65.3%	24.1%	2.3%	8.3%
2024/25	352	47.7%	33.0%	2.3%	17.0%

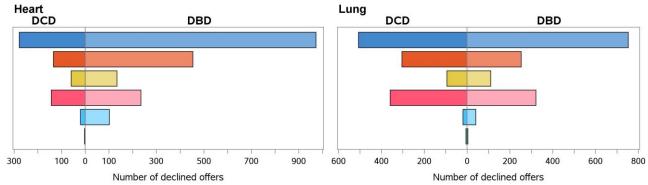
3.3 Reasons for offer decline

Organs are offered to transplant centres as per an organ-specific <u>offering scheme</u>. This means that an organ can be offered to a number of centres and/or patients, and it can be declined multiple times before reaching its ultimate outcome of being either transplanted or not transplanted. The primary reason for decline, for each of these individual centre/patient offers, is captured on the <u>UK Transplant Registry</u>. **Figure 3.5 and Table 3.7** presents these reasons for offer decline for <u>DBD</u> donors and <u>DCD</u> donors separately, grouped into the following categories; organ unsuitable, donor unsuitable, logistic reasons, centre reasons, recipient reasons and other reasons. See Appendix <u>A5: Decline reason</u> <u>categories</u> for how the offer decline reasons are categorised. Fast track offers and offers made to centres outside of the UK are excluded from these summaries. For all organ groups, 'organ unsuitable' is a common reason for decline, and for abdominal organs, 'donor unsuitable' is also commonly reported. 'Recipient reasons' are also a frequently reported reason for decline for kidneys.

Figure 3.5 Reasons for offer decline for organs offered from UK donors, 1 April 2024 – 31 March 2025







Note that the x-axis range differs for each organ group.

Table 3.7 Reasons for offer decline for organs offered from UK donors, 1 April 2024 - 31 March 2025

Organ	Total number of offers declined	Percentage declined due to								
		Organ unsuitable	Donor unsuitable	Logistic reasons	Centre reasons	Recipient reasons	Other			
DBD										
Kidney	1815	30.3%	27.8%	2.4%	0.5%	38.8%	0.2%			
Liver	1374	33.8%	27.1%	8.3%	5.1%	25.6%	0.0%			
Pancreas	1046	29.8%	44.2%	17.1%	0.6%	8.0%	0.3%			
Heart	1898	51.3%	23.9%	7.1%	12.4%	5.4%	0.0%			
Lung	1484	50.7%	17.0%	7.5%	21.7%	2.8%	0.3%			
DCD										
Kidney	2700	26.9%	31.3%	2.9%	0.7%	37.6%	0.6%			
Liver	1130	22.2%	46.5%	14.7%	15.8%	0.6%	0.2%			
Pancreas	784	26.1%	49.0%	16.6%	0.6%	6.4%	1.3%			
Heart	637	43.6%	21.0%	9.3%	22.4%	3.1%	0.5%			
Lung	1288	39.4%	23.6%	7.3%	27.9%	1.5%	0.4%			

3.4 Centre-specific offer decline rates

Funnel plots are presented below 1) to compare offer decline rates between centres and 2) to see how the centre-specific offer decline rates compare to the overall national offer decline rate. The overall national unadjusted offer decline rate is shown by the solid line while the 95% and 99.8% confidence limits are indicated via a thin and thick dotted line, respectively. Each dot in the plot represents an individual transplant centre. Centres that are positioned above the upper limits indicate an offer decline rate that is higher than the national rate, while centres positioned below the lower limits indicates on offer decline rate that is lower than the national rate. The number of offers a centre may receive will depend on patient case mix as per the organ specific offering scheme, however the following summaries are not risk adjusted for known centre differences in patient case mix.

The cohort inclusion criteria differ for each organ group and are hence described in detail in each of the following sub-sections. However, for all organ groups, only organs that resulted in transplantation are included in the analysis.

3.4.1 Kidney

Kidney-only offers from <u>DBD</u> and <u>DCD</u> donors who had at least one kidney retrieved, offered directly and on behalf of a named individual patient and resulted in transplantation are included in the analysis. Any offers made through the <u>reallocation of kidneys</u>, declined kidney or <u>fast track</u> schemes were excluded. Only offers through the <u>DCD</u> kidney <u>offering scheme</u> are presented, all local <u>DCD</u> offers are excluded. Only individual offers for named patients were considered which excluded any <u>ABO</u> and <u>HLA-incompatible</u> patients.

In order to understand centre practices more comprehensively, data are presented separately for:

- Standard criteria (SCD) DBD kidney offers to adult (≥18 years) patients
 - o Adult SCD are donors that did not meet the ECD criteria (below).
- Extended criteria (ECD) DBD kidney offers to adult (≥18 years) patients
 - ECDs for adult offers have been defined as donors aged ≥60 years at the time of death OR aged 50 to 59 years with at least two or three donor characteristics: hypertension, creatinine > 130 μmol/l or death due to intracranial hemorrhage.
- Standard criteria (SCD) DCD kidney offers to adult (≥18 years) patients
 - SCDs for adult offers are donors that did not meet the ECD criteria (above).
- Standard criteria (SCD) DBD kidney offers to paediatric (<18 years) patients
 - SCDs for paediatric offers are DBD donors aged <50 years at time of death.

Adult Standard Criteria DBD kidney offer decline rates, 1 April 2022 - 31 March 2025

Figure 3.6 compares individual centre adult kidney <u>offer decline rates</u> with the national rate for <u>DBD</u> SCD over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.8**.

Figure 3.6 Adult standard criteria DBD donor kidney offer decline rates for kidneys that resulted in a transplant 1 April 2022 and 31 March 2025 100% 80% 60% 40% 20% 99.8% Upper CL ---- 95% Lower CL 95% Upper CL 99.8% Lower CL National rate Centre rate 0% 1 1 0 50 100 150 200 250 300 350 400

Centre specific offers

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Table 3.8 compares individual centre adult kidney <u>offer decline rates</u> for <u>DBD</u> SCD over time by financial year.

	standard cr e, 1 April 202				r decline ra	tes by tra	ınsplant	
	2022	/23	2023	/24	2024	/25	Overall	
		Decline		Decline		Decline		
	Number	rate	Number	rate	Number	rate	Number	Decline
Centre	of offers	(%)	of offers	(%)	of offers	(%)	of offers	rate (%)
Belfast	8	(25)	2	(0)	5	(20)	15	(20)
Birmingham	129	(55)	122	(50)	85	(54)	336	(53)
Bristol	39	(33)	35	(49)	26	(50)	100	(43)
Cambridge	22	(36)	20	(30)	20	(30)	62	(32)
Cardiff	45	(60)	35	(60)	31	(58)	111	(59)
Coventry	18	(44)	25	(48)	30	(67)	73	(55)
Edinburgh	32	(47)	29	(66)	39	(62)	100	(58)
Glasgow	50	(48)	43	(42)	36	(44)	129	(45)
Guy's	117	(56)	96	(58)	83	(54)	296	(56)
Leeds	80	(58)	68	(63)	62	(52)	210	(58)
Leicester	54	(65)	59	(51)	51	(57)	164	(57)
Liverpool	58	(59)	57	(58)	35	(40)	150	(54)
Manchester	90	(56)	95	(58)	84	(63)	269	(59)
Newcastle	41	(49)	41	(59)	38	(47)	120	(52)
Nottingham	47	(70)	39	(49)	36	(58)	122	(60)
Oxford	33	(73)	60	(65)	62	(53)	155	(62)
Plymouth	23	(48)	18	(61)	7	(43)	48	(52)
Portsmouth	50	(56)	44	(61)	35	(49)	129	(56)
Sheffield	36	(67)	26	(62)	27	(52)	89	(61)
St George's	77	(48)	65	(46)	49	(49)	191	(48)
The Royal Free	49	(39)	42	(57)	63	(41)	154	(45)
The Royal London	93	(62)	91	(47)	108	(72)	292	(61)
WLRTC	77	(55)	86	(65)	86	(64)	249	(61)
UK	1268	(55)	1198	(55)	1098	(55)	3564	(55)
	Centre has Centre has	reached reached	the upper 99 the upper 99 the lower 99 the lower 99	5% confid	ence limit			

Figure 3.7 compares individual centre adult kidney <u>offer decline rates</u> with the national rate for <u>DBD</u> ECD over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.9**.

Figure 3.7 Adult extended criteria DBD donor kidney offer decline rates for kidneys that resulted in a transplant 1 April 2022 and 31 March 2025 100% 80% 60% 40% 20% 99.8% Upper CL ---- 95% Lower CL 95% Upper CL 99.8% Lower CL National rate Centre rate 0% 1 ı I 0 50 100 150 200 250 300

Centre specific offers

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Table 3.9 compares individual centre adult kidney <u>offer decline rates</u> for <u>DBD</u> ECD over time by financial year.

Table 3.9		tended crit I April 2022				decline ra	ites by tra	ansplant	
		2022	/23	2023	3/24	2024	1/25	Ove	rall
			Decline		Decline		Decline		Decline
		Number	rate	Number	rate	Number	rate	Number	rate
Centre	Code	of offers	(%)	of offers	(%)	of offers	(%)	of offers	(%)
Belfast	Α	3	(0)	2	(50)	6	(17)	11	(18)
Birmingham	В	74	(72)	73	(56)	60	(63)	207	(64)
Bristol	С	17	(47)	24	(54)	30	(47)	71	(49)
Cambridge	D	13	(54)	17	(53)	13	(54)	43	(53)
Cardiff	Ε	26	(65)	21	(71)	17	(47)	64	(63)
Coventry	F	18	(50)	23	(61)	13	(62)	54	(57)
Edinburgh	G	27	(59)	35	(54)	48	(81)	110	(67)
Glasgow	Н	30	(57)	31	(52)	34	(53)	95	(54)
Guy's	J	65	(68)	80	(63)	61	(62)	206	(64)
Leeds	K	41	(56)	56	(68)	72	(67)	169	(64)
Leicester	L	46	(67)	47	(57)	39	(64)	132	(63)
Liverpool	M	38	(71)	30	(73)	20	(60)	88	(69)
Manchester	N	52	(56)	66	(53)	73	(70)	191	(60)
Newcastle	0	17	(59)	41	(37)	40	(55)	98	(48)
Nottingham	Р	36	(75)	26	(69)	29	(66)	91	(70)
Oxford	Q	43	(56)	52	(65)	50	(66)	145	(63)
Plymouth	R	24	(46)	18	(72)	12	(67)	54	(59)
Portsmouth	S	34	(71)	31	(55)	39	(59)	104	(62)
Sheffield	T	34	(62)	19	(53)	25	(48)	78	(55)
St George's	U	30	(73)	34	(68)	20	(55)	84	(67)
The Royal Free	V	34	(56)	32	(69)	32	(63)	98	(62)
The Royal	W	59	(78)	77	(73)	79	(75)	215	(75)
London WLRTC	Χ	66	(52)	68	(66)	63	(62)	197	(60)
UK		827	(63)	903	(61)	875	(63)	2605	(62)
	C	entre has re entre has re entre has re entre has re	eached th eached th	ie upper 95 ie lower 95	% confide % confider	nce limit nce limit			

Adult Standard Criteria DCD kidney offer decline rates, 1 April 2022 - 31 March 2025

Figure 3.8 compares individual centre adult kidney <u>offer decline rates</u> with the national rate for <u>DCD</u> SCD over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.10**.

Figure 3.8 Adult standard criteria DCD donor kidney offer decline rates for kidneys that resulted in a transplant 1 April 2022 and 31 March 2025 100% 80% 60% 40% 20% 99.8% Upper CL ---- 95% Lower CL 95% Upper CL 99.8% Lower CL National rate Centre rate 0% - 1 - 1 - 1 - 1 - 1 0 20 40 60 80 100 120 140 160 180 200 220 240 260 280 300 320 340

Centre specific offers

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Table 3.10 compares individual centre adult kidney <u>offer decline rates</u> for $\underline{\text{DCD}}$ SCD over time by financial year.

Table 3.10		standard cı , 1 April 20				r decline ra	ites by tra	ansplant			
		2022	/23	2023	/24	2024		Ove	rall		
			Decline		Decline		Decline		Decline		
		Number	rate	Number	rate	Number	rate	Number	rate		
Centre	Code	of offers	(%)	of offers	(%)	of offers	(%)	of offers	(%)		
Belfast	Α	8	(25)	13	(54)	4	(0)	25	(36)		
Birmingham	В	102	(67)	91	(64)	103	(55)	296	(62)		
Bristol	С	38	(34)	39	(41)	29	(45)	106	(40)		
Cambridge	D	22	(18)	27	(56)	28	(43)	77	(40)		
Cardiff	Е	36	(72)	40	(63)	34	(41)	110	(59)		
Coventry	F	20	(60)	23	(61)	32	(69)	75	(64)		
Edinburgh	G	18	(56)	30	(63)	32	(69)	80	(64)		
Glasgow	Н	30	(53)	29	(34)	30	(60)	89	(49)		
Guy's	J	69	(70)	91	(65)	79	(57)	239	(64)		
Leeds	K	45	(44)	82	(62)	64	(47)	191	(53)		
Leicester	L	53	(62)	49	(55)	51	(61)	153	(59)		
Liverpool	M	29	(59)	40	(73)	35	(49)	104	(61)		
Manchester	N	65	(58)	81	(63)	103	(58)	249	(60)		
Newcastle	0	28	(50)	35	(74)	35	(43)	98	(56)		
Nottingham	Р	37	(78)	31	(61)	32	(72)	100	(71)		
Oxford	Q	42	(50)	41	(61)	57	(51)	140	(54)		
Plymouth	R	23	(61)	21	(43)	13	(31)	57	(47)		
Portsmouth	S	41	(63)	44	(68)	19	(79)	104	(68)		
Sheffield	T	35	(69)	35	(57)	22	(64)	92	(63)		
St George's	U	35	(43)	56	(70)	50	(48)	141	(55)		
The Royal Free	V	18	(39)	48	(60)	54	(57)	120	(56)		
The Royal London	W	73	(74)	85	(62)	111	(68)	269	(68)		
WLRTC	Χ	44	(50)	89	(57)	80	(63)	213	(58)		
UK		911	(59)	1120	(61)	1097	(57)	3128	(59)		
	Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit										

Paediatric Standard Criteria DBD kidney offer decline rates, 1 April 2022 – 31 March 2025

Figure 3.9 compares individual centre paediatric kidney <u>offer decline rates</u> with the national rate for <u>DBD</u> SCD over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.11**.

Figure 3.9 Paediatric standard criteria DBD donor kidney offer decline rates for kidneys that resulted in a transplant 1 April 2022 and 31 March 2025 100% 80% 60% 40% 20% 99.8% Upper CL -----95% Lower CL 95% Upper CL 99.8% Lower CL National rate Centre rate 0% 1 10 20 0 30 40 50 60 Centre specific offers

Table 3.11 compares individual centre paediatric kidney <u>offer decline rates</u> for paediatric <u>DBD</u> SCD over time by financial year.

Table 3.11 Paediatric standard criteria DBD donor kidney offer decline rates by transplant centre, 1 April 2022 and 31 March 2025

		2022	2/23	202	3/24	2024	4/25	Ove	rall
		Number	Decline	Number	Decline	Number	Decline	Number	Decline
Centre	Code	of offers	rate (%)						
Belfast	Α	0	(0)	1	(0)	0	(0)	1	(0)
Birmingham	В	13	(23)	9	(22)	7	(29)	29	(24)
Bristol	С	6	(33)	4	(0)	2	(0)	12	(17)
GOSH	I	7	(0)	10	(60)	6	(50)	23	(39)
Glasgow	Н	5	(40)	0	(0)	2	(0)	7	(29)
Guy's	J	8	(25)	8	(38)	1	(0)	17	(29)
Leeds	K	4	(25)	1	(0)	3	(67)	8	(38)
Manchester	N	9	(33)	6	(33)	11	(36)	26	(35)
Newcastle	0	2	100)	1	100)	1	100)	4	100)
Nottingham	Р	6	(83)	8	(50)	3	(33)	17	(59)
UK		60	(33)	48	(38)	36	(36)	144	(35)

3.4.2 Liver

Named adult (≥16) and large paediatric (<16 and weight >40kg) <u>elective liver offers</u> to UK transplant centres where the liver resulted in a liver-only first transplant are included in the analysis. Offers to super-urgent, hepatoblastoma, <u>ACLF</u>, paediatric, intestinal or liver and cardiothoracic patients are excluded. Offers to Dublin are not included.

