Final Report

OPTN Organ Procurement Organization (OPO) Committee | Descriptive Data Request

Modifications to the Deceased Donor Registration (DDR) form 6-Month Monitoring Report

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Background/Purpose

Under the OPTN Final Rule, OPOs and transplant centers are required to submit data to the OPTN[1]. In 2006, the OPTN established the principles of data collection where institutional members must provide sufficient data to allow the OPTN to do the following[2]:

- Develop transplant, donation, and allocation policies – Deceased donor data provides information useful for developing evidence-based allocation policies.
- Determine if OPTN members are complying with policy – This ensures trust in the transplant system by using data to evaluate member compliance with OPTN policies.
- Determine member-specific performance – In collaboration with the SRTR, the OPTN is required to make information on OPO performance publicly available.
- Ensure patient safety when no alternative sources of data exist – Clinical information on deceased donors can provide an understanding of potential impacts on patient outcomes and patient safety.
- Fulfill the requirements of the OPTN Final Rule.

Additionally, the OPTN Board of Directors approved the following OPTN Data Vision Statement during its December 5-6, 2016 meeting[3]:

The OPTN collects information in accordance with the Final Rule: 1) to characterize the population it serves; 2) to improve the allocation and utilization of organs; and 3) to develop and assess policies and processes to optimize outcomes. The overall intent is to provide value to patients, OPTN members, the organ donation/transplantation community, and the general public.

- Whenever possible, data collected in center or OPO electronic health records, and other databases should be accessible to the OPTN without the need for additional data entry.
- Variables collected should specifically support the data uses outlined above and should be re-evaluated on a regular basis.
- Data collected should be accurate (based on clear definitions), complete, timely, and subject to ongoing quality control audits/efforts.

The Deceased donor Registration (DDR) is an important data collection tool for OPOs to submit information on deceased donors. OPTN Policy 18.1: Data Submission Requirements, requires OPOs to submit the DDR within "30 days after the donor organ disposition (feedback) form is submitted and disposition is reported for all organs." It should be noted that this requirement will change to 60 days following implementation of OPTN Board-approved data submission policy changes[4]. The sections of the DDR include:

- Clinical information
- Lifestyle Factors
- Organ Recovery
- Procurement and Authorization
- Donor Information
- Organ Disposition

The Committee collaborated with the OPTN Data Advisory Committee (DAC) in developing the modified DDR form in order to improve data collection efforts. OPO and DAC committee members, in collaboration with SRTR and UNOS Research department staff, used their clinical expertise to develop recommendations for changes to the data elements and definitions. Additional feedback was received from the leadership of several committees, including the Ad Hoc Disease Transmission Advisory Committee, Heart Transplantation Committee, and Liver and Intestinal Organ Transplantation Committee.

[1] 42 CFR § 121.11

[2] "Principles of Data Collection," OPTN, accessed December 11, 2020. https://optn.transplant.hrsa.gov/members/committees/data-advisory-committee/

[3] https://optn.transplant.hrsa.gov/media/2038/board_executivesummary_201612.pdf

[4] https://optn.transplant.hrsa.gov/media/3459/modify-data-submission-policies-policy-notice.pdf

Strategic Plan Goal or Committee Project Addressed

Increase the number of transplants

Committee Request

This report assesses the impact of the modified deceased donor registration form. As outlined in the monitoring plan for this policy change, specific measures examined will include:

1. The number and percent of data values entered by OPOs for modified data elements
2. A comparison of the distribution of entered data values pre and post implementation

Data and Methods

The analyses in this report use data from OPTN Deceased Donor Registration forms. Analyses are based on OPTN data as of September 06, 2024. Data are subject to change based on future data submission or correction.

Cohort:

Deceased Donor Registration forms validated before policy implementation (March 14, 2023 - September 13, 2023) and after implementation (September 14, 2023 - March 13, 2024)

Results

Between March 14, 2023 and March 13, 2024, 16,427 DDR forms were validated. 8,422 of those forms were validated during the pre-policy period. 8,005 were validated in the post-policy period. Of the forms that were validated during the pre-policy period, 2,987 were for donation after circulatory death (DCD) donors and 5,435 were for donation after brain death (DBD) donors. 3,080 DCD donors and 4,925 DBD donors had DDRs that were validated during the post-policy period. Fields with a value of "N/A", "Not Done", "Missing", or "Unknown" were selected from a status drop-down list. "No Value Entered" refers to fields that were left blank.

Donor Information

Data Element: *Home city, state, and zip code*
Change: *Add the option to enter "unknown" for each of these data elements. This is important due to situations where OPOs are unable to collect and report this information.*

Figure 1. Distribution of Values Entered for Address fields by Data Element and Era

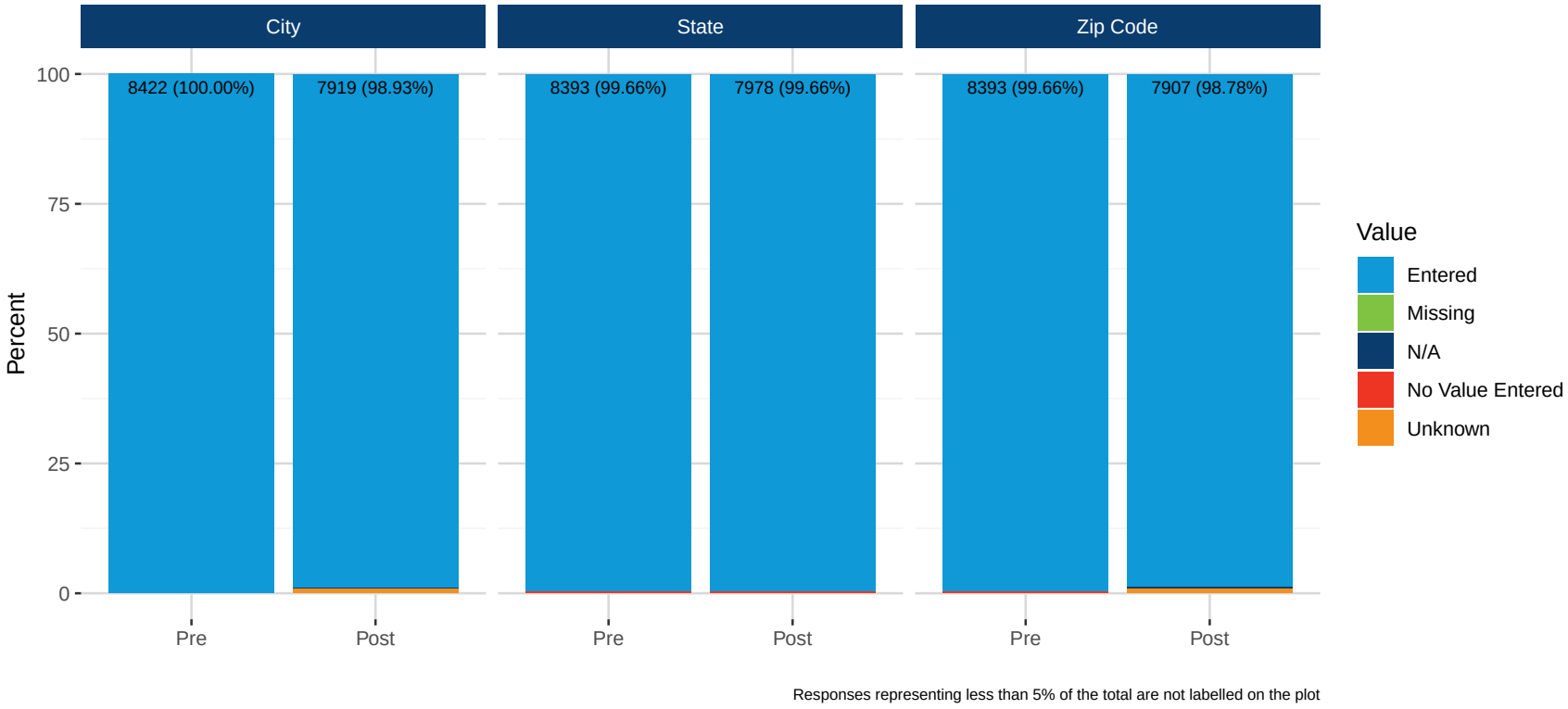


Table 1. Number and Percent of Values Entered for Address fields by Data Element and Era

Data Element	Era	Value	Number of Forms	Percent(%)
City	Pre	Entered	8,422	100.00
	Post	Entered	7,919	98.93
		Missing	1	0.01
		N/A	14	0.17
		Unknown	71	0.89
State	Pre	Entered	8,393	99.66
		No Value Entered	29	0.34
	Post	Entered	7,978	99.66
		No Value Entered	27	0.34
Zip Code	Pre	Entered	8,393	99.66
		No Value Entered	29	0.34
	Post	Entered	7,907	98.78
		Missing	1	0.01
		N/A	30	0.37
		Unknown	67	0.84

Figure 1 and Table 1 show the number and percent of values entered for donor home address data fields. Less than 2% of forms had a "Missing", "N/A", or "Unknown" entry for the City and Zip Code fields post-implementation.

Authorization

***Data Element**: Medical examiner/coroner*
***Change**:*
Previous:
Medical examiner/coroner:

- *No*
- *Yes, Medical examiner consented*
- *Yes, Medical examiner refused consent*

Current:

- *Did the OPO notify the medical examiner/coroner?*
- *If yes, did the medical examiner/coroner accept the case?*
- *If yes, were there any restrictions?*

These recommendations will capture information about how the interaction with the medical examiner/coroner affects authorization for organ donation. Note: Death Notification Registration (DNR) changes required to maintain alignment

Table 2. Number and Percent of Values Entered for Medical Examiner/Coroner Response field (Pre-Implementation)

Examiner/Coroner Notified	Number of Forms	Percent(%)
Yes, Medical Examiner Consented	5,533	65.70
No	2,824	33.53
Unknown	54	0.64
Yes, Medical Examiner Refused Consent	11	0.13

Table 3. Number and Percent of Values Entered for Medical Examiner/Coroner Response fields (Post-Implementation)

Examiner/Coroner Notified	Accepted Case	Restrictions	Number of Forms	Percent(%)
No	No Value Entered	No Value Entered	1,316	16.44
Yes	No	No Value Entered	2,000	24.98
	No Value Entered	No Value Entered	1	0.01
	Yes	No	4,567	57.05
		Yes	121	1.51

Table 2 and Table 3 show the number and percent of values entered for the Medical Examiner/Coroner Response fields. In the post-policy era, all forms indicated whether or not an examiner/coroner was notified of a case, compared to 0.64% of entries with a value of "Unknown" for the Examiner/Coroner Notified field in the pre-policy era.

***Data Element**: Did the patient have written documentation of their intent to be a donor? If yes, indicate mechanisms*
***Change**: Align with proposed changes to the Death Notification Registration (DNR) by replacing with the following two questions:*

- *Did patient legally document decision to be a donor?*
- *Was authorization obtained for organ donation?*

Remove mechanisms from DDR since OPOs collect this information and mechanisms, such as driver's license or donor card, are not used by the OPTN.

