



# *Benchmark Report* | OPOs

NCNC

July 2024



OPO Benchmark Report  
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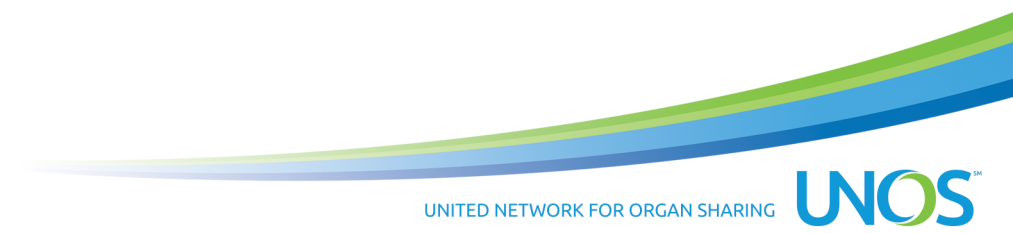
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## Introduction

The OPO Benchmark Report aims to provide OPOs with information on a routine basis using data visualizations to compare OPO activity, performance, and characteristics to OPOs with similar characteristics, OPOs in the same region, and national trends. This individualized report will be generated quarterly (January, April, July, October) with updated data and delivered securely via the Data Services portal in UNet. This report allows all OPOs to see the same comparisons on the same metrics at the same frequency. Currently the report is intended to be accessed by OPO administrators, but is available to anyone with UNet access at your organization. The OPO Benchmark Report was first released in June, 2018. Archived OPO Benchmark Reports can be requested by contacting [dataportalfeedback@unos.org](mailto:dataportalfeedback@unos.org).

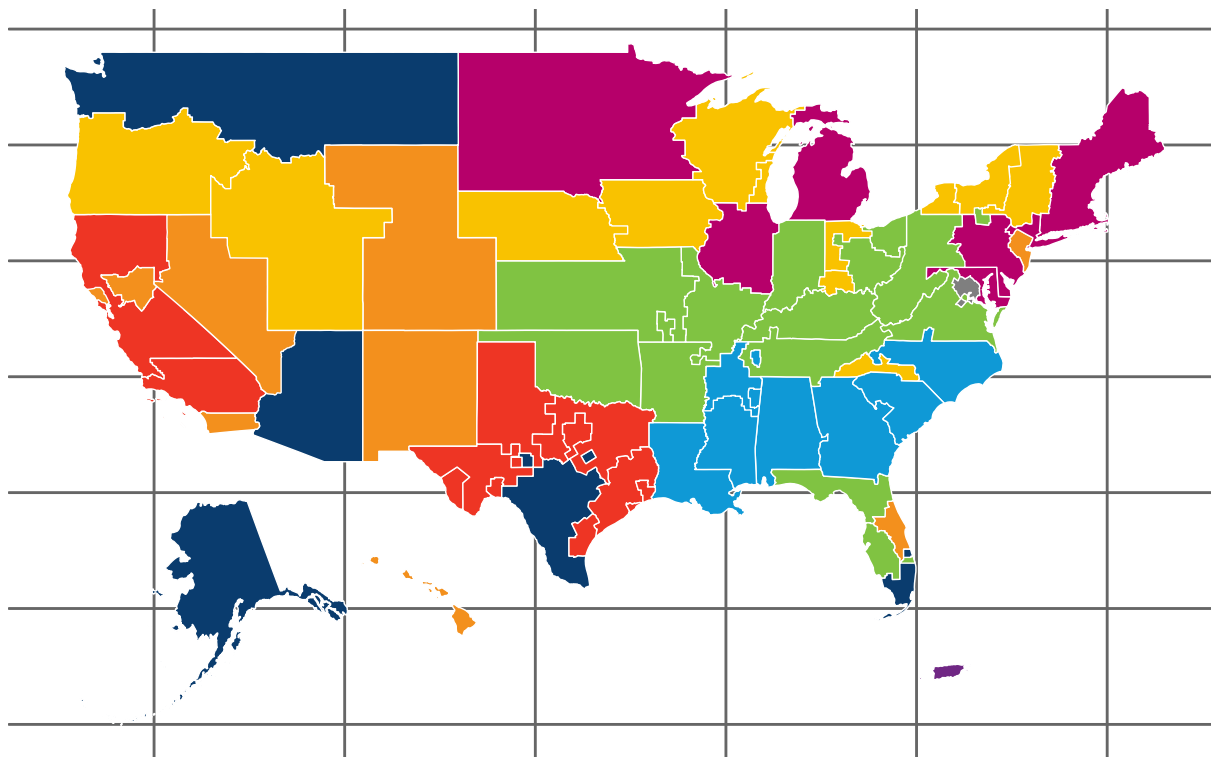
Contents of the OPO Benchmark Report were chosen based on internal UNOS staff discussions as well as feedback from individual OPOs. Having current data delivered regularly should help OPO administrators as they understand their donor population, DSA listing practices, and organ offer activity - and compare it to others in the United States. Over time, UNOS will update the content of the report to deliver the most useful information to OPOs. Different data may become more useful as policies or regulations change, or as organizations begin to see more sophisticated uses for the report.

The current report is divided into three chapters, beginning with the Offers chapter. This chapter is designed to allow an OPO to see how their allocation efforts compare to other OPOs for both organs that were transplanted as well as those that were not. The chapter analyzes the data based on both the number of candidate offers as well as the number of center offers. The Supply chapter allows the OPO to see how their donor volume, and organ utilization and non-use rates compare to other OPOs. The Demand chapter displays the characteristics of the waiting lists in the DSA that the OPO serves and how those characteristics compare to those of other OPOs. The Supply and Demand chapters help to put into context the data that are provided in the Offers chapter.

The clusters, used as a comparison group along with region and the nation, aim to group DSAs together based on a more holistic and objective measure of similarity using many descriptive factors. The clusters are based on over 60 general characteristics of the DSA, instead of modeling based on outcomes like conversion and yield. The clusters allow an OPO to compare to other OPOs with similar populations and circumstances. This provides OPOs with another perspective for their quality improvement efforts. By incorporating multiple informative characteristics of DSAs together simultaneously, a more complete picture of the DSA is developed, revealing likenesses. Further details of the eight data sources, 60+ characteristics, and methodology used can be found in UNOS Data Portal Documentation.

Do not hesitate to contact UNOS with questions relating to data shown in the report, or about conventions used to display the data. UNOS would like this report to evolve over time with the input of professionals in the community who are able to use it for quality improvement. To contact UNOS in reference to the OPO Benchmark Report, please e-mail [dataportalfeedback@unos.org](mailto:dataportalfeedback@unos.org).

## Map of DSA Clusters



### Clusters:

- ALOB, GALL, LAOP, MSOP, NCNC, SCOP, TNMS
- AROR, AZOB, FLUF, FLWC, INOP, KYDA, MDPC, MOMA, MWOB, OHLB, OHLP, OKOP, PATF, TNDS, VATB, WALC
- CADN, CAOP, NYRT, TXGC, TXSB
- CAGS, CASD, FLFH, HIOP, NMOP, NVLV, TXSA
- CORS, IAOP, NCCM, NEOR, NYAP, NYFL, NYWN, OHLC, OHOV, ORUO, UTOP, WIDN, WIUW
- DCTC, FLMP, NJTO
- ILIP, MAOB, MIOP, MNOP, PADV
- PRL *\*For purposes of the OPO Benchmark Report, PRL will be compared to the following cluster of OPOs: CAGS, CASD, FLFH, HIOP, NMOP, NVLV, TXSA; however, these OPOs will not include PRL in their comparisons.*

Chapter	Section	Release Date	Update/Correction
All	All	April 2023	Updated cluster analysis to account for OPO merger in Jan 2023
Demand	Lung	October 2023	Added Continuous Lung Allocation CAS subscore, Medical Urgency Points, and Post-Transplant Survival Points

## Updates, Corrections and Revisions

## FAQ

### What's in the Benchmark Report?

The OPO benchmark report currently consists of an FAQ, Offers chapter, Supply chapter, and Demand chapter.

### Who can see my data in the Benchmark report?

Every OPO receives a copy of the report via the data portal specific to their OPO showing the data for their OPO, region, DSA clusters and national level data which they alone can access.

### Where does the data for these reports come from?

Data for the Offer Chapters are obtained from deceased donor registration forms (DDR) and Potential Transplant Recipient (PTR) data collected by UNOS. Data for the Demand Chapters are obtained from candidate registration forms (TCR) as well as Waitlist<sup>sm</sup>, looking at those candidates on the waiting list on the date specified in the report. Data for the Supply Chapters are obtained from DDRs. Only those donors with at least one organ recovered for the purpose of transplantation during the 12 month period stated in the report are included in the cohort used in the chapter.

### What is the difference between DCD and DBD donors?

How are DCD and DBD donors differentiated? Donors having donated after circulatory death (DCD) are identified via whether the donor was recovered under DCD protocol reported by the OPO on the OPTN DDR. Donors are otherwise categorized as donation after brain death (DBD).

### Will content be added to the Benchmark Report?

The benchmark team is continually working to provide information that is relevant to the transplant community. Any major changes to the benchmark report will only occur annually.

### How can I obtain an older version of my Benchmark Report?

The OPO benchmark report was first released in June, 2018. Archived benchmark reports can be requested by contacting [dataportalfeedback@unos.org](mailto:dataportalfeedback@unos.org) by anyone with UNet access at your center.

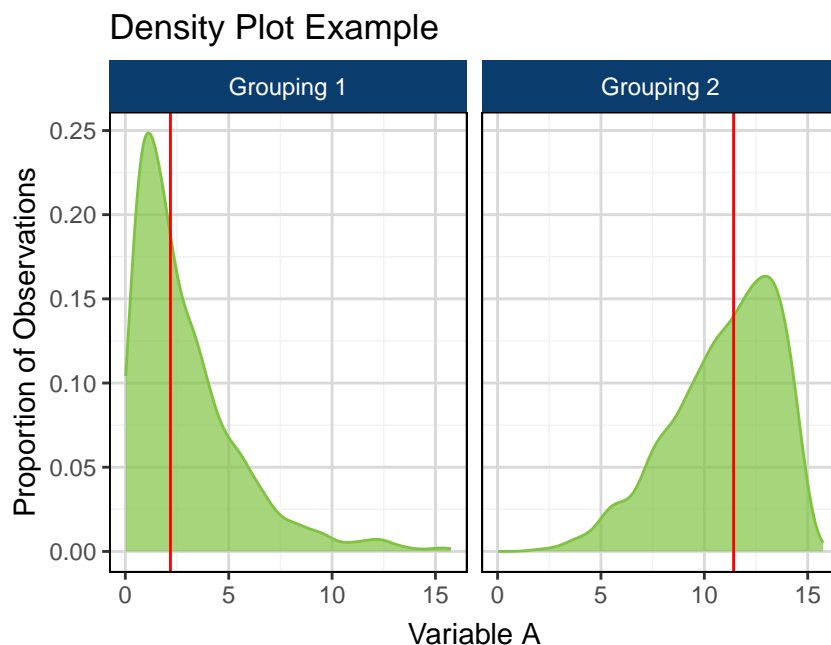
### What are percentiles (e.g. p5, q3)?

A percentile specifies a value below which a given percentage of observations fall. For example, 5% of observations in the data set are smaller than the p5 value and 95% are smaller than the p95 value.

### What is a density plot?

A density plot is a graphical representation of the distribution of a continuous variable (e.g. time, BMI). The plot peaks around the center of the data; that is, most of the observations have values which fall around the value that is below the highest part of the curve. A density plot does not tell you what proportion of observations had a specific value. These plots are accompanied by a table providing the p5 and p95 values, and 90% of observations fall within that interval.

An example of a density plot is provided in the figure below. The red line represents the median of Variable A for each grouping. Members of Grouping 1 tend to have smaller values of Variable A, while members of Grouping 2 have larger values. Both grouping have fairly spread out data, as the values of Variable A range from 0 to 15 in both plots.





# Chapter 1

## Offers

### Offers Sent Between April 1, 2023 and March 31, 2024

This section of the benchmark report contains data on placement efforts between April 1, 2023 and March 31, 2024. Updating the OPO benchmark report every three months with data on new offers and placement attempts during that time will give each OPO a chance to look at their data compared to other OPOs over the same time period.

Offer data displayed in the chapter are derived from deceased donors recovered for the purpose of transplantation, where a match was run, and at least one offer was made. Bypassed offers and import matches performed by OPOs are not included in the current data. A placement attempt is defined as an actual offer sent to a transplant center for a potential recipient. Final organ disposition was defined as whether or not the organ was reported as transplanted on the deceased donor registration form (DDR). Center offers are calculated using the number of distinct transplant centers offered the organ(s) for each match run within the timeframe of this report. Candidate offers are calculated using the distinct number of registrations that the OPO offered the organ to on each match run.

The comparison groups chosen for the benchmark report are:

**Regional:** All deceased donors recovered in the OPO's region (deceased donors recovered by the OPO are excluded from this group for the purpose of comparison).

**DSA Cluster:** All deceased donors recovered in the OPO's cluster (deceased donors recovered by the OPO are excluded from this group for the purpose of comparison).

**National:** All deceased donors recovered across the country (deceased donors recovered by the OPO are included in this group).

### Offers Between April 1, 2023 and March 31, 2024 as of July 5, 2024

Data presented in this section reflect offers sent by NCNC between April 1, 2023 and March 31, 2024. This section is based on OPTN data as of July 5, 2024 and subject to change based on future data submission or correction. NCNC is located in Region 11, and is compared to the following cluster of OPOs: ALOB, GALL, LAOP, MSOP, SCOP, TNMS.

Kidney

Figure 1. Placement Attempts for Kidneys Between April 1, 2023 and March 31, 2024

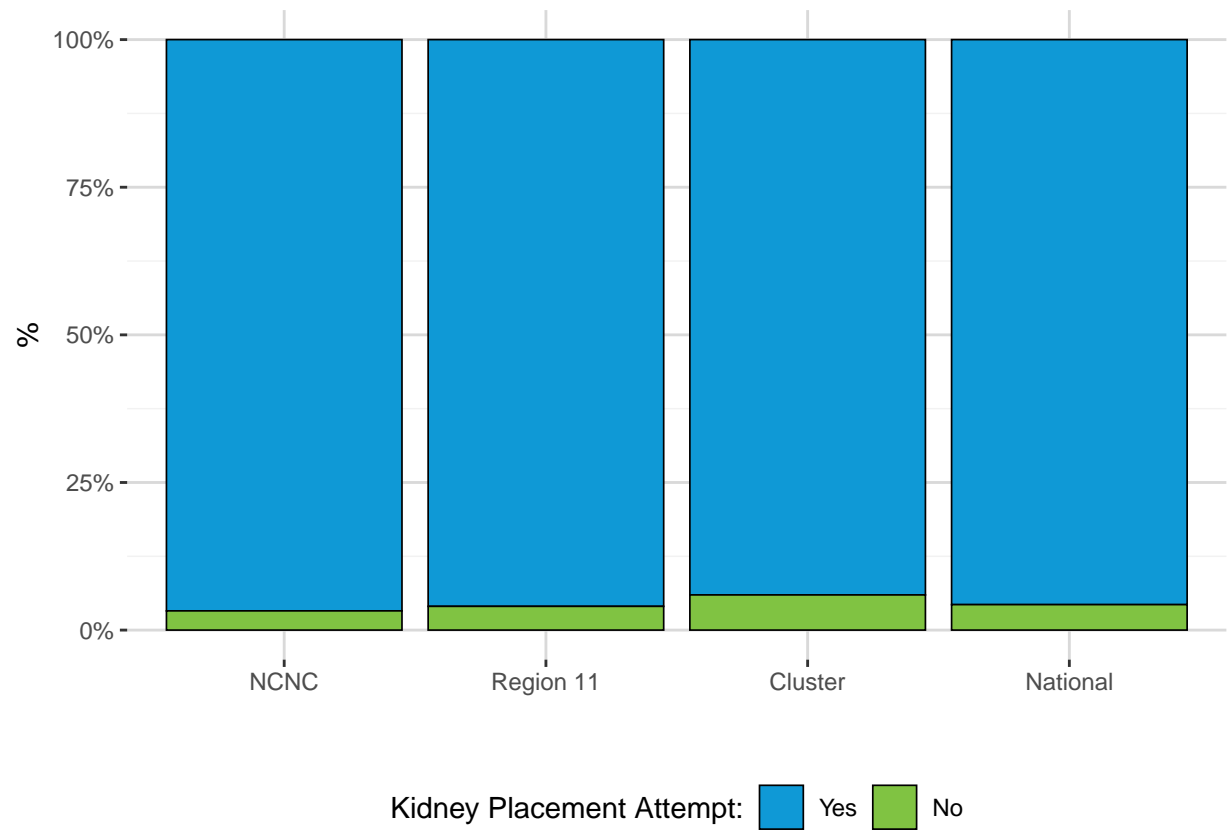
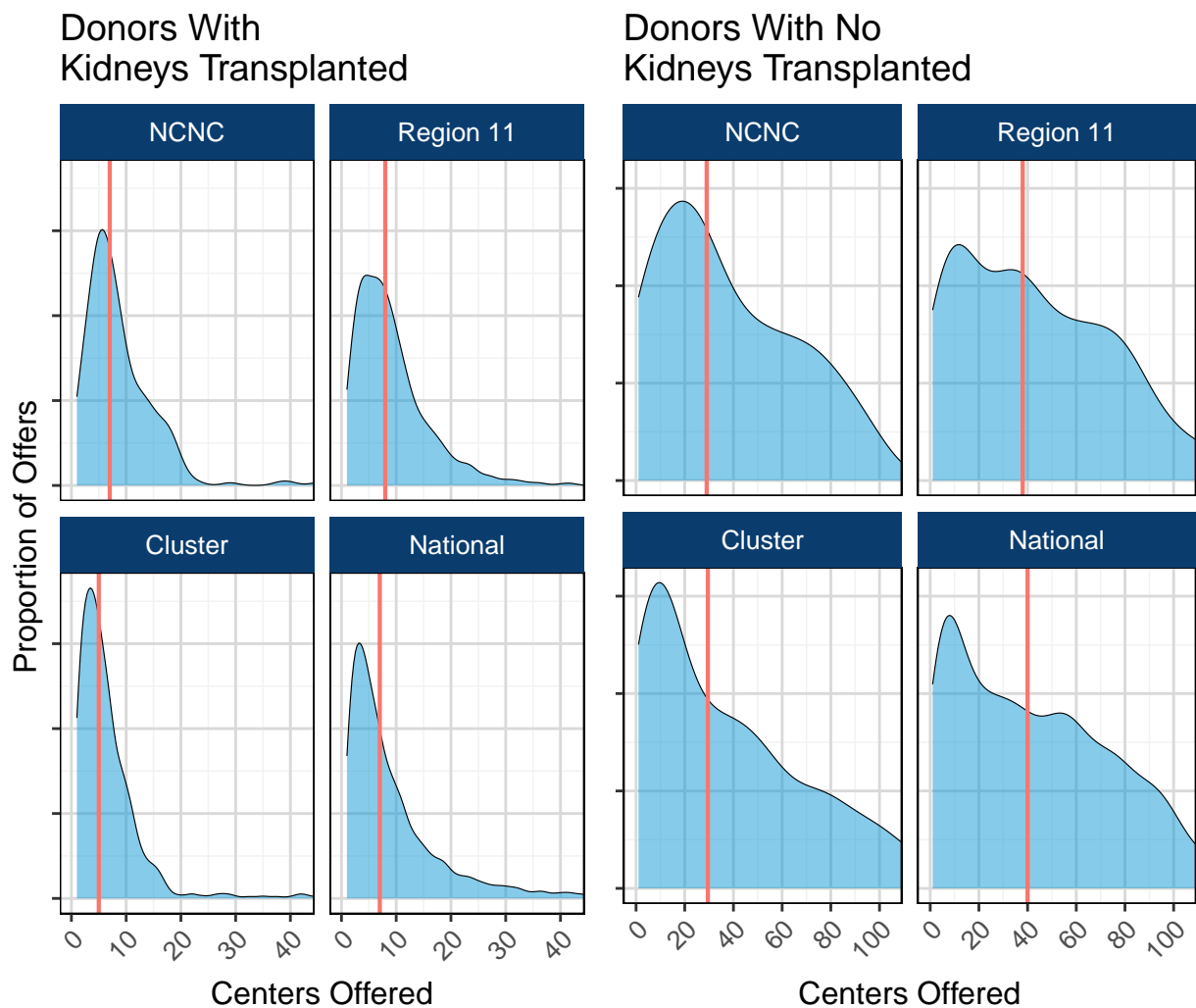


Figure 1 displays the frequency of kidney placement attempts for deceased donors recovered between April 1, 2023 and March 31, 2024. Nationally, 95.69% of donors recovered had a kidney placement attempt.