For <u>DBD</u> donors, all <u>fast track</u> offers were excluded as these are offered at a centre level. For <u>DCD</u> donors, <u>fast track</u> offers were only included if the offer was accepted and transplanted.

Figure 3.10 compares individual centre adult liver <u>offer decline rates</u> with the national rate for <u>DBD</u> donors over the time period, 1 April 2022 and 31 March 2025 while **Figure 3.11** considers offers from <u>DCD</u> donors.

A <u>DBD</u> liver transplant can involve a whole liver, reduced liver or split liver. The term reduced is used when only one lobe of the liver is transplanted and the term split applies when both lobes of the liver are transplanted into two different recipients. Offers of whole livers and right lobes which resulted in transplantation are included in **Figure 3.10** and <u>offer decline rates</u> by centre and organ offered are presented in **Table 3.12**.

100% 80% Edinburgh 60% 40% 20% 99.8% Upper CL ---- 95% Lower CL 95% Upper CL 99.8% Lower CL National rate Centre rate 0% 100 200 250 0 50 150 300 350 400 450 500 550 Centre specific offers

Figure 3.10 Named adult elective liver offer decline rates that resulted in a liver only first transplant from DBD donors, 1 April 2022 and 31 March 2025

Figure 3.11 Adult elective liver offer decline rates that resulted in a liver only first transplant from DCD donors, 1 April 2022 and 31 March 2025

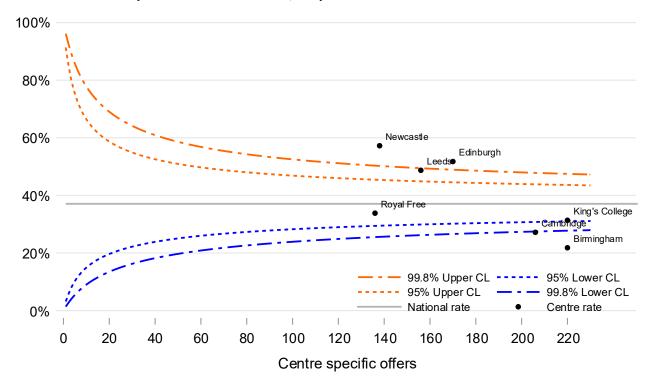


Table 3.12 Offer decline rates for each centre by offered organ and donor type 1 April 2022 and 31 March 2025 **DBD Donors DCD Donors Whole Livers Whole Livers Right Lobe All Livers** Centre Number Decline Number Decline Number Decline Number Decline of offers rate (%) of offers rate (%) of offers rate (%) of offers rate (%) A. All donors Birmingham Cambridge Edinburgh King's College Leeds Newcastle Royal Free Total B. DBD donors aged ≤65 years and DCD donors aged ≤60 years Birmingham Cambridge Edinburgh King's College Leeds Newcastle Royal Free Total Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

3.4.3 Pancreas

Pancreas offers from <u>DBD</u> and <u>DCD</u> donors whose pancreas was retrieved, offered directly on behalf of a named individual patient and resulted in transplantation are included in the analysis. Any offers of pancreases declined for transplantation, pancreases offered for <u>multi-organ</u> or small bowel transplant were excluded, as were offers made through the <u>fast track</u> scheme or the <u>reallocation of the pancreas</u>. Only individual offers for named patients were considered which excluded any <u>ABO</u>- and <u>HLA-incompatible</u> patients.

Figure 3.12 compares individual centre pancreas <u>offer decline rates</u> for <u>DBD</u> donors with the national rate over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.13**.

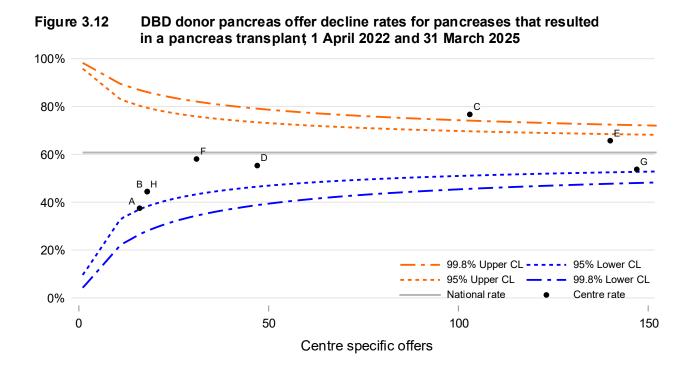


Table 3.13 compares individual centre pancreas <u>offer decline rates</u> for <u>DBD</u> donors over time by financial year.

Table 3.13	DBD donor pancreas offer decline rates by transplant centre, 1 April 2022 and 31 March 2025								
Centre	Code	202: Number of offers	2/23 Decline rate (%)	202: Number of offers	3/24 Decline rate (%)	2024 Number of offers	4/25 Decline rate (%)	Ove Number of offers	Prall Decline rate (%)
Cambridge	Α	6	(50)	4	(25)	6	(33)	16	(38)
Cardiff	В	7	(43)	8	(38)	3	(67)	18	(44)
Edinburgh	С	41	(73)	34	(85)	28	(71)	103	(77)
Guy's	D	20	(45)	13	(69)	14	(57)	47	(55)
Manchester	Е	42	(64)	54	(67)	44	(66)	140	(66)
Newcastle	F	9	(67)	10	(40)	12	(67)	31	(58)
Oxford	G	57	(54)	50	(52)	40	(55)	147	(54)
WLRTC	Н	5	(40)	7	(43)	6	(50)	18	(44)
UK		187	(59)	180	(62)	153	(61)	520	(61)
	Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit								

Figure 3.13 compares individual centre pancreas <u>offer decline rates</u> for <u>DCD</u> donors with the national rate over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 3.14**.

Figure 3.13 DCD donor pancreas offer decline rates for pancreases that resulted in a pancreas transplant, 1 April 2022 and 31 March 2025

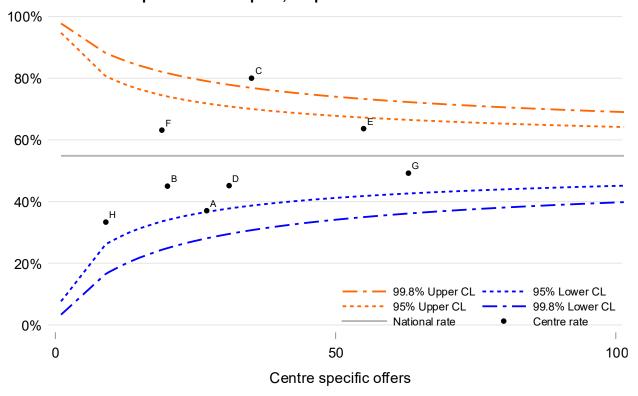


Table 3.14 compares individual centre pancreas $\underline{\text{offer decline rates}}$ for $\underline{\text{DCD}}$ donors over time by financial year.

Table 3.14	DCD donor pancreas offer decline rates by transplant centre, 1 April 2022 and 31 March 2025								
		202	2/23	202	3/24	2024	4/25	Ove	rall
		Number	Decline	Number	Decline	Number	Decline	Number	Decline
Centre	Code	of offers	rate (%)	of offers	rate (%)	of offers	rate (%)	of offers	rate (%)
Cambridge	Α	4	(50)	16	(31)	7	(43)	27	(37)
Cardiff	В	8	(50)	6	(50)	6	(33)	20	(45)
Edinburgh	С	14	(71)	14	(93)	7	(71)	35	(80)
Guy's	D	17	(47)	10	(50)	4	(25)	31	(45)
Manchester	E	9	(56)	29	(59)	17	(76)	55	(64)
Newcastle	F	8	(63)	6	(67)	5	(60)	19	(63)
Oxford	G	17	(59)	25	(44)	21	(48)	63	(49)
WLRTC	Н	3	(33)	3	(33)	3	(33)	9	(33)
UK		80	(56)	109	(54)	70	(54)	259	(55)
	Ce	entre has re	ached the	upper 99.8	% confiden	ice limit			
		entre has re							
		entre has re							
	Ce	entre has re	ached the	lower 99.8°	% confiden	ce limit			

3.4.4 Heart

This section presents an analysis of adult (≥16) and paediatric (<16) <u>DBD</u> donor heart <u>offer decline rates</u> separately. This only considers offers of hearts between 1 April 2022 and 31 March 2025 that were eventually transplanted and excludes all <u>fast track</u> offers. Hearts offered as part of a heart-lung block are included. Super-urgent, urgent and non-urgent offers are all considered. For the adult offer decline analysis, only adult donor offers to adult recipients are considered, meaning that offers to paediatric patients at Newcastle are excluded. For the paediatric offer decline analysis, all paediatric donor offers to Great Ormond Street Hospital (GOSH) are included but only paediatric donor offers to paediatric patients at Newcastle are included.

In 2017, group offering for non-urgent cardiothoracic organ offers was introduced, where all centres receive a simultaneous offer for their non-urgent patients but acceptance is determined by a centre's position in the allocation sequence. Therefore, in the adult donor analysis, adjustments have been made to count any centre who is ranked above the accepting centre in the allocation sequence for that donor as declining the heart, even if they did not respond to the group offer, and any declines recorded for a centre ranked below the accepting centre were discounted.

Figure 3.14 compares individual centre adult heart <u>offer decline rates</u> for <u>DBD</u> donors with the national rate over the time period.

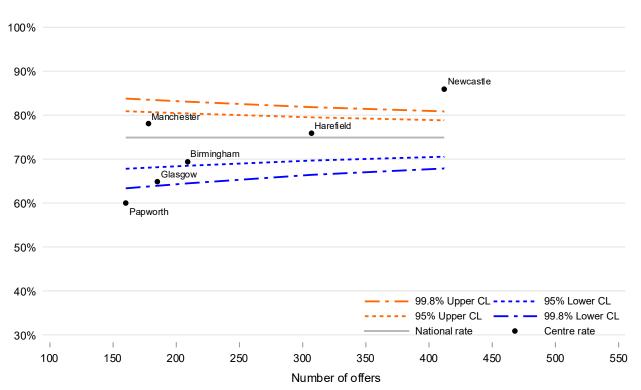


Figure 3.14 UK adult DBD donor heart offer decline rates by centre, 1 April 2022 to 31 March 2025

Table 3.15 shows a breakdown of each centre's adult heart <u>offer decline rate</u> for <u>DBD</u> donors across the three years analysed.

		2022/23		2023/24		2024/2	5 (Overall
	Number						Number	
Centre	of offers	Decline rate (%)	Number of offers	Decline rate (%)	Number of offers	Decline rate (%)	of offers	Decline rate (%)
Birmingham	59	(64)	91	(73)	59	(69)	209	(69)
Glasgow	59	(54)	66	(71)	60	(68)	185	(65)
Harefield	87	(77)	122	(75)	98	(76)	307	(76)
Manchester	39	(74)	84	(83)	55	(73)	178	(78)
Newcastle	137	(85)	186	(89)	89	(81)	412	(86)
Papworth	53	(58)	62	(63)	45	(58)	160	(60)
UK	434	(72)	611	(78)	406	(72)	1451	(75)
	Cen	tre has read	hed the upr	per 99.8% c	onfidence li	mit		
					offidence lim			

Table 3.16 compares individual centre paediatric heart <u>offer decline rates</u> for <u>DBD</u> donors over the three years between 1 April 2022 and 31 March 2025.

Table 3.16 Paediatric DBD donor heart offer decline rates by transplant centre, 1 April 2022 and 31 March 2025								
	202	2/23	202	3/24	2024	4/25	Ove	rall
Centre	Number of offers	Decline rate (%)						
GOSH	14	(64)	17	(76)	4	(25)	35	(66)
Newcastle	10	(40)	14	(79)	3	(33)	27	(59)
uĸ	24	(54)	31	(77)	7	(29)	62	(63)

3.4.5 Lung

This section presents an analysis of adult (≥16) and paediatric (<16) DBD and DCD donor lung offer decline rates separately. This only considers offers of bilateral lungs between 1 April 2022 and 31 March 2025 that were eventually transplanted and excludes all fast track offers. A bilateral lung offer is counted as accepted if either both the lungs were accepted or just a single lung was accepted. Lungs offered as part of a heart-lung block are considered, this includes cases where just the lungs were declined as well as cases where both the heart and lungs were declined. Urgent and non-urgent offers are all considered; super-urgent offers are additionally considered for the adult donor analysis. For the adult offer decline analysis, only adult donor offers to adult recipients are considered, meaning that offers to paediatric patients at Newcastle are excluded. For the paediatric offer decline analysis, all paediatric donor offers to GOSH are included but only paediatric donor offers to paediatric patients at Newcastle are included.

In 2017, group offering for non-urgent cardiothoracic organ offers was introduced, where all centres receive a simultaneous offer for their non-urgent patients but acceptance is determined by a centre's position in the allocation sequence. Therefore, in the adult donor analysis, adjustments have been made to count any centre who is ranked above the accepting centre in the allocation sequence for that donor as declining the lung, even if they did not respond to the group offer, and any declines recorded for a centre ranked below the accepting centre were discounted.

Figure 3.15 compares individual centre adult lung <u>offer decline rates</u> for <u>DBD</u> donors with the national rate over the time period.

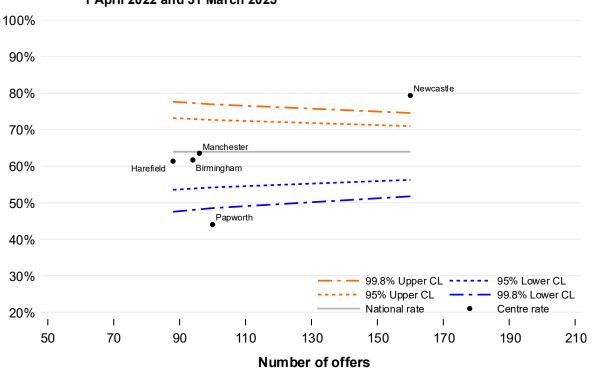


Figure 3.15 UK Adult DBD donor bilateral lung offer decline rates by centre, 1 April 2022 and 31 March 2025

Table 3.17 shows a breakdown of each centre's adult bilateral lung <u>offer decline rate</u> for <u>DBD</u> donors across the three years analysed.

Table 3.17 Adult DBD Bilateral Lung offer decline rates by transplant centre, between 1 April 2022 and 31 March 2025								
	202	2/23	202	3/24	202	4/25	Ove	erall
Centre	Number of offers	Decline rate (%)						
Birmingham	24	(67)	35	(71)	35	(49)	94	(62)
Harefield	26	(69)	38	(61)	24	(54)	88	(61)
Manchester	31	(77)	38	(58)	27	(56)	96	(64)
Newcastle	41	(80)	67	(79)	52	(79)	160	(79)
Papworth	33	(61)	40	(30)	27	(44)	100	(44)
UK	155	(72)	218	(62)	165	(59)	538	(64)
Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit								

Figure 3.16 and **Table 3.18** compare individual centre decline rates for <u>DCD</u>. Due to a relatively small number of DCD declines for subsequently transplanted lungs, there is no breakdown by centre and year in **Table 3.18**.