Figure 2. Distribution of Values Entered for Documented Decision to be a Donor fields by Era

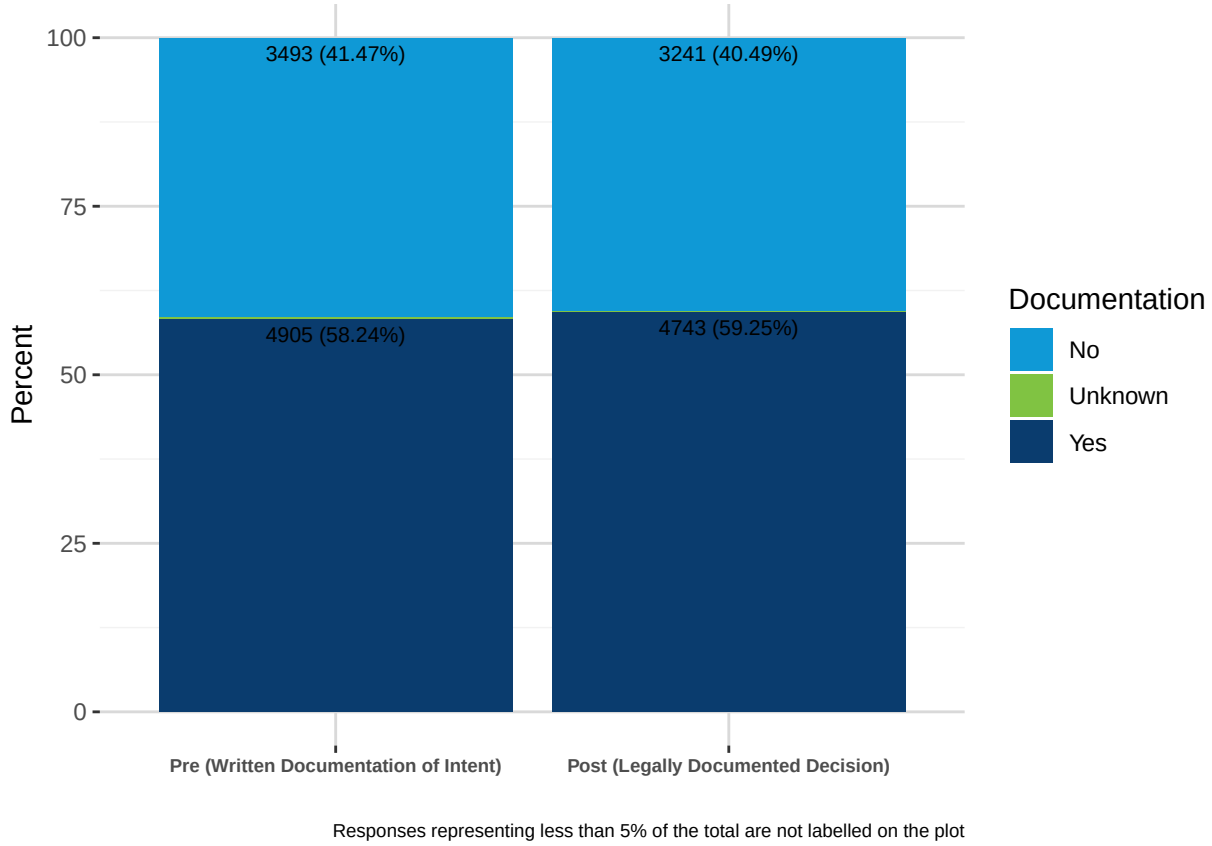


Table 4. Number and Percent of Values Entered for Written Documentation of Intent and Mechanisms fields (Pre-Implementation)

Written Documentation of Intent	Mechanism	Number of Forms	Percent(%)
No	Indicated	1	0.01
	Not Indicated	3,492	41.46
Unknown	Not Indicated	24	0.28
Yes	Indicated	4,893	58.10
	Not Indicated	12	0.14

Table 5. Number and Percent of Values Entered for Legally Documented Decision and Authorization Obtained fields (Post-Implementation)

Legally Documented Decision	Authorization Obtained	Number of Forms	Percent(%)
No	No	1	0.01
	Yes	3,240	40.47
Unknown	Yes	21	0.26
Yes	Yes	4,743	59.25

Figure 2, Table 4, and Table 5 show the number and percent of values entered for Documented Decision to be a Donor fields pre and post policy implementation. 0.26% of forms had a value of "Unknown" for the Legally Documented Decision field in the post-policy era, compared to 0.28% of forms for the Written Documentation of Intent field in the pre-policy era.

Clinical Information

***Data Element**: Donor Weight*
***Change**: Update data definition to specify that the weight entered should be the first measured weight following admission to the hospital.*

Enter the first measured weight of the donor after hospital admission in lbs (pounds) or kg (kilograms). This field is required. If the donor's weight ~~at the time of recovery~~ is unavailable, select the reason from the status drop-down list (N/A, Not Done, Missing, Unknown).

Figure 3. Distribution of Values Entered for Donor Weight by Era

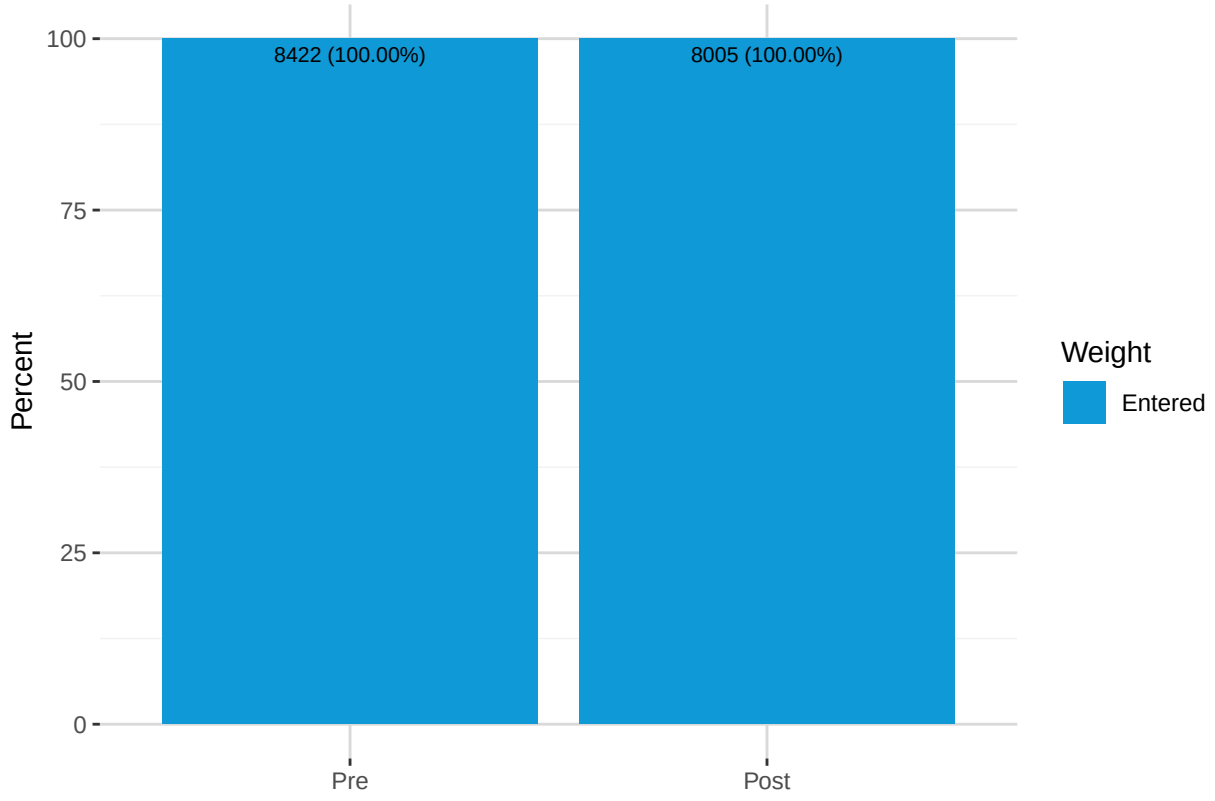


Table 6. Number and Percent of Values Entered for Donor Weight by Era

Era	Donor Weight	Number of Forms	Percent(%)
Pre	Entered	8,422	100
Post	Entered	8,005	100

Figure 3 and Table 6 show the number and percent of values entered for donor weight. 100% of forms had a weight entered in the donor weight field in the post-policy period, compared to 100% of forms in the pre-policy period.

Data Element *: Terminal lab data*
Change*: If a lab value is unavailable, only allow "not done" option instead of N/A, not done, missing, unknown.*

Switch the order of serum lipase and serum amylase.

Update "Na" in DonorNet to align with serum sodium in the DDR.

Update data definition to specify that the terminal lab values include tests performed during donor management and prior to the donor entering the OR.

For each of the laboratory tests enter the value, in the units indicated, from tests performed during donor management and prior to the donor entering the operating room. ~~closest to the time of recovery.~~ These fields are required. If a lab value is unavailable, select the reason from the status (ST) drop-down list (N/A, ~~Not Done~~, Missing, Unknown). (List of Status codes).

Table 7. Number and Percent of Values Entered for Terminal Lab fields by Lab Test and Era

Lab Test	Era	Result	Number of Forms	Percent(%)
BUN	Pre	Entered	8,419	99.96
		N/A	2	0.02
		Not Done	1	0.01
	Post	Entered	8,000	99.94
		Not Done	1	0.01
		Unknown	4	0.05
Hematocrit	Pre	Entered	8,420	99.98
		N/A	2	0.02
	Post	Entered	7,998	99.91
		Not Done	2	0.02
		Unknown	5	0.06
	Pre	Entered	8,345	99.09
		N/A	15	0.18
		Not Done	58	0.69
		Unknown	4	0.05
		Entered	7,922	98.96
		Missing	2	0.02
		N/A	13	0.16

INR				
	Post	Not Done	56	0.70
		Unknown	12	0.15
Protein in Urine	Pre	No	2,733	32.45
		Unknown	99	1.18
		Yes	5,590	66.37
	Post	No	2,387	29.82
		Unknown	112	1.40
		Yes	5,506	68.78
SGOT/AST	Pre	Entered	8,403	99.77
		N/A	2	0.02
		Not Done	17	0.20
	Post	Entered	7,993	99.85
		N/A	1	0.01
		Not Done	7	0.09
		Unknown	4	0.05
SGPT/ALT	Pre	Entered	8,403	99.77
		N/A	2	0.02
		Not Done	17	0.20
	Post	Entered	7,996	99.89
		N/A	1	0.01
		Not Done	4	0.05
		Unknown	4	0.05
Serum Creatinine	Pre	Entered	8,420	99.98
		N/A	1	0.01
		Not Done	1	0.01
	Post	Entered	8,001	99.95
		Unknown	4	0.05
	Pre	Entered	8,421	99.99
		N/A	1	0.01
	Post	Entered	8,000	99.94

Serum Sodium	Post	Unknown	5	0.06
Total Bilirubin	Pre	Entered	8,403	99.77
		N/A	2	0.02
		Not Done	16	0.19
		Unknown	1	0.01
	Post	Entered	7,992	99.84
		N/A	1	0.01
		Not Done	7	0.09
		Unknown	5	0.06

Table 7 shows the number and percent of values entered for Terminal Lab fields for all donors. Table 8 shows the number and percent of values entered for terminal lab fields for pancreas donors. In the post-policy period, Serum Creatinine was the terminal lab field with the highest percentage of available values entered (99.95%), and Protein in Urine was the terminal lab field with the lowest percentage of available values entered (98.6%). For pancreas donors, Serum Lipase was the field with the highest percentage of available values entered in the post policy period (91.05%), and HbA1c was the terminal lab field with the lowest percentage of available values entered (88.79%).