Figure 2. Distribution of Center Offers for Kidneys Between April 1, 2023 and March 31, 2024

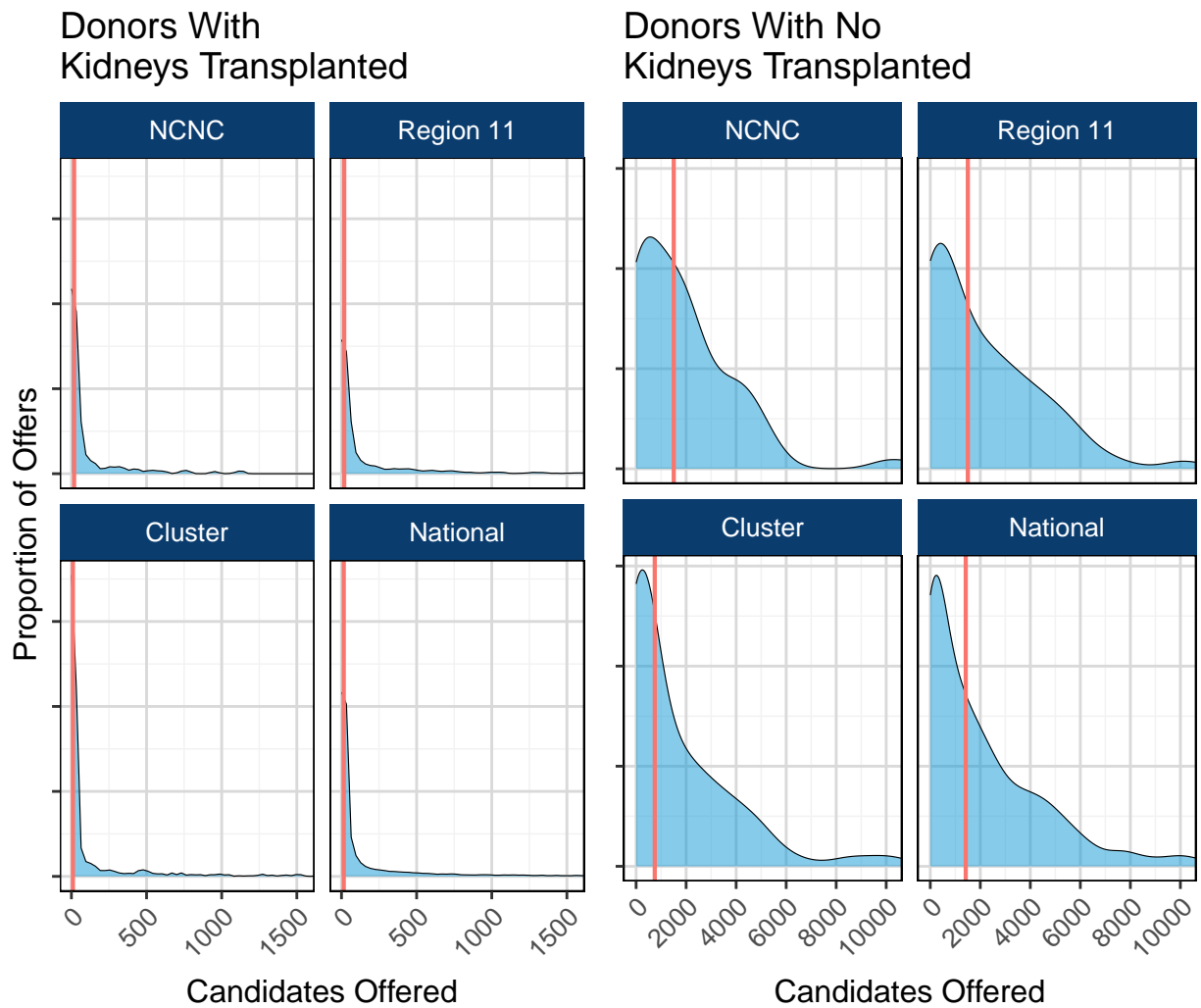


Distribution of Center Offers for Kidneys

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	2	7	19	89	1	2	29	88	98
Region 11	1	2	8	27	112	1	3	38	100	133
Cluster	1	1	5	42	126	1	3	30	101	153
National	1	1	7	37	159	1	3	40	104	159

Figure 2 displays the distribution of center offers for kidneys between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of center offers for transplanted kidneys was 7, while the median number of center offers for kidneys not transplanted was 40 centers.

Figure 3. Distribution of Candidate Offers for Kidneys Between April 1, 2023 and March 31, 2024



Distribution of Kidney Candidate Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	2	18	740	4653	1	5	1505	5112	12186
Region 11	1	2	18	1230	10055	1	6	1503	7060	15677
Cluster	1	1	10	1510	10308	1	5	745	10124	17902
National	1	2	15	1539	16245	1	6	1418	10070	18541

Figure 3 displays the distribution of kidney candidate offers between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of kidney candidate offers for transplanted kidneys was 15, while the median number of kidney candidate offers for kidneys not transplanted was 1418 individuals.

Liver

Figure 4. Placement Attempts for Livers Between April 1, 2023 and March 31, 2024

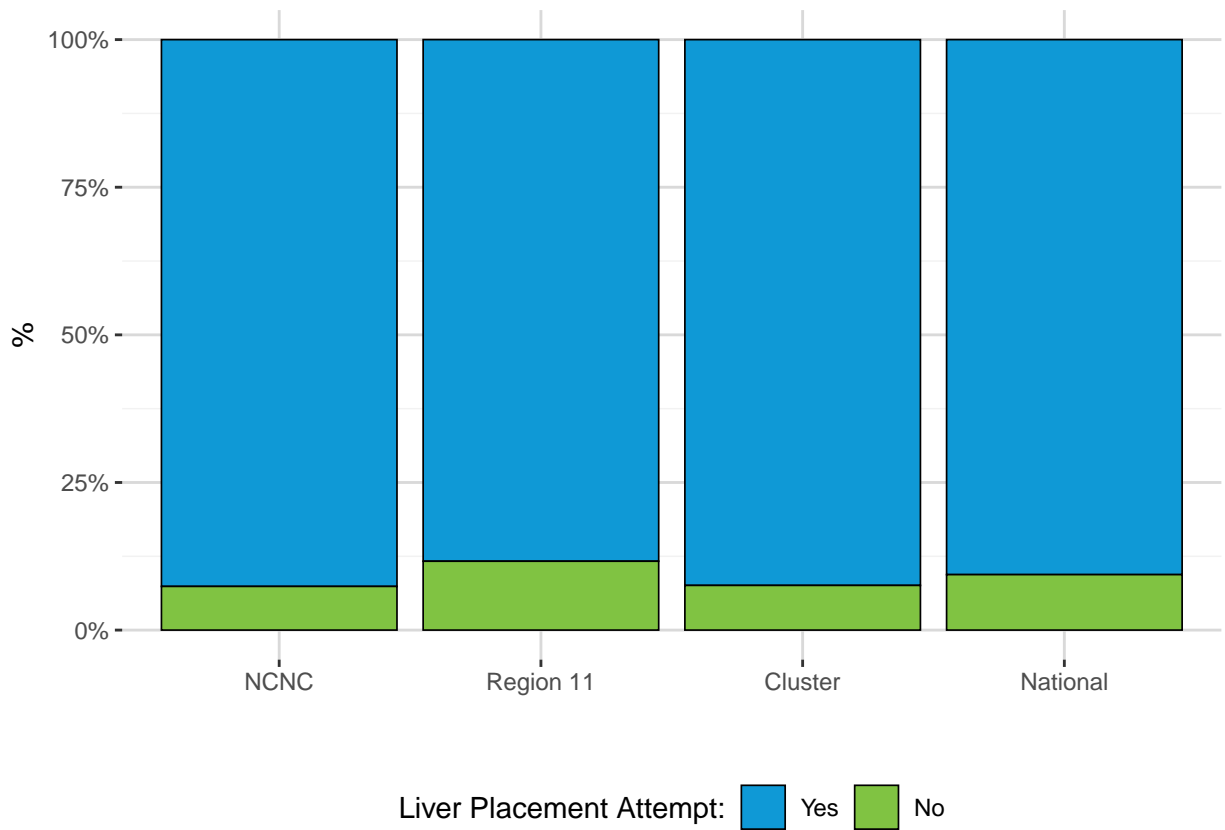
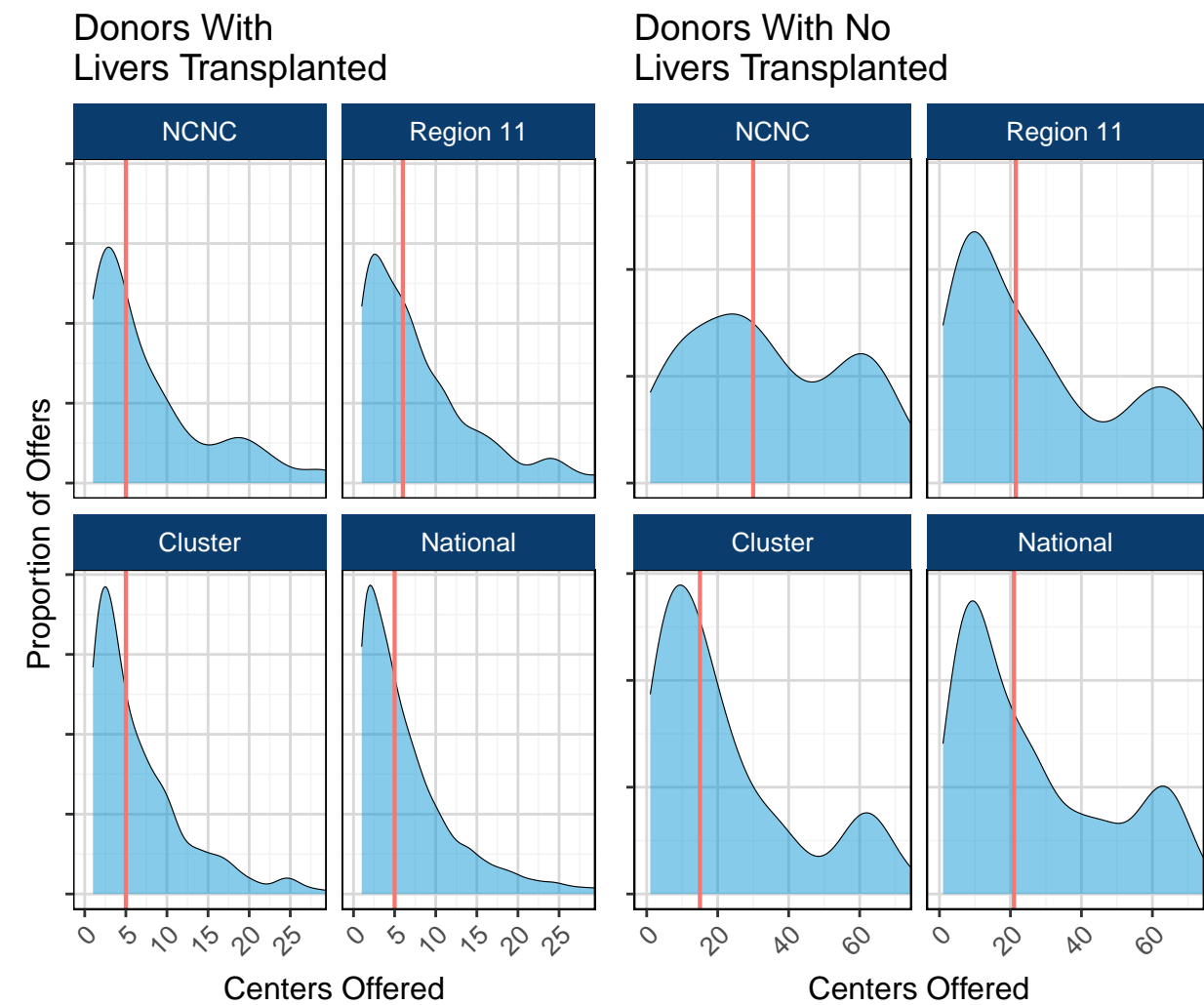


Figure 4 displays the frequency of liver placement attempts for deceased donors recovered between April 1, 2023 and March 31, 2024. Nationally, 90.61% of donors recovered had a liver placement attempt.

Figure 5. Distribution of Center Offers for Livers Between April 1, 2023 and March 31, 2024

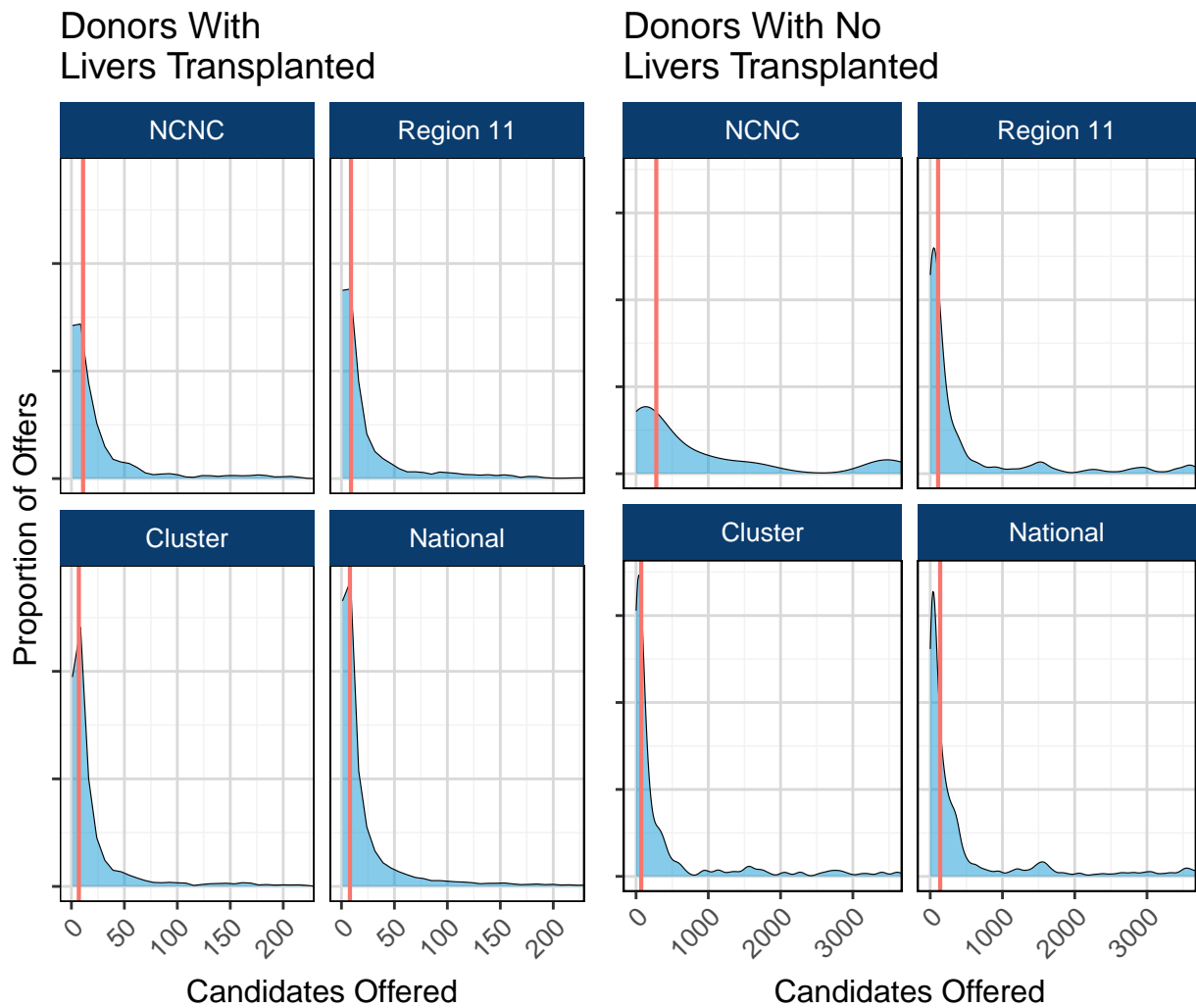


Distribution of Center Offers for Livers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	5	28	64	1	4	30	67	91
Region 11	1	1	6	26	102	1	2	22	71	115
Cluster	1	1	5	23	78	1	2	15	66	101
National	1	1	5	24	106	1	2	21	68	115

Figure 5 displays the distribution of center offers for livers between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of center offers for transplanted livers was 5, while the median number of center offers for livers not transplanted was 21 centers.

Figure 6. Distribution of Candidate Offers for Livers Between April 1, 2023 and March 31, 2024



Distribution of Liver Candidate Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	11	218	1096	1	6	280	3504	3687
Region 11	1	1	9	161	3905	1	6	110	3419	6068
Cluster	1	1	7	152	1396	1	5	71	2733	4040
National	1	1	8	185	3905	1	6	138	3220	6080

Figure 6 displays the distribution of liver candidate offers between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of liver candidate offers for transplanted livers was 8, while the median number of liver candidate offers for livers not transplanted was 138 individuals.