Figure 3.16 UK Adult DCD donor bilateral lung offer decline rates by centre, 1 April 2022 and 31 March 2025

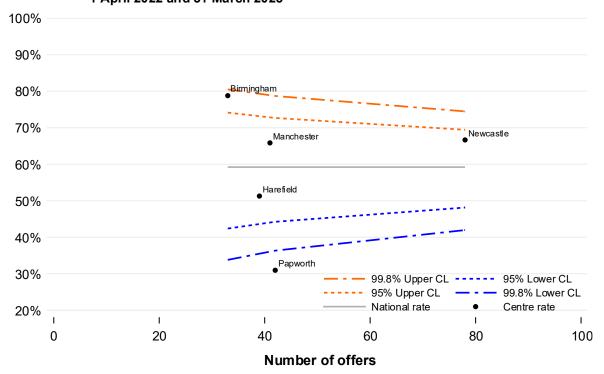


Table 3.18	Adult DCD bilateral lu between 1 April 2022		sults by transplant centre,
Centre		Number of offers	Decline rate (%)
Birmingham		33	78.8
Harefield		39	51.3
Manchester		41	65.9
Newcastle		78	66.7
Papworth		42	31.0
UK		233	59.2
	Centre has reach	ed the upper 99.8% confide	ence limit
		ed the upper 95% confiden	
	Centre has reach	ed the lower 95% confidence	ce limit
	Centre has reach	ed the lower 99.8% confide	nce limit

Table 3.19 compares individual centre paediatric bilateral lung <u>offer decline rates</u> for <u>DBD</u> donors between 1 April 2022 to 31 March 2025.

Table 3.19 Paediatric DBD Bilat between 1 April 2022	teral Lung offer decline rates by tran 2 and 31 March 2025	nsplant centre,
Centre	Ov Number of offers	verall Decline rate (%)
Great Ormond Street	7	(86)
Newcastle	6	(83)
UK	13	(85)

Table 3.20 compares individual centre paediatric bilateral lung <u>offer decline rates</u> for <u>DCD</u> donors between 1 April 2022 to 31 March 2025.

Table 3.20 Paediatric DCD Bilateral Lung offer decline rates by transplant centre, between 1 April 2022 and 31 March 2025						
	Ov	erall				
Centre	Number of offers	Decline rate (%)				
Great Ormond Street	7	(86)				
Newcastle	5	100)				
UK	12	(92)				

Utilisation of Retrieved Organs

4.1 Percentage of retrieved not transplanted organs per year

Figure 4.1 and Tables 4.1 and 4.2 present the percentage of organs retrieved that were not transplanted, for <u>DBD</u> donors. The equivalent summaries are presented in **Figure 4.2 and Tables 4.2 and 4.3** for <u>DCD</u> donors. The percentage of retrieved pancreases that were not transplanted is consistently higher compared to all other organ groups, for both <u>DBD</u> and <u>DCD</u> donors.

Figure 4.1 Percentage of organs retrieved that were not transplanted from DBD donors, in the UK, 1 April 2015 - 31 March 2025

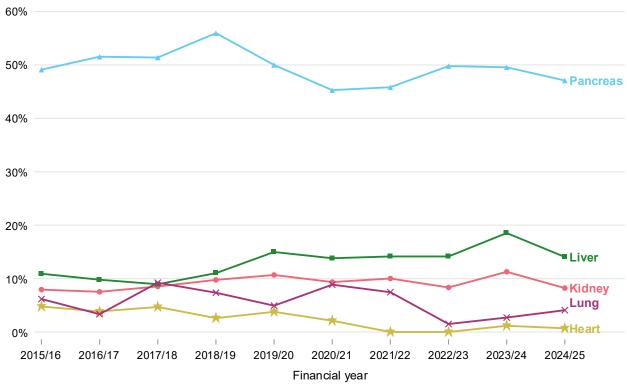
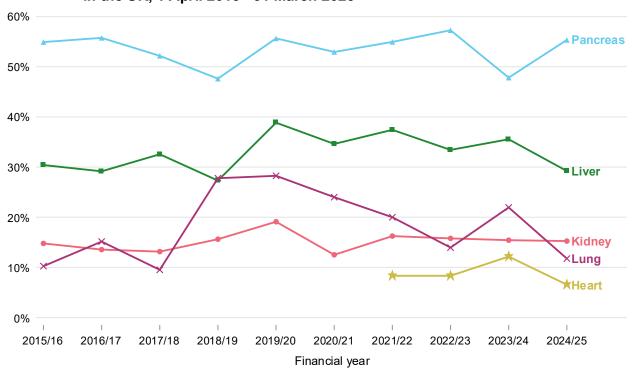


Figure 4.2 Percentage of organs retrieved that were not transplanted from DCD donors, in the UK, 1 April 2015 - 31 March 2025



On 7 September 2020, the UK National DCD heart programme was introduced. Therefore DCD heart data prior to 2021/22 is not shown.

Table 4.1 Percentage of abdominal retrieved not transplanted organs from DBD donors, in the UK, 1 April 2015 - 31 March 2025

Financial Year	Retrieved	Retrieved not transplanted (%)	Transplanted (%)
Kidney			
2015/16	1462	116 (7.9%)	1346 (92.1%)
2016/17	1529	115 (7.5%)	1414 (92.5%)
2017/18	1748	149 (8.5%)	1599 (91.5%)
2018/19	1743	170 (9.8%)	1573 (90.2%)
2019/20	1705	182 (10.7%)	1523 (89.3%)
2020/21	1380	129 (9.3%)	1251 (90.7%)
2021/22	1448	145 (10.0%)	1303 (90.0%)
2022/23	1428	119 (8.3%)	1309 (91.7%)
2023/24	1438	162 (11.3%)	1276 (88.7%)
2024/25	1289	106 (8.2%)	1183 (91.8%)
Liver			
2015/16	715	78 (10.9%)	637 (89.1%)
2016/17	746	73 (9.8%)	673 (90.2%)
2017/18	850	76 (8.9%)	774 (91.1%)
2018/19	853	94 (11.0%)	759 (89.0%)
2019/20	848	127 (15.0%)	721 (85.0%)
2020/21	688	95 (13.8%)	593 (86.2%)
2021/22	707	100 (14.1%)	607 (85.9%)
2022/23	700	99 (14.1%)	601 (85.9%)
2023/24	691	128 (18.5%)	563 (81.5%)
2024/25	612	86 (14.1%)	526 (85.9%)
Pancreas			
2015/16	342	168 (49.1%)	174 (50.9%)
2016/17	355	183 (51.5%)	172 (48.5%)
2017/18	360	185 (51.4%)	175 (48.6%)
2018/19	361	202 (56.0%)	159 (44.0%)
2019/20	332	166 (50.0%)	166 (50.0%)
2020/21	159	72 (45.3%)	87 (54.7%)
2021/22	240	110 (45.8%)	130 (54.2%)
2022/23	243	121 (49.8%)	122 (50.2%)
2023/24	232	115 (49.6%)	117 (50.4%)
2024/25	206	97 (47.1%)	109 (52.9%)

Table 4.2 Percentage of abdominal retrieved not transplanted organs from DBD donors, in the UK, 1 April 2015 - 31 March 2025

Financial Year	Retrieved	Retrieved not transplanted (%)	Transplanted (%)
Heart			
2015/16	189	9 (4.8%)	180 (95.2%)
2016/17	182	7 (3.8%)	175 (96.2%)
2017/18	192	9 (4.7%)	183 (95.3%)
2018/19	154	4 (2.6%)	150 (97.4%)
2019/20	159	6 (3.8%)	153 (96.2%)
2020/21	142	3 (2.1%)	139 (97.9%)
2021/22	136	0 (0.0%)	136 (100.0%)
2022/23	152	0 (0.0%)	152 (100.0%)
2023/24	172	2 (1.2%)	170 (98.8%)
2024/25	144	1 (0.7%)	143 (99.3%)
Lung			
2015/16	162	10 (6.2%)	152 (93.8%)
2016/17	150	5 (3.3%)	145 (96.7%)
2017/18	195	18 (9.2%)	177 (90.8%)
2018/19	136	10 (7.4%)	126 (92.6%)
2019/20	142	7 (4.9%)	135 (95.1%)
2020/21	79	7 (8.9%)	72 (91.1%)
2021/22	94	7 (7.4%)	87 (92.6%)
2022/23	67	1 (1.5%)	66 (98.5%)
2023/24	111	3 (2.7%)	108 (97.3%)
2024/25	98	4 (4.1%)	94 (95.9%)

Table 4.3 Percentage of abdominal retrieved not transplanted organs from DCD donors, in the UK, 1 April 2015 - 31 March 2025

Financial Year	Retrieved	Retrieved not transplanted (%)	Transplanted (%)
Kidney			
2015/16	1103	163 (14.8%)	940 (85.2%)
2016/17	1129	153 (13.6%)	976 (86.4%)
2017/18	1179	155 (13.1%)	1024 (86.9%)
2018/19	1242	194 (15.6%)	1048 (84.4%)
2019/20	1225	234 (19.1%)	991 (80.9%)
2020/21	799	100 (12.5%)	699 (87.5%)
2021/22	1182	192 (16.2%)	990 (83.8%)
2022/23	1267	200 (15.8%)	1067 (84.2%)
2023/24	1426	220 (15.4%)	1206 (84.6%)
2024/25	1403	214 (15.3%)	1189 (84.7%)
Liver			
2015/16	296	90 (30.4%)	206 (69.6%)
2016/17	295	86 (29.2%)	209 (70.8%)
2017/18	298	97 (32.6%)	201 (67.4%)
2018/19	260	71 (27.3%)	189 (72.7%)
2019/20	278	108 (38.8%)	170 (61.2%)
2020/21	182	63 (34.6%)	119 (65.4%)
2021/22	310	116 (37.4%)	194 (62.6%)
2022/23	374	125 (33.4%)	249 (66.6%)
2023/24	408	145 (35.5%)	263 (64.5%)
2024/25	438	128 (29.2%)	310 (70.8%)
Pancreas			
2015/16	122	67 (54.9%)	55 (45.1%)
2016/17	113	63 (55.8%)	50 (44.2%)
2017/18	115	60 (52.2%)	55 (47.8%)
2018/19	105	50 (47.6%)	55 (52.4%)
2019/20	115	64 (55.7%)	51 (44.3%)
2020/21	51	27 (52.9%)	24 (47.1%)
2021/22	91	50 (54.9%)	41 (45.1%)
2022/23	110	63 (57.3%)	47 (42.7%)
2023/24	115	55 (47.8%)	60 (52.2%)
2024/25	103	57 (55.3%)	46 (44.7%)

Table 4.4 Percentage of abdominal retrieved not transplanted organs from DCD donors, in the UK, 1 April 2015 - 31 March 2025 Retrieved not transplanted **Financial Year** Retrieved Transplanted (%) (%) Heart 2021/22 48 4 (8.3%) 44 (91.7%) 2022/23 60 5 (8.3%) 55 (91.7%) 2023/24 74 9 (12.2%) 65 (87.8%) 2024/25 61 4 (6.6%) 57 (93.4%) Lung 2015/16 39 4 (10.3%) 35 (89.7%) 2016/17 33 5 (15.2%) 28 (84.8%) 2017/18 42 4 (9.5%) 38 (90.5%) 2018/19 54 15 (27.8%) 39 (72.2%) 13 (28.3%) 2019/20 46 33 (71.7%)

6 (24.0%)

6 (20.0%)

6 (14.0%)

9 (22.0%)

8 (11.8%)

19 (76.0%)

24 (80.0%)

37 (86.0%)

32 (78.0%)

60 (88.2%)

4.2 Reasons for non-use of retrieved not transplanted organs

25

30

43

41

68

2020/21

2021/22

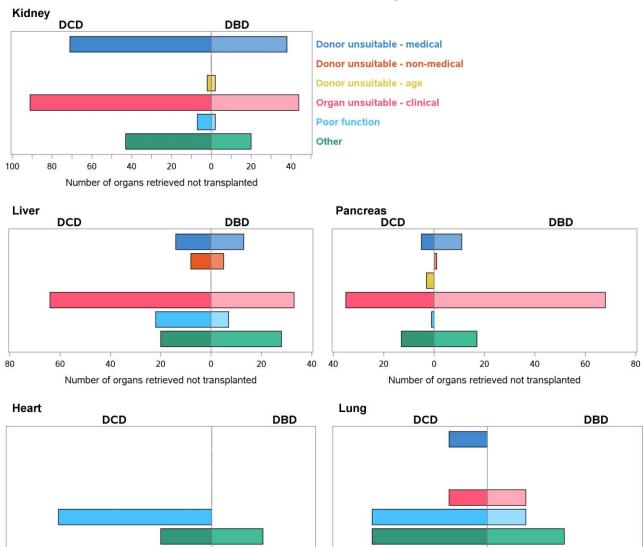
2022/23

2023/24

2024/25

The primary reason why retrieved organs were not transplanted is recorded on the <u>UK</u> <u>Transplant Registry</u>. **Figure 4.3** and **Table 4.5** present these reasons for non-use for <u>DBD</u> donors and <u>DCD</u> donors separately, grouped into the following categories; donor unsuitable – medical, donor unsuitable – non-medical, donor unsuitable – age, organ unsuitable – clinical, poor function, other reasons. See <u>Appendix A6: Reason for non-use categories</u> for how the non-use reasons are categorised. The most common reasons recorded differ substantially between the organ groups and between <u>DBD</u> and <u>DCD</u> donors. However, note the very low numbers in heart and lung summaries.

Figure 4.3 Reasons for non-use for retrieved not transplanted organs from DBD and DCD donors in the UK, 1 April 2024 – 31 March 2025



2

Number of organs retrieved not transplanted

Note that the x-axis range differs for each organ group.

Number of organs retrieved not transplanted

Table 4.5 Reasons for non-use for retrieved not transplanted organs from DBD and DCD donors in the UK, 1 April 2024 - 31 March 2025

Percentage retrieved not transplanted due to **Total number** Donor Donor Organ Donor unsuitable unsuitable retrieved not unsuitable unsuitable -Poor Other Organ transplanted medical - non-medical age clinical function DBD Kidney 106 35.8% 0.0% 1.9% 41.5% 1.9% 18.9% 8.1% 32.6% Liver 86 15.1% 5.8% 0.0% 38.4% 0.0% 0.0% 17.5% **Pancreas** 97 11.3% 1.0% 70.1% 0.0% 0.0% 0.0% Heart 1 0.0% 0.0% 100.0% 0.0% 0.0% 25.0% 50.0% Lung 4 0.0% 25.0% DCD Kidney 214 33.2% 0.0% 0.9% 42.5% 3.3% 20.1% Liver 128 10.9% 6.3% 0.0% 50.0% 17.2% 15.6% Pancreas 57 8.8% 0.0% 5.3% 61.4% 1.8% 22.8% 0.0% 25.0% Heart 4 0.0% 0.0% 0.0% 75.0% Lung 8 12.5% 0.0% 0.0% 12.5% 37.5% 37.5%

Utilisation of Organs by Organ Quality

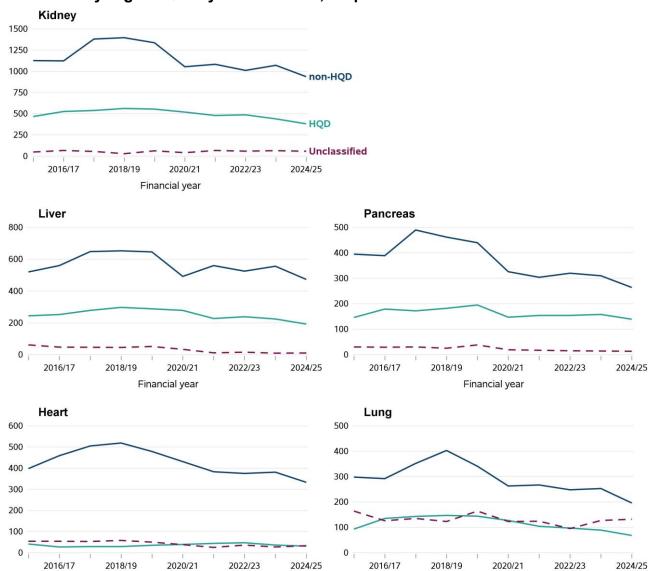
5.1 Offered organs by Higher Quality Donor status

A <u>Higher Quality Donor (HQD)</u> is defined by a set of parameters captured on the <u>UK</u> <u>Transplant Registry</u>. These parameters are listed in <u>Appendix A3</u>. There is a different set of parameters for each organ so a donor may be considered an <u>HQD</u> for one organ but not another. While a donor may be considered 'higher quality' according to these parameters for a particular organ, there may be other reasons, which are not captured on the registry, which would deem the organ of lower quality in practice.