Table 8. Number and Percent of Values Entered for Terminal Lab fields by Lab Test and Era (Pancreas Donors Only)

Lab Test	Era	Result	Number of Forms	Percent(%)
HbA1c	Pre	Entered	2,018	87.06
		Missing	3	0.13
		N/A	31	1.34
		No Value Entered	1	0.04
		Not Done	259	11.17
		Unknown	6	0.26
	Post	Entered	1,885	88.79
		Missing	1	0.05
		N/A	22	1.04
		No Value Entered	1	0.05
		Not Done	201	9.47
		Unknown	13	0.61
Serum Amylase	Pre	Entered	2,096	90.42
		N/A	23	0.99
		No Value Entered	1	0.04
		Not Done	194	8.37
		Unknown	4	0.17
	Post	Entered	1,907	89.83
		N/A	27	1.27
		No Value Entered	1	0.05
		Not Done	179	8.43
		Unknown	9	0.42
Serum Lipase	Pre	Entered	2,128	91.80
		N/A	21	0.91
		No Value Entered	1	0.04
		Not Done	164	7.08
		Unknown	4	0.17
	Post	Entered	1,933	91.05
		N/A	26	1.22
		No Value Entered	1	0.05
		Not Done	156	7.35
		Unknown	7	0.33

Note:
Counts include pancreata recovered not for transplant

Data Element *: Serology and NAT results*
Change*: Rename using the common terminology "infectious disease testing" and delete the separate NAT results section by incorporating NAT results into the same section since these are all infectious disease testing results.*

Add the word "equivocal" to the response options, as shown below, since lab results can be indeterminate (no clear negative or positive result) or equivocal (cannot be interpreted as negative or positive).

For each of the tests listed, select the results from the lists (Cannot Disclose, Indeterminate/Equivocal, Negative, Not Done, Positive, or Unknown). These fields are required.

Table 9. Number and Percent of Values Entered for Infectious Disease fields by Infectious Disease and Era

Infectious Disease	Era	Result	Number of Forms	Percent(%)
Anti-CMV	Pre	Indeterminate/Equivocal	34	0.40
		Negative	3,172	37.66
		Not Done	167	1.98
		Positive	5,049	59.95
	Post	Indeterminate/Equivocal	25	0.31
		Negative	2,915	36.41
		Not Done	158	1.97
		Positive	4,907	61.30
Chagas	Pre	Indeterminate/Equivocal	1	0.01
		Negative	1,851	21.98
		Not Done	6,565	77.95
		Positive	5	0.06
	Post	Negative	2,076	25.93
		Not Done	5,925	74.02
		Positive	4	0.05
Chagas NAT	Pre	Indeterminate/Equivocal	1	0.01
		Negative	28	0.33
		Not Done	8,393	99.66
	Post	Negative	19	0.24
		Not Done	7,986	99.76

EBNA	Pre	Indeterminate/Equivocal	7	0.08
		Negative	164	1.95
		Not Done	7,232	85.87
		Positive	1,019	12.10
	Post	Indeterminate/Equivocal	9	0.11
		Negative	185	2.31
		Not Done	6,844	85.50
		Positive	967	12.08
EBV (VCA) (IgG)	Pre	Indeterminate/Equivocal	65	0.77
		Negative	630	7.48
		Not Done	177	2.10
		Positive	7,550	89.65
	Post	Indeterminate/Equivocal	48	0.60
		Negative	533	6.66
		Not Done	169	2.11
		Positive	7,255	90.63
EBV (VCA) (IgM)	Pre	Indeterminate/Equivocal	24	0.28
		Negative	6,781	80.52
		Not Done	1,472	17.48
		Positive	145	1.72
	Post	Indeterminate/Equivocal	27	0.34
		Negative	6,143	76.74
		Not Done	1,657	20.70
		Positive	178	2.22
	Pre	Indeterminate/Equivocal	1	0.01
		Negative	7,914	93.97
		Not Done	9	0.11
		Positive	498	5.91
	Post	Negative	7,543	94.23
		Not Done	4	0.05

HBV NAT

	Post			
		Positive	458	5.72
HBsAb	Pre	Indeterminate/Equivocal	15	0.18
		Negative	236	2.80
		Not Done	7,975	94.69
		Positive	196	2.33
	Post	Indeterminate/Equivocal	12	0.15
		Negative	190	2.37
		Not Done	7,697	96.15
		Positive	106	1.32
HBsAg	Pre	Indeterminate/Equivocal	6	0.07
		Negative	8,358	99.24
		Not Done	7	0.08
		Positive	51	0.61
	Post	Indeterminate/Equivocal	3	0.04
		Negative	7,951	99.33
		Not Done	6	0.07
		Positive	45	0.56
HCV	Pre	Negative	7,592	90.14
		Not Done	5	0.06
		Positive	825	9.80
	Post	Indeterminate/Equivocal	1	0.01
		Negative	7,253	90.61
		Not Done	2	0.02
		Positive	749	9.36
	Pre	Indeterminate/Equivocal	5	0.06
		Negative	8,005	95.05
		Not Done	7	0.08
		Positive	405	4.81
		Indeterminate/Equivocal	3	0.04

HCV NAT	Post	Negative	7,653	95.60
		Not Done	6	0.07
		Positive	343	4.28
HIV	Pre	Negative	5,706	67.75
		Not Done	2,689	31.93
		Positive	27	0.32
	Post	Negative	5,061	63.22
		Not Done	2,919	36.46
		Positive	25	0.31
HIV Ag/Ab Combo	Pre	Negative	2,798	33.22
		Not Done	5,616	66.68
		Positive	8	0.09
	Post	Negative	3,034	37.90
		Not Done	4,957	61.92
		Positive	14	0.17
HIV NAT	Pre	Indeterminate/Equivocal	7	0.08
		Negative	8,389	99.61
		Not Done	11	0.13
		Positive	15	0.18
	Post	Indeterminate/Equivocal	2	0.02
		Negative	7,980	99.69
		Not Done	9	0.11
		Positive	14	0.17
HTLV	Pre	Indeterminate/Equivocal	1	0.01
		Negative	1,678	19.92
		Not Done	6,743	80.06
	Post	Negative	1,555	19.43
		Not Done	6,448	80.55
		Positive	2	0.02
		Indeterminate/Equivocal	2	0.02

HTLV NAT	Pre	Negative	10	0.12
		Not Done	8,410	99.86
	Post	Negative	6	0.07
		Not Done	7,999	99.93
Strongyloides	Pre	Indeterminate/Equivocal	9	0.11
		Negative	1,383	16.42
		Not Done	6,969	82.75
		Positive	61	0.72
	Post	Indeterminate/Equivocal	26	0.32
		Negative	1,426	17.81
		Not Done	6,493	81.11
		Positive	60	0.75
Syphilis	Pre	Negative	8,234	97.77
		Not Done	38	0.45
		Positive	150	1.78
	Post	Indeterminate/Equivocal	1	0.01
		Negative	7,830	97.81
		Not Done	19	0.24
		Positive	155	1.94
Toxoplasma (IgG)	Pre	Indeterminate/Equivocal	40	0.47
		Negative	7,464	88.63
		Not Done	27	0.32
		Positive	891	10.58
	Post	Indeterminate/Equivocal	38	0.47
		Negative	7,009	87.56
		Not Done	31	0.39
		Positive	927	11.58
		Indeterminate/Equivocal	1	0.01
		Negative	1,051	12.48

West Nile	Pre	Not Done	7,367	87.47
		Positive	3	0.04
	Post	Negative	926	11.57
		Not Done	7,079	88.43
West Nile NAT	Pre	Indeterminate/Equivocal	3	0.04
		Negative	3,120	37.05
		Not Done	5,299	62.92
	Post	Negative	3,039	37.96
		Not Done	4,966	62.04

Table 9 shows the number and percent of values entered for Infectious Disease fields. In the post-implementation era, HTLV NAT had the highest percentage of "Not Done" entries (99.93%), while HCV had the lowest percentage (0.02%).

***Data Element**: Inotropic medications at time of cross clamp*
***Change**: Update field label to include "or at time of withdrawal of life-sustaining medical support" in order to capture this information for donation after circulatory death (DCD) donors.*

Figure 4. Distribution of Values Entered for Inotropic Medications fields by Donor Type and Era

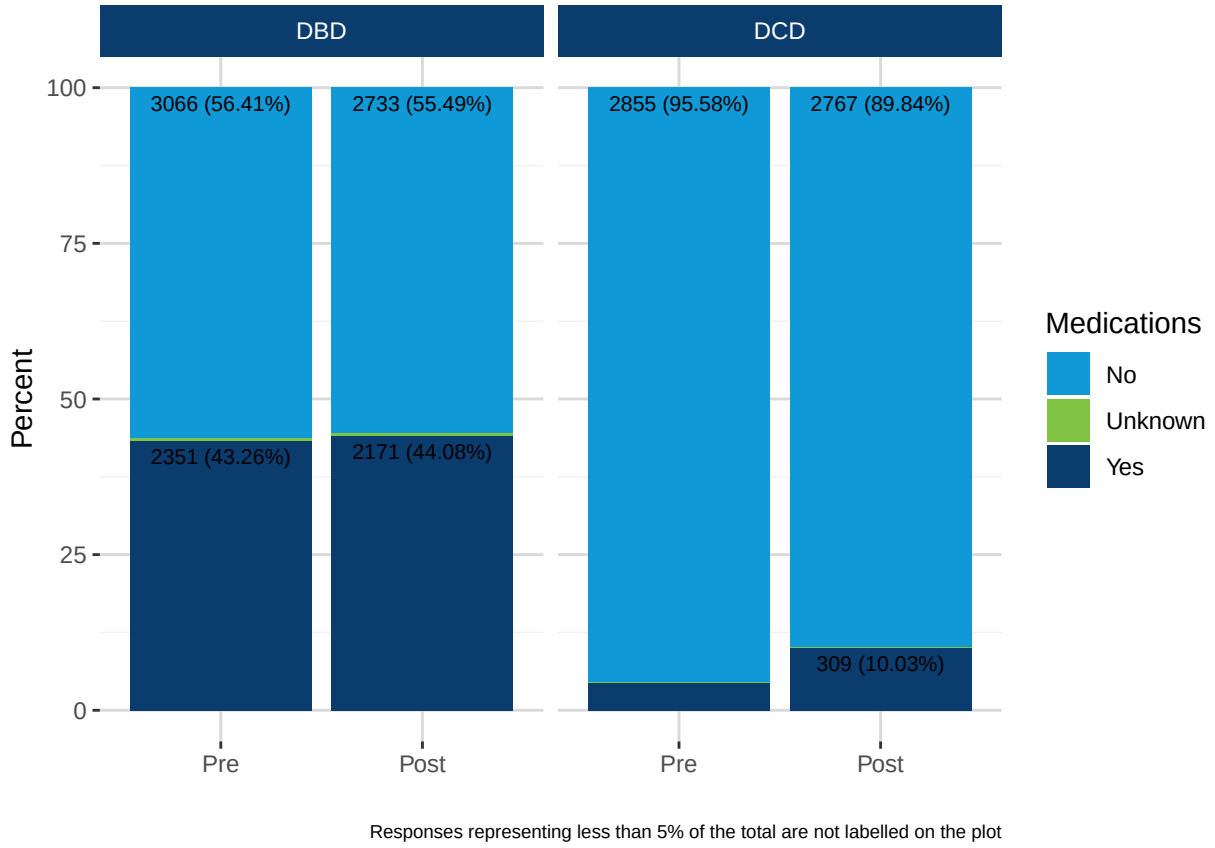


Table 10. Number and Percent of Values Entered for Inotropic Medications fields by Donor Type and Era

Donor Type	Era	Inotropic Medications	Number of Forms	Percent(%)
DBD	Pre	No	3,066	56.41
		Unknown	18	0.33
		Yes	2,351	43.26
	Post	No	2,733	55.49
		Unknown	21	0.43
		Yes	2,171	44.08
DCD	Pre	No	2,855	95.58
		Unknown	2	0.07
		Yes	130	4.35
	Post	No	2,767	89.84
		Unknown	4	0.13
		Yes	309	10.03

Figure 4 and Table 10 show the number and percent of donor inotropic medication values entered by era. Compared to the pre-policy era, the percent of "Unknown" entries for DCD donors increased in the post-policy era from 0.07% to 0.13%.