Heart

Figure 7. Placement Attempts for Hearts Between April 1, 2023 and March 31, 2024

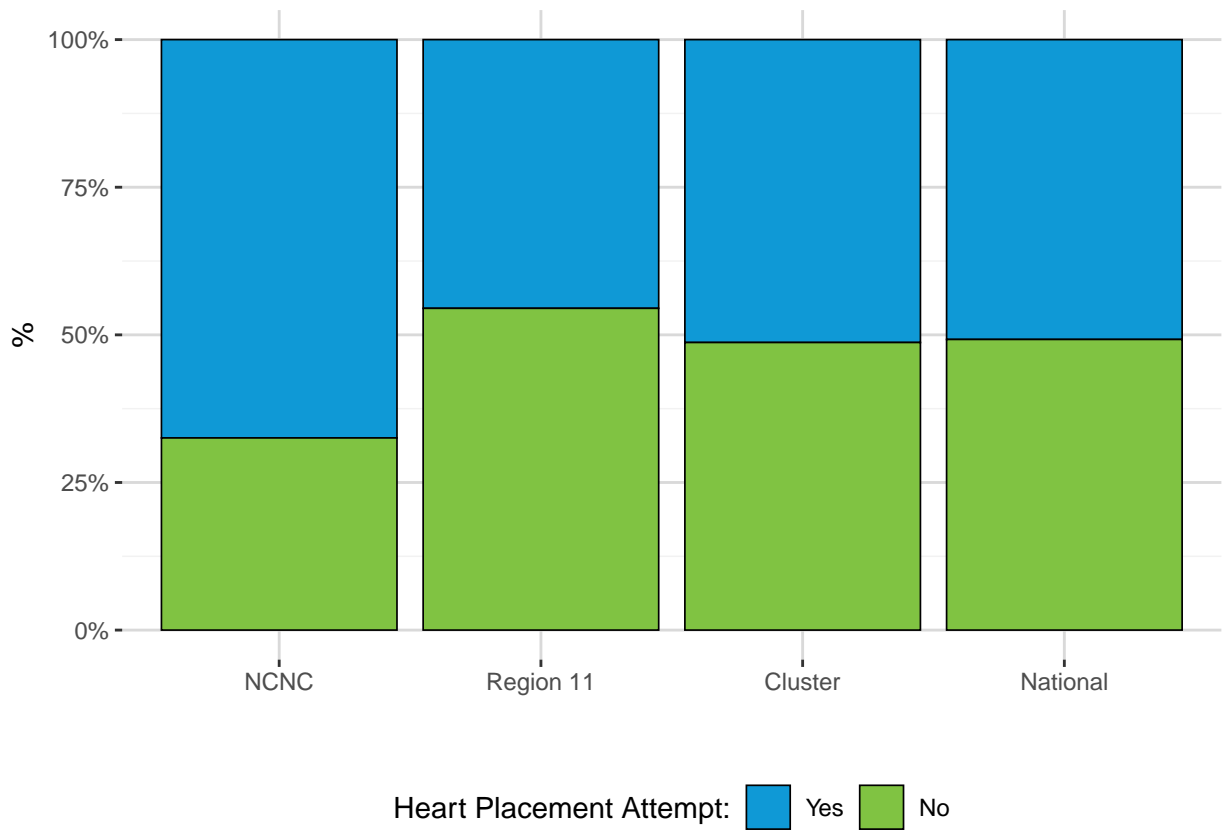
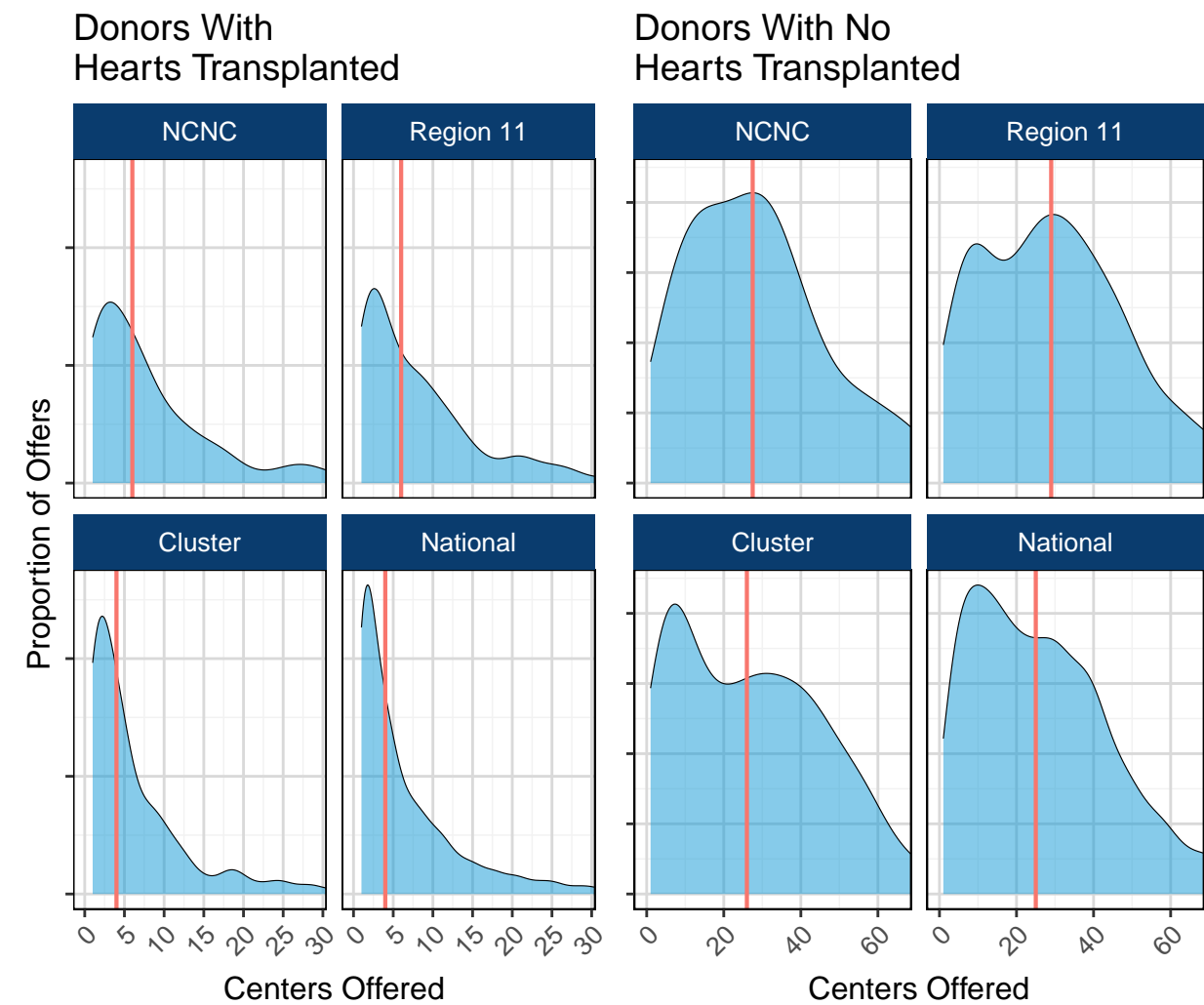


Figure 7 displays the frequency of heart placement attempts for donors recovered between April 1, 2023 and March 31, 2024. Nationally, 50.78% of donors recovered had a heart placement attempt.



Figure 8. Distribution of Center Offers for Hearts Between April 1, 2023 and March 31, 2024

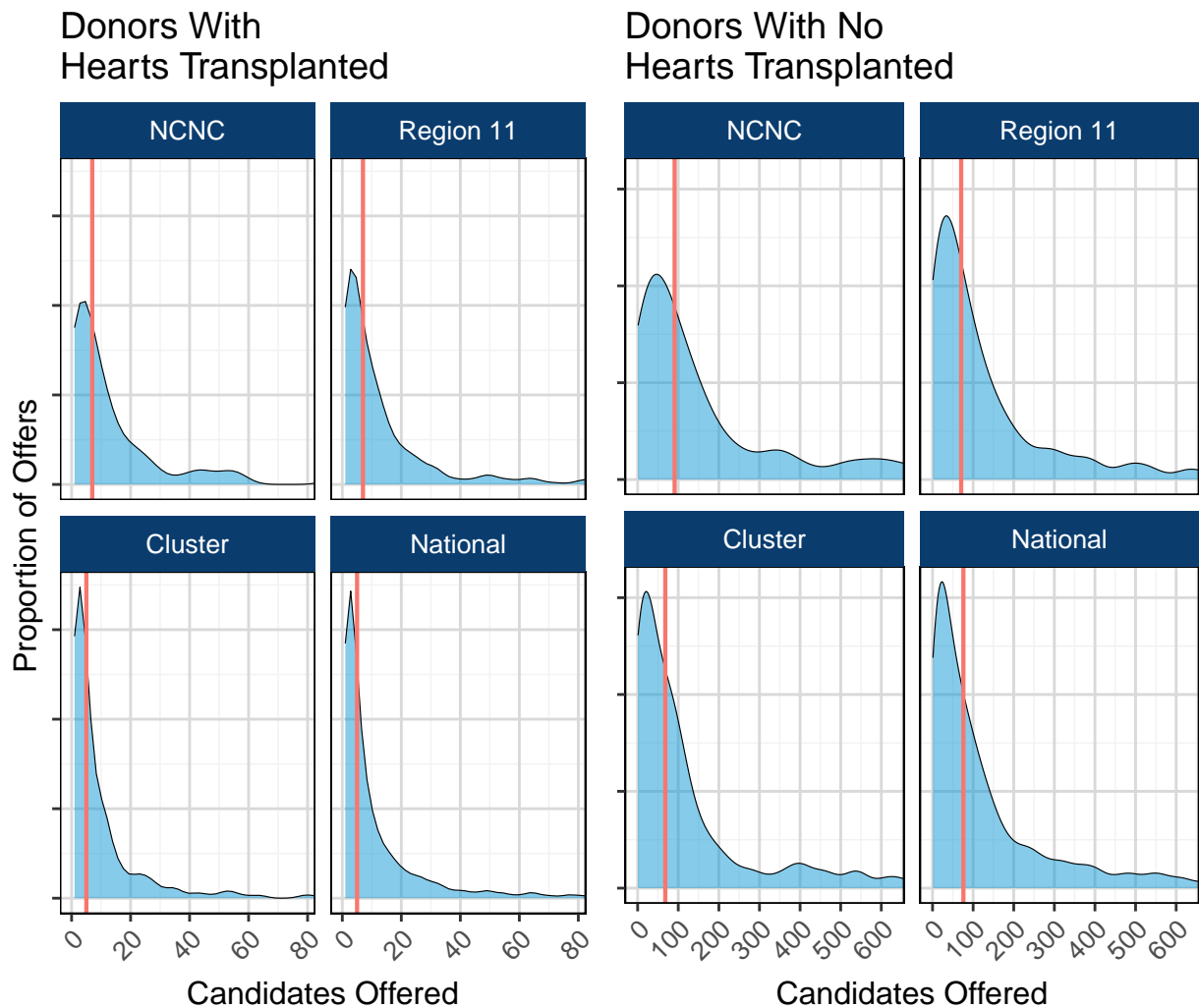


Distribution of Heart Centers Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	6	27	47	1	5	28	65	83
Region 11	1	1	6	29	54	1	5	29	64	95
Cluster	1	1	4	25	59	1	3	26	60	97
National	1	1	4	28	75	1	3	25	64	104

Figure 8 displays the distribution of center offers for hearts between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of center offers for transplanted hearts was 4, while the median number of center offers for hearts not transplanted was 25 centers.

Figure 9. Distribution of Candidate Offers for Hearts Between April 1, 2023 and March 31, 2024



Distribution of Heart Candidate Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	7	55	165	2	7	91	625	1179
Region 11	1	1	7	79	193	1	5	70	516	1033
Cluster	1	1	5	55	248	1	3	68	520	1167
National	1	1	5	66	943	1	4	76	566	1562

Figure 9 displays the distribution of heart candidate offers between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of heart candidate offers for transplanted hearts was 5, while the median number of heart candidate offers for hearts not transplanted was 76 individuals.

Lung

Figure 10. Placement Attempts for Lungs Between April 1, 2023 and March 31, 2024

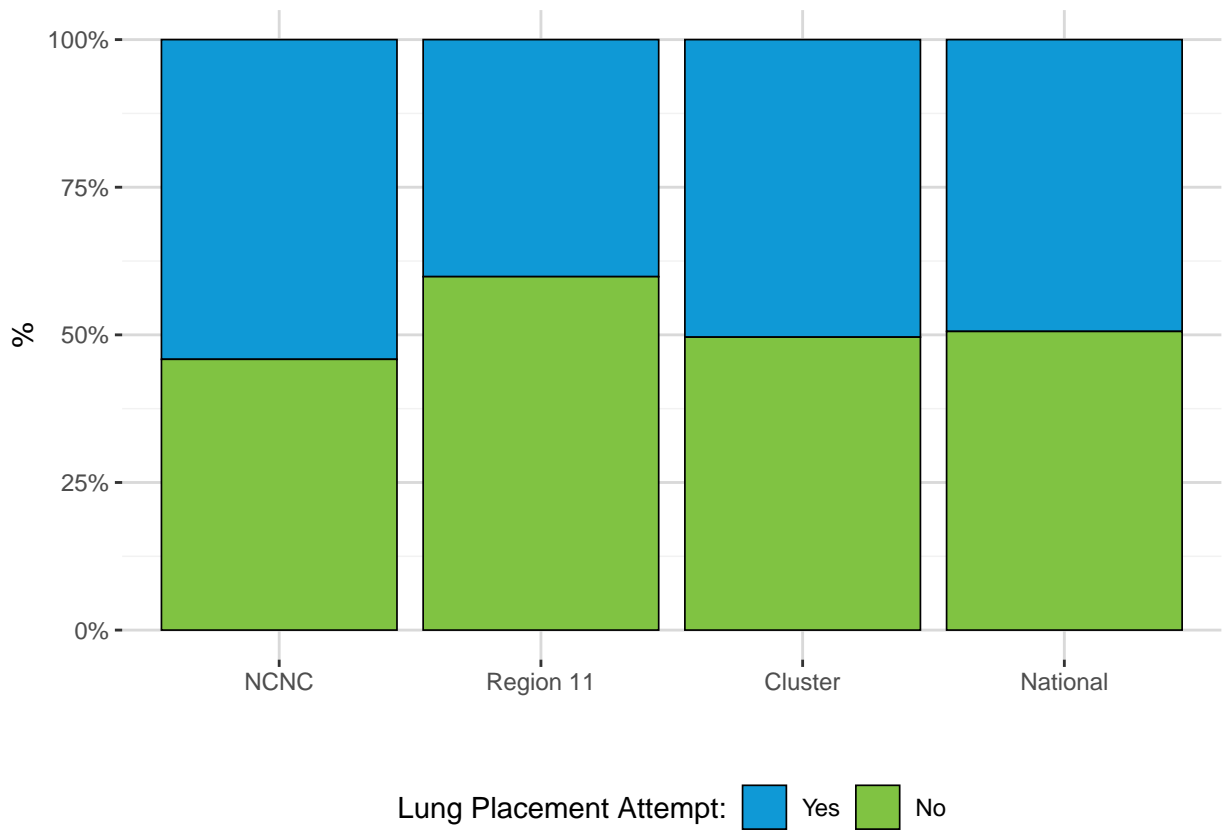
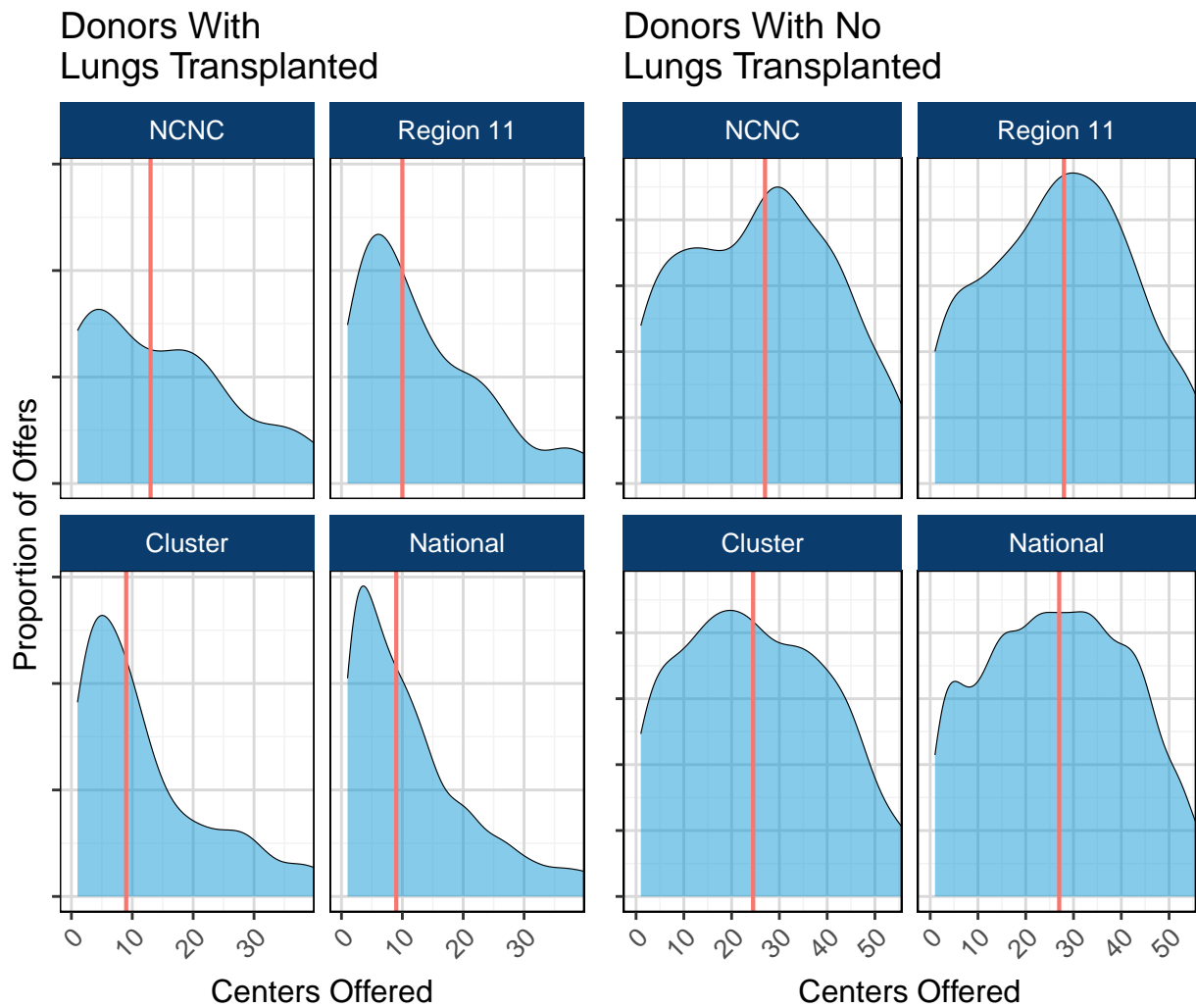


Figure 10 displays the frequency of lung placement attempts for donors recovered between April 1, 2023 and March 31, 2024. Nationally, 49.42% of donors recovered had a lung placement attempt.

Figure 11. Distribution of Center Offers for Lungs Between April 1, 2023 and March 31, 2024

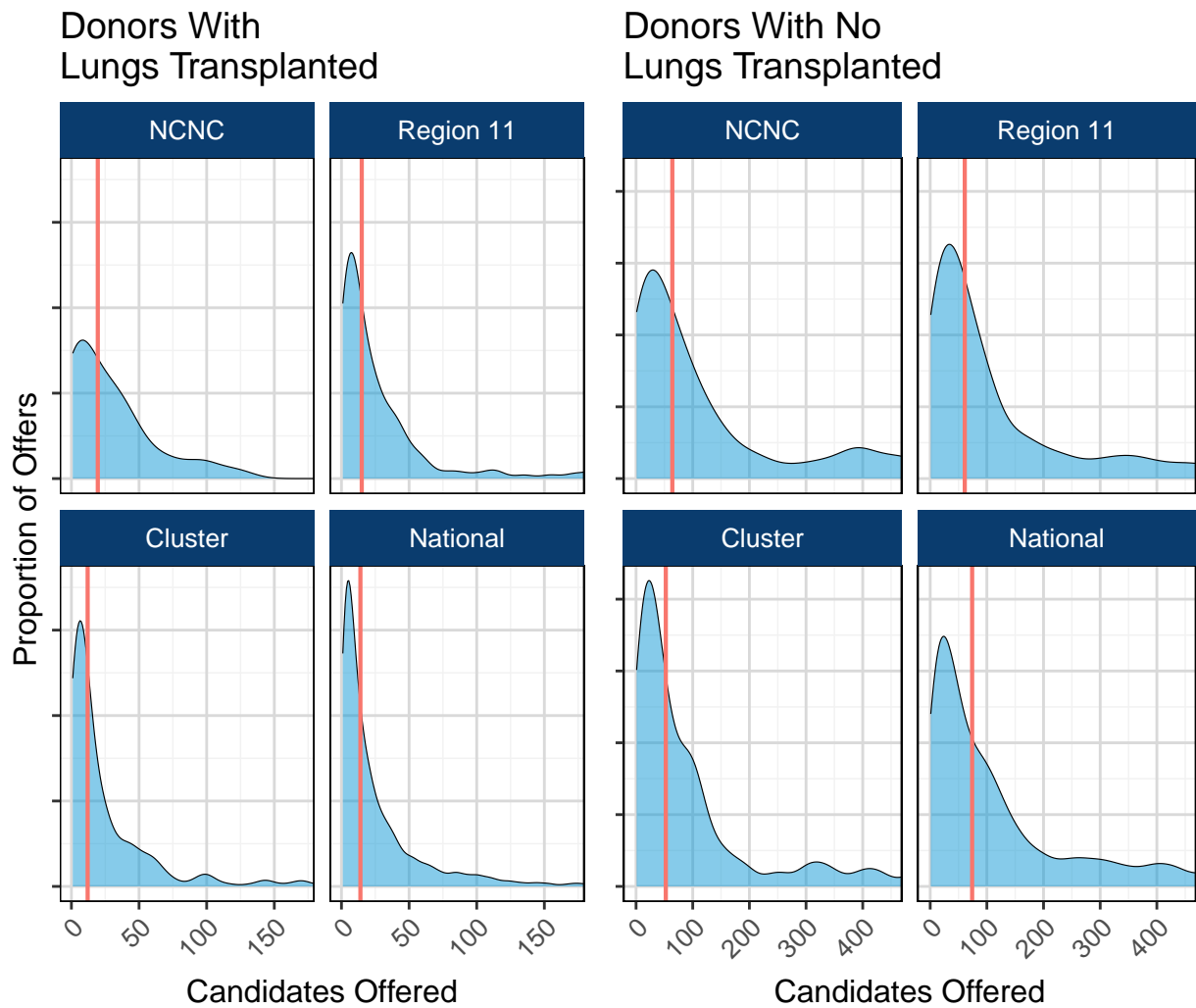


Distribution of Lung Centers Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	13	35	41	1	2	27	52	55
Region 11	1	1	10	36	53	1	3	28	53	62
Cluster	1	2	9	38	53	1	2	24	52	62
National	1	1	9	36	61	1	3	27	52	64

Figure 11 displays the distribution of center offers for lungs between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of center offers for transplanted lungs was 9, while the median number of center offers for lungs not transplanted was 27 centers.