Figure 5.1 and Tables 5.1 and 5.2 show the number of HQD organs offered each year from DBD donors, alongside the number of non-HQD donor organs offered. Note that if data are missing on any of the HQD parameters, then the HQD status is considered 'unclassified' for that organ. Generally, at least a quarter of abdominal DBD organs are classed as HQD organs. For lungs, this is slightly lower and for hearts, the proportion of DBD offers classed as HQD can be as low as 5%. The number of unclassified lung offers is high due to a substantial amount of missing data for the HQD parameters.

Equivalent information for <u>DCD</u> donors in **Figure 5.2 and Tables 5.3 and 5.4** although note there are no <u>DCD HQD</u> livers by definition.

Figure 5.1 Number of offered organs from DBD donors in the UK by Higher Quality Donor status, 1 April 2015 – 31 March 2025



Financial year

Financial year

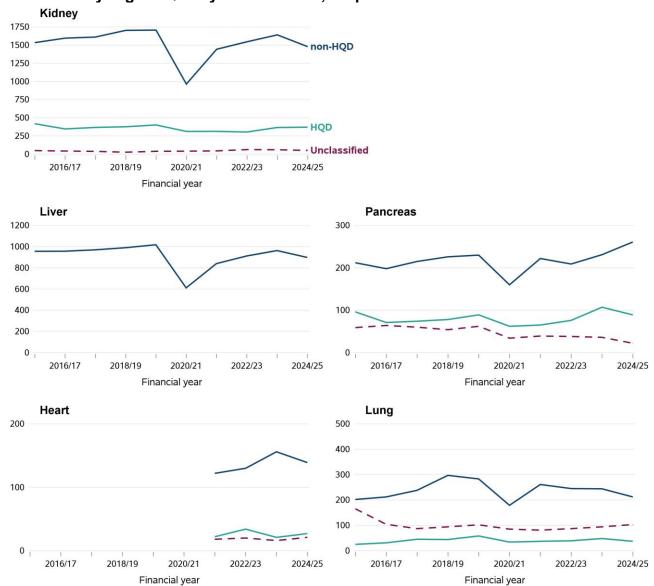
Table 5.1 Number of offered abdominal organs from DBD donors in the UK by Higher Quality Donor status, 1 April 2015 - 31 March 2025

Financial Year	HQD	non-HQD	Unclassified
Kidney			
2015/16	467	1127	48
2016/17	526	1123	66
2017/18	538	1381	55
2018/19	562	1397	28
2019/20	554	1337	62
2020/21	519	1054	40
2021/22	479	1083	66
2022/23	487	1011	58
2023/24	439	1071	64
2024/25	381	937	57
Liver			
2015/16	244	520	61
2016/17	252	560	47
2017/18	278	648	46
2018/19	297	653	45
2019/20	288	646	51
2020/21	278	492	33
2021/22	227	560	11
2022/23	238	525	15
2023/24	224	556	9
2024/25	192	473	10
Pancreas			
2015/16	146	395	30
2016/17	179	389	29
2017/18	172	490	30
2018/19	182	462	25
2019/20	195	440	38
2020/21	147	326	19
2021/22	154	304	17
2022/23	154	320	15
2023/24	158	310	14
2024/25	139	264	13

Table 5.2 Number of offered cardiothoracic organs from DBD donors in the UK by Higher Quality Donor status, 1 April 2015 - 31 March 2025

	Financial Year	HQD	non-HQD	Unclassified
Heart				
	2015/16	41	398	54
	2016/17	27	459	54
	2017/18	29	505	53
	2018/19	29	519	58
	2019/20	35	479	50
	2020/21	39	431	38
	2021/22	44	383	25
	2022/23	47	375	36
	2023/24	36	381	27
	2024/25	31	333	33
Lung				
	2015/16	93	298	164
	2016/17	135	292	126
	2017/18	143	352	135
	2018/19	147	403	123
	2019/20	144	341	164
	2020/21	127	263	123
	2021/22	104	267	124
	2022/23	97	248	95
	2023/24	89	253	127
	2024/25	68	196	132

Figure 5.2 Number of offered organs from DCD donors in the UK by Higher Quality Donor status, 1 April 2015 – 31 March 2025



^{1.} On 7 September 2020, the UK National DCD heart programme was introduced. Therefore DCD heart data prior to 2022/23 is not shown.

^{2.} Donors must be DBD for the associated liver to be high quality.

Table 5.3 Number of offered abdominal organs from DCD donors in the UK by Higher Quality Donor status, 1 April 2015 - 31 March 2025

Financial Year	HQD	non-HQD	Unclassified		
Kidney					
2015/16	418	1534	48		
2016/17	346	1596	42		
2017/18	367	1611	37		
2018/19	376	1703	26		
2019/20	401	1707	38		
2020/21	312	964	40		
2021/22	313	1443	44		
2022/23	304	1546	62		
2023/24	2023/24 366 1641		60		
2024/25	370	1479	50		
Liver					
2015/16		956			
2016/17		957			
2017/18		970			
2018/19		990			
2019/20		1018			
2020/21		611			
2021/22		840			
2022/23		912			
2023/24		963			
2024/25		898			
Pancreas					
2015/16	96	212	59		
2016/17	71	198	64		
2017/18	74	215	60		
2018/19	78	226 54			
2019/20	89	230	62		
2020/21	62	62 160 34			
2021/22	65	222	39		
2022/23	76	209	38		
2023/24	107	231	36		
2024/25	89	261	22		

Table 5.4 Number of offered cardiothoracic organs from DCD donors in the UK by Higher Quality Donor status, 1 April 2015 - 31 March 2025

Financial Year	HQD	non-HQD	Unclassified
Heart			
2021/22	22	122	18
2022/23	34	130	20
2023/24	21	156	16
2024/25	27	139	21
Lung			
2015/16	25	202	165
2016/17	31	212	104
2017/18	45	238	87
2018/19	44	297	94
2019/20	58	283	102
2020/21	34	179	85
2021/22	37	261	81
2022/23	39	245	87
2023/24	48	244	94
2024/25	37	213	102

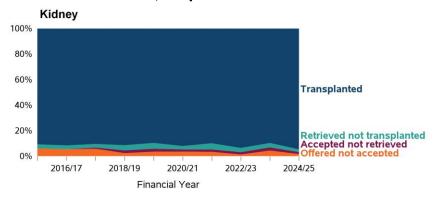
5.2 Outcomes of offered Higher Quality Donor organs

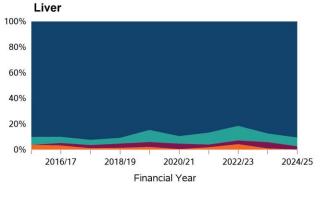
Figure 5.3, Table 5.5 and Table 5.6 present the outcomes of offered organs from <u>DBD</u> <u>Higher Quality Donors (HQD)</u>, by considering whether or not they were accepted, retrieved or transplanted. The same information is presented for <u>DCD HQDs</u> in **Figure 5.4**, **Table 5.7** and **Table 5.8**.

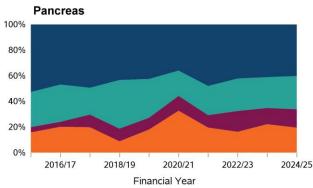
Utilisation is expected to be greater for offered <u>HQD</u> organs compared to all offered organs due to the selective nature of the <u>HQD</u> parameters. Comparing **Figure 5.3** with **Figure 3.3**, transplantation rates of offered <u>DBD HQD</u> organs are almost double that of all offered <u>DBD</u> organs, for pancreases, hearts and lungs. Despite this, transplantation rates are still much lower than for kidneys and livers. For kidneys and livers, transplantation rates of offered <u>DBD HQD</u> organs are also higher when comparing with transplantation rates for all offered <u>DBD organs</u>, and this fluctuates around 90%.

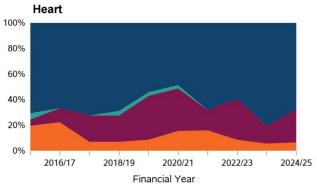
For <u>DCD</u> organs, the transplantation rate of offered <u>HQD</u> organs (**Figure 5.4**) is higher when comparing with all offered organs (**Figure 3.4**), but considering these donors estimated to be of 'higher quality', utilisation is not particularly high. Note that <u>DCD</u> donors with <u>prolonged time to asystole</u> are included in this analysis so not all organs were able to be transplanted.

Figure 5.3 Outcomes of offered organs from DBD Higher Quality Donors in the UK, 1 April 2015 – 31 March 2025









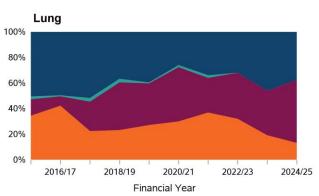


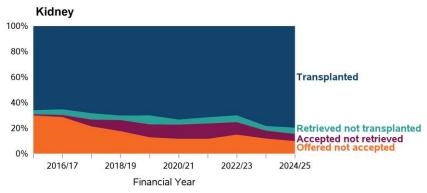
Table 5.5 Outcomes of offered abdominal organs from DBD Higher Quality Donors in the UK, between 1 April 2015 - 31 March 2025

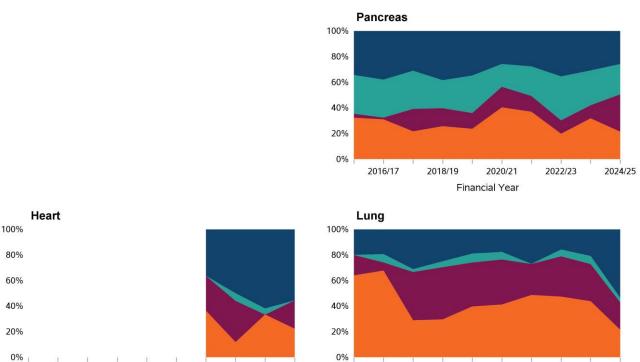
Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Kidney					
2015/16	467	6.0%	0.0%	3.2%	90.8%
2016/17	526	5.3%	0.0%	3.0%	91.6%
2017/18	538	5.8%	0.9%	2.8%	90.5%
2018/19	562	2.3%	2.1%	4.1%	91.5%
2019/20	554	3.4%	2.3%	4.5%	89.7%
2020/21	519	3.5%	1.7%	2.7%	92.1%
2021/22	479	3.3%	1.9%	4.8%	90.0%
2022/23	487	1.2%	1.8%	3.3%	93.6%
2023/24	439	4.3%	2.5%	3.4%	89.7%
2024/25	381	1.6%	1.6%	2.1%	94.8%
Liver					
2015/16	244	3.7%	0.0%	6.1%	90.2%
2016/17	252	3.2%	2.0%	4.8%	90.1%
2017/18	278	1.1%	2.5%	4.0%	92.4%
2018/19	297	1.3%	3.4%	4.4%	90.9%
2019/20	288	2.1%	3.8%	9.4%	84.7%
2020/21	278	0.4%	4.3%	5.8%	89.6%
2021/22	227	1.8%	2.2%	9.3%	86.8%
2022/23	238	4.2%	2.9%	11.3%	81.5%
2023/24	224	0.9%	4.9%	6.7%	87.5%
2024/25	192	0.0%	2.6%	6.8%	90.6%
Pancreas					
2015/16	146	15.8%	4.1%	27.4%	52.7%
2016/17	179	20.1%	3.9%	29.1%	46.9%
2017/18	172	19.8%	9.9%	20.9%	49.4%
2018/19	182	8.8%	9.9%	37.9%	43.4%
2019/20	195	17.9%	9.2%	30.3%	42.6%
2020/21	147	32.7%	11.6%	19.7%	36.1%
2021/22	154	19.5%	9.7%	22.7%	48.1%
2022/23	154	16.2%	16.2%	25.3%	42.2%
2023/24	158	22.2%	12.7%	24.1%	41.1%
2024/25	139	19.4%	14.4%	25.9%	40.3%

Table 5.6 Outcomes of offered cardiothoracic organs from DBD Higher Quality Donors in the UK, between 1 April 2015 - 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Heart					
2015/16	41	19.5%	4.9%	4.9%	70.7%
2016/17	27	22.2%	11.1%	0.0%	66.7%
2017/18	29	6.9%	20.7%	0.0%	72.4%
2018/19	29	6.9%	20.7%	3.4%	69.0%
2019/20	35	8.6%	34.3%	2.9%	54.3%
2020/21	39	15.4%	33.3%	2.6%	48.7%
2021/22	44	15.9%	15.9%	0.0%	68.2%
2022/23	47	8.5%	31.9%	0.0%	59.6%
2023/24	36	5.6%	13.9%	0.0%	80.6%
2024/25	31	6.5%	25.8%	0.0%	67.7%
Lung					
2015/16	93	34.4%	12.9%	2.2%	50.5%
2016/17	135	42.2%	7.4%	0.7%	49.6%
2017/18	143	22.4%	23.1%	2.8%	51.7%
2018/19	147	23.1%	37.4%	2.7%	36.7%
2019/20	144	27.1%	32.6%	0.7%	39.6%
2020/21	127	29.9%	42.5%	1.6%	26.0%
2021/22	104	37.5%	26.9%	1.9%	33.7%
2022/23	97	32.0%	36.1%	0.0%	32.0%
2023/24	89	19.1%	34.8%	0.0%	46.1%
2024/25	68	13.2%	47.1%	0.0%	39.7%

Figure 5.4 Outcomes of offered organs from DCD Higher Quality Donors in the UK, 1 April 2015 – 31 March 2025





1. On 7 September 2020, the UK National DCD heart programme was introduced. Therefore DCD heart data prior to 2022/23 is not shown.