***Data Element**: Number of transfusions*
***Change**: Transfusions prior to ABO determination: Yes or No. If yes, total number and total volume. Transfusions following ABO determination: Yes or No. If yes, total number and total volume.*

Figure 5. Distribution of Values Entered for Transfusions fields by Era

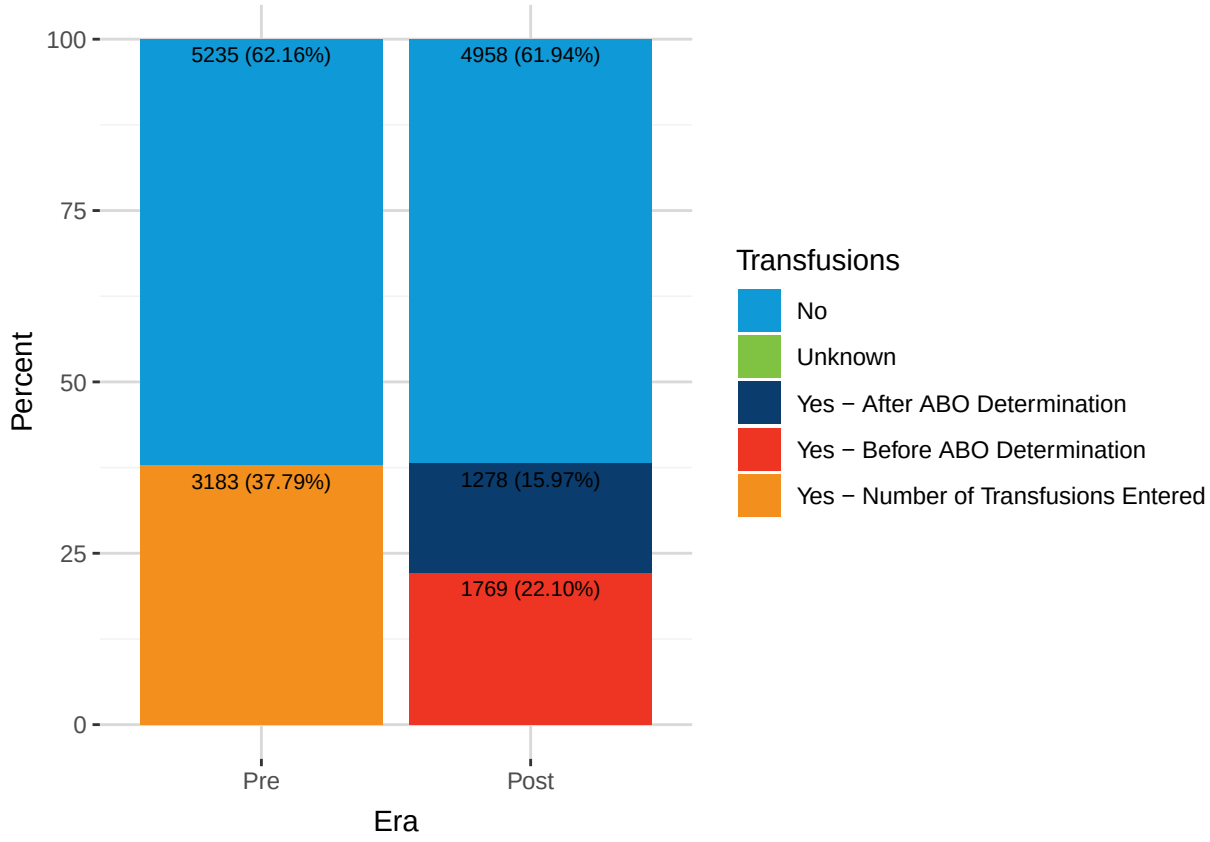


Table 11. Number and Percent of Values Entered for Transfusions fields by Era

Era	Transfusions	Number of Forms	Percent(%)
Pre	Yes - Number of Transfusions Entered	3,183	37.79
	Unknown	4	0.05
	No	5,235	62.16
Post	Yes - Before ABO Determination	1,769	22.10
	Yes - After ABO Determination	1,278	15.97
	No	4,958	61.94

Figure 5, Table 11, Figure 6, and Table 12 show the number and percent of values entered for the Number of Transfusions, Transfusions Prior to/Following ABO Determination, and Transfusion Total Volume fields pre and post implementation. No forms in the post-policy period had an "Unknown" entry for the Transfusions Prior to/Following ABO Determination fields.

Figure 6. Distribution of Values Entered for Transfusion Volume by Timing of Transfusion (Post-Implementation)

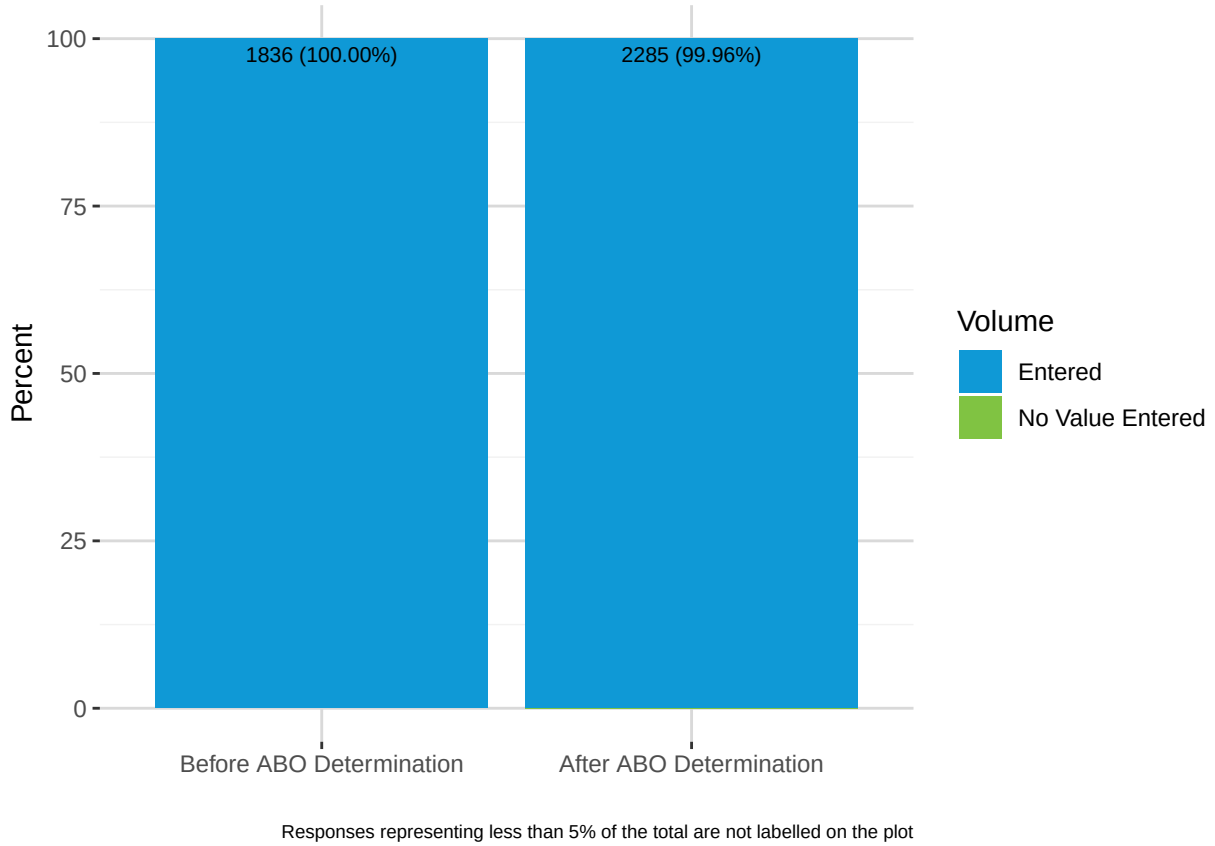


Table 12. Number and Percent of Values Entered for Transfusion Volume by Timing of Transfusion (Post-Implementation)

Time of Transfusion	Volume	Number of Forms	Percent(%)
Before ABO Determination	Entered	1,836	100.00
After ABO Determination	Entered	2,285	99.96
	No Value Entered	1	0.04

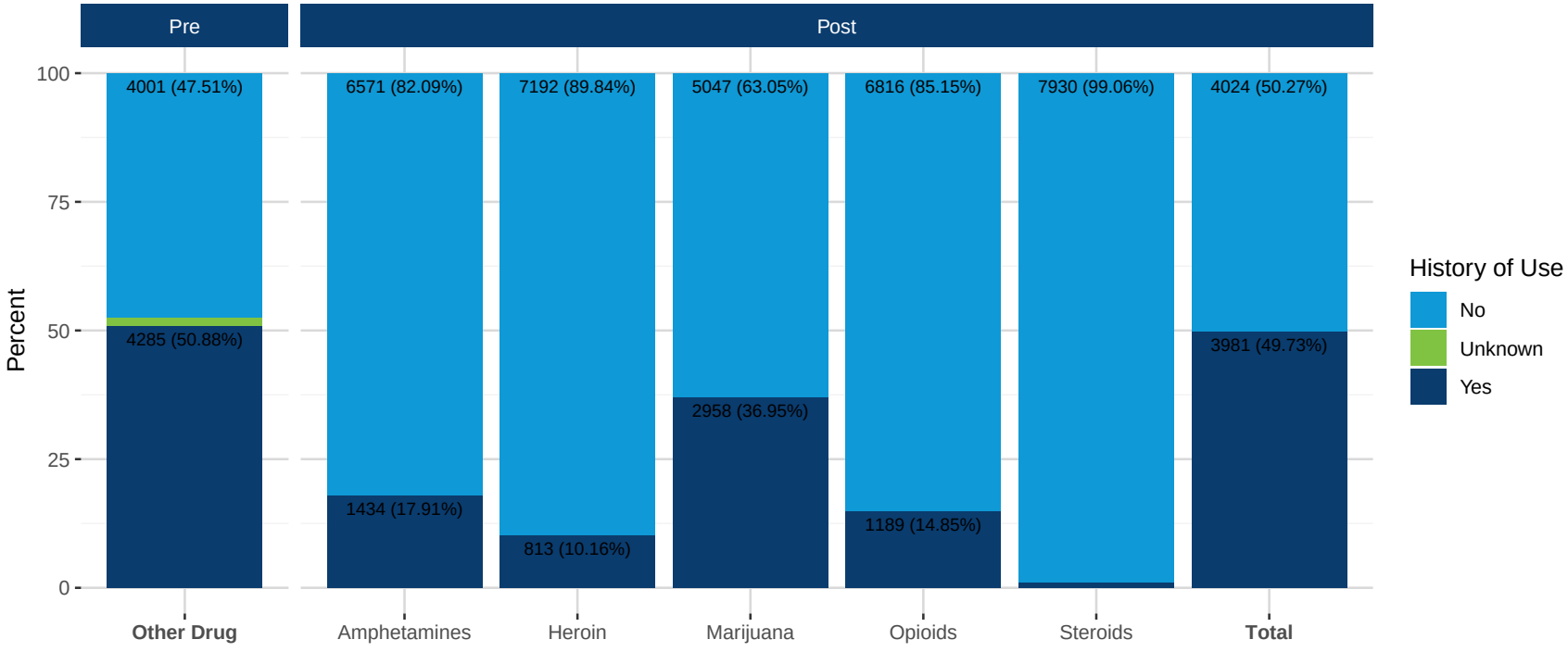
Lifestyle Factors

Data Element: *Cocaine use (ever) AND continued in last six months / Other drug use (ever) AND continued in last six months*
Change: *Currently collected as yes, no, or unknown responses.*

Ever use or take drugs, such as steroids, cocaine, heroin, amphetamines, or opioids?