Figure 12. Distribution of Candidate Offers for Lungs Between April 1, 2023 and March 31, 2024



Distribution of Lung Candidate Offers

	Transplanted					Not Transplanted				
	Min	p5	Med	p95	Max	Min	p5	Med	p95	Max
NCNC	1	1	20	96	122	1	2	64	447	538
Region 11	1	1	15	171	264	1	3	61	436	551
Cluster	1	2	12	147	276	1	2	52	410	568
National	1	1	14	117	453	1	4	74	431	608

Figure 12 displays the distribution of lung candidate offers between April 1, 2023 and March 31, 2024. Figures are restricted to the 95th percentile for display. Nationally, the median number of lung candidate offers for transplanted lungs was 14, while the median number of lung candidate offers for lungs not transplanted was 74 individuals.

## Chapter 2

# Supply

### Deceased Donors Recovered Between April 1, 2023 and March 31, 2024

This section of the benchmark report contains data on deceased donors recovered between April 1, 2023 and March 31, 2024. Updating the OPO benchmark report every three months with data on new donors recovered during that time will give each OPO a chance to look at their demographics compared to other OPOs over the same time period. Data in the supply chapter are comprised of deceased donors with at least one organ recovered for the purpose of transplantation. Summaries of donor data are focused on fields collected by the OPTN on the deceased donor registrations (DDR).

The comparison groups chosen for the benchmark report are:

**Regional:** All deceased donors recovered in the OPO's region (deceased donors recovered by the OPO are excluded from this group for the purpose of comparison).

**DSA Cluster:** All deceased donors recovered in the OPO's cluster (deceased donors recovered by the OPO are excluded from this group for the purpose of comparison).

**National:** All deceased donors recovered across the country (deceased donors recovered by the OPO are included in this group).

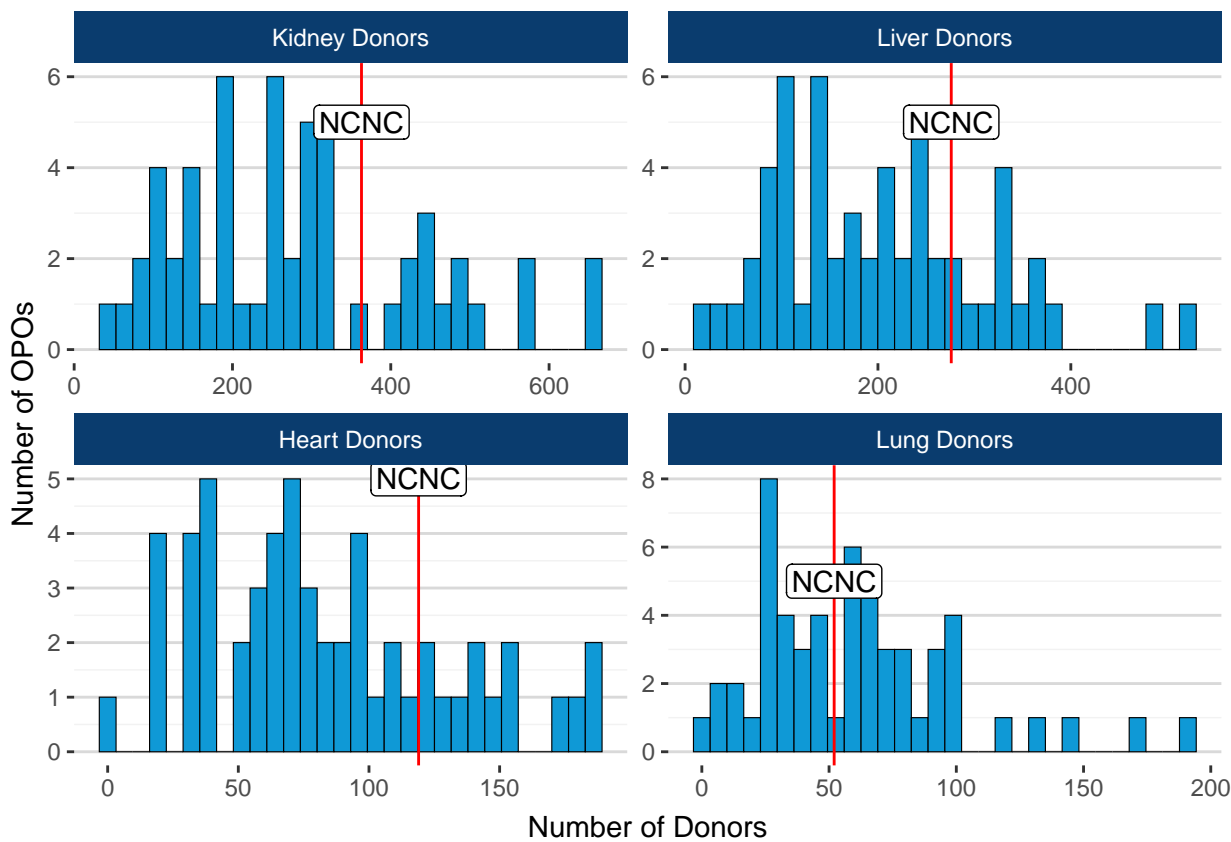
### Definitions of Calculations used in the Supply Chapter

For the purpose of this report, utilization rate is calculated by dividing the number of organs transplanted by the total possible number of organs recovered. The non-use rate is calculated by dividing the number of organs not used by the number of organs recovered for the purpose of transplantation.

### Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 as of July 5, 2024

Data presented in this section reflect deceased donors recovered by NCNC between April 1, 2023 and March 31, 2024. This section is based on OPTN data as of July 5, 2024 and subject to change based on future data submission or correction. NCNC is located in Region 11, and is compared to the following cluster of OPOs: ALOB, GALL, LAOP, MSOP, SCOP, TNMS.

Figure 1. Organ Donor Volume Between April 1, 2023 and March 31, 2024



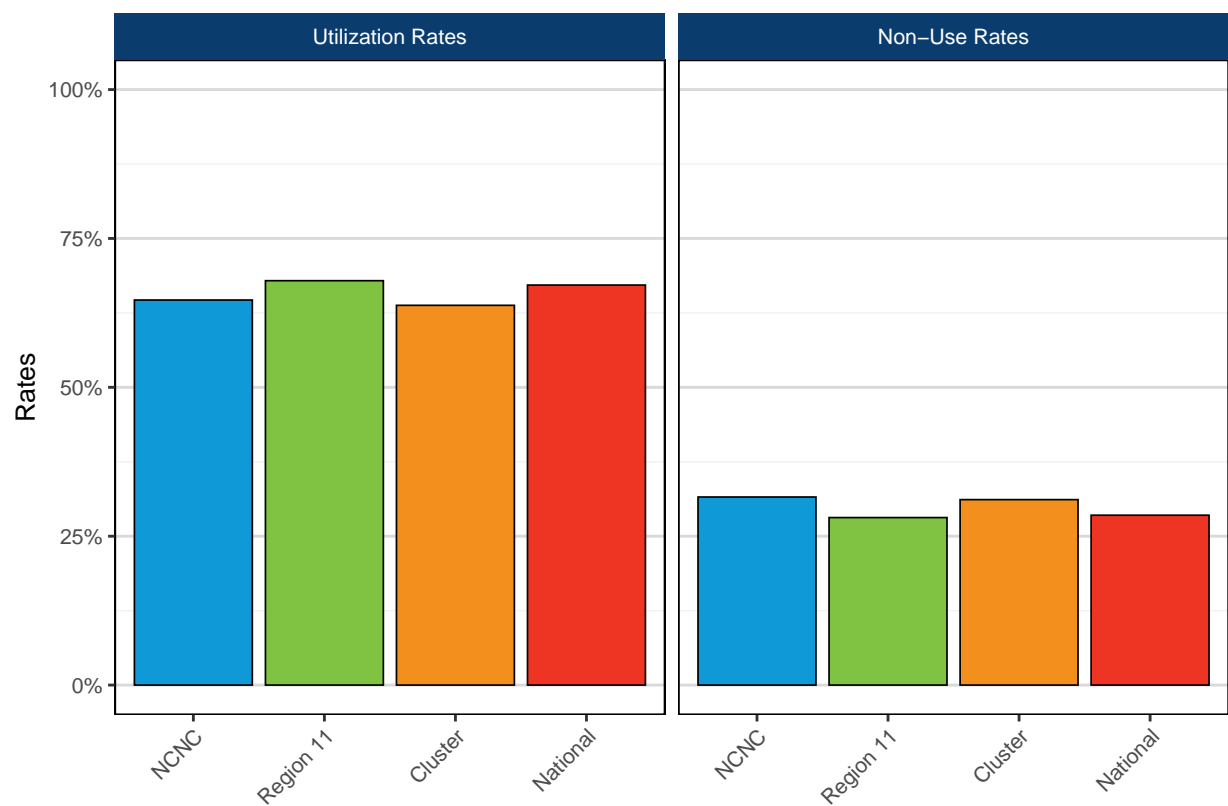
Distribution of OPO Donor Volume					
	Min	q2	Med	q3	Max
Kidney Donors	46	158	259	363	660
Liver Donors	23	105	194	268	527
Heart Donors	1	41	74	111	187
Lung Donors	1	29	58	77	192

NCNC Donor Volume		
OPO	Donor	n
NCNC	Kidney Donors	363
	Liver Donors	276
	Heart Donors	119
	Lung Donors	52
	Total Donors	382

Figure 1 shows the national distribution of deceased donors recovered by OPOs from April 1, 2023 to March 31, 2024 by organ. The vertical red line represents the donor volume for NCNC donors between April 1, 2023 and March 31, 2024. The tables above display the distribution of all OPOs donor volume by organ donor as well as the individual number of deceased organ donor volume at NCNC between April 1, 2023 to March 31, 2024.

Kidney

Figure 2. Kidney Utilization and Non-Use Rates Between April 1, 2023 and March 31, 2024



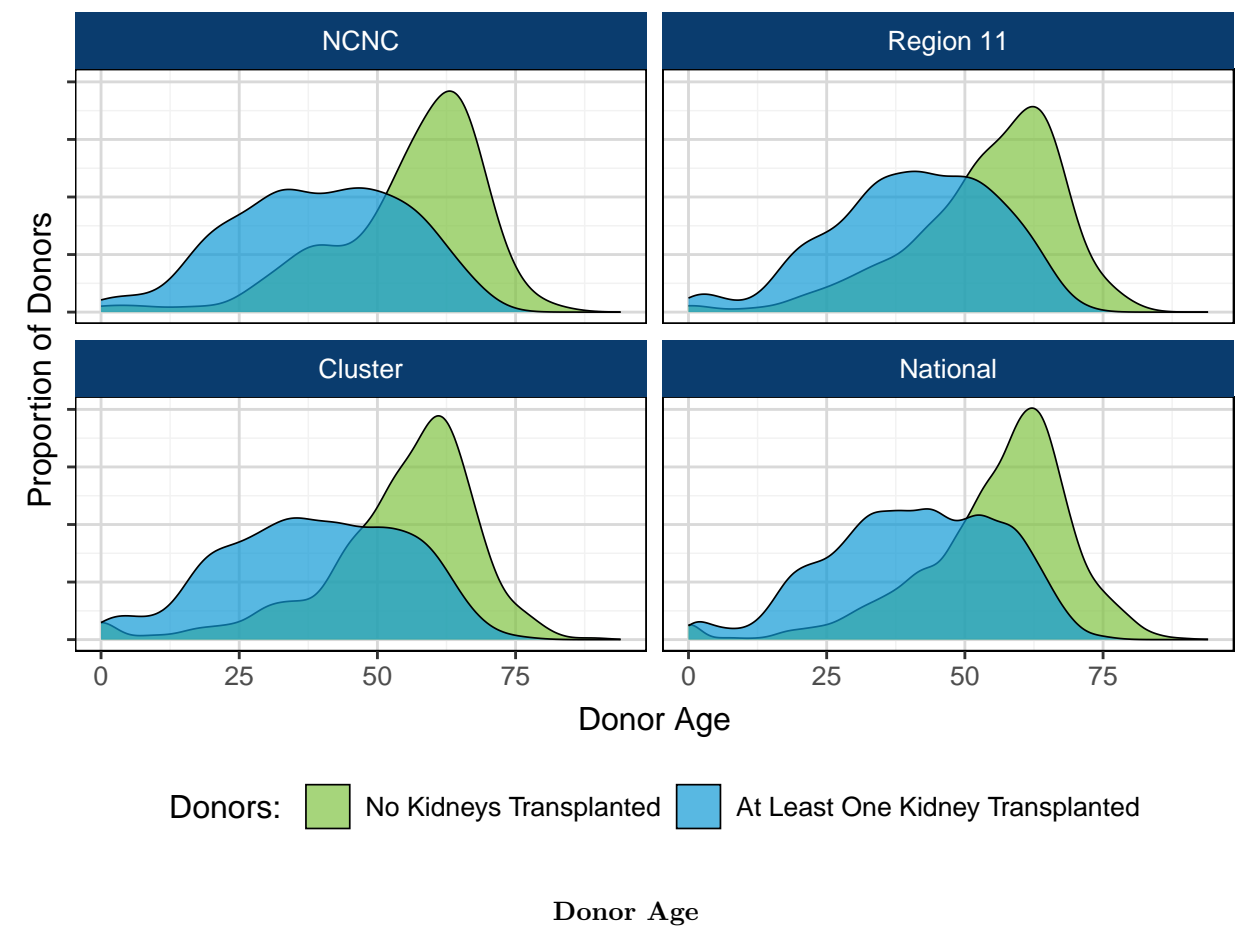
Kidney Utilization and Non-Use Rates (%)

Rate	NCNC	Region 11	Cluster	National
Utilization Rates	64.66%	67.90%	63.77%	67.17%
Non-Use Rates	31.58%	28.13%	31.14%	28.53%

Figure 2 displays kidney utilization and non-use rates for deceased donors recovered between April 1, 2023 to March 31, 2024. Nationally, the kidney utilization rate was 67.17% compared to a kidney non-use rate of 28.53%.



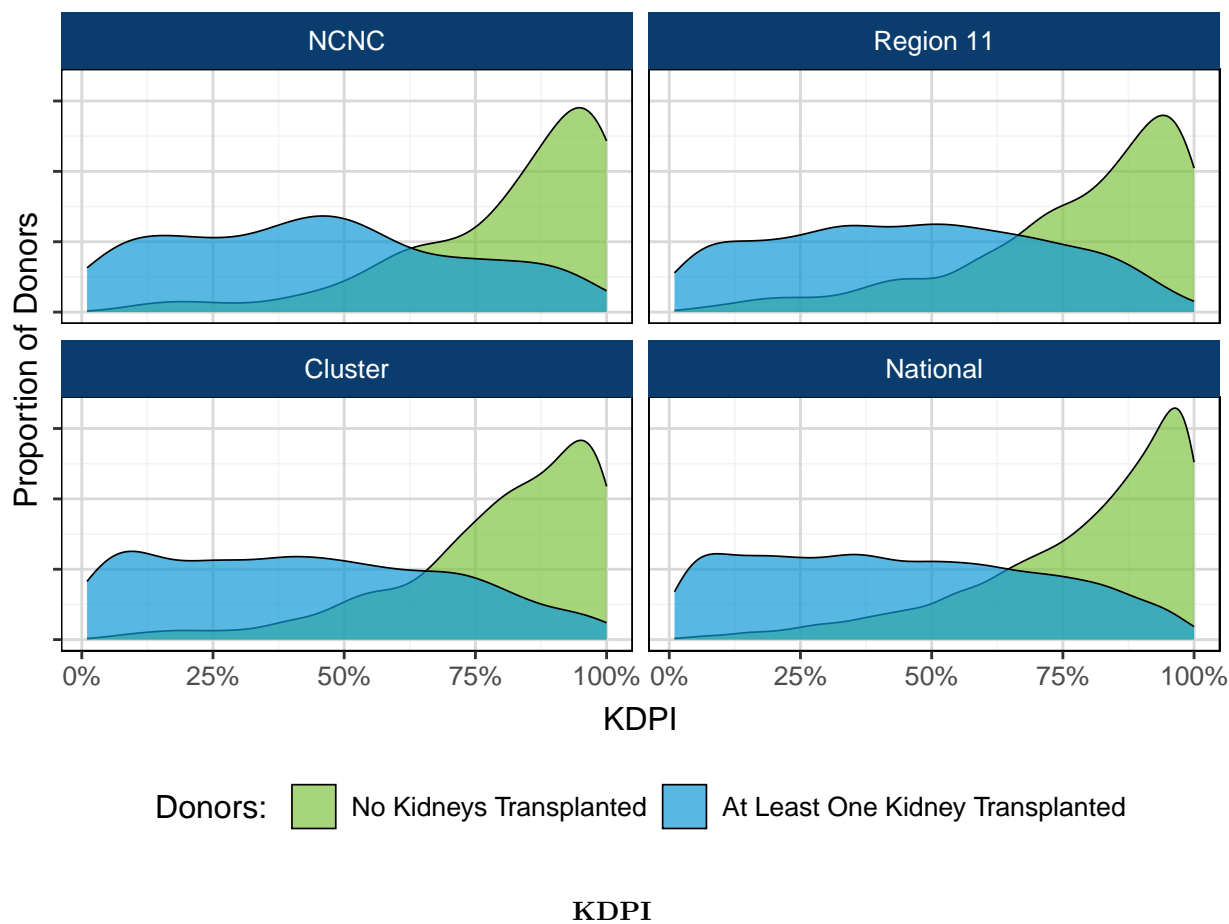
Figure 3. Deceased Donor Age Distribution for Donors Recovered Between April 1, 2023 and March 31, 2024 by Kidneys Transplanted



Disposition	Group	Min	p5	Med	p95	Max
At Least One Kidney Transplanted	NCNC	0	15	40	63	70
	Region 11	0	16	42	63	73
	Cluster	0	11	39	62	76
	National	0	16	42	64	79
No Kidneys Transplanted	NCNC	0	30	59	70	81
	Region 11	0	27	57	71	80
	Cluster	0	24	57	71	89
	National	0	30	58	74	94

Figure 3 displays the age distribution of deceased donors recovered by donors with at least one kidney transplanted vs. donors with no kidneys transplanted. Nationally, the median age of donors with at least one kidney transplanted was 42, compared to a median age of 58 for donors with no kidneys transplanted.

Figure 4. KDPI Distribution of Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 by Kidneys Transplanted



Disposition	Group	Min	p5	Med	p95	Max
At Least One Kidney Transplanted	NCNC	1%	5%	44%	92%	97%
	Region 11	1%	6%	46%	87%	100%
	Cluster	1%	3%	40%	88%	100%
	National	1%	5%	42%	89%	100%
No Kidneys Transplanted	NCNC	12%	43%	88%	100%	100%
	Region 11	6%	35%	84%	100%	100%
	Cluster	6%	40%	84%	100%	100%
	National	1%	37%	85%	100%	100%

Figure 4 displays the distribution of KDPI for deceased donors by donors with at least one kidney transplanted vs. donors with no kidneys transplanted. Nationally, the median KDPI of donors with at least one kidney transplanted was 42%, compared to a median KPDI of 85% for deceased donors with no kidneys transplanted. The reference population used in mapping KDRI to KDPI consists of all deceased donors in the U.S. with at least one kidney recovered in 2023 for the purpose of transplantation.