2024/25

2018/19

2020/21

Financial Year

2016/17

2022/23

2024/25

2. Donors must be DBD for the associated liver to be high quality.

2020/21

Financial Year

2022/23

2018/19

2016/17

Table 5.7 Outcomes of offered abdominal organs from DCD Higher Quality Donors in the UK, between 1 April 2015 - 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Kidney					
2015/16	418	29.9%	1.0%	3.1%	66.0%
2016/17	346	28.6%	1.7%	4.3%	65.3%
2017/18	367	21.3%	5.4%	4.9%	68.4%
2018/19	376	17.6%	8.8%	3.5%	70.2%
2019/20	401	12.7%	10.2%	7.0%	70.1%
2020/21	312	11.5%	11.2%	3.8%	73.4%
2021/22	313	11.5%	12.1%	4.8%	71.6%
2022/23	304	14.8%	9.9%	5.3%	70.1%
2023/24	366	11.7%	6.3%	3.6%	78.4%
2024/25	370	9.7%	5.7%	4.9%	79.7%
Pancreas					
2015/16	96	32.3%	3.1%	30.2%	34.4%
2016/17	71	31.0%	1.4%	29.6%	38.0%
2017/18	74	21.6%	17.6%	29.7%	31.1%
2018/19	78	25.6%	14.1%	21.8%	38.5%
2019/20	89	23.6%	12.4%	29.2%	34.8%
2020/21	62	40.3%	16.1%	17.7%	25.8%
2021/22	65	36.9%	12.3%	23.1%	27.7%
2022/23	76	19.7%	10.5%	34.2%	35.5%
2023/24	107	31.8%	10.3%	27.1%	30.8%
2024/25	89	21.3%	29.2%	23.6%	25.8%

Table 5.8 Outcomes of offered cardiothoracic organs from DCD Higher Quality Donors in the UK, between 1 April 2015 - 31 March 2025

Financial year	Total number offered	% Offered not accepted	% Accepted not retrieved	% Retrieved not transplanted	% Transplanted
Heart					
2021/22	22	36.4%	27.3%	0.0%	36.4%
2022/23	34	11.8%	32.4%	5.9%	50.0%
2023/24	21	33.3%	0.0%	4.8%	61.9%
2024/25	27	22.2%	22.2%	0.0%	55.6%
Lung					
2015/16	25	64.0%	16.0%	0.0%	20.0%
2016/17	31	67.7%	6.5%	6.5%	19.4%
2017/18	45	28.9%	37.8%	2.2%	31.1%
2018/19	44	29.5%	40.9%	4.5%	25.0%
2019/20	58	39.7%	34.5%	6.9%	19.0%
2020/21	34	41.2%	35.3%	5.9%	17.6%
2021/22	37	48.6%	24.3%	0.0%	27.0%
2022/23	39	48.7%	30.8%	5.1%	15.4%
2023/24	48	43.8%	29.2%	6.3%	20.8%
2024/25	37	21.6%	21.6%	2.7%	54.1%

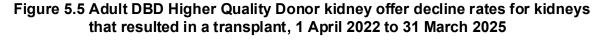
5.3 Centre-specific offer decline rates for Higher Quality Donors

Similarly to Section 3 of this report, <u>funnel plots</u> are presented below to compare centre specific <u>offer decline rates</u> and indicate how consistent the rates of the individual transplant centres are with the national rate. However, only <u>Higher Quality Donors (HQDs)</u> are considered in this section. The overall national <u>unadjusted HQD offer decline rate</u> is shown by the solid line while the 95% and 99.8% <u>confidence limits</u> are indicated via a thin and thick dotted line, respectively. Each dot in the plot represents an individual transplant centre. Centres that are positioned above the upper limits indicate an <u>offer decline rate</u> that is higher than the national rate, while centres positioned below the lower limits indicates an offer decline rate that is lower than the national rate. The number of HQD offers a centre may receive will depend on patient <u>case mix</u> as per the organ specific <u>offering scheme</u>, however the following summaries are not risk adjusted for known centre differences in patient <u>case mix</u>.

5.3.1 Kidney

Kidney-only offers from <u>DBD</u> and <u>DCD HQD</u> donors who had at least one kidney retrieved, offered directly and on behalf of a named individual patient and resulted in transplantation are included in the analysis. Any offers made through the <u>reallocation</u> of kidneys, declined kidney or <u>fast track</u> schemes were excluded. Only offers through the <u>DCD</u> kidney <u>offering scheme</u> are presented, all local <u>DCD</u> offers are excluded. Only individual offers for named patients were considered which excluded any <u>ABO</u>- and <u>HLA-incompatible</u> patients. Only <u>HQD</u> kidney offers to adult patients are presented and results are presented separately for <u>DBD</u> and <u>DCD</u> donors. The <u>HQD</u> criteria are listed in <u>Appendix A3</u>.

Figure 5.5 compares individual centre adult kidney <u>offer decline rates</u> with the national rate for <u>DBD HQD</u> donors over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 5.9**.



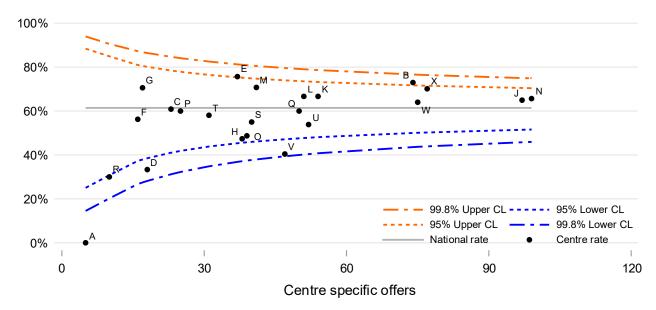


Table 5.9 Adult DBD Higher Quality Donor kidney offer decline rates by transplant centre, 1 April 2022 to 31 March 2025

		2022	/23	2023	3/24	2024	1/25	Ove	rall
			Decline		Decline		Decline		Decline
		Number	rate	Number	rate	Number	rate	Number	rate
Centre	Code	of offers	(%)						
5 16 1			(2)		(2)	•	(0)		(0)
Belfast	A	3	(0)	0	(0)	2	(0)	5	(0)
Birmingham	В	26	(65)	29	(76)	19	(79)	74	(73)
Bristol	С	6	(33)	9	(89)	8	(50)	23	(61)
Cambridge	D	9	(33)	5	(0)	4	(75)	18	(33)
Cardiff	Е	15	(73)	11	(64)	11	(91)	37	(76)
Coventry	F	7	(57)	5	(20)	4	100)	16	(56)
Edinburgh	G	5	(60)	3	(33)	9	(89)	17	(71)
Glasgow	Н	16	(50)	12	(50)	10	(40)	38	(47)
Guy's	J	38	(63)	31	(65)	28	(68)	97	(65)
Leeds	K	24	(75)	14	(57)	16	(63)	54	(67)
Leicester	L	18	(72)	17	(59)	16	(69)	51	(67)
Liverpool	M	15	(73)	16	(75)	10	(60)	41	(71)
Manchester	N	31	(65)	31	(58)	37	(73)	99	(66)
Newcastle	0	11	(45)	12	(50)	16	(50)	39	(49)
Nottingham	Р	8	(88)	9	(44)	8	(50)	25	(60)
Oxford	Q	7	(43)	25	(72)	18	(50)	50	(60)
Plymouth	R	4	(25)	4	(50)	2	(0)	10	(30)
Portsmouth	S	14	(50)	13	(62)	13	(54)	40	(55)
Sheffield	T	11	(45)	10	(70)	10	(60)	31	(58)
St George's	U	18	(61)	20	(50)	14	(50)	52	(54)
The Royal	V	10	(50)	13	(62)	24	(25)	47	(40)
Free			` ,		, ,		` ,		, ,
The Royal	W	25	(60)	20	(40)	30	(83)	75	(64)
London									
WLRTC	Χ	23	(61)	25	(76)	29	(72)	77	(70)
UK		344	(60)	334	(61)	338	(63)	1016	(61)

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.

Figure 5.6 compares individual centre adult kidney <u>offer decline rates</u> with the national rate for <u>DCD HQD</u> donors over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 5.10**.

Figure 5.6 Adult DCD Higher Quality Donor kidney offer decline rates for kidneys that resulted in a transplant, 1 April 2022 to 31 March 2025

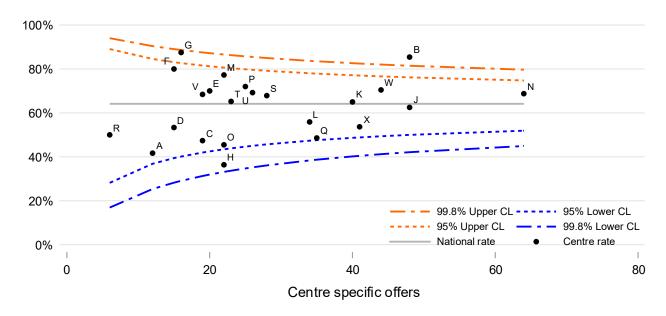


Table 5.10 Adult DCD Higher Quality Donor kidney offer decline rates by transplant centre, 1 April 2022 to 31 March 2025

		2022	/23	2023	3/24	2024	1/25	Ove	rall
			Decline		Decline		Decline		Decline
		Number	rate	Number	rate	Number	rate	Number	rate
Centre	Code	of offers	(%)						
Belfast	Α	2	(50)	8	(50)	2	(0)	12	(42)
Birmingham	В	15	(93)	14	(86)	19	(79)	48	(85)
Bristol	С	5	(60)	11	(45)	3	(33)	19	(47)
Cambridge	D	2	(0)	6	(50)	7	(71)	15	(53)
Cardiff	Е	4	(75)	9	(78)	7	(57)	20	(70)
Coventry	F	1	100)	6	100)	8	(63)	15	(80)
Edinburgh	G	1	100)	6	(83)	9	(89)	16	(88)
Glasgow	Н	6	(33)	7	(14)	9	(56)	22	(36)
Guy's	J	14	(93)	20	(50)	14	(50)	48	(63)
Leeds	K	10	(70)	21	(76)	9	(33)	40	(65)
Leicester	L	10	(70)	11	(45)	13	(54)	34	(56)
Liverpool	M	5	100)	6	100)	11	(55)	22	(77)
Manchester	N	17	(59)	26	(69)	21	(76)	64	(69)
Newcastle	0	3	(0)	9	(56)	10	(50)	22	(45)
Nottingham	Р	8	(75)	8	(63)	9	(78)	25	(72)
Oxford	Q	9	(44)	7	(86)	19	(37)	35	(49)
Plymouth	R	2	(50)	4	(50)			6	(50)
Portsmouth	S	12	(67)	12	(75)	4	(50)	28	(68)
Sheffield	T	12	(67)	6	(50)	5	(80)	23	(65)
St George's	U	4	(50)	8	(75)	14	(71)	26	(69)
The Royal	V	2	(0)	6	(67)	11	(82)	19	(68)
Free									
The Royal	W	8	(63)	15	(80)	21	(67)	44	(70)
London									
WLRTC	Χ	10	(40)	16	(44)	15	(73)	41	(54)
uĸ		162	(65)	242	(65)	240	(63)	644	(64)

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.

5.3.2 Liver

Named adult (≥16) and large paediatric (<16 and weight >40kg) <u>elective</u> <u>Higher Quality</u> <u>Donor (HQD)</u> liver offers to UK transplant centres where the liver resulted in a liver-only first transplant are included in the analysis. Offers to super-urgent, hepatoblastoma, <u>ACLF</u>, paediatric, intestinal or liver and cardiothoracic patients are excluded. Dublin are not included. The <u>HQD</u> criteria are listed in <u>Appendix A3</u>.

For <u>DBD</u> donors, all <u>fast track</u> offers were excluded. By definition, there are no <u>DCD HQD</u> liver donors (<u>Appendix A3</u>).

Figure 5.7 compares individual centre adult liver <u>offer decline rates</u> with the national rate for <u>HQD DBD</u> donors over the time period, 1 April 2022 and 31 March 2025.

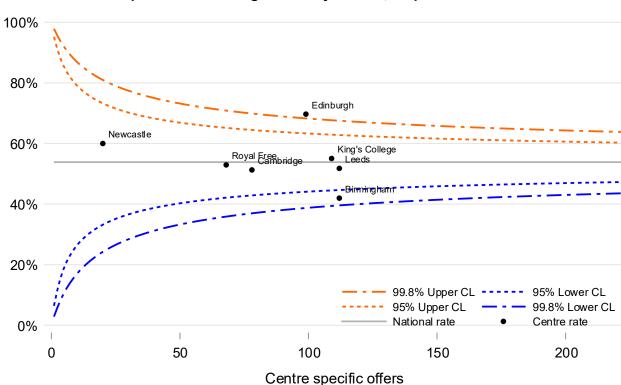


Figure 5.7 Named adult elective liver offer decline rates that resulted in a liver only first transplant from DBD Higher Quality Donors, 1 April 22 and 31 March 25

A <u>DBD</u> liver transplant can involve a whole liver, reduced liver or split liver. The term reduced is used when only one lobe of the liver is transplanted and the term split applies when both lobes of the liver are transplanted into two different recipients. Offers of whole livers and right lobes which resulted in transplantation are included in **Figure 5.7** and adult liver <u>offer decline rates</u> for <u>HQD DBD</u> donors by centre and organ offered are presented in **Table 5.11**.

Table 5.11 Higher Quality Donor liver offer decline rates for each centre by offered organ
1 April 2022 to 31 March 2025

DBD Donors

Whole Livers Right Lobe All Livers

Centre Number of Decline rate Number

			DBD D	onors			
	Whole	Livers	Right	Lobe	All Livers		
Centre	Number of	Decline rate	Number of	Decline rate	Number of	Decline rate	
	offers	(%)	offers	(%)	offers	(%)	
Birmingham	91	35	21	71	112	42	
Cambridge	56	46	22	64	78	51	
Edinburgh	61	51	38	100	99	70	
King's	78	50	31	68	109	55	
College							
Leeds	82	46	30	67	112	52	
Newcastle	14	43	6	100	20	60	
Royal Free	45	47	23	65	68	53	
Total	427	45	171	75	598	54	
'	•						

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

5.3.3 Pancreas

Pancreas offers from <u>DBD</u> and <u>DCD Higher Quality Donors (HQD)</u> whose pancreas was retrieved, offered directly on behalf of a named individual patient and resulted in transplantation are included in the analysis. Any offers of pancreases declined for transplantation, pancreases offered for <u>multi-organ</u> or small bowel transplant were excluded, as were offers made through the <u>fast track</u> scheme or the <u>reallocation</u> of the pancreas. Only individual offers for named patients were considered which excluded any <u>ABO</u>- and <u>HLA-incompatible</u> patients. The <u>HQD</u> criteria are listed in <u>Appendix A3</u>.

Figure 5.8 compares individual centre pancreas <u>offer decline rates</u> for <u>HQD DBD</u> donors with the national rate over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 5.12**.

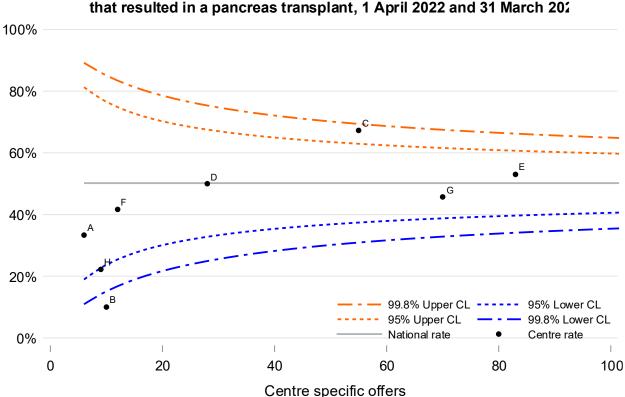


Figure 5.8 DBD Higher Quality Donor pancreas offer decline rates for pancreases that resulted in a pancreas transplant, 1 April 2022 and 31 March 202

Table 5.12 compares individual centre pancreas <u>offer decline rates</u> for <u>DBD HQD</u> donors over time by financial year.

Table 5.12 DBD Higher Quality Donor pancreas offer decline rates by transplant centre 1 April 2022 to 31 March 2025

		2021/		2022/		2024/		Ove	_
Centre	Code	Number of offers	Decline rate (%)	Number of offers	Decline rate (%)	Number of offers	Decline rate (%)	Number of offers	Decline rate (%)
Cambridge	Α	2	(50)	1	(0)	3	(33)	6	(33)
Cardiff	В	4	(25)	5	(0)	1	(0)	10	(10)
Edinburgh	С	23	(65)	16	(81)	16	(56)	55	(67)
Guy's	D	11	(45)	9	(56)	8	(50)	28	(50)
Manchester	E	29	(55)	31	(58)	23	(43)	83	(53)
Newcastle	F	4	(50)	3	(0)	5	(60)	12	(42)
Oxford	G	29	(45)	28	(46)	13	(46)	70	(46)
WLRTC	Н	3	(0)	5	(40)	1	(0)	9	(22)
UK		105	(50)	98	(52)	70	(47)	273	(50)

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.

Figure 5.9 compares individual centre pancreas <u>offer decline rates</u> for <u>DCD HQD</u> donors with the national rate over the time period, 1 April 2022 and 31 March 2025. Centres can be identified by the information shown in **Table 5.13**.