- *Type of drug*
- *How often and how long was it used?*
- *When was it last used?*
- *Route (inhaled, needles, ingested)*

Figure 7. Distribution of Values Entered for History of Drug Use fields by Era and Drug



Responses representing less than 5% of the total are not labelled on the plot

Table 13. Number and Percent of Values Entered for History of Drug Use fields by Era and Drug

Era	Drug	History of Use	Number of Forms	Percent(%)
Pre	Other Drug	No	4,001	47.51
		Unknown	136	1.61
		Yes	4,285	50.88
Post	Amphetamines	No	6,571	82.09
		Yes	1,434	17.91
	Heroin	No	7,192	89.84
		Yes	813	10.16
	Marijuana	No	5,047	63.05
		Yes	2,958	36.95
	Opioids	No	6,816	85.15
		Yes	1,189	14.85
	Steroids	No	7,930	99.06
		Yes	75	0.94
	Total	No	4,024	50.27
		Yes	3,981	49.73

Figure 7 and Table 13 show the number and percent of values entered for donor history of drug use fields. In Table 13, "Total" in the Drug column is the aggregate number and percent of forms that indicate that a donor had a history of amphetamines, heroin, marijuana, opioids, and/or steroid use in the post-policy period. There were no "Unknown" entries in the post-policy era for these fields.

Figure 8. Distribution of Values Entered for Continued Use in Last Six Months field (Pre-Implementation)

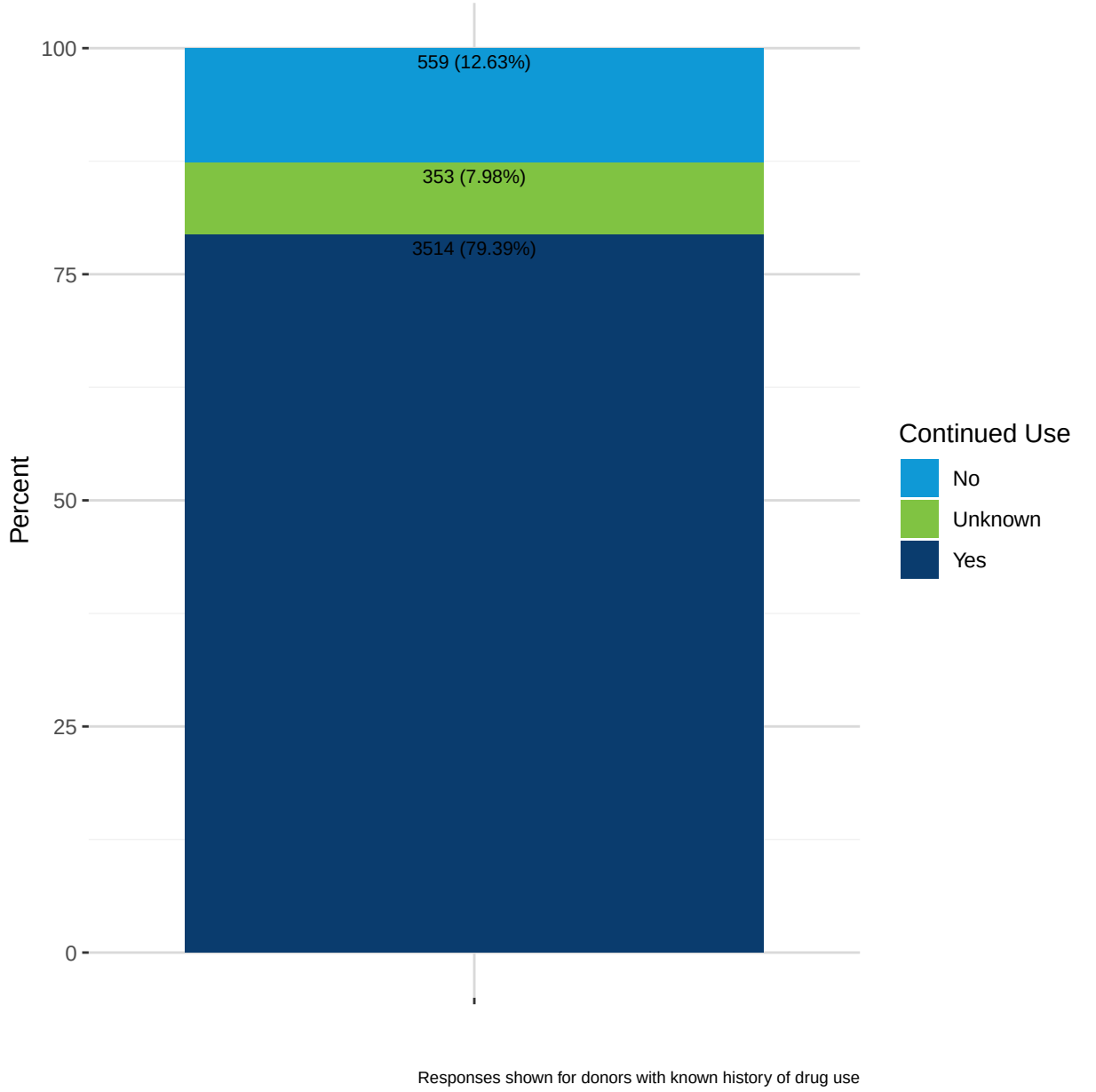
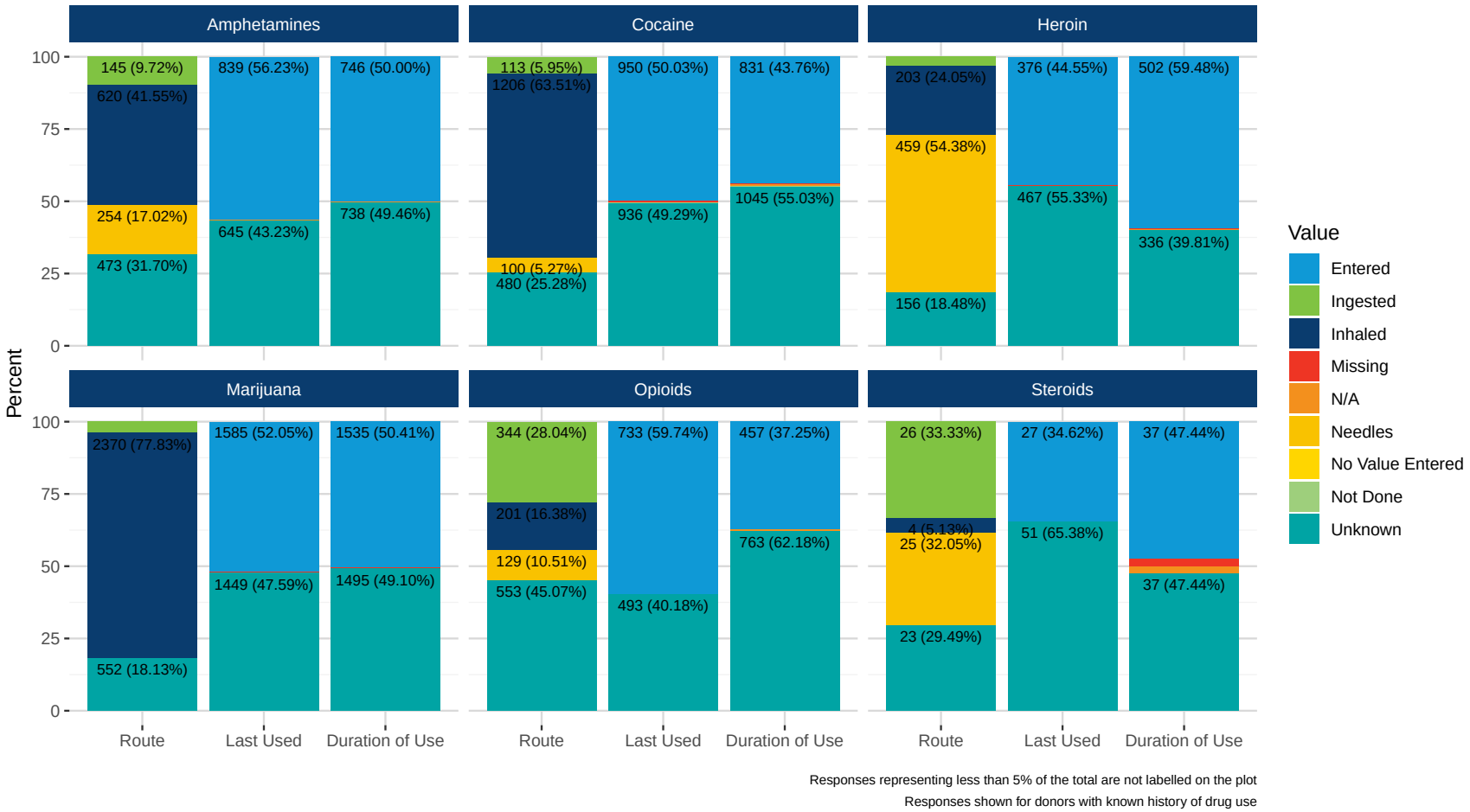


Table 14. Number and Percent of Values Entered for Continued Use in Last Six Months field (Pre-Implementation)

Continued Use	Number of Forms	Percent(%)
No	559	12.63
Unknown	353	7.98
Yes	3,514	79.39

Note:
Responses shown for donors with known history of drug use

Figure 9. Distribution of Values Entered for Duration of Drug Use, Last Use Date, and Route of Usage by Drug (Post-Implementation)



Responses representing less than 5% of the total are not labelled on the plot

Responses shown for donors with known history of drug use

Table 15. Number and Percent of Values Entered for Duration of Drug Use, Last Use Date, and Route of Usage by Drug and (Post-Implementation)

Drug	Data Element	Value	Number of Forms	Percent(%)
Amphetamines	Duration of Use	Entered	746	50.00
		Missing	3	0.20
		N/A	4	0.27
		Not Done	1	0.07
		Unknown	738	49.46
	Last Used	Entered	839	56.23
		Missing	4	0.27
		N/A	2	0.13
		Not Done	2	0.13
		Unknown	645	43.23
	Route	Ingested	145	9.72
		Inhaled	620	41.55
		Needles	254	17.02
		Unknown	473	31.70
	Duration of Use	Entered	831	43.76
		Missing	7	0.37
		N/A	13	0.68
		Not Done	3	0.16
		Unknown	1,045	55.03
	Last Used	Entered	950	50.03
		Missing	7	0.37
		N/A	4	0.21
		Not Done	2	0.11
		Unknown	936	49.29
		Ingested	113	5.95
		Inhaled	1,206	63.51

Cocaine				
	Route	Needles	100	5.27
		Unknown	480	25.28
Heroin	Duration of Use	Entered	502	59.48
		Missing	2	0.24
		N/A	3	0.36
		No Value Entered	1	0.12
		Unknown	336	39.81
	Last Used	Entered	376	44.55
		Missing	1	0.12
		Unknown	467	55.33
	Route	Ingested	26	3.08
		Inhaled	203	24.05
		Needles	459	54.38
		Unknown	156	18.48
Marijuana	Duration of Use	Entered	1,535	50.41
		Missing	7	0.23
		N/A	6	0.20
		Not Done	2	0.07
		Unknown	1,495	49.10
	Last Used	Entered	1,585	52.05
		Missing	5	0.16
		N/A	4	0.13
		Not Done	2	0.07
		Unknown	1,449	47.59
	Route	Ingested	121	3.97
		Inhaled	2,370	77.83
		Needles	2	0.07
		Unknown	552	18.13
		Entered	457	37.25
		Missing	2	0.16

Opioids	Duration of Use	N/A	5	0.41
		Unknown	763	62.18
	Last Used	Entered	733	59.74
		Missing	1	0.08
		Unknown	493	40.18
	Route	Ingested	344	28.04
		Inhaled	201	16.38
		Needles	129	10.51
		Unknown	553	45.07
Steroids	Duration of Use	Entered	37	47.44
		Missing	2	2.56
		N/A	2	2.56
		Unknown	37	47.44
	Last Used	Entered	27	34.62
		Unknown	51	65.38
	Route	Ingested	26	33.33
		Inhaled	4	5.13
		Needles	25	32.05
		Unknown	23	29.49

Note:
Responses shown for donors with known history of drug use

Figure 8 and Table 14 show the number and percent of values entered for the Continued Use in Last Six Months field for donors with a known history of drug use pre-implementation. Figure 9 and Table 15 show the number and percent of values entered for duration of drug use, last date of use, and route of use for donors with a known history of drug use post-implementation. For the Duration of Use field, donors with a history of using heroin had the highest percentage of available data entered (59.48%), while donors with a history of using opioids had the lowest percentage (37.25%). For the Last Date of Use field, donors with a history of using opioids had the highest percentage of available data entered (59.74%), while donors with a history of using steroids had the lowest percentage (34.62%).