Figure 5. Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 by Kidneys Transplanted and Donor Type

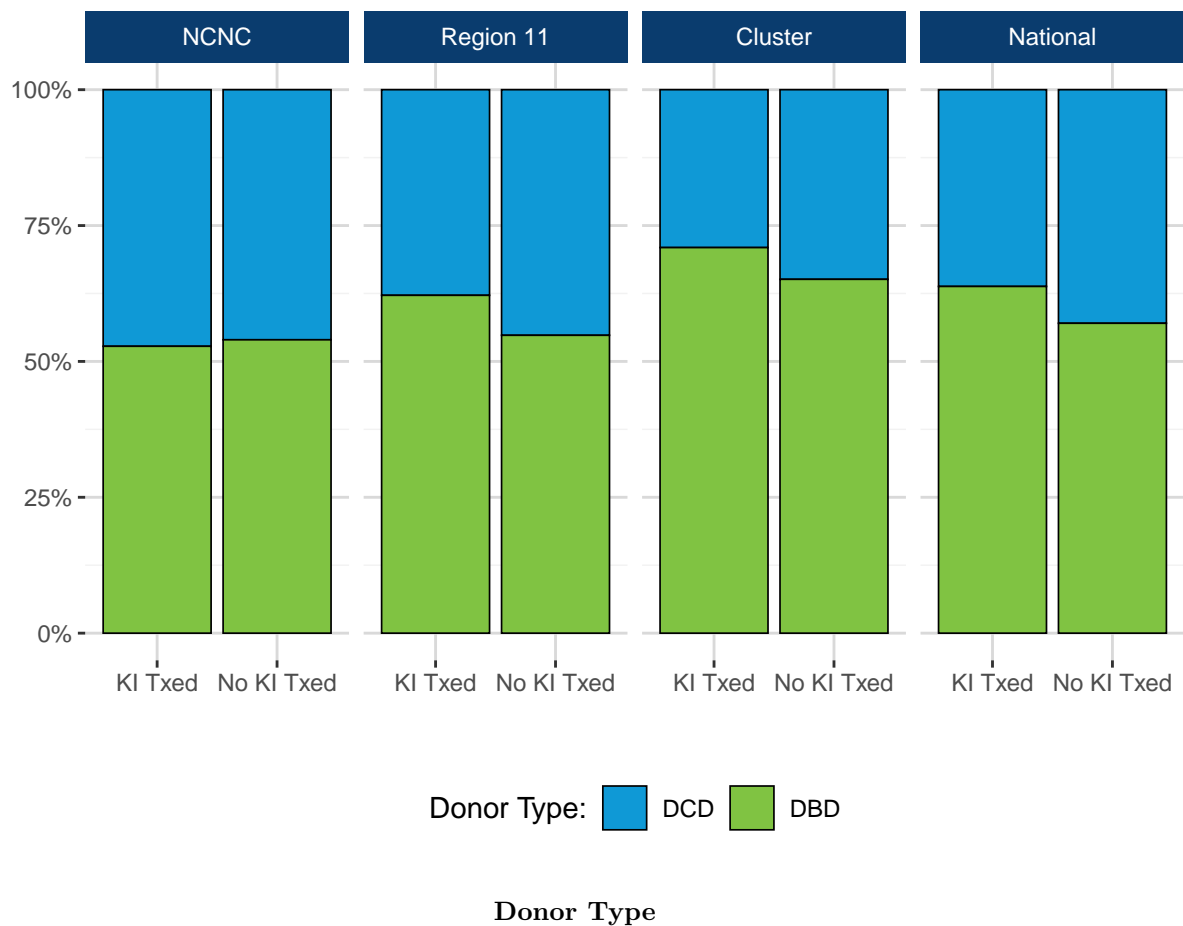
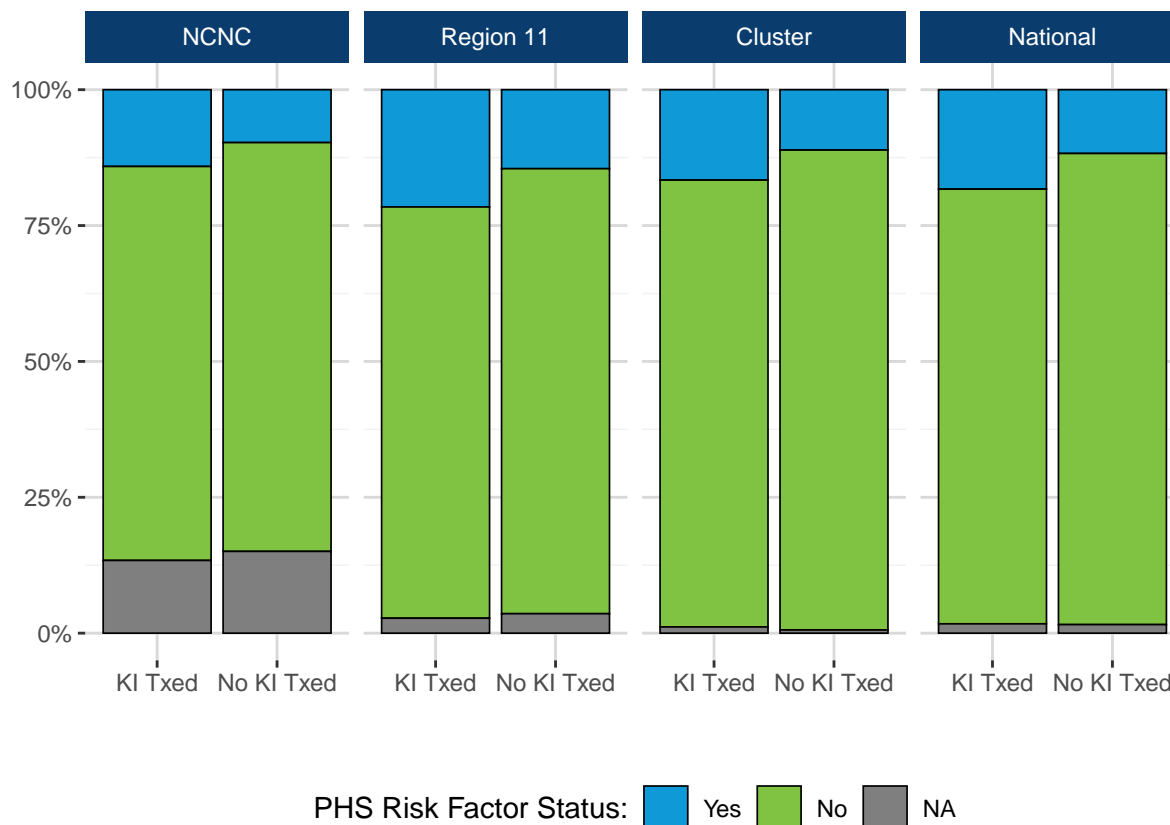


Figure 5 displays the proportion of DCD donors by donors with at least one kidney transplanted vs. donors with no kidneys transplanted. Nationally, 36.20% of deceased donors with at least one kidney transplanted were DCD compared to 42.98% of donors with no kidneys transplanted.

**Figure 6. Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 by Kidneys Transplanted and PHS Risk Factor Status**

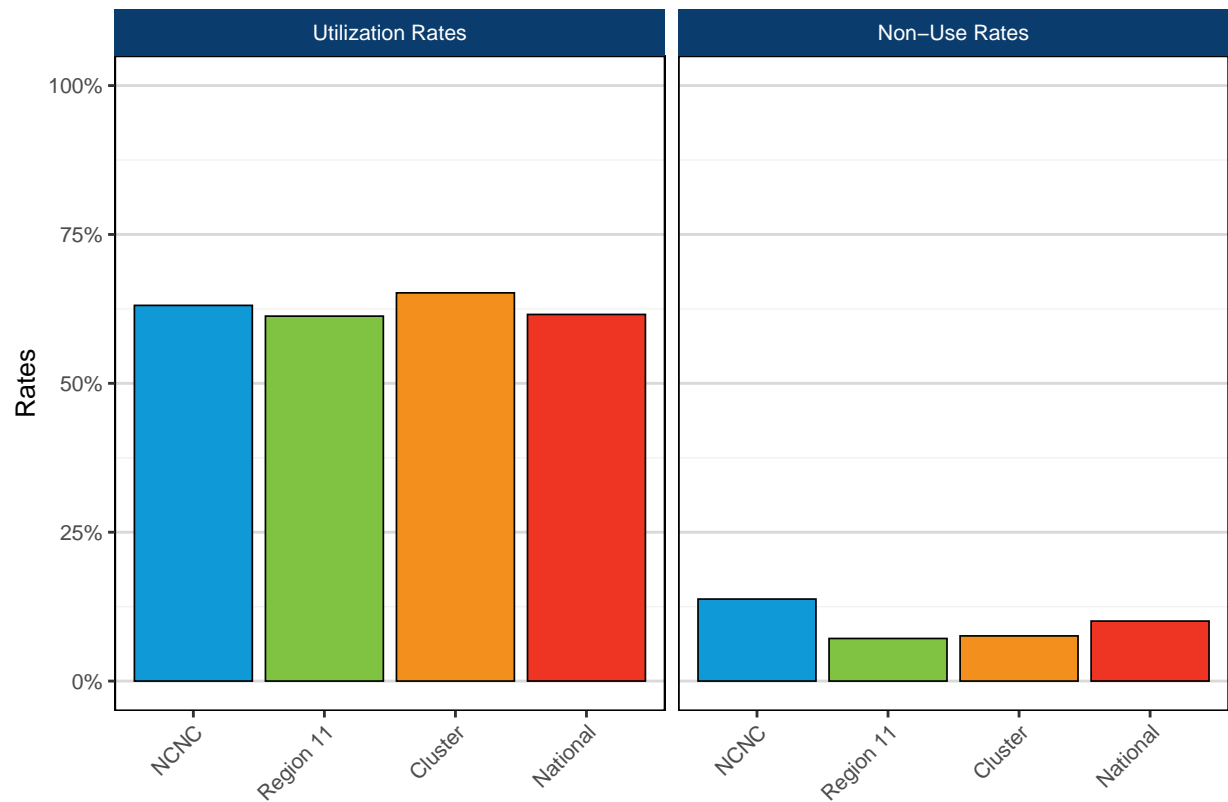


PHS Risk Factor Status					
Disposition	PHS Risk Factors	NCNC	Region 11	Cluster	National
At Least One Kidney Transplanted	Yes	14.13%	21.58%	16.64%	18.30%
	No	72.49%	75.67%	82.22%	79.98%
	-	13.38%	2.75%	1.14%	1.72%
No Kidneys Transplanted	Yes	9.73%	14.54%	11.11%	11.74%
	No	75.22%	81.88%	88.30%	86.69%
	-	15.04%	3.58%	0.58%	1.57%

Figure 6 displays the proportion of deceased donors with PHS risk factors by donors with at least one kidney transplanted vs. donors with no kidneys transplanted. A donor is considered to have PHS risk factors if they have factors for blood-borne disease transmission according to the United States Public Health Service (PHS) Guidelines and OPTN policy in effect on the date of referral. Nationally, 18.30% of deceased donors with at least one kidney transplanted were considered to have PHS risk factors, compared to 11.74% of deceased donors with no kidneys transplanted.

Liver

Figure 7. Liver Utilization and Non-Use Rates Between April 1, 2023 and March 31, 2024



Liver Utilization and Non-Use Rates (%)

Rate	NCNC	Region 11	Cluster	National
Utilization Rates	63.09%	61.28%	65.19%	61.56%
Non-Use Rates	13.77%	7.15%	7.59%	10.07%

Figure 7 displays liver utilization and non-use rates for deceased donors recovered between April 1, 2023 to March 31, 2024. Nationally, the liver utilization rate was 61.56% compared to a liver non-use rate of 10.07%.

Figure 8. Deceased Donor Age Distribution for Donors Recovered Between April 1, 2023 and March 31, 2024 by Livers Transplanted

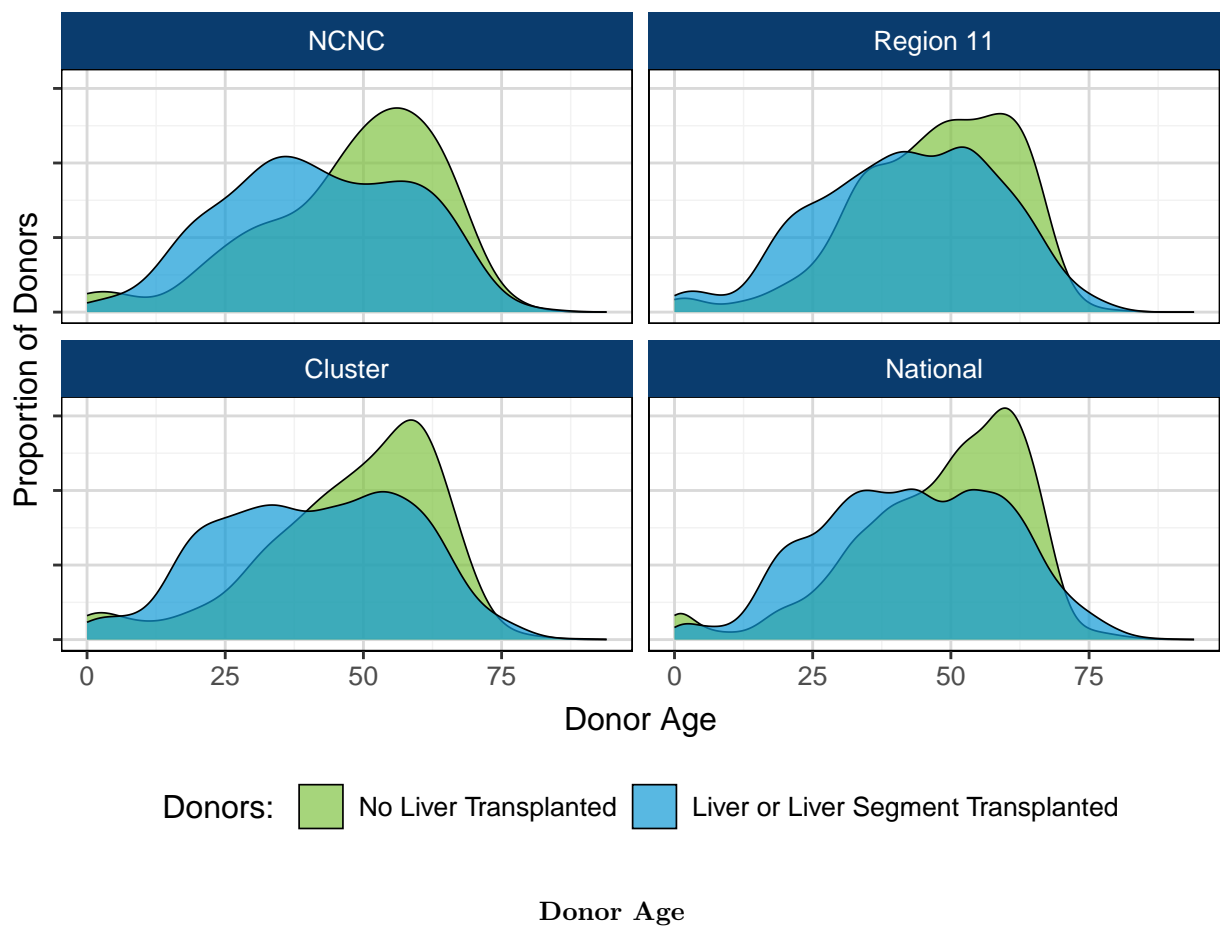
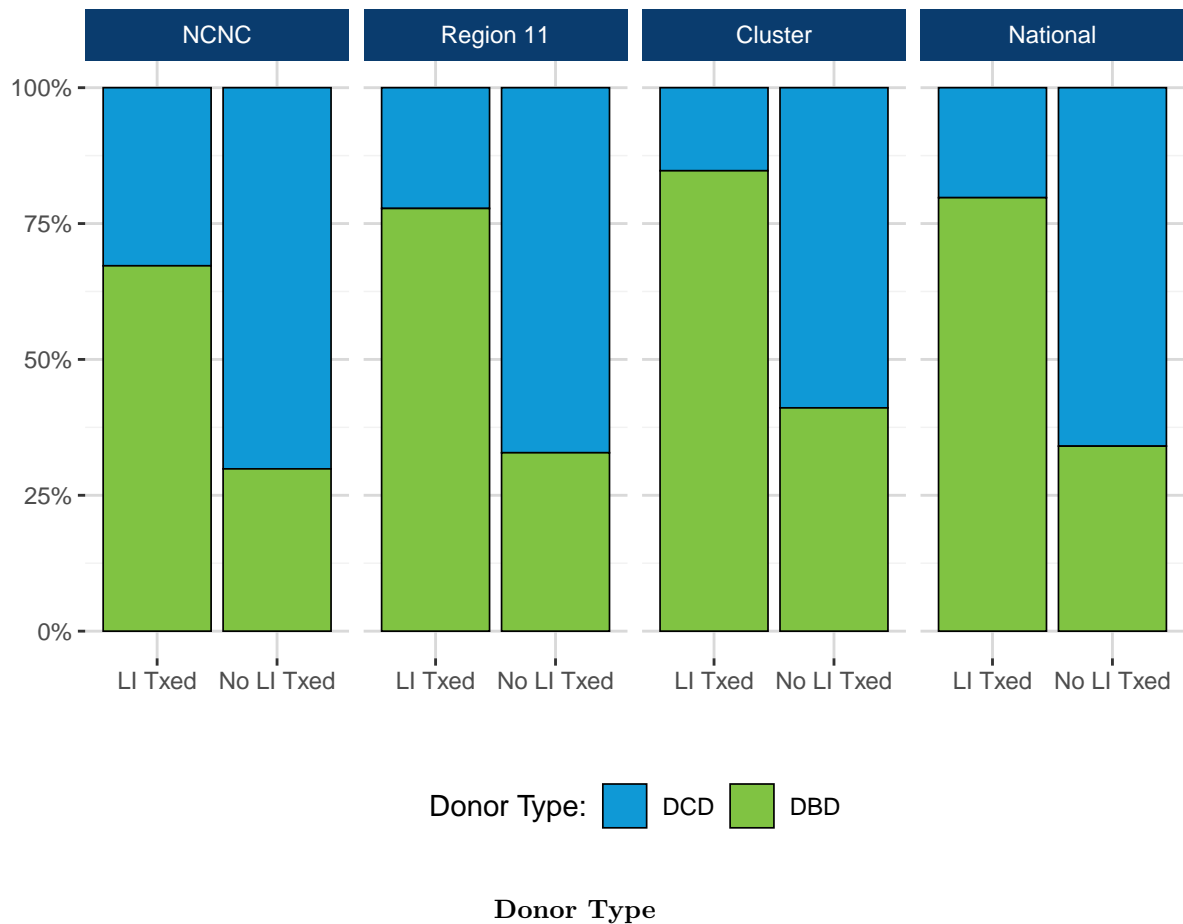


Figure 8 displays the age distribution of deceased donors recovered by donors where a liver was transplanted vs donors with no liver transplanted. Nationally, the median age of donors with a liver or liver segment was transplanted was 43, compared to a median age of 51 for donors with no liver transplanted.