Figure 5.9 DCD Higher Quality Donor pancreas offer decline rates for pancreases that resulted in a pancreas transplant, 1 April 2022 and 31 March 2025

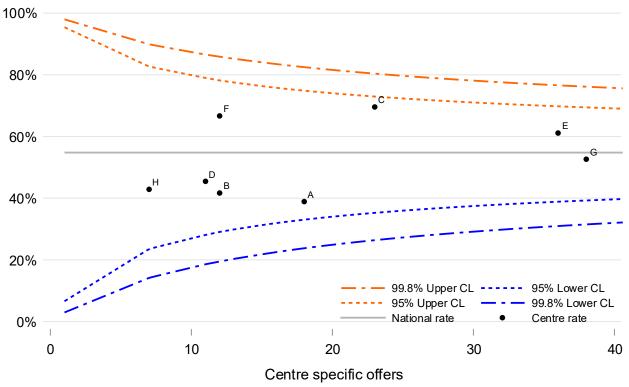


Table 5.13 compares individual centre pancreas <u>offer decline rates</u> for <u>DCD HQD</u> donors over time by financial year.

Table 5.13 DCD Higher Quality Donor pancreas offer decline rates by transplant centre, 1 April 2022 to 31 March 2025

		2021	2022	2022	/2023	2024	2025	Ove	rall
		Number	Decline	Number	Decline	Number	Decline	Number	Decline
Centre	Code	of offers	rate (%)						
Cambridge	Α	3	(67)	11	(27)	4	(50)	18	(39)
Cardiff	В	4	(25)	4	(50)	4	(50)	12	(42)
Edinburgh	С	9	(56)	9	(89)	5	(60)	23	(70)
Guy's	D	5	(60)	6	(33)	0	-	11	(45)
Manchester	Ε	7	(57)	18	(56)	11	(73)	36	(61)
Newcastle	F	6	(33)	4	100)	2	100)	12	(67)
Oxford	G	10	(60)	14	(57)	14	(43)	38	(53)
WLRTC	Н	2	(50)	2	(50)	3	(33)	7	(43)
UK		46	(52)	68	(56)	43	(56)	157	(55)

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.

5.3.4 Heart

This section presents an analysis of adult (≥16) <u>Higher Quality Donor (HQD) DBD</u> donor heart <u>offer decline rates</u>. This only considers offers of hearts between 1 April 2022 and 31 March 2025 that were eventually transplanted and excludes all <u>fast track</u> offers. Hearts offered as part of a heart-lung block are included. Super-urgent, urgent and non-urgent offers are all considered. Only adult donor offers to adult recipients are considered, meaning that offers to paediatric patients at Newcastle are excluded. The <u>HQD</u> criteria are listed in <u>Appendix A3</u>.

In 2017, group offering for non-urgent cardiothoracic organ offers was introduced, where all centres receive a simultaneous offer for their non-urgent patients but acceptance is determined by a centre's position in the allocation sequence. Therefore, adjustments have been made to count any centre who is ranked above the accepting centre in the allocation sequence for that donor as declining the heart, even if they did not respond to the group offer, and any declines recorded for a centre ranked below the accepting centre were discounted.

Figure 5.10 compares individual centre adult heart <u>offer decline rates</u> for <u>DBD HQD</u> donors with the national rate over the time period.

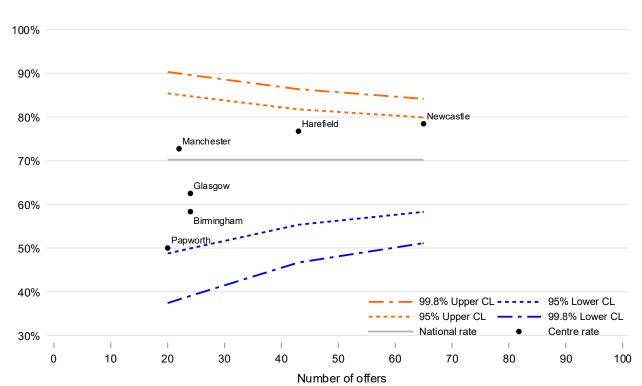


Figure 5.10 Adult DBD Higher Quality Donor heart offer decline rates for hearts that resulted in a transplant, 1 April 2022 to 31 March 2025

Table 5.14 compares individual centre adult heart <u>offer decline rates</u> for <u>DBD HQD</u> donors over time by financial year.

Table 5.14 Adult DBD Higher Quality Donor heart (including cardiac block) offer decline rates by transplant centre, 1 April 2022 and 31 March 2025

	202	2/23	202	3/24	202	4/25	Ove	erall
	Number	Decline	Number	Decline	Number	Decline	Number	Decline
Centre	of offers	rate (%)						
Birmingham	6	(67)	10	(60)	8	(50)	24	(58)
Glasgow	9	(44)	8	(100)	7	(43)	24	(63)
Harefield	14	(71)	10	(80)	19	(79)	43	(77)
Manchester	5	(100)	9	(78)	8	(50)	22	(73)
Newcastle	27	(81)	27	(74)	11	(82)	65	(78)
Papworth	8	(50)	9	(33)	3	(100)	20	(50)
UK	69	(71)	73	(71)	56	(68)	198	(70)

Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit

Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.

5.3.5 Lung

This section presents an analysis of adult (≥16) Higher Quality Donor (HQD) DBD and DCD donor lung offer decline rates. This only considers offers of bilateral lungs between 1 April 2022 and 31 March 2025 that were eventually transplanted and excludes all fast track offers. A bilateral lung offer is counted as accepted if either both the lungs were accepted or just a single lung was accepted. Lungs offered as part of a heart-lung block are considered, this includes cases where just the lungs were declined as well as cases where both the heart and lungs were declined. Urgent and non-urgent offers are all considered; super-urgent offers are additionally considered for the adult donor analysis. Only adult donor offers to adult recipients are considered, meaning that offers to paediatric patients at Newcastle are excluded. The HQD criteria are listed in Appendix A3.

In 2017, group offering for non-urgent cardiothoracic organ offers was introduced, where all centres receive a simultaneous offer for their non-urgent patients but acceptance is determined by a centre's position in the allocation sequence. Therefore, adjustments have been made to count any centre who is ranked above the accepting centre in the allocation sequence for that donor as declining the lung, even if they did not respond to the group offer, and any declines recorded for a centre ranked below the accepting centre were discounted.

Figure 5.11 compares individual centre adult lung <u>offer decline rates</u> for <u>DBD HQD</u> donors with the national rate over the time period.

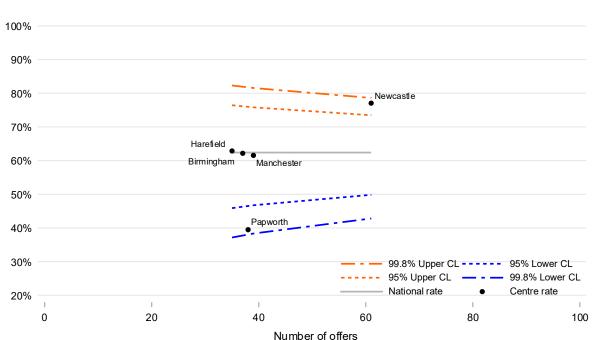


Figure 5.11 Adult DBD Higher Quality Donor bilateral lung offer decline rates for bilateral lungs that resulted in a transplant, 1 April 2022 to 31 March 2025

Table 5.15 compares individual centre adult lung <u>offer decline rates</u> for <u>DBD HQD</u> donors over time by financial year.

	2022/23 2023			3/24	2024	Overall			
	Number	Decline	Number	Decline	Number	Decline	Number	Decline	
Centre	of offers	rate (%)	of offers	rate (%)	of offers	rate (%)	of offers	rate (%)	
Birmingham	10	(50)	17	(71)	10	(60)	37	(62)	
Harefield	12	(75)	15	(60)	8	(50)	35	(63)	
Manchester	14	(64)	16	(63)	9	(56)	39	(62)	
Newcastle	23	(83)	26	(77)	12	(67)	61	(77)	
Papworth	13	(54)	17	(35)	8	(25)	38	(39)	
UK	72	(68)	91	(63)	47	(53)	210	(62)	
Centre has reached the upper 99.8% confidence limit Centre has reached the upper 95% confidence limit Centre has reached the lower 95% confidence limit Centre has reached the lower 99.8% confidence limit Centre has reached the lower 99.8% confidence limit Note: highlighting only shown in the 'Overall' column due to small numbers in the annual columns.									

Figure 5.12 compares individual centre adult lung <u>offer decline rates</u> for <u>DCD HQD</u> donors with the national rate over the time period.

Figure 5.12 Adult DCD Higher Quality Donor bilateral lung offer decline rates for bilateral lungs that resulted in a transplant, 1 April 2022 to 31 March 2025

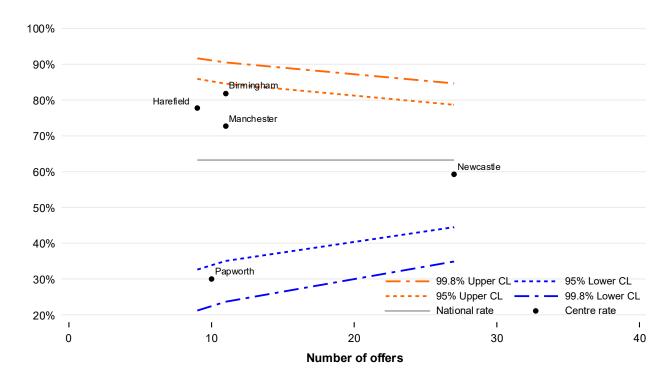


Table 5.16 compares individual centre adult lung <u>offer decline rates</u> for <u>DCD HQD</u> donors. Due to small numbers only the overall column, which summarises declines over the three-year period, is shown.

Table 5.16 Adult DCD Higher Quality Donor bilateral lung offer decline rates by transplant centre, 1 April 2022 and 31 March 2025									
Centre	Number of offers	Decline rate (%)							
Birmingham	11	(82)							
Harefield	9	(78)							
Manchester	11	(73)							
Newcastle	27	(59)							
Papworth	10	(30)							
uk	68	(63)							
Cen	tre has reached the upper 99.8% confide	ence limit							
	tre has reached the upper 95% confidence								
	tre has reached the lower 95% confidence								
Centre has reached the lower 99.8% confidence limit									

5.4 Retrieved not transplanted organs by Donor Risk Index

<u>Donor Risk Indices (DRIs)</u> can be used to estimate the quality of an organ using data captured on the <u>UK Transplant Registry</u>. <u>DRIs</u> are equations that are derived from statistical models and lead to a single value estimate of risk; higher values indicate higher estimated risk. There are published <u>DRIs</u> that have been validated for UK cohorts for kidney, liver and pancreas, which are outlined in <u>Appendix A4</u>. This section presents the percentage of retrieved organs that were not transplanted, by <u>DRI</u>, for these three organ groups.

For each organ group, the <u>DRI</u> has been calculated for all retrieved organs across the 10 year period and the 25th, 50th and 75th percentile value calculated, for <u>DBD</u> donors and <u>DCD</u> donors separately. <u>DBD</u> organs were then analysed in one of four categories, depending on the value of the <u>DRI</u> calculated for that organ:

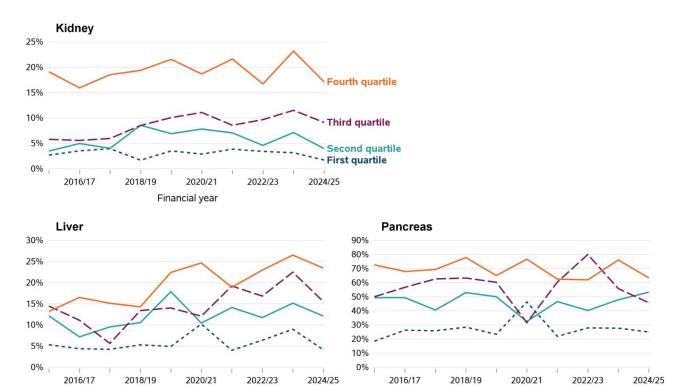
- First quartile (lowest risk): Calculated DRI < 25th percentile value for <u>DBD</u> donors
- Second quartile: 25th percentile value for <u>DBD</u> donors ≤ calculated DRI< 50th percentile value for <u>DBD</u> donors
- Third quartile: 50th percentile value for <u>DBD</u> donors ≤ calculated DRI < 75th percentile value for <u>DBD</u> donors
- Fourth quartile (highest risk): calculated DRI ≥ 75th percentile value for <u>DBD</u> donors

The equivalent method was applied to DCD donors.

Figure 5.13 and **Table 5.17** presents the percentage of retrieved organs that were not transplanted, by <u>DRI</u> quartile, for <u>DBD</u> organs. As expected, organs with a lower <u>DRI</u> (first quartile and considered lowest risk) generally had the lowest percentage of retrieved organs that were not transplanted. For kidneys, this was generally around 2-3% and for livers, around 5-6%. Kidneys with the highest <u>DRI</u> (fourth quartile and considered highest risk) still had a lower percentage not transplanted compared to pancreases with the lowest <u>DRI</u> (first quartile and considered lowest risk).

Figure 5.14 and **Table 5.18** show that the percentage of retrieved organs that are not transplanted for <u>DCD</u> donors is higher than for <u>DBD</u> donors although similar patterns can be seen. Kidneys with the highest <u>DRI</u> (fourth quartile and considered highest risk) had a lower percentage not transplanted compared to pancreases with the lowest <u>DRI</u> (first quartile and considered lowest risk).