***Data Element**: According to the OPTN policy in effect on the date of referral, does the donor have risk factors for blood-borne transmissions?*
***Change**: According to the OPTN policy in effect ~~on the date of referral,~~ does the donor have risk factors for blood-borne transmissions?*

Figure 10. Distribution of Values Entered for Risk Factors for Blood-Borne Transmissions fields by Era

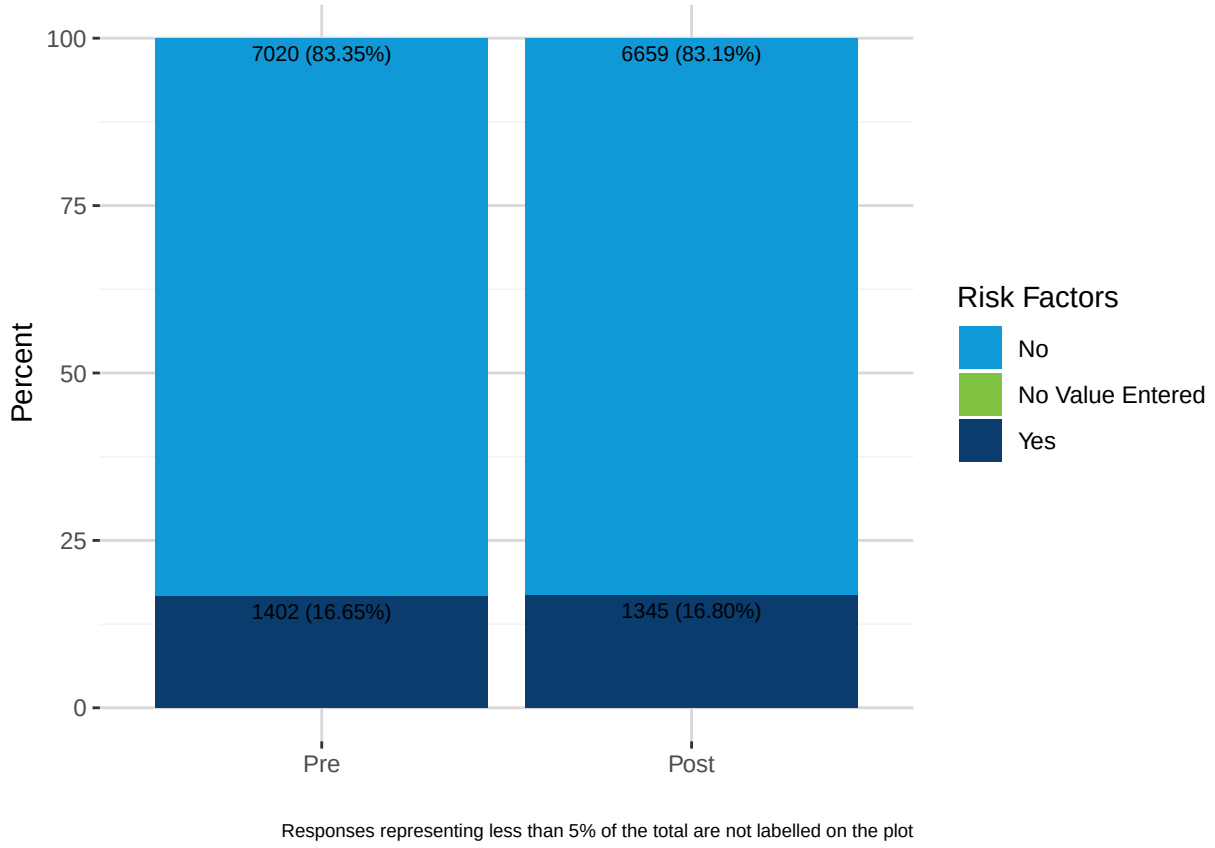


Table 16. Number and Percent of Values Entered for Risk Factors for Blood-Borne Transmissions fields by Era

Era	Risk Factors	Number of Fields	Percent(%)
Pre	No	7,020	83.35
	Yes	1,402	16.65
Post	No	6,659	83.19
	No Value Entered	1	0.01
	Yes	1,345	16.80

Figure 10 and Table 16 show the number and percent of values entered for Risk Factors of Blood-Borne Illness fields. 99.98% of forms post-implementation had a value of either "Yes" or "No" for the Risk Factors for Blood-Borne Transmissions field.

Organ Recovery

***Data Element**: For each organ disposition: If DCD, date/time organ recovered or removed from donor*
***Change**: Remove "If DCD" so this information is captured for both DCD and DBD donors on all organs.*

Figure 11. Distribution of Values Entered for Recovery Date field by Donor Type and Era

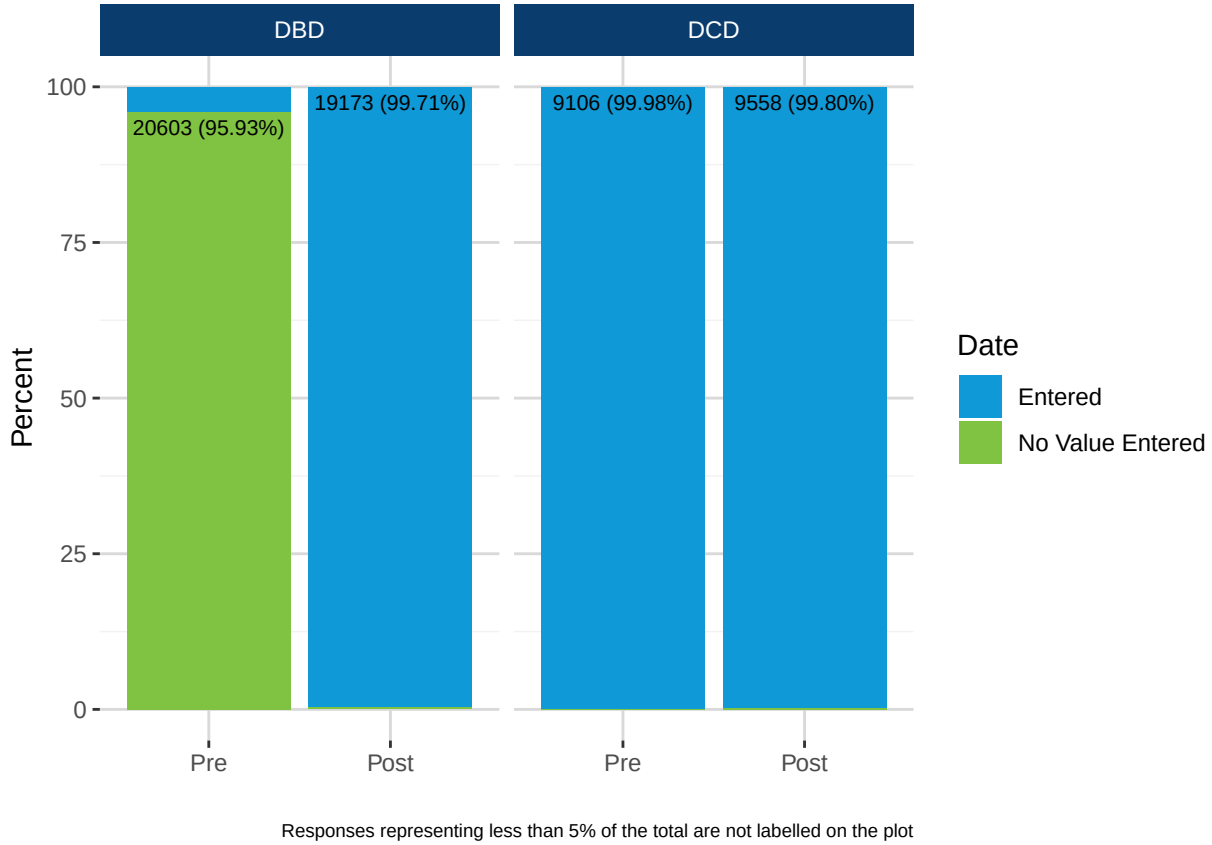


Table 17. Number and Percent of Values Entered for Recovery Date field by Donor Type and Era

Donor Type	Era	Recovery Date	Number of Fields	Percent(%)
DBD	Pre	Entered	874	4.07
		No Value Entered	20,603	95.93
	Post	Entered	19,173	99.71
		No Value Entered	55	0.29
DCD	Pre	Entered	9,106	99.98
		No Value Entered	2	0.02
	Post	Entered	9,558	99.80
		No Value Entered	19	0.20

Figure 11 and Table 17 show the number and percent of values entered for the Recovery Date field. Compared to the pre-policy era, the percent of Recovery Time values entered for DBD donors post-policy increased from 4.07% to 99.71%.

***Data Element**: Date and time of pronouncement of death*
***Change**: Previous location: Procurement and Authorization*

Current location: Organ Recovery – The procurement and authorization section is being modified to only collect information about authorization for donation.

Table 18. Number and Percent of Values Entered for Date and Time of Pronouncement of Death field by Era

Era	Pronouncement of Death	Number of Forms	Percent(%)
Pre	Entered	8,422	100
Post	Entered	8,005	100

Table 18 shows the number and percent of values entered for the Pronouncement of Death field. All forms in both the pre and post policy era had a value entered.