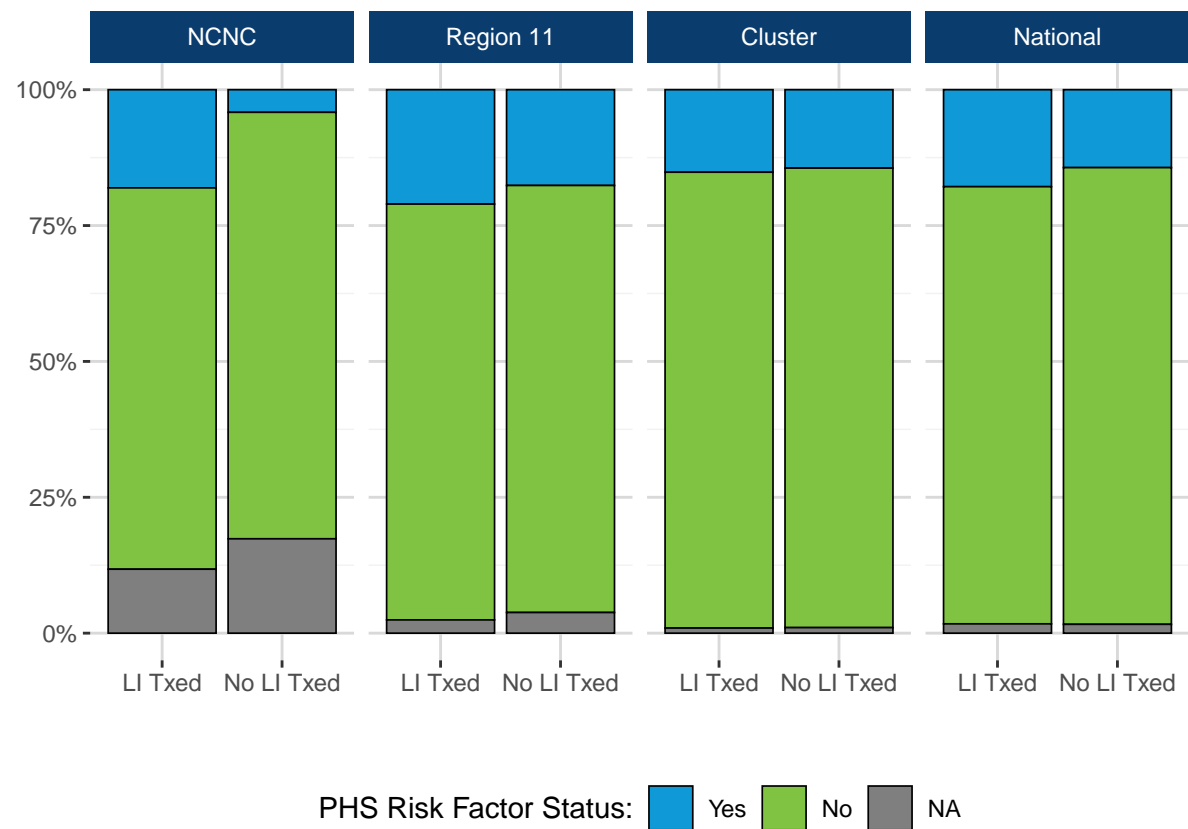
Figure 9. Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 by Livers Transplanted and Donor Type



Disposition	Donor Type	NCNC	Region 11	Cluster	National
Liver or Liver Segment Transplanted	DCD	32.77%	22.22%	15.28%	20.24%
	DBD	67.23%	77.78%	84.72%	79.76%
No Liver Transplanted	DCD	70.14%	67.17%	58.91%	65.96%
	DBD	29.86%	32.83%	41.09%	34.04%

Figure 9 displays the proportion of DCD donors by donors with a liver transplanted vs. donors with no liver transplanted. Nationally, 20.24% of donors with a liver transplanted were DCD compared to 65.96% of donors with no liver or liver segment transplanted.

Figure 10. Deceased Donors Recovered Between April 1, 2023 and March 31, 2024 by Livers Transplanted and PHS Risk Factor Status



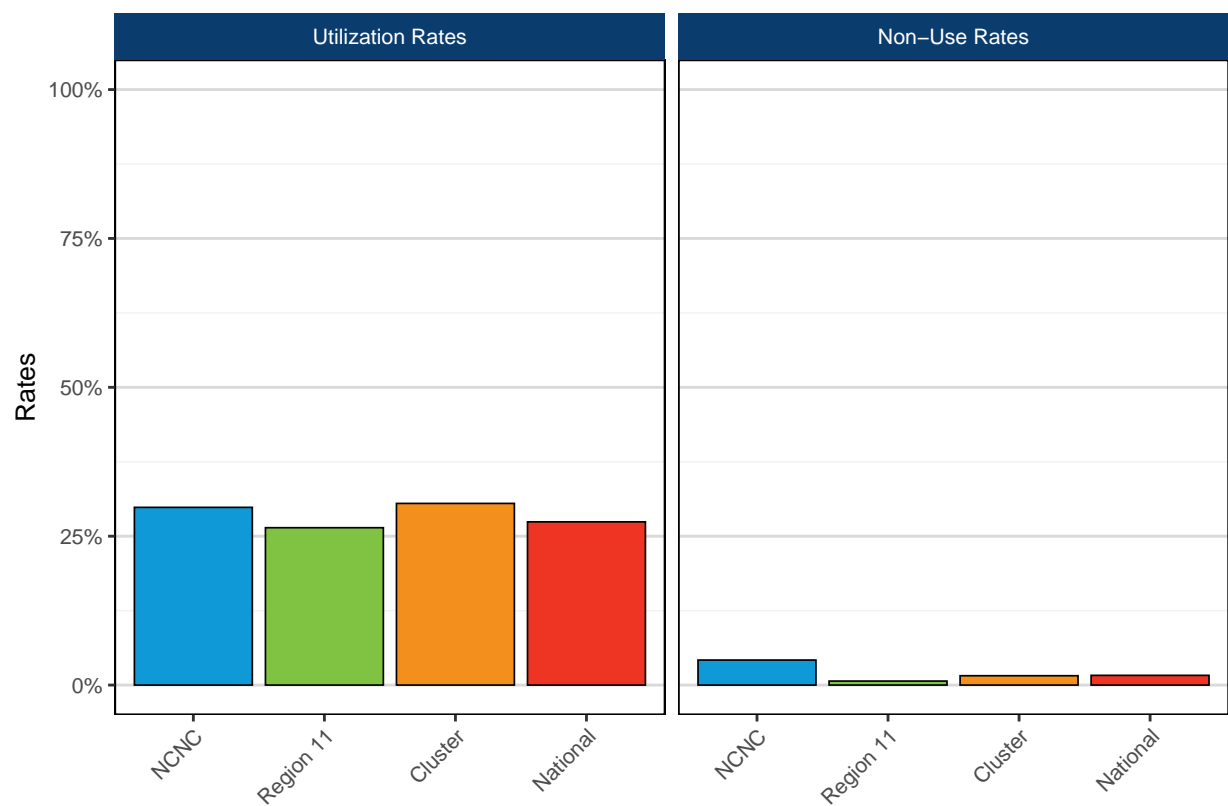
Disposition		PHS Risk Factor Status			
Liver or Liver Segment Transplanted	Yes	18.07%	21.05%	15.19%	17.85%
	No	70.17%	76.51%	83.87%	80.43%
	-	11.76%	2.44%	0.94%	1.71%
No Liver Transplanted	Yes	4.17%	17.63%	14.43%	14.34%
	No	78.47%	78.57%	84.55%	84.03%
	-	17.36%	3.80%	1.02%	1.62%

Figure 10 displays the proportion of deceased donors with PHS risk factors by donors with a liver transplanted vs. donors with no liver transplanted. A donor is considered to have PHS risk factors if they have factors for blood-borne disease transmission according to the United States Public Health Service (PHS) Guidelines and OPTN policy in effect on the date of referral. Nationally, 17.85% of deceased donors with a liver transplanted were considered to have PHS risk factors, compared to 14.34% of deceased donors with no liver transplanted.



Heart

Figure 11. Heart Utilization and Non-Use Rates Between April 1, 2023 and March 31, 2024

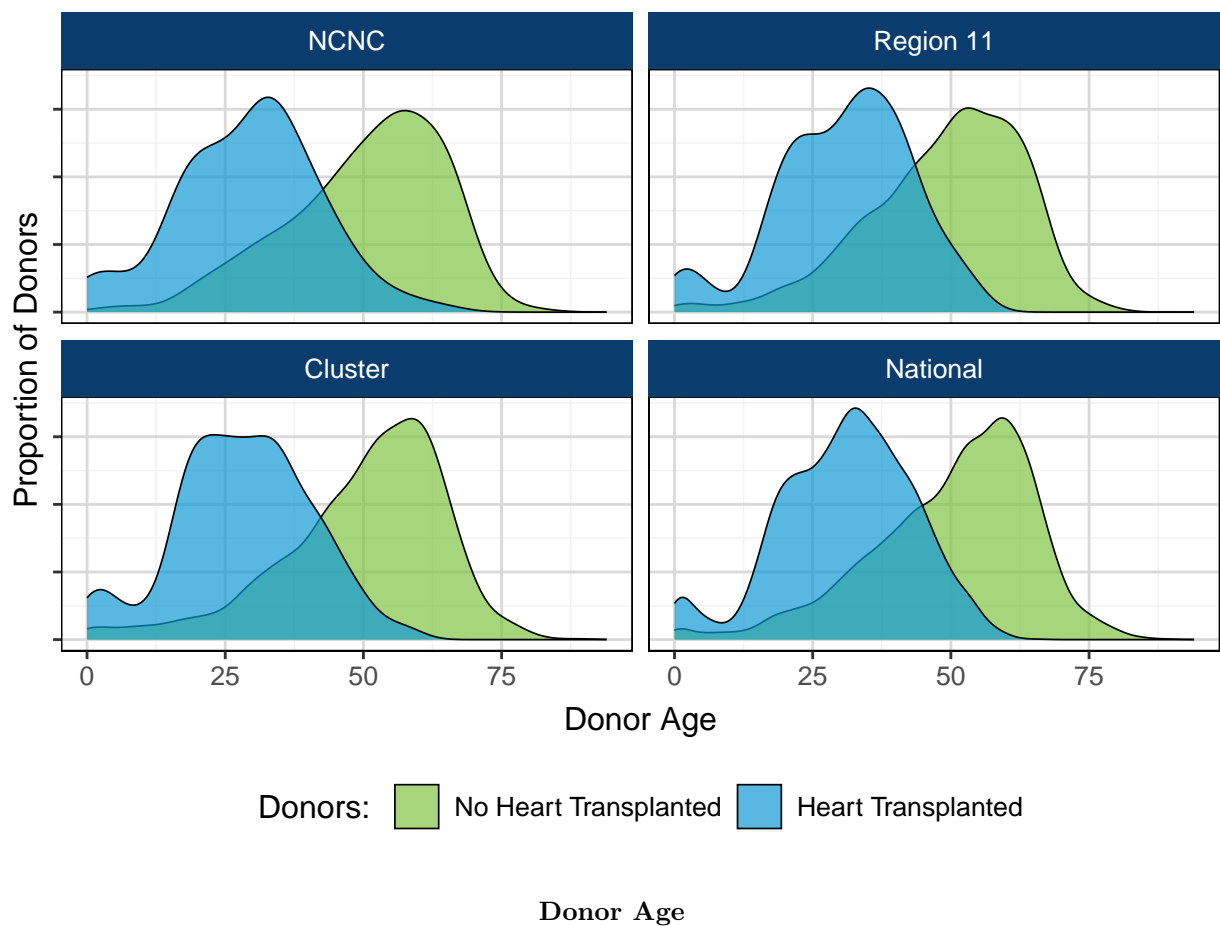


Heart Utilization and Non-Use Rates (%)

Rate	NCNC	Region 11	Cluster	National
Utilization Rates	29.84%	26.43%	30.50%	27.41%
Non-Use Rates	4.20%	0.67%	1.57%	1.63%

Figure 11 displays heart utilization and non-use rates for donors recovered between April 1, 2023 to March 31, 2024. Nationally, the heart utilization rate was 27.41% compared to a heart non-use rate of 1.63%.

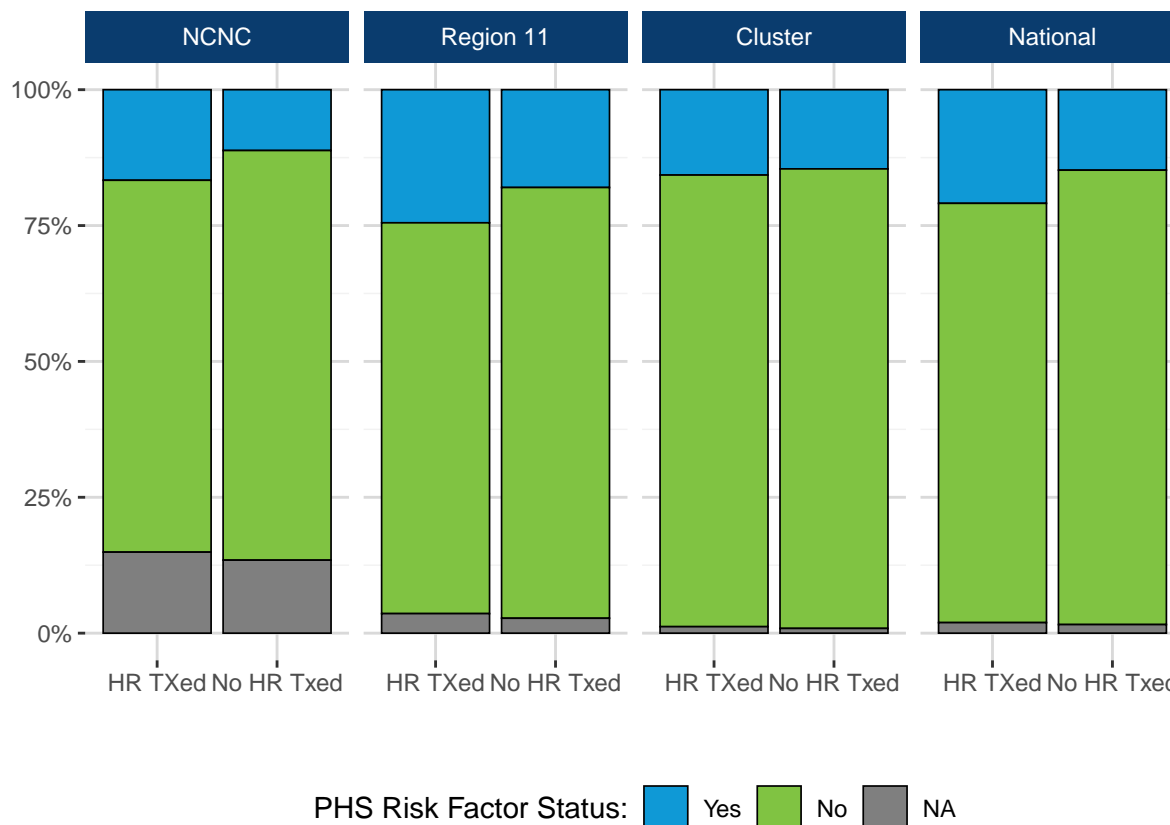
Figure 12. Donor Age Distribution for Donors Recovered Between April 1, 2023 and March 31, 2024 by Heart Transplanted



Disposition	Group	Min	p5	Med	p95	Max
Heart Transplanted	NCNC	0	5	31	49	64
	Region 11	0	6	32	49	57
	Cluster	0	4	28	48	59
	National	0	10	32	50	66
No Heart Transplanted	NCNC	3	25	53	68	81
	Region 11	0	23	51	67	80
	Cluster	0	21	53	68	89
	National	0	23	53	69	94

Figure 12 displays the age distribution of donors recovered by donors where the heart was transplanted vs donors with no heart transplanted. Nationally, the median age of donors with a transplanted heart was 32, compared to a median age of 53 for donors with no heart transplanted.

**Figure 13. Donors Recovered Between April 1, 2023 and March 31, 2024 by Heart Transplanted and PHS Risk Factor Status**

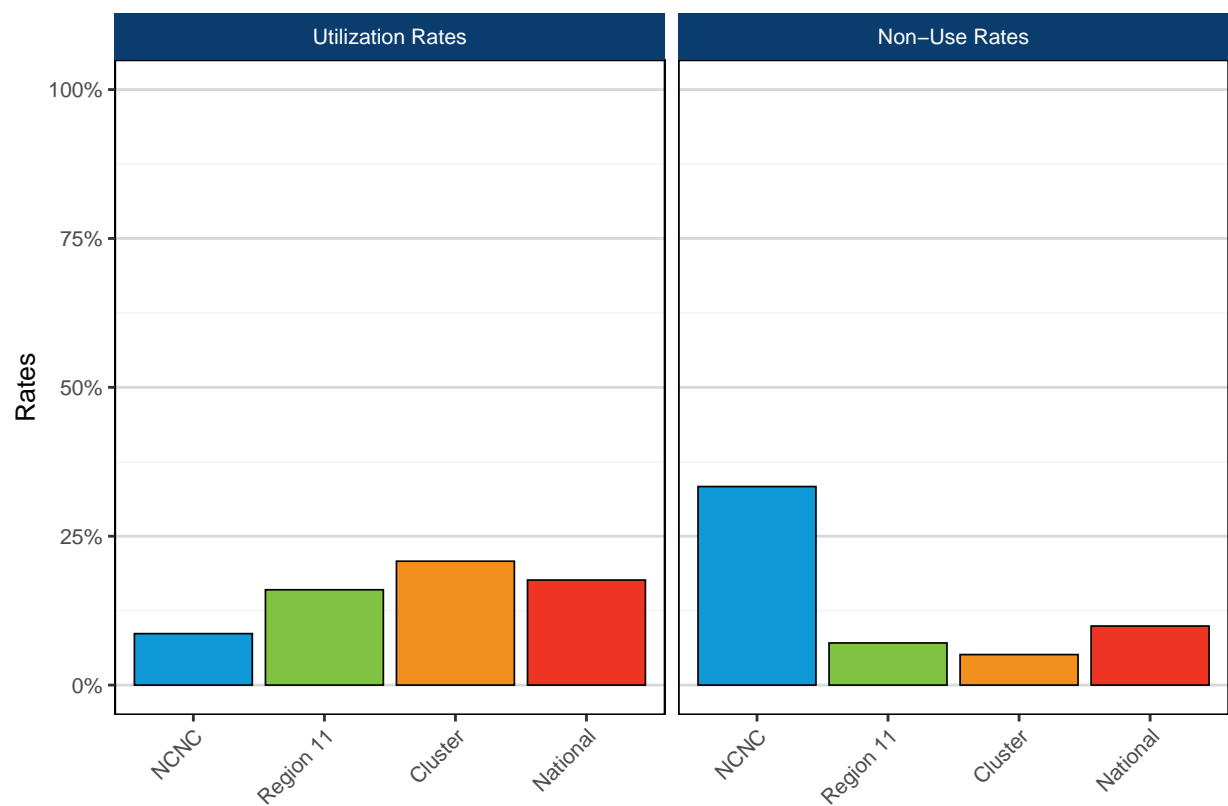


PHS Risk Factor Status		NCNC	Region 11	Cluster	National
Disposition	PHS Risk Factors				
Heart Transplanted	Yes	16.67%	24.49%	15.71%	20.92%
	No	68.42%	71.91%	83.10%	77.15%
	-	14.91%	3.60%	1.19%	1.94%
No Heart Transplanted	Yes	11.19%	18.00%	14.57%	14.81%
	No	75.37%	79.26%	84.55%	83.61%
	-	13.43%	2.74%	0.87%	1.58%

Figure 13 displays the proportion of deceased donors with PHS risk factors by donors with a heart transplanted vs. donors with no heart transplanted. A donor is considered to have risk factors if they have factors for blood-borne disease transmission according to the United States Public Health Service (PHS) Guidelines and OPTN policy in effect on the date of referral. Nationally, 20.92% of donors with a heart transplanted were considered to have PHS risk factors, compared to 14.81% of donors with no heart transplanted.