Figure 5.13 Percentage of organs retrieved that were not transplanted from DBD donors in the UK, split by DRI quartile, 1 April 2015 – 31 March 2025



2024/25

2016/17

2020/21

Financial year

2022/23

2024/25

2016/17

2018/19

2020/21

Financial year

2022/23

Table 5.17 Percentage of organs retrieved that were not transplanted from DBD donors in the UK, split by DRI quartile, 1 April 2015 - 31 March 2025

	Percentage retrieved not transplanted							
		Second						
Financial Year	First Quartile	Quartile	Third Quartile	Fourth Quartile				
Kidney								
2015/16	2.7%	3.5%	5.8%	19.1%				
2016/17	3.5%	5.0%	5.6%	15.9%				
2017/18	3.9%	4.0%	6.0%	18.5%				
2018/19	1.7%	8.6%	8.5%	19.4%				
2019/20	3.5%	6.9%	10.1%	21.6%				
2020/21	2.9%	7.8%	11.1%	18.7%				
2021/22	3.8%	7.1%	8.6%	21.6%				
2022/23	3.4%	4.6%	9.7%	16.7%				
2023/24	3.1%	7.1%	11.5%	23.2%				
2024/25	1.7%	4.0%	9.1%	17.1%				
Liver								
2015/16	5.3%	12.1%	14.5%	13.2%				
2016/17	4.4%	7.2%	11.1%	16.5%				
2017/18	4.2%	9.5%	5.6%	15.1%				
2018/19	5.3%	10.6%	13.4%	14.3%				
2019/20	4.9%	17.9%	14.0%	22.4%				
2020/21	10.2%	10.4%	12.1%	24.7%				
2021/22	4.0%	14.1%	19.2%	18.9%				
2022/23	6.4%	11.7%	16.8%	23.0%				
2023/24	9.0%	15.2%	22.5%	26.5%				
2024/25	4.1%	12.1%	15.5%	23.5%				
Pancreas								
2015/16	18.4%	49.3%	50.0%	72.6%				
2016/17	26.3%	49.4%	56.7%	67.9%				
2017/18	25.8%	40.6%	62.6%	69.4%				
2018/19	28.4%	52.9%	63.3%	77.8%				
2019/20	23.4%	50.0%	60.3%	65.1%				
2020/21	46.3%	32.4%	31.6%	76.7%				
2021/22	21.9%	46.6%	60.4%	62.5%				
2022/23	27.9%	40.2%	80.0%	62.0%				
2023/24	27.7%	47.8%	55.8%	76.1%				
2024/25	25.0%	53.2%	45.8%	63.4%				

Figure 5.14 Percentage of organs retrieved that were not transplanted from DCD donors in the UK, split by DRI quartile, 1 April 2015 – 31 March 2025

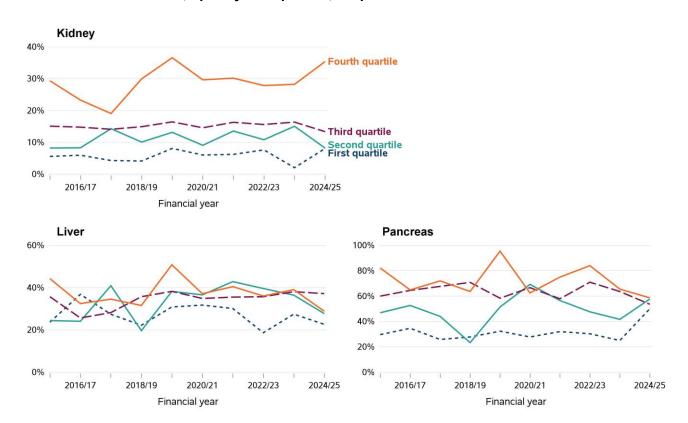


Table 5.18 Percentage of organs retrieved that were not transplanted from DCD donors in the UK, split by DRI quartile, 1 April 2015 - 31 March 2025

	Percentage retrieved not transplanted								
		Second							
Financial Year	First Quartile	Quartile	Third Quartile	Fourth Quartile					
Kidney									
2015/16	5.6%	8.2%	15.1%	29.4%					
2016/17	5.9%	8.3%	14.8%	23.3%					
2017/18	4.3%	14.3%	14.1%	19.1%					
2018/19	4.1%	10.1%	14.9%	30.0%					
2019/20	8.1%	13.1%	16.4%	36.6%					
2020/21	6.0%	9.1%	14.6%	29.7%					
2021/22	6.2%	13.5%	16.3%	30.2%					
2022/23	7.6%	10.8%	15.6%	27.9%					
2023/24	2.0%	15.0%	16.4%	28.2%					
2024/25	8.1%	8.2%	13.4%	35.4%					
Liver									
2015/16	23.7%	24.4%	35.7%	44.3%					
2016/17	36.8%	24.1%	25.6%	32.5%					
2017/18	27.4%	40.9%	28.2%	34.6%					
2018/19	22.2%	19.6%	35.7%	31.6%					
2019/20	30.9%	38.2%	38.2%	50.8%					
2020/21	31.7%	36.6%	34.9%	37.1%					
2021/22	30.1%	42.9%	35.5%	40.5%					
2022/23	18.7%	39.6%	35.7%	36.0%					
2023/24	27.5%	36.4%	38.1%	39.0%					
2024/25	22.6%	27.7%	37.2%	28.8%					
Pancreas									
2015/16	29.6%	46.9%	60.0%	82.1%					
2016/17	34.6%	52.6%	64.5%	64.9%					
2017/18	25.8%	44.0%	67.6%	72.0%					
2018/19	27.8%	23.3%	70.8%	63.6%					
2019/20	32.4%	51.4%	58.3%	95.5%					
2020/21	27.8%	69.2%	66.7%	62.5%					
2021/22	32.0%	56.5%	57.9%	75.0%					
2022/23	30.3%	47.6%	71.0%	84.0%					
2023/24	25.0%	41.7%	63.6%	65.5%					
2024/25	50.0%	57.7%	53.6%	58.6%					

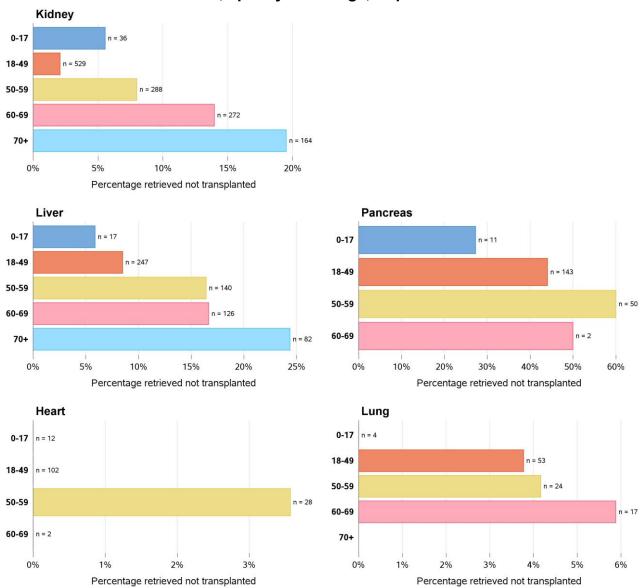
5.5 Retrieved not transplanted organs by donor age

The percentage of retrieved organs that were not transplanted is shown for <u>DBD</u> donors in **Figure 5.15 and Table 5.19**, and for <u>DCD</u> donors in **Figure 5.16 and Table 5.20**, with donors grouped into the following age categories:

- 0-17
- 18-49
- 50-59
- 60-69
- 70+

For abdominal organs, generally, the percentage of retrieved organs that were not transplanted increased as the donor age category increased. This was seen for both <u>DBD</u> and <u>DCD</u> donors. Due to the low number of retrieved not transplanted cardiothoracic organs, trends were less clear.

Figure 5.15 Percentage of organs retrieved that were not transplanted from DBD donors in the UK, split by donor age,1 April 2024 – 31 March 2025

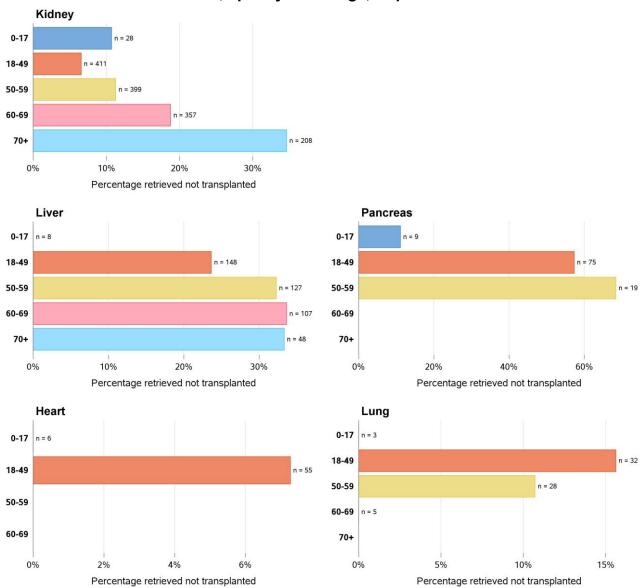


Note that the x-axis range differs for each organ group.

Table 5.19 Retrieved not transplanted I organs from DBD donors in the UK, by donor age, between 1 April 2024 - 31 March 2025

	Donor Age									
	0 - 17		18 - 49		50 - 59		60 - 69		70+	
	Retrieved	Retrieved not transplanted (%)	Retrieved	Retrieved not transplanted (%)						
Kidney	36	2 (5.6%)	529	11 (2.1%)	288	23 (8.0%)	272	38 (14.0%)	164	32 (19.5%)
Liver	17	1 (5.9%)	247	21 (8.5%)	140	23 (16.4%)	126	21 (16.7%)	82	20 (24.4%)
Pancreas	11	3 (27.3%)	143	63 (44.1%)	50	30 (60.0%)	2	1 (50.0%)	0	-
Heart	12	0 (0.0%)	102	0 (0.0%)	28	1 (3.6%)	2	0 (0.0%)	0	-
Lung	4	0 (0.0%)	53	2 (3.8%)	24	1 (4.2%)	17	1 (5.9%)	0	-

Figure 5.16 Percentage of organs retrieved that were not transplanted from DCD donors in the UK, split by donor age,1 April 2024 – 31 March 2025



Note that the x-axis range differs for each organ group.

Table 5.20 Retrieved not transplanted organs from DCD donors in the UK, by donor age, between 1 April 2024 - 31 March 2025

	Donor Age										
	0 - 17		18 - 49		50 - 59		60 - 69		70+		
	Retrieved	Retrieved not transplanted (%)									
Kidney	28	3 (10.7%)	411	27 (6.6%)	399	45 (11.3%)	357	67 (18.8%)	208	72 (34.6%)	
Liver	8	0 (0.0%)	148	35 (23.6%)	127	41 (32.3%)	107	36 (33.6%)	48	16 (33.3%)	
Pancreas	9	1 (11.1%)	75	43 (57.3%)	19	13 (68.4%)	0	-	0	-	
Heart	6	0 (0.0%)	55	4 (7.3%)	0	-	0	-	0	-	
Lung	3	0 (0.0%)	32	5 (15.6%)	28	3 (10.7%)	5	0 (0.0%)	0	-	

Appendix

A1 Glossary of terms

ABO incompatible

The blood group of the donor is incompatible with the blood group of the recipient.

ACLF patients

Patients with acute-on-chronic liver failure, an advanced form of liver disease.

Offering Scheme

When an organ becomes available for transplantation, it is offered to centres/patients according to an offering scheme. Each organ has its own allocation policy which can be found on the NHSBT website:

Policies and guidance - ODT Clinical - NHS Blood and Transplant

Case mix

The types of patients treated at a unit for a common condition. This can vary across units depending on the facilities available at the unit as well as the types of people in the catchment area of the unit. The definition of what type of patient a person is depends on the patient characteristics that influence the outcome of the treatment. For example the case mix for patients registered for a kidney transplant is defined in terms of various factors such as the blood group, tissue type and age of the patient. These factors have an influence on the chance of a patient receiving a transplant.

Confidence interval (CI)

When an estimate of a quantity such as an offer decline rate is obtained from data, the value of the estimate depends on the set of donor organs that were used. If, by chance, data from a different set of donor organs had been used, the value of the estimate may have been different. There is therefore some uncertainty linked with any estimate. A confidence interval is a range of values whose width gives an indication of the uncertainty or precision of an estimate. The number of offers analysed influences the width of a confidence interval. Smaller data sets tend to lead to wider confidence intervals compared to larger data sets. Estimates from larger data sets are therefore more precise than those from smaller data sets. Confidence intervals are calculated with a stated probability, usually 95%. We then say that there is a 95% chance that the confidence interval includes the true value of the quantity we wish to estimate.

Confidence limit

The upper and lower bounds of a confidence interval.

Donor after brain death (DBD)

A donor whose heart is still beating when their entire brain has stopped working so that they cannot survive without the use of a ventilator. Organs for transplant are removed from the donor while their heart is still beating, but only after extensive tests determine that the brain cannot recover and they have been certified dead.

Donor after circulatory death (DCD)

A donor whose heart stops beating before their brain stops working and who is then certified dead. The organs are then removed.

Donor Risk Index (DRI)

A Donor Risk Index (DRI) can be used to estimate the quality of an organ using data captured on the UK Transplant Registry. DRIs are equations that are derived from

statistical models and lead to a single value estimate of risk; higher values indicate higher estimated risk. There are published DRIs that have been validated for UK cohorts for kidney, liver and pancreas, which are outlined in **Appendix A4**.

Elective liver patients

Separate selection criteria to join the liver transplant list have been devised for those patients requiring emergency transplantation (super-urgent) compared to those who require a routine procedure (elective transplantation). The two groups have a different range of aetiologies with markedly different short-term prognoses; different criteria are required to define that prognosis. Similarly, processes to allocate a donor liver are different for super-urgent and elective transplantation, reflecting those patient groups with a different risk of death without transplantation.

Funnel plot

A graphical method that shows how consistent the offer decline rates of the different transplant units are compared to the national rate. The graph shows for each unit, an offer decline rate plotted against the number of offers received, with the national rate and confidence limits around this national rate superimposed. In this report, 95% and 99.8% confidence limits were used. Units that lie within the confidence limits have offer decline rates that are statistically consistent with the national rate. When a unit is close to or outside the limits, this is an indication that the centre may have a rate that is considerably different from the national rate.

Fast Track

For each organ group, there are a set of criteria for which the organ my be fast tracked, meaning that the organ will not be offered through the standard allocation scheme and will instead be offered straight out to all centres registered on to the fast track scheme. The fast track criteria for each organ group can be found in the NHSBT allocation polices:

Policies and guidance - ODT Clinical - NHS Blood and Transplant

Higher Quality Donor

A Higher Quality Donor (HQD) is defined by a set of parameters captured on the UK Transplant Registry. These parameters are listed in <u>Appendix A3</u>. There is a different set of parameters for each organ so a donor may be considered an HQD for one organ but not another. While a donor may be considered 'higher quality' according to these parameters for a particular organ, there may be other reasons, which are not captured on the registry, which would deem the organ of lower quality in reality.

HLA incompatible

Human Leucocyte Antigen (HLA) antigens are carried on many cells in the body. Sometimes a patient may have particular antibodies that can react against the donor kidney. Such 'anti-HLA' antibodies carried by the patient are labelled as being 'incompatible' with the donor kidney. This is known as HLA incompatibility.

Multi-organ transplant

A transplant in which the recipient receives more than one organ. For example, a recipient may undergo a transplant of a kidney and liver.

NHSBT Annual Activity Report

The NHSBT Annual Activity Report gives a comprehensive update about organ donors, transplant waiting lists and transplant activity for the UK for the latest financial year and can be found here:

Annual Activity Report - ODT Clinical - NHS Blood and Transplant

Offer decline rate

When an organ is offered to a centre, the centre can either decline or transplant the organ. The offer decline rate is the percentage of all offers that were declined.

Prolonged Time to Asystole

In DCD donation, organ donation takes place following the diagnosis of death using circulatory criteria after the withdrawal of life sustaining treatment. If diagnosis of death does not occur within a suitable time frame to allow donation to occur, then the organs experience deterioration post treatment withdrawal. This is referred to as prolonged time to asystole.

Reallocation of kidneys

Between 3 April 2006 and 11 September 2019 all kidneys from donation after brain death (DBD) donors were allocated through the 2006 National Kidney Allocation Scheme. There are however certain situations when a kidney can be reallocated to an alternative patient of the centre's choice. This occurs when the kidney is accepted and dispatched to a named patient but is subsequently declined and there are no other patients listed nationally who fall within Tiers A to D of the kidney offering scheme (000 mismatched adults and paediatric patients or favourably matched paediatric patients). In this situation the centre in receipt of the kidney can reallocate the organ to a locally listed patient of their choice based on an individual centre matching run. Since 11 September 2019 all kidneys from deceased donors have been allocated through the 2019 National Kidney Offering Scheme. In a similar fashion to the 2006 scheme, if a kidney needs to be reallocated because the patient for whom the kidney has been accepted cannot subsequently receive the transplant then the kidney can be reallocated to an alternative patient of the centre's choice if the kidney has been dispatched to the transplant centre and there are no suitable patients in Tier A.

Reallocation of pancreases

All pancreases from deceased donors are allocated through the National Pancreas Offering Scheme. If a pancreas needs to be reallocated because the patient for whom the pancreas has been accepted cannot subsequently receive the transplant, then the pancreas can be reallocated to an alternative patient of the centre's choice if the pancreas has been dispatched to the transplant centre.