***Data Element**: If DCD donor, Controlled?*
***Change**: Remove option for an unknown response to "If Yes, controlled." The rationale is that OPOs will know whether it was a controlled or uncontrolled DCD and therefore the option of "unknown" is unnecessary.*

Figure 12. Distribution of Values Entered for Controlled field by Era (DCD Donors Only)

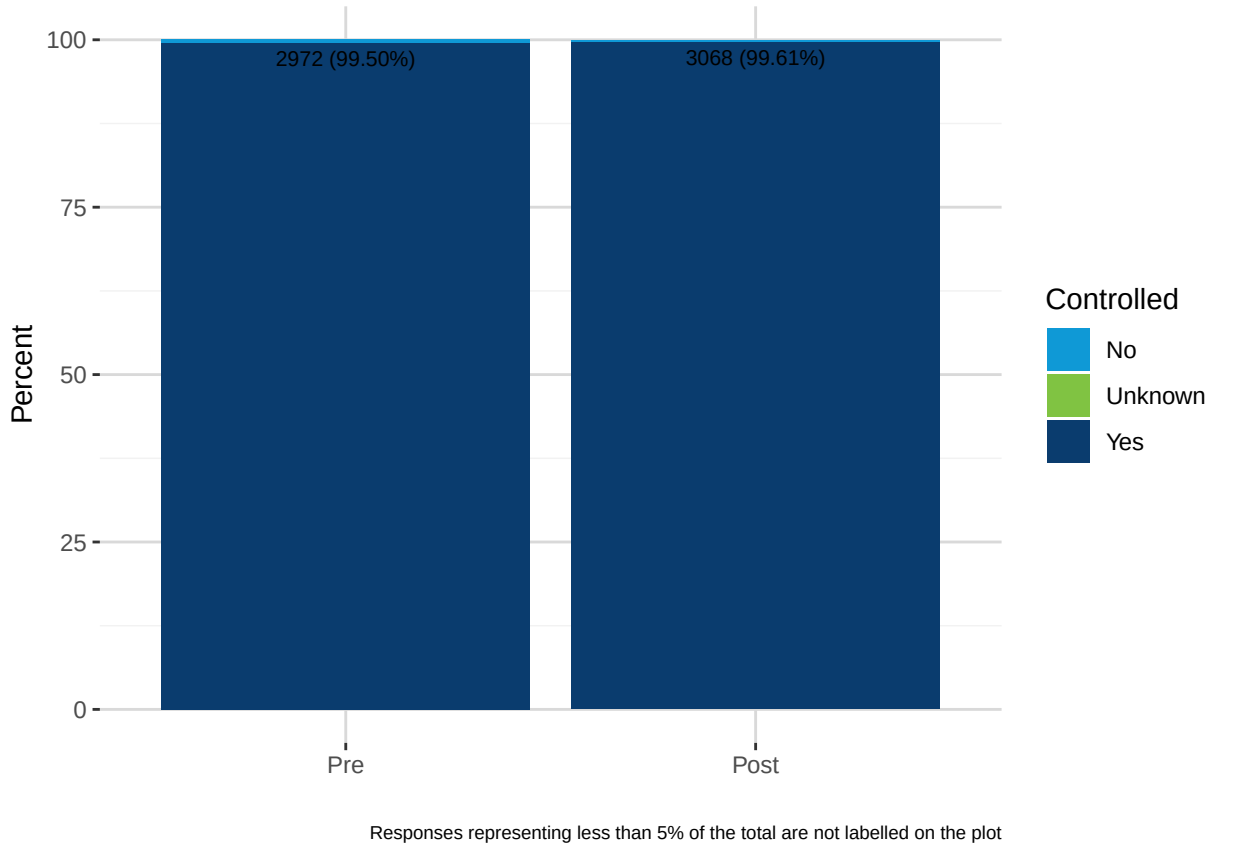


Table 19. Number and Percent of Values Entered for Controlled field by Era (DCD Donors Only)

Era	Controlled	Number of Forms	Percent(%)
Pre	No	14	0.47
	Unknown	1	0.03
	Yes	2,972	99.50
Post	No	12	0.39
	Yes	3,068	99.61

Figure 12 and Table 19 show the number and percent of values entered for the Controlled field for DCD donors. There were no "Unknown" entries for this field in the post-policy era.

***Data Element**: If Controlled DCD donor, Date/time agonal phase begins*
***Change**: Update the field as shown below:*
If Yes, Date and time agonal phase begins (systolic BP < 80mmHgor O2 sat. < 80% sustained).

Figure 13. Distribution of Values Entered for Agonal Phase Date and Time by Era (Controlled DCD Donors Only)

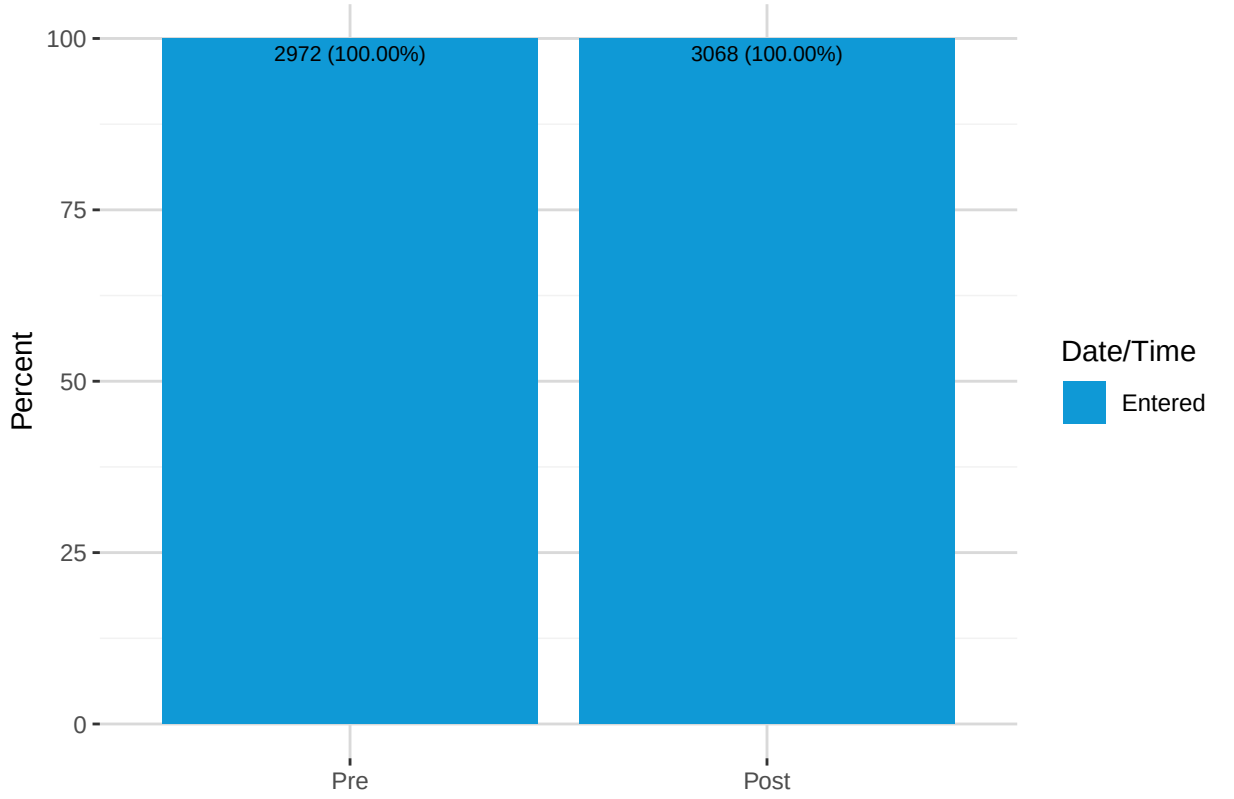


Table 20. Number and Percent of Values Entered for Agonal Phase Date and Time by Era (Controlled DCD Donors Only)

Era	Date/Time	Number of Forms	Percent(%)
Pre	Entered	2,972	100
Post	Entered	3,068	100

Figure 13 and Table 20 show the number and percent of values entered for the Agonal Phase Date/Time field for controlled DCD donors. Agonal Phase dates and times were entered for all controlled DCD donors both pre and post-implementation.

***Data Element**: Cardiac arrest since neurological event that led to declaration of brain death - If yes, duration of resuscitation*
***Change**: New location: Organ Recovery – The procurement and authorization section is being modified to only collect information about authorization for donation.*

Figure 14. Distribution of Values Entered for Cardiac Arrest Since Neurological Event field by Era

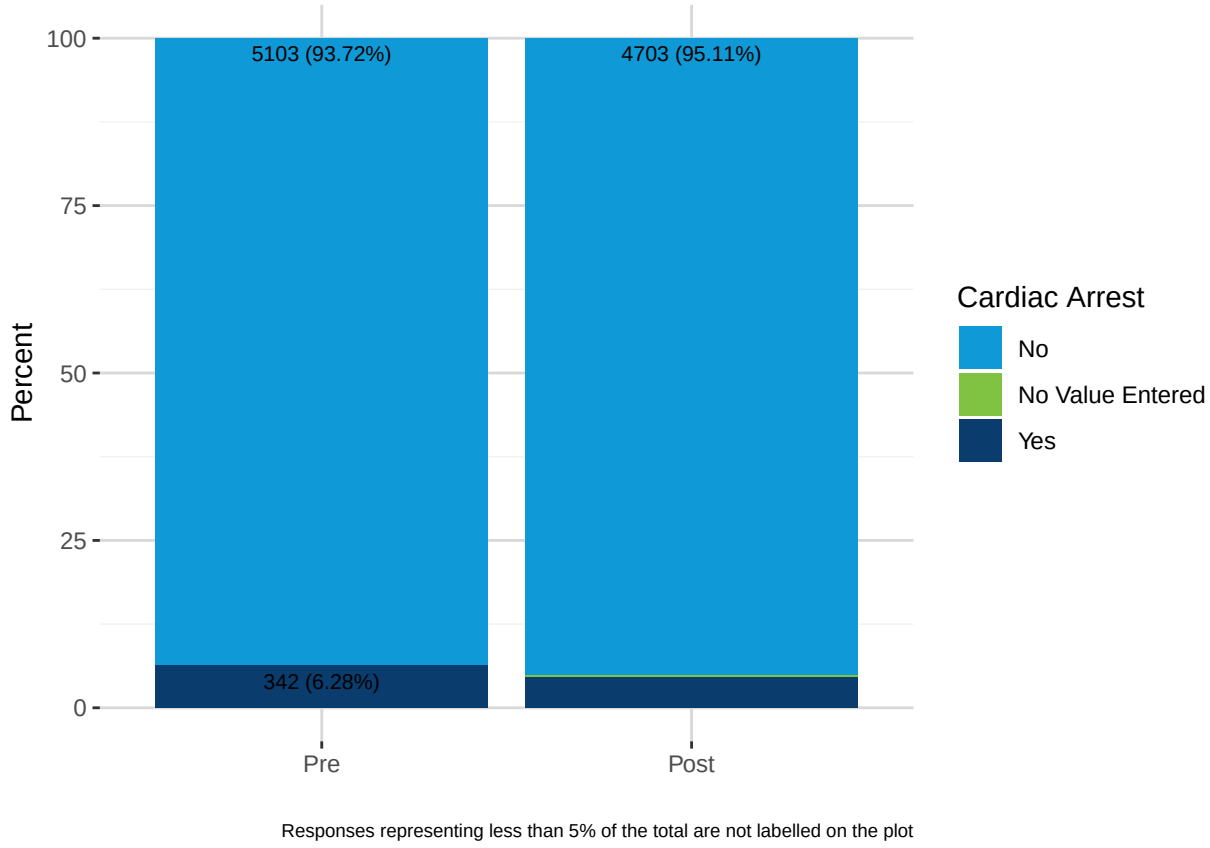


Table 22. Number and Percent of Values Entered for Cardiac Arrest Since Neurological Event field by Era

Era	Cardiac Arrest	Number of Forms	Percent(%)
Pre	No	5,103	93.72
	Yes	342	6.28
Post	No	4,703	95.11
	No Value Entered	20	0.40
	Yes	222	4.49

Table 23. Number and Percent of Values Entered for Cardiac Arrest Since Neurological Event - Duration of Resuscitation field by Era

Era	Duration of Resuscitation	Number of Forms	Percent(%)
Pre	Entered	178	52.05
	Missing	7	2.05
	Unknown	157	45.91
Post	Entered	163	73.42
	Missing	1	0.45
	Unknown	58	26.13

Figure 14, Table 22, and Table 23 show the number and percent of values entered for the Cardiac Arrest Since Neurological Event fields. The proportion of fields with no value entered to indicate whether or not a donor had cardiac arrest since a neurological event increased from 0% in the pre implementation period to 0.4% in the post implementation period. Of the forms that indicated that a donor had cardiac arrest, 73.42% of those forms in the post-policy era had an available value entered in the Duration of Resuscitation field, compared to 52.05% in the pre policy period.