Lung

Figure 14. Lung Utilization and Non-Use Rates Between April 1, 2023 and March 31, 2024

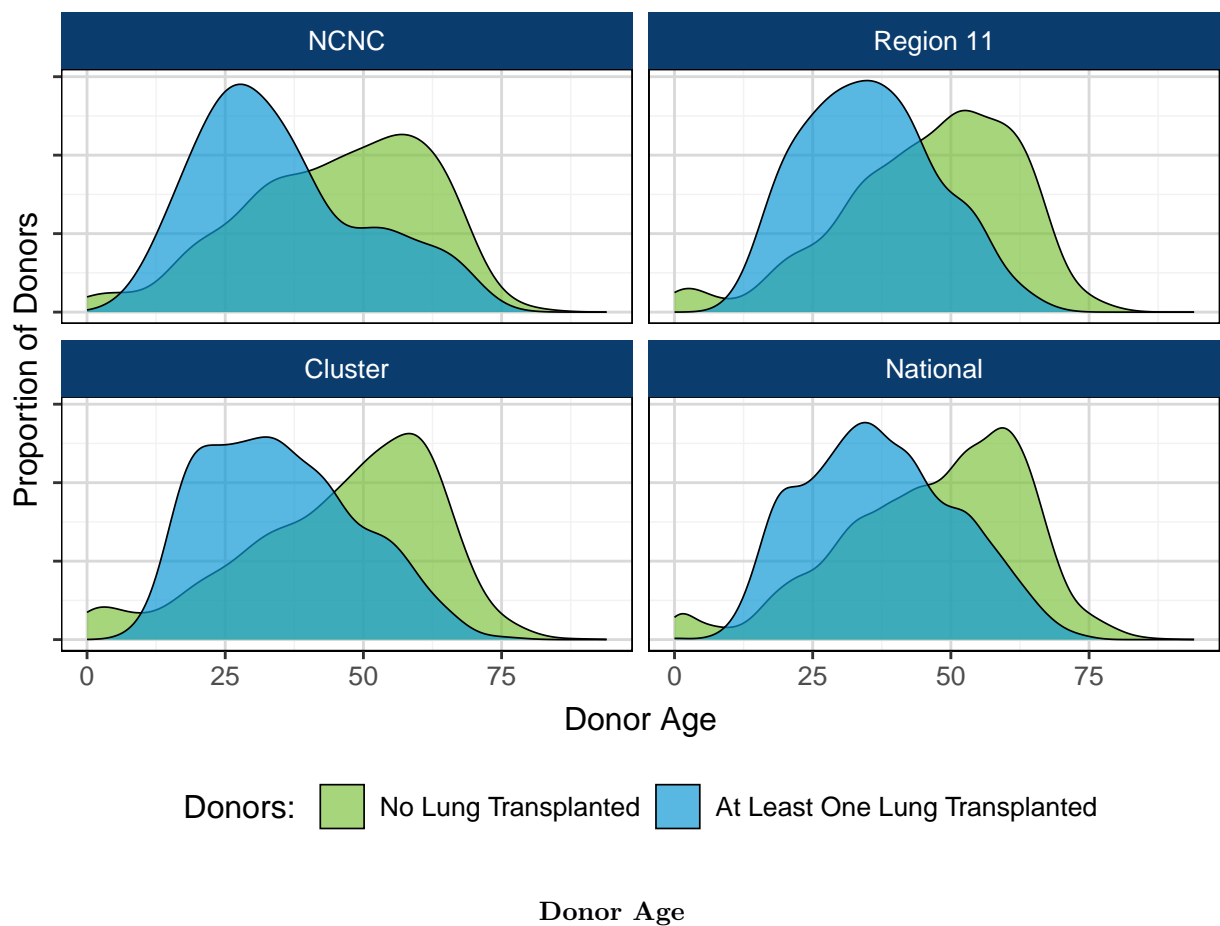


Lung Utilization and Non-Use Rates (%)

Rate	NCNC	Region 11	Cluster	National
Utilization Rates	8.64%	16.00%	20.80%	17.64%
Non-Use Rates	33.33%	7.07%	5.12%	9.91%

Figure 14 displays lung utilization and non-use rates for donors recovered between April 1, 2023 to March 31, 2024. Nationally, the lung utilization rate was 17.64% compared to a lung non-use rate of 9.91%.

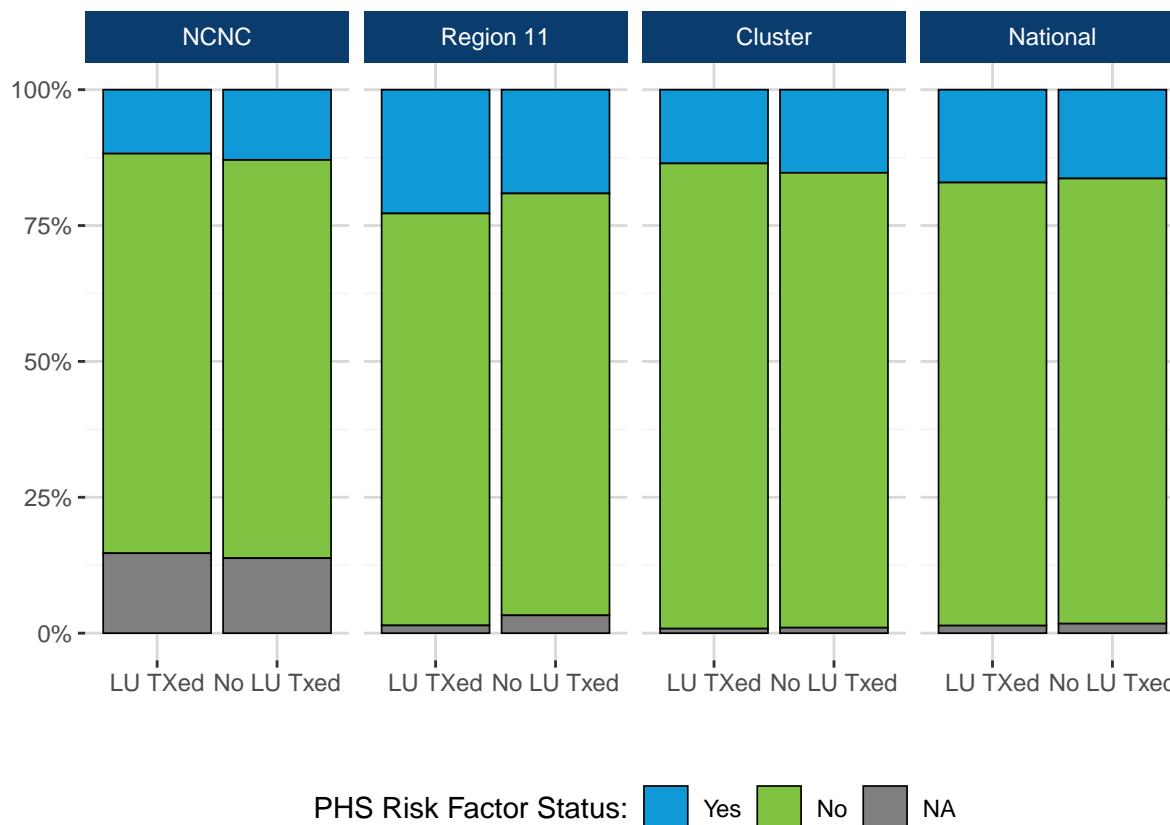
Figure 15. Donor Age Distribution for Donors Recovered Between April 1, 2023 and March 31, 2024 by Lung Transplanted



Disposition	Group	Min	p5	Med	p95	Max
At Least One Lung Transplanted	NCNC	12	16	32	64	67
	Region 11	12	17	35	55	67
	Cluster	10	17	34	59	75
	National	0	17	36	61	75
No Lung Transplanted	NCNC	0	16	47	67	81
	Region 11	0	18	48	67	80
	Cluster	0	10	49	68	89
	National	0	17	49	69	94

Figure 15 displays the distribution of donors recovered by donors where lungs were transplanted vs donors with no lungs transplanted. Nationally, the median age of donors with lungs transplanted was 36, compared to a median age of 49 for donors with no lungs transplanted.

**Figure 16. Donors Recovered Between April 1, 2023 and March 31, 2024 by Lung Transplanted and PHS Risk Factor Status**



PHS Risk Factor Status					
Disposition	PHS Risk Factors	NCNC	Region 11	Cluster	National
At Least One Lung Transplanted	Yes	11.76%	22.78%	13.57%	17.09%
	No	73.53%	75.80%	85.60%	81.53%
	-	14.71%	1.42%	0.83%	1.38%
No Lung Transplanted	Yes	12.93%	19.10%	15.30%	16.34%
	No	73.28%	77.62%	83.70%	81.91%
	-	13.79%	3.28%	1.01%	1.75%

Figure 16 displays the proportion of deceased donors with PHS risk factors by donors with at least one lung transplanted vs. donors with no lungs transplanted. A donor is considered to have PHS risk factors if they have factors for blood-borne disease transmission according to the United States Public Health Service (PHS) Guidelines and OPTN policy in effect on the date of referral. Nationally, 17.09% of deceased donors with at least one lung transplanted were considered to have PHS risk factors, compared to 16.34% of deceased donors with no lungs transplanted.

## Chapter 3

# Demand

### Candidates Waiting on June 30, 2024

This section of the benchmark report contains data on the waiting list using “snapshot” data at the end of a given month. Each month, UNOS captures the snapshot of the waiting list to show exactly what the waiting list looked like at that point in time. Updating the OPO benchmark report every three months with a new snapshot will give each OPO a chance to look at the candidate populations they serve compared to other OPOs over the same time period. Data in the demand chapter are comprised of waiting list registrations, not individual candidates. Patients who are registered at more than one center or who require more than one organ type will have multiple records in the dataset. Registrants will be referred to as candidates throughout this chapter.

The comparison groups chosen for the benchmark report are:

**Regional:** All candidates waiting in the OPO’s region (the OPO is excluded from this group for the purpose of comparison).

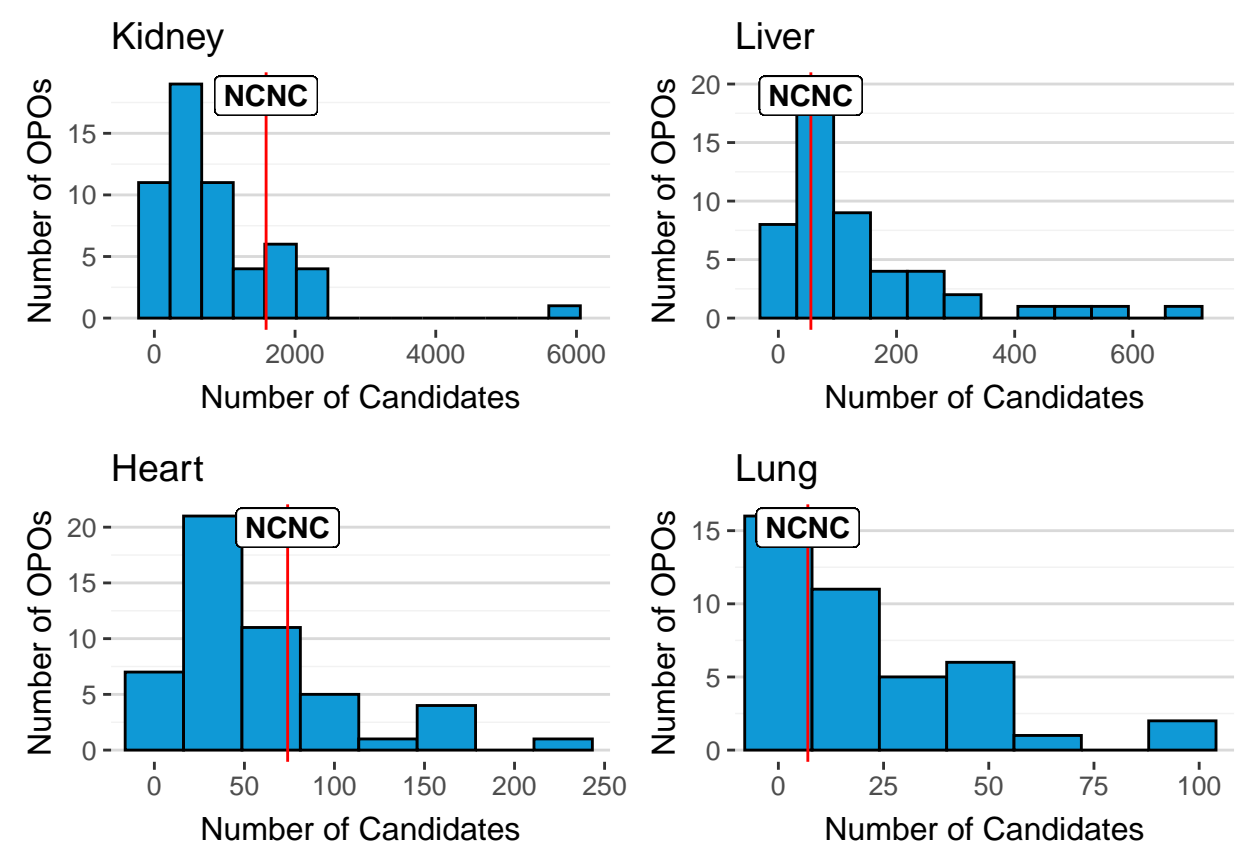
**DSA Cluster:** All deceased donors recovered in the OPO’s cluster (the OPO is excluded from this group for the purpose of comparison).

**National:** All candidates waiting across the country (the OPO is included in this group).

### A Snapshot of NCNC Waiting List on June 30, 2024 as of July 5, 2024

Data presented in this section reflect candidates waiting at centers in NCNC on June 30, 2024. This section is based on OPTN data as of July 5, 2024 and subject to change based on future data submission or correction. NCNC is located in Region 11, and is compared to the following cluster of OPOs: ALOB, GALL, LAOP, MSOP, SCOP, TNMS.

Figure 1: Waiting List Volume by Organ for Active Candidates Waiting on June 30, 2024



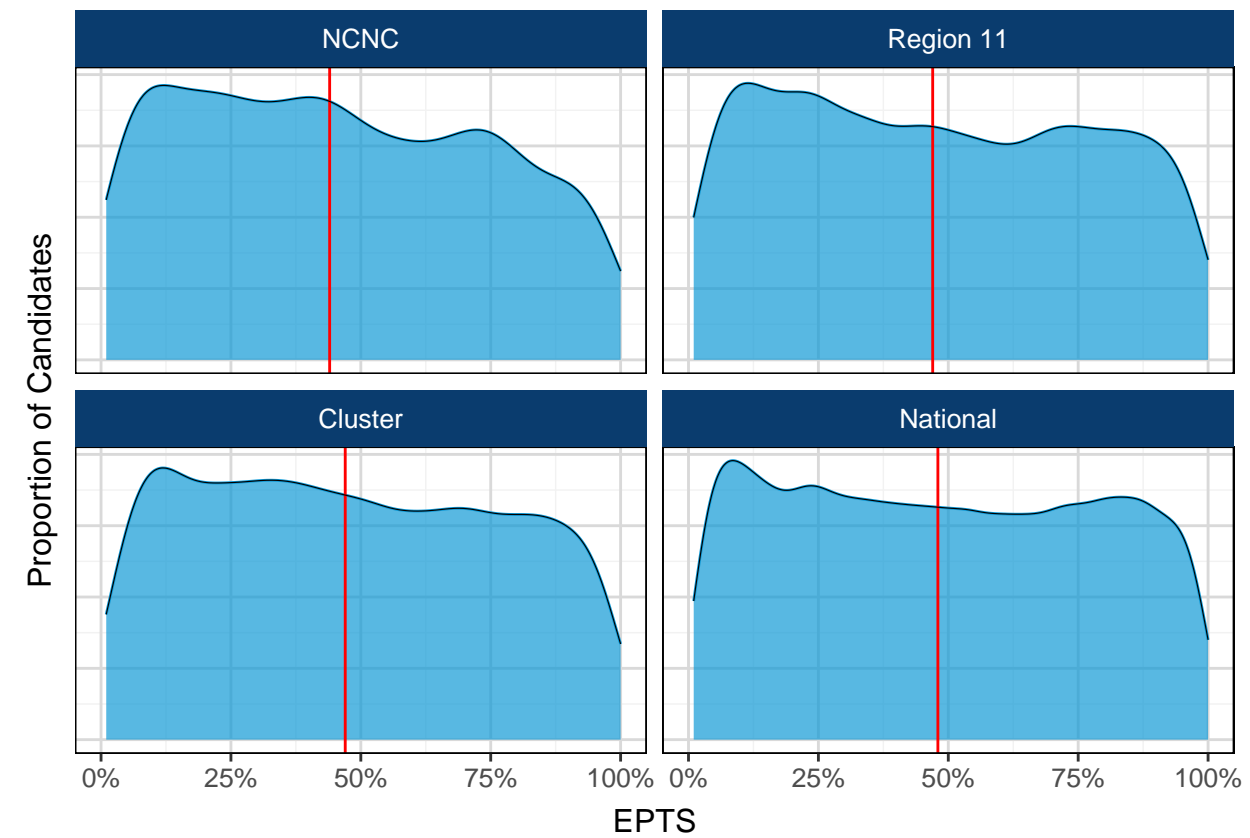
Distribution of Waiting List Volume by Organ

Organ	Min	p5	Med	p95	Max
Kidney	31	140	614	2415	5862
Liver	12	20	92	477	698
Heart	2	10	39	153	229
Lung	2	4	11	67	98

Figure 1 shows the national distribution of waiting list volume of active registrations by DSA and organ for a snapshot of the waiting list on June 30, 2024. NCNC's waiting list volume is indicated by vertical red lines. There were 1588 kidney, 55 liver, 74 heart, and 7 lung candidates waiting in NCNC. Nationally, the median volume on this snapshot was 614 kidney, 92 liver, 39 heart, and 11 lung candidates.



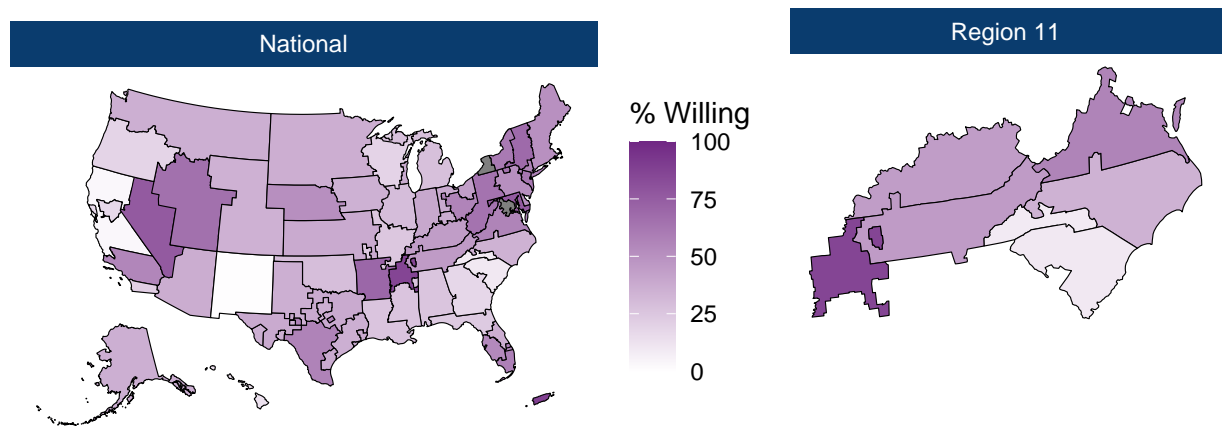
Figure 2: EPTS for Active Adult (18+) Kidney Candidates Waiting on June 30, 2024



EPTS	NCNC	Region 11	Cluster	National
0% - 20%	24.13%	22.50%	21.49%	21.95%
21% - 100%	75.87%	77.50%	78.51%	78.05%
Total	100.00%	100.00%	100.00%	100.00%

Figure 2 shows the distribution of EPTS scores among active adult (18+) kidney candidates on the waiting list as of June 30, 2024. Nationally, at the time of the snapshot, 78.05% of candidates had an EPTS score of 21% - 100%.