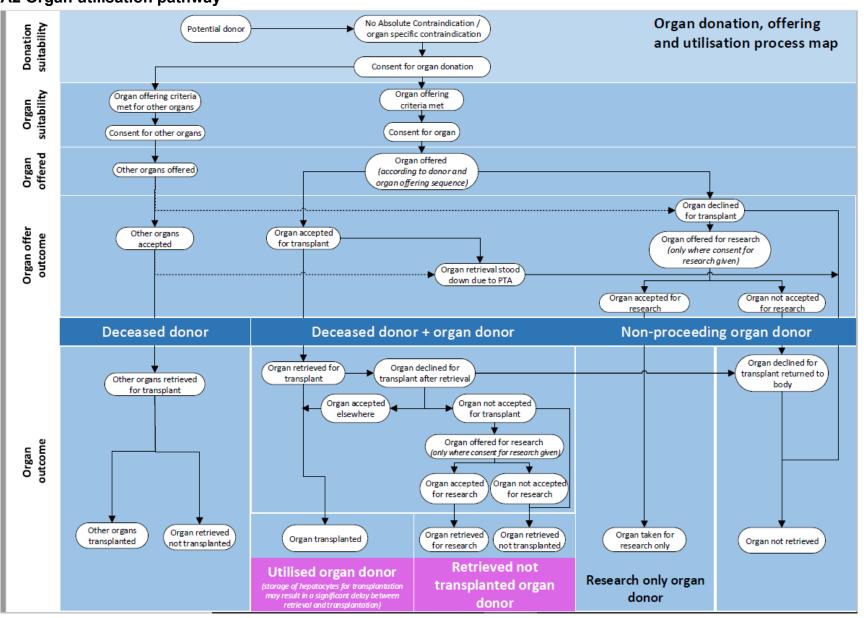
UK Transplant Registry

The UK Transplant Registry, managed by NHS Blood and Transplant, is a computerised system which stores information about donors, transplants and transplant patients. It is essential to facilitate allocation and matching of organs and is also used for improving patient care based on robust evidence.

Unadjusted offer decline rates

Unadjusted offer decline rates do not take account of risk factors and are based only on the number of offers made to a given centre and the number that were declined, during the period of interest. All offers are assumed to be equally likely to be declined. However, some centres may have higher unadjusted offer decline rates than others simply because they tend to have patients with more complex needs on their waiting list and therefore are not in a position to accept organs with a higher perceived risk. Comparison of unadjusted offer decline rates across centres and to the national rate is therefore inappropriate.

A2 Organ utilisation pathway



A3 Higher Quality Donor (HQD) definitions

Kidney HQD parameters:

- No history of malignancy
- No evidence of positive HBsAg
- No evidence of positive HCVAb
- No evidence of positive HIV
- No evidence of positive HTLV
- Aged >10 and <50 years
- No history of hypertension
- No history of diabetes
- No urinary infections in the current hospital admission

Liver HQD parameters:

- DBD donor
- No history of malignancy
- No evidence of positive HBsAg
- No evidence of positive HCVAb
- No evidence of positive HIV
- Age >15 and <60 years
- BMI <30
- Liver Serum ALT <150
- ITU stay less than 10 days
- Bilirubin <25

Pancreas HQD parameters:

- No history of malignancy
- No evidence of positive HBsAg
- No evidence of positive HCVAb
- No evidence of positive HIV
- No evidence of positive HTLV
- Age >15 and <50 years
- BMI <27
- ITU stay less than 10 days
- No cardiac arrest of more than 60 minutes

Heart HQD parameters:

- Age >16 and <50 years
- No past medical history of any of the following:
 - History of hypertension
 - History of diabetes
 - Current or past smoker
 - History of cardiac disease
- Echocardiogram: LVEF ≥50% and IVS ≤12
- Current dose of Adrenaline, Dopamine and Dobutamine = 0 at the time of organ offer
- No history of malignancy
- No evidence of positive HBsAg1
- No evidence of positive HCVAb1
- No evidence of positive HIV1
- No evidence of positive HTLV1

Lung HQD parameters:

- Age 16 55 years
- No history of malignancy
- No history of smoking OR age <30 OR Smoking ≤ 20 pack years
- pO2≥ 40 kPA with FiO2 1 and PEEP 5 at offering
- Mechanical ventilation ≤7 days
- No evidence of positive HBsAg1
- No evidence of positive HCVAb1
- No evidence of positive HIV1
- No evidence of positive HTLV1

A4 Donor Risk Indices

Kidney

The Kidney Donor Risk Index used in the UK Kidney Offering Scheme was used:

KDRI = $\exp\{0.023 \text{ x (age -}50) - 0.152 \text{ x ((Height-170)/}10) + (0.149 \text{ if past history of hypertension)} - (0.184 \text{ if female}) + (0.190 \text{ if positive CMV status}) - 0.023 \text{ x ((eGFR -}90)/}10) + 0.015 \text{ x (days in hospital)}}$

Liver

The Donor Liver Index presented in Collet et all (2017) was used:

DLI = $\exp\{1.6775 + 0.009179 \text{ age } - (0.1948 \text{ if female}) + (0.6363 \text{ if DCD}) + (0.4697 \text{ if split liver}) - 0.01283 x (Height) + (0.1570 \text{ if smoker}) + 0.009019 x (Bilirubin)}$

Note that the split liver factor (in grey) was excluded from the equation for the purposes of this report as this would not be populated for unused livers.

Collett D, Friend PJ, Watson CJ. Factors Associated With Short- and Long-term Liver Graft Survival in the United Kingdom: Development of a UK Donor Liver Index. Transplantation. 2017 Apr;101(4):786-792.

Pancreas

The Pancreas Donor Risk Index presented in Axelrod et al (2010) was used, which has been validated for use in a UK population (Mittal et all, 2015):

pDRI= exp{ $(-0.13792 \text{ if female}) - (0.034455 \text{ if age} < 20) \times (age -20) + 0.026149 \times (age -28) + (0.19490 \text{ if Creatinine} > 2.5) + (0.23951 \text{ if black ethnic group}) + (0.15711 \text{ if Asian ethnic group}) - 0.000986347 \times (Donor BMI -24) + (0.033274 \text{ if BMI} > 25]) \times (BMI - 25) - .006073879 \times (Height -173) + (0.21018 \text{ if cause of death CVA}) - (0.28137 \text{ if cause of death CVA}) + (0.033172 \text{ if DCD})}$

Note that the preservation time factor (in grey) was excluded from the equation for the purposes of this report as this would not be populated for unused pancreases.

Axelrod DA, Sung RS, Meyer KH, Wolfe RA, Kaufman DB. Systematic evaluation of pancreas allograft quality, outcomes and geographic variation in utilization. Am J Transplant. 2010 Apr;10(4):837-845.

Mittal S, Lee FJ, Bradbury L, Collett D, Reddy S, Sinha S, Sharples E, Ploeg RJ, Friend PJ, Vaidya A. Validation of the Pancreas Donor Risk Index for use in a UK population. Transpl Int. 2015 Sep;28(9):1028-33.

A5 Decline reason categories

All available offer decline reasons are listed below, grouped by category. Please note that some of these decline reasons may not apply to the offered organs included in this report.

Category Offer decline reasons within this category

Organ unsuitable

Organ not present; Donor unsuitable - DCD donor; Donor unstable; Donor unsuitable - size; Donor arrested; Poor function; Infection; Contamination/damage in removal; Poor function/ischaemic time; Anatomical anomaly, please specify; Poor perfusion; On perfusion machine; HLA/ABO type; X-match positive; Unable to x-match; Better match required; Organ damaged; Contamination - organ unsuitable; Ischaemia time too long - warm; Ischaemia time too long - cold; Unable to x-match - no recipient material; Infection in storage medium; Expired in tissue bank; Tissue bank classify as unsuitable; Steatosis (Fatty organ) - organ unsuitable; Organ/tissue unsuitable for transplant; Unable to purify pancreas islets; Insufficient pancreas islets; Whole organ cut down for transplant; Zone team felt organ not viable; Organ too small; Fibrosis; Insufficient distension with collagenase; Insufficient islet yield - organ unsuitable; Insufficient islet viability; Insufficient islet purity; Packed cell volume too large; Organ fatty infiltration; No kidney available; Organ damage (retrieval injury), please specify; Organ damage (at transplant centre), please specify; Organ damage (pre-mortem), please specify; Organ trauma - contusion, laceration; Insufficient investigations to assess organ function; Poor function - initial assessment; Poor function at retrieval; Biliary pathology, please specify; Extensive adhesions; Scarring; Donor diabetes - organ unsuitable; Donor history of chronic pancreatitis; Donor hyperglycaemia (without diabetes diagnosis); Organ failed viability assessment, please specify; Taken for vessels only; Taken for histology/biopsy only; Multiple cysts; Severe hypertension; Paediatric en bloc not performed in this centre; Would only accept for dual kidney transplant; Renal tumour, please specify - organ unsuitable; Organ unsuitable - scan results; Coronary artery disease; Excessive catecholamines; Ventricular hypertrophy; Donor unsuitable - smoking history - organ unsuitable; Aspiration; Atelectasis; Bullous disease/emphysema; ABO mismatch; Age mismatch; HLA mismatch; Size mismatch; Sex mismatch; Size and sex mismatch; Anticipated positive crossmatch; Donor hepatitis C; Donor hypertension; Donor hepatitis B; Atheromatous SMA/splenic artery; Portal vein diseased; IVC diseased; Atheromatous aortic patch/proximal renal artery; Donor specific antibodies; Insufficient islet yield - organ unsuitable for named recipient; Donor diabetes - organ unsuitable for named recipient; Renal tumour, please specify - organ unsuitable for named recipient; Donor unsuitable - smoking history - organ unsuitable for named recipient; Steatosis (fatty organ) - organ unsuitable for named recipient; Organ damage due to COVID-19; Adverse findings on machine perfusion; Poor function following machine perfusion; Unsuitable for isolation - isolation lab opinion, please specify; Other, please specify - organ unsuitable; Other - organ unsuitable for named recipient

Donor unsuitable

Donor unsuitable - cause of death; Donor unsuitable - age; Donor unsuitable - past history; Brain stem tests not satisfied; Donor unsuitable - other/unknown; No blood for virology; Clinical; Donor unsuitable - Tumour, please specify; Donor unsuitable - Medication; Other disease, please specify; Unable to x-match - no donor material; Donor unsuitable - virology; Donor unsuitable - medical reason; Increased infection risk, please specify; Prolonged time to asystole; Composite organ/tissue unavailable - donor unsuitable; Whole liver unavailable - donor unsuitable; Prolonged ventilation; Donor COVID-19 infection risk; Donor positive for COVID-19 after offering; Other, please specify - donor unsuitable

Logistic issues

No beds/staff/theatre; No time; Centre already transplanting; Limited theatre time; Poor weather; Distance; No beds; No staff; No theatre; Transport difficulties; Donor cross clamp time too imminent; No UK retrieval team available; Timing of donation; No isolation lab available; No "COVID-19 free" ICU beds available; No "COVID-19 free" ward beds available; Limited resources due to COVID-19; COVID-19 related transport difficulty, please specify; Other, please specify - logistic issues

Centre reasons

No suitable recipients; Centre barred; Centre closed; Centre criteria not achieved; Organ used elsewhere; No response to fast track/group offer; Recipient centre; No suitable recipients due to reduced patient list: COVID-19; Centre closed due to COVID-19 risk, please specify; Centre closed due to COVID-19 staff absences, please specify; Max number liver acceptances reached; Other, please specify - centre reason

Recipient reasons

Recipient unfit; Recipient died; Recipient unavailable; Recipient refused; Recipient did not need transplant; Recipient due to receive live donor tx; Split liver not suitable for recipient; Recipient has potential live donor; Recipient travel time too long; Donor already accepted for this recipient; Composite organ/tissue unavailable - recipient unsuitable; Whole liver unavailable - recipient unsuitable; Recipient unfit - COVID-19; Declined by centre due to COVID-19 risk in recipient; Declined by centre due to COVID-19 risk with transplant; Recipient unsuitable for augmented immunosuppression (COVID-19 risk); Other - recipient unsuitable

Other

Not applicable; Organ not offered eg euro/living donor; Offer withdrawn; Donor recovered; Other administrative reason; Offered to national pool as payback; Currently in tissue bank; Epikeratophakia; Issued from tissue bank for unknown; Taken for hepatocytes; Only taken for research use; Packaging; Offer waived; Offer from Europe for super-urgents; Heart retrieved for valves only; Used for research after declined by centres; Donor centre; Other, please specify; Unknown; Other administrative reason; Tissue damage - ocular; Tissue was torn on receipt of the tissue; Tissue damaged during graft preparation by surgeon; Tissue damaged in hospital; Contamination - ocular; Tissue recalled by eye bank due to identification of contamination post-issue; Suspected contamination detected in hospital; Not reported; Tissue unsuitable for transplant; Incorrect tissue ordered by hospital; Incorrect tissue issued by eye bank; Opacity/scars identified; Unsuitable pre-cut or pre-peeled tissue - DS(A)EK/DMEK; Issues with preloaded tissues; Quality concerns identified in hospital; Other, please specify - ocular; Other, please specify - research/disposed of; Decline for all recipients, please specify

A6 Reason for non-use categories

All available reasons for non-use are listed below, grouped by category. Please note that some of these reasons may not apply to the retrieved organs included in this report.

Category Non-use reasons within this category

Donor unsuitable - medical

Donor unsuitable - cause of death; Infection; Clinical; Donor unsuitable - Tumour, please specify; Anatomical anomaly, please specify; Donor unsuitable - Medication; Other disease, please specify; Donor unsuitable - virology; Donor unsuitable - medical reason; Prolonged time to asystole; Insufficient investigations to assess organ function; Donor history of chronic pancreatitis; Organ unsuitable - scan results; Aspiration; Organ damage due to COVID-19; Donor COVID-19 infection risk; Other, please specify - donor unsuitable

Donor unsuitable - non medical

Organ not present; Donor recovered; Donor unsuitable - DCD donor; Brain stem tests not satisfied; Donor unstable; Donor unsuitable - size; Donor unsuitable - other/unknown

Donor unsuitable -

Donor unsuitable - age

Organ unsuitable clinical

Donor unsuitable - past history; Contamination/damage in removal; Poor function/ischaemic time; Poor perfusion; On perfusion machine; HLA/ABO type; Organ damaged; Contamination - organ unsuitable; Ischaemia time too long - warm; Ischaemia time too long - cold; Steatosis (Fatty organ) - organ unsuitable; Organ/tissue unsuitable for transplant; Unable to purify pancreas islets; Insufficient pancreas islets; Organ too small; Fibrosis; Insufficient distension with collagenase; Insufficient islet yield - organ unsuitable; Insufficient islet viability; Insufficient islet purity; Packed cell volume too large; Organ fatty infiltration; Organ damage (retrieval injury), please specify; Organ damage (at transplant centre), please specify; Donor diabetes - organ unsuitable; Organ failed viability assessment, please specify; Renal tumour, please specify - organ unsuitable; Coronary artery disease; Insufficient islet yield - organ unsuitable for named recipient; Other, please specify - organ unsuitable

Poor function

Poor function; Poor function - initial assessment; Poor function at retrieval; Poor function following machine perfusion

Other

Donor arrested; No suitable recipients; No beds/staff/theatre; No time; Centre barred; Centre already transplanting; Centre closed; Centre criteria not achieved; No blood for virology; Other administrative reason; X-match positive; Unable to x-match; Better match required; Unable to x-match - no donor material; Unable to x-match - no recipient material; Recipient unfit; Recipient died; Recipient unavailable; Recipient refused; Recipient did not need transplant; Limited theatre time; Offered to national pool as payback; Currently in tissue bank; Infection in storage medium; Expired in tissue bank; Epikeratophakia; Tissue bank classify as unsuitable; Issued from tissue bank for unknown; Taken for hepatocytes; Only taken for research use; Poor weather; Packaging; Organ used elsewhere; Distance; Offer waived; No beds; No staff; No theatre; Transport difficulties; No response to fast track/group offer; Offer from Europe for super-urgents; Heart retrieved for valves only; Used for research after declined by centres; Whole organ cut down for transplant; Donor centre; Recipient centre; Zone team felt organ not viable; Other, please specify; Unknown; No isolation lab available; Not reported; Other, please specify - ocular; Other, please specify - logistic issues; Other, please specify - centre reason; Other, please specify - research/disposed of

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