***Data Element**: If DCD donor, core cooling used?*
***Change**: Remove "If DCD donor," so the core cooling information is collected on both donation after brain death (DBD) and DCD donors. Replace "core cooling" with "flush" which is more commonly used terminology.*

Figure 15. Distribution of Values Entered for Core Cooling Flush field by Donor Type and Era

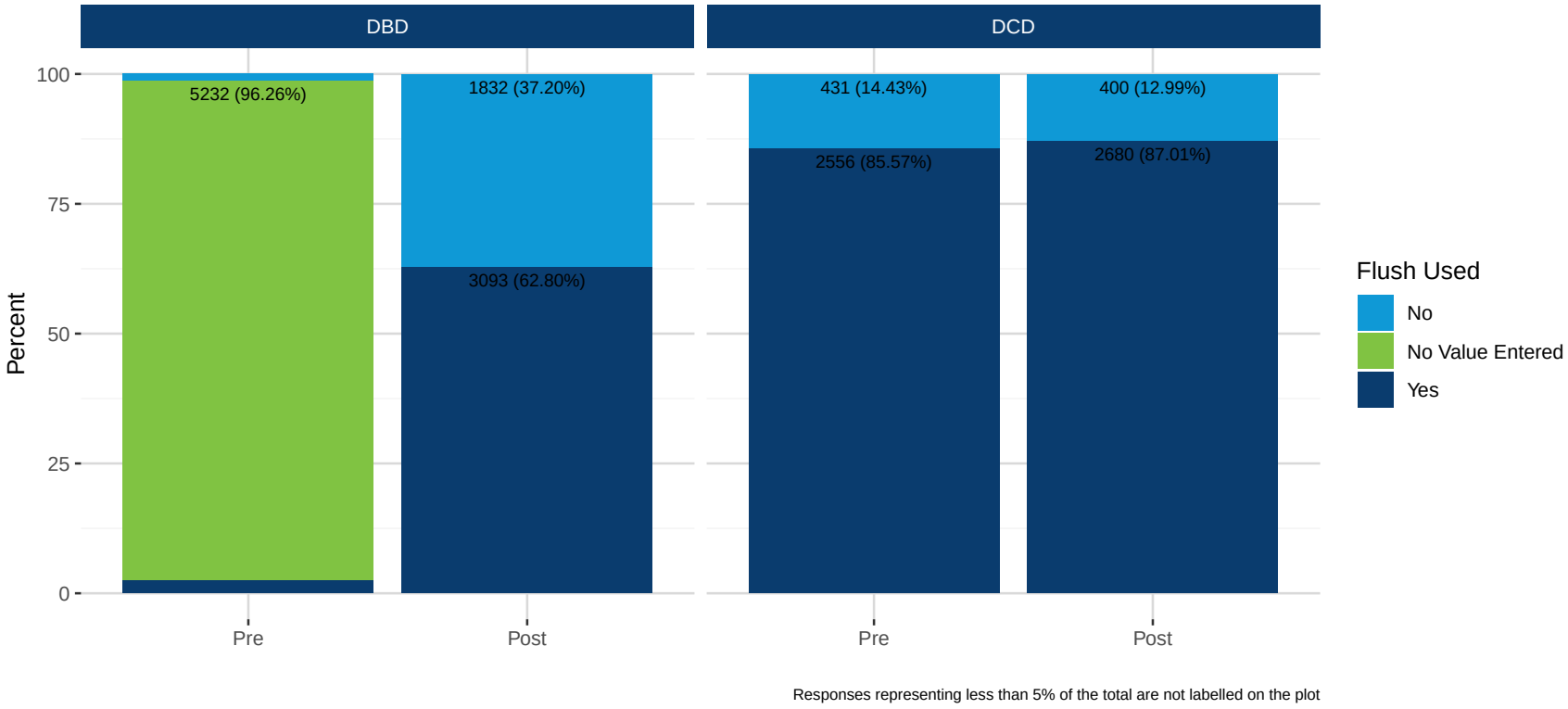


Table 24. Number and Percent of Values Entered for Core Cooling Flush field by Donor Type and Era

Donor Type	Era	Core Cooling Flush Used	Number of Forms	Percent(%)
DBD	Pre	No	70	1.29
		No Value Entered	5,232	96.26
		Yes	133	2.45
	Post	No	1,832	37.20
		Yes	3,093	62.80
DCD	Pre	No	431	14.43
		Yes	2,556	85.57
	Post	No	400	12.99
		Yes	2,680	87.01

Figure 15 and Table 24 show the number and percent of values entered for the Core Cooling Flush field for both DCD and DBD donors. All forms post-implementation had a value of either "Yes" or "No" entered for the Core Cooling Flush field.

***Data Element**: History of Myocardial Infarction (MI)*
***Change**: Add this data element to DonorNet so the information can cascade to the DDR.*

Figure 16. Distribution of Values Entered for History of Myocardial Infarction field by Era

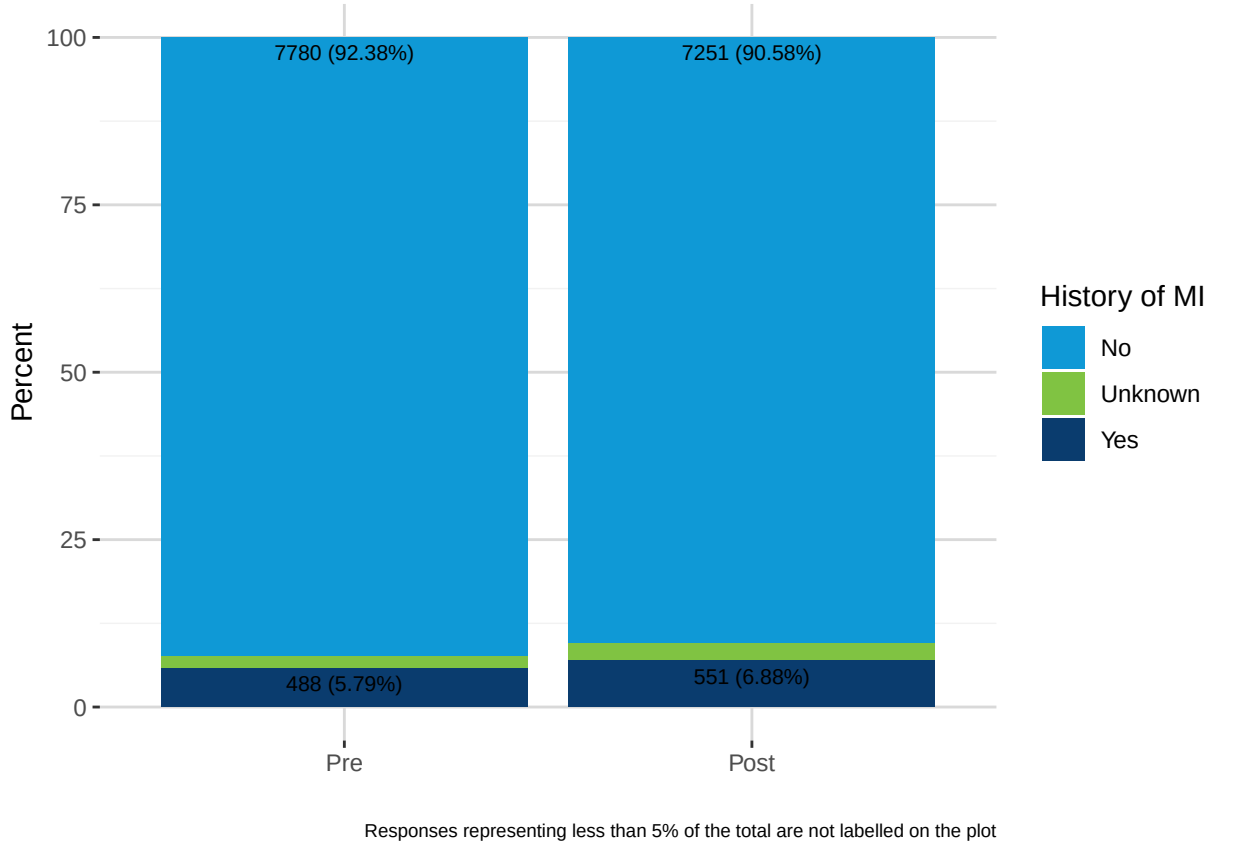


Table 25. Number and Percent of Values Entered for History of Myocardial Infarction field by Era

Era	History of MI	Number of Forms	Percent(%)
Pre	No	7,780	92.38
	Unknown	154	1.83
	Yes	488	5.79
Post	No	7,251	90.58
	Unknown	203	2.54
	Yes	551	6.88

Figure 16 and Table 25 show the number and percent of values entered for the History of Myocardial Infarction field. There was little change in the proportion of each value type entered from the pre-policy period to the post-policy period.

***Data Element**: LV ejection fraction (%) and method*
***Change**: Updated data definitions - Provide the left ventricular ejection fraction, if known. This should be the final measurement collected prior to the donor entering the operating room. If the left ventricular ejection fraction is unavailable, select the reason from the status (ST) drop-down list (N/A, Not Done, Missing, Unknown).This field is required.*

Method: Select the left ventricular ejection method from the drop-down list. If a value is entered for LV ejection fraction, this field is required. (List of LV Ejection Method codes)

- *Echo (echocardiogram)*
- *MUGA (multiple gated acquisition scan)*
- *Angiogram*

Table 26. Numer and Percent of Values Entered for LV Ejection fields by Era

Era	Fraction	Method	Number of Forms	Percent(%)
Pre	Entered	Angiogram	3	0.04
		Echo (echocardiogram)	241	2.86
	N/A	No Value Entered	5	0.06
	No Value Entered	No Value Entered	8,085	96.00
	Not Done	No Value Entered	86	1.02
	Unknown	No Value Entered	2	0.02
Post	Entered	Angiogram	28	0.35
		Echo (echocardiogram)	5,349	66.82
	Missing	No Value Entered	6	0.07
	N/A	No Value Entered	349	4.36
	Not Done	No Value Entered	2,248	28.08
	Unknown	No Value Entered	25	0.31

Table 26 shows the values entered for the LV Ejection Fraction and Method fields. Every form in the post-implementation era had either an available value entered, or an "N/A", "Not Done", "Missing", or "Unknown" entry from the drop-down list. Furthermore, the left ventricular ejection method used was indicated in every form in which an LV Ejection fraction was entered.

Data Element: *Coronary angiogram*
Change: *Previous: If the donor had a coronary angiogram, select Yes, Yes - normal or Yes - not normal from the list. If the donor did not have a coronary angiogram, select No. This field is required.*

Current:

- *No*
- *Yes, normal (no evidence of coronary artery disease)*
- *Yes, abnormal but non-obstructive (all stenosis determined to be < 70%)*
- *Yes, abnormal and obstructive (presence of any stenosis determined to be > 70%)*

Figure 17. Distribution of Values Entered for Coronary Angiogram field by Era