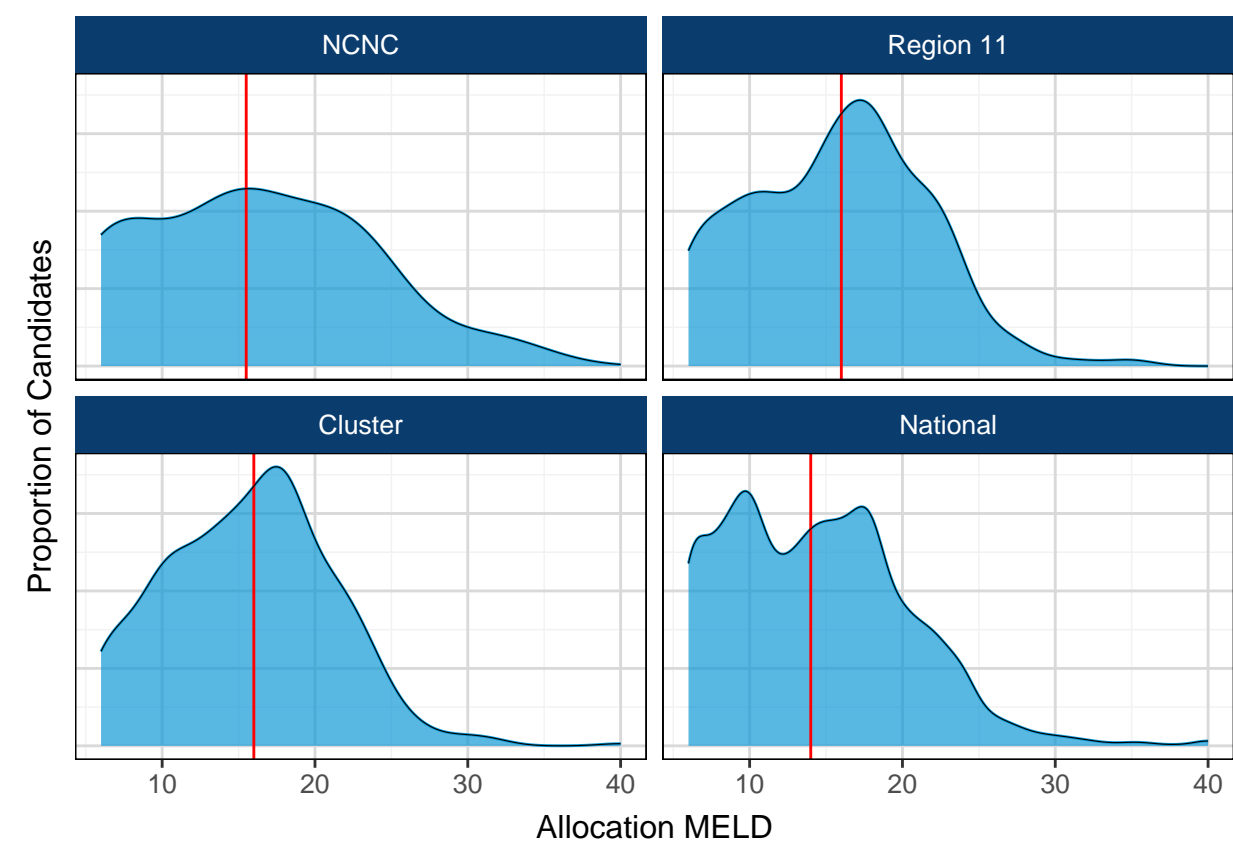
Figure 3: Willingness to Accept Local > 85% KDPI Kidneys (non-0MM) by DSA for Active Kidney Candidates Waiting on June 30, 2024



Accept Local > 85 KDPI	NCNC	Region 11	Cluster	National
Unwilling	65.11%	59.21%	73.70%	57.48%
Willing	34.89%	40.79%	26.30%	42.52%
Total	100.00%	100.00%	100.00%	100.00%

Nationally, 42.52% of active kidney candidates were reported as willing to accept a local KDPI >85% non-0 antigen mismatch kidney at the time of the snapshot.

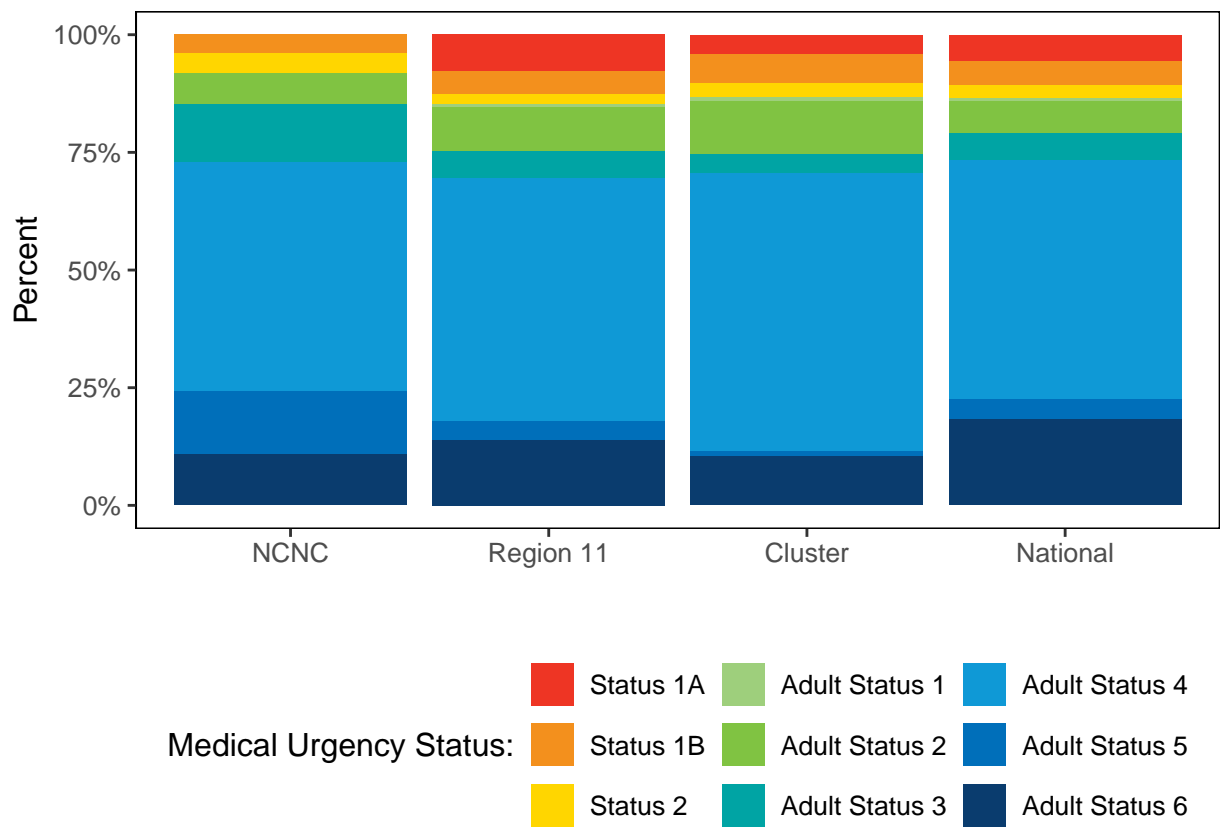
Figure 4: Allocation MELD for Active Liver Candidates 12+ Waiting on June 30, 2024



Allocation MELD	Min	p5	Med	p95	Max
NCNC	6	6	16	29	34
Region 11	6	6	16	24	35
Cluster	6	6	16	24	40
National	6	6	14	24	40

Figure 4 shows the distribution of MELD scores for a snapshot of active liver candidates 12+ waiting on June 30, 2024. The median MELD for liver candidates 12+ waiting on June 30, 2024 nationally was 14. As of 6/28/2022, liver status on the waitlist excludes exception points.

Figure 5: Medical Urgency Status for Active Heart Candidates Waiting on June 30, 2024



Medical Urgency Status:

Status	NCNC	Region 11	Cluster	National
Status 1A	0.00%	7.72%	4.15%	5.68%
Status 1B	4.05%	4.88%	6.22%	4.93%
Status 2	4.05%	2.03%	2.90%	2.93%
Adult Status 1	0.00%	0.81%	0.83%	0.68%
Adult Status 2	6.76%	9.35%	11.20%	6.68%
Adult Status 3	12.16%	5.69%	4.15%	5.65%
Adult Status 4	48.65%	51.63%	58.92%	50.96%
Adult Status 5	13.51%	4.07%	1.24%	4.22%
Adult Status 6	10.81%	13.82%	10.37%	18.26%
Total	100.00%	100.00%	100.00%	100.00%

Figure 5 shows the distribution of medical urgency status for a snapshot of active heart candidates waiting on June 30, 2024. Adult Statuses 1, 2, and 3 candidates combined accounted for 13.01% of the national heart waiting list.

**Figure 6: Allocation CAS Subscore for Active Lung Candidates Waiting on June 30, 2024**

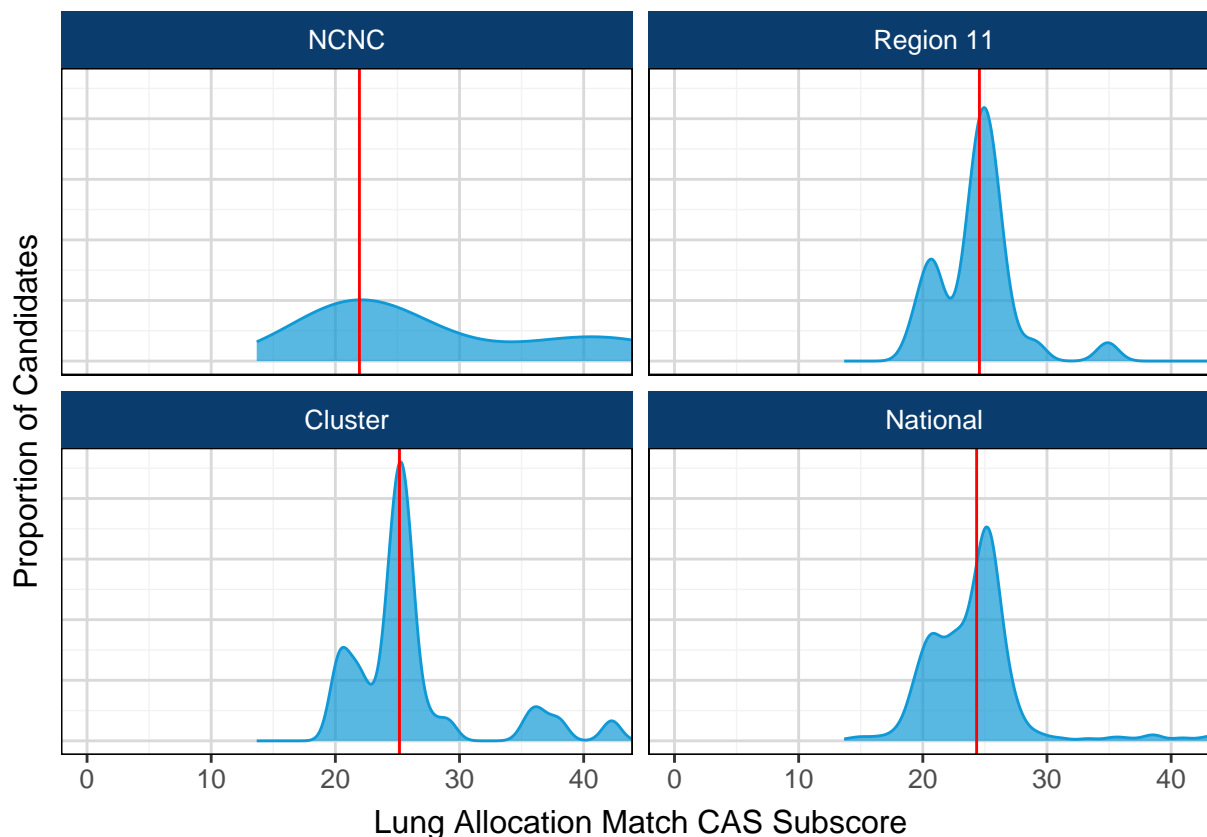
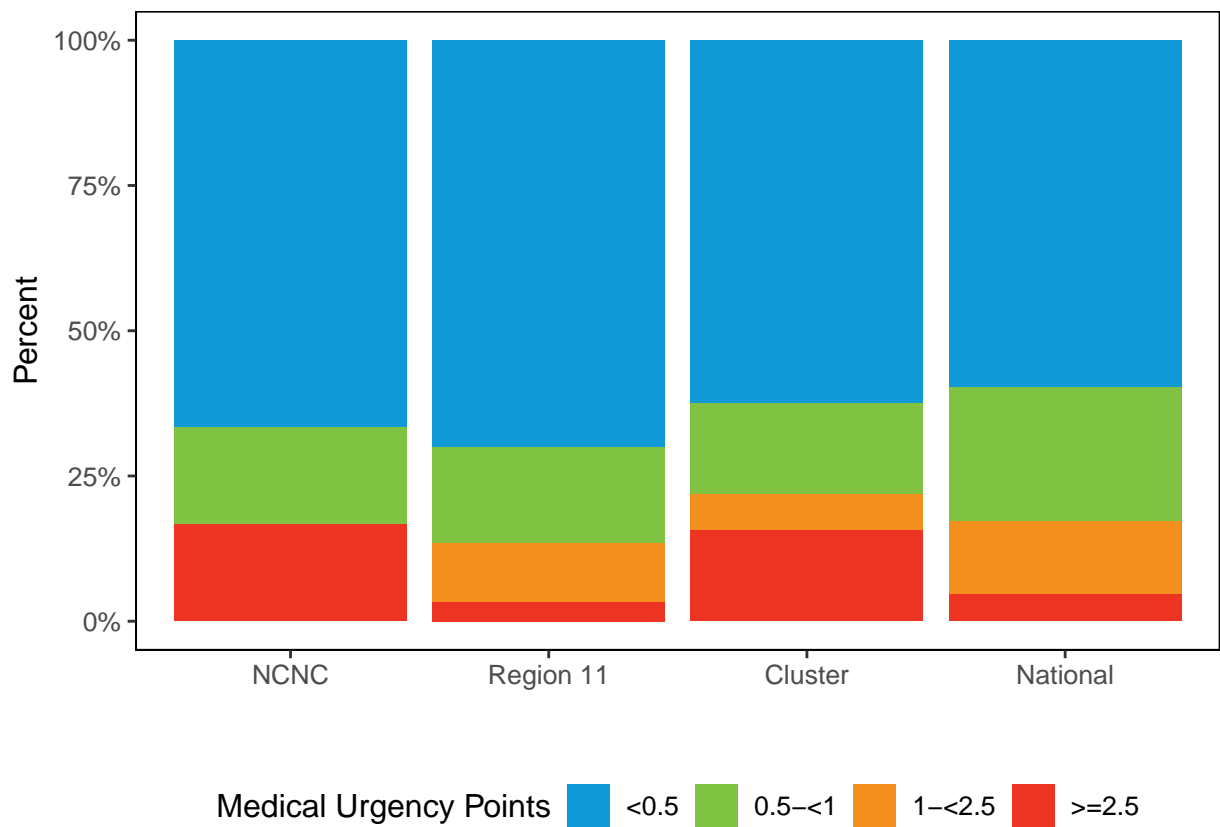


Figure 6 shows the distribution of CAS subscore for a snapshot of active lung candidates waiting on June 30, 2024. CAS subscores are calculated by summing all components of CAS, except for the efficiency points. Nationally, the median CAS subscores were 24.4, though the CAS subscore for 5% of active lung candidates exceeded 31.3.

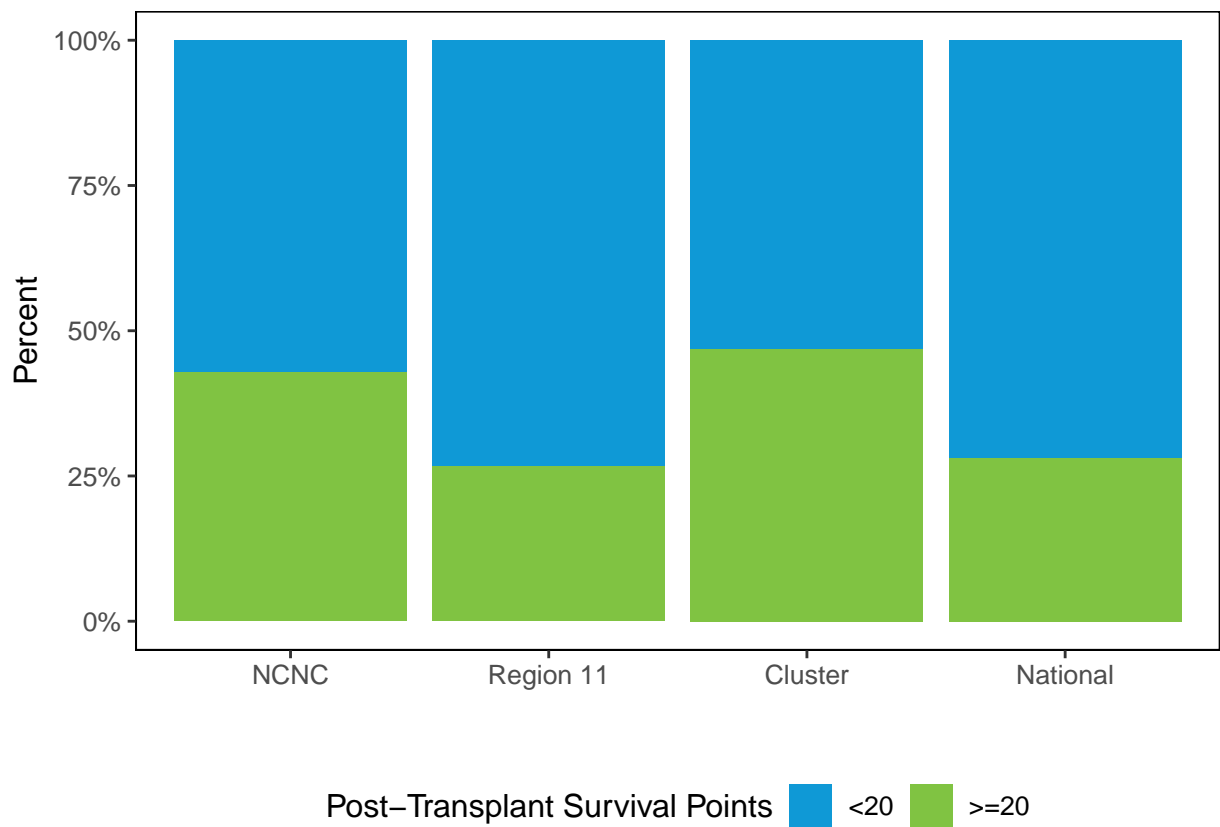
Figure 7: Medical Urgency Points for Active Lung Candidates Waiting on June 30, 2024



Medical Urgency Points	NCNC	Region 11	Cluster	National
<0.5	66.67%	70.00%	62.50%	59.74%
0.5-<1	16.67%	16.67%	15.62%	23.10%
1-<2.5	0.00%	10.00%	6.25%	12.54%
>=2.5	16.67%	3.33%	15.62%	4.62%
Total	100.00%	100.00%	100.00%	100.00%

Figure 7 shows the distribution of medical urgency points for a snapshot of active lung candidates waiting on June 30, 2024. Nationally, 59.74% of active lung candidates had medical urgency points of <0.5.

Figure 8: Post-Transplant Survival Points for Active Lung Candidates Waiting on June 30, 2024



Post-Transplant Survival Points	NCNC	Region 11	Cluster	National
<20	57.14%	73.33%	53.12%	71.91%
>=20	42.86%	26.67%	46.88%	28.09%
Total	100.00%	100.00%	100.00%	100.00%

Figure 8 shows the distribution of post-transplant survival points for a snapshot of active lung candidates waiting on June 30, 2024. Nationally, 71.91% of active lung candidates had post-transplant survival points of <20.

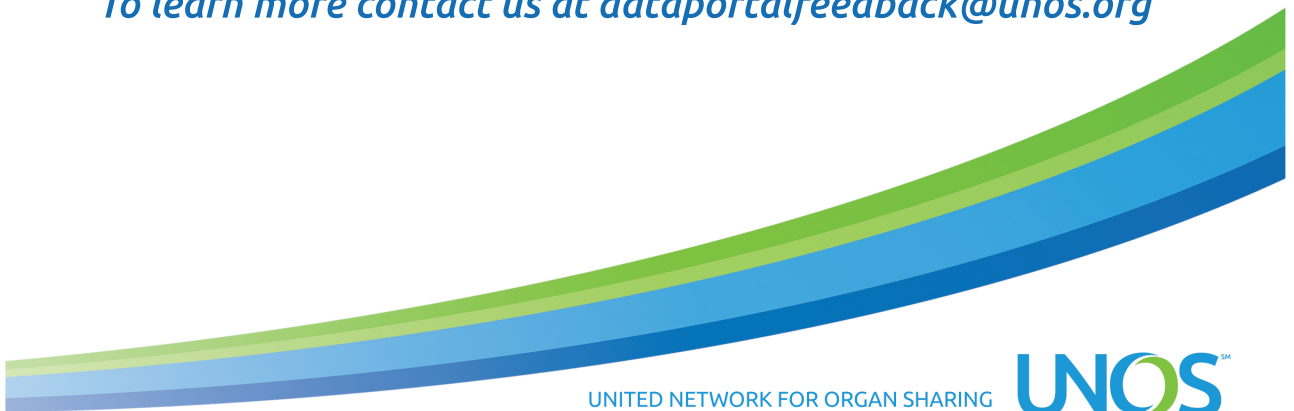
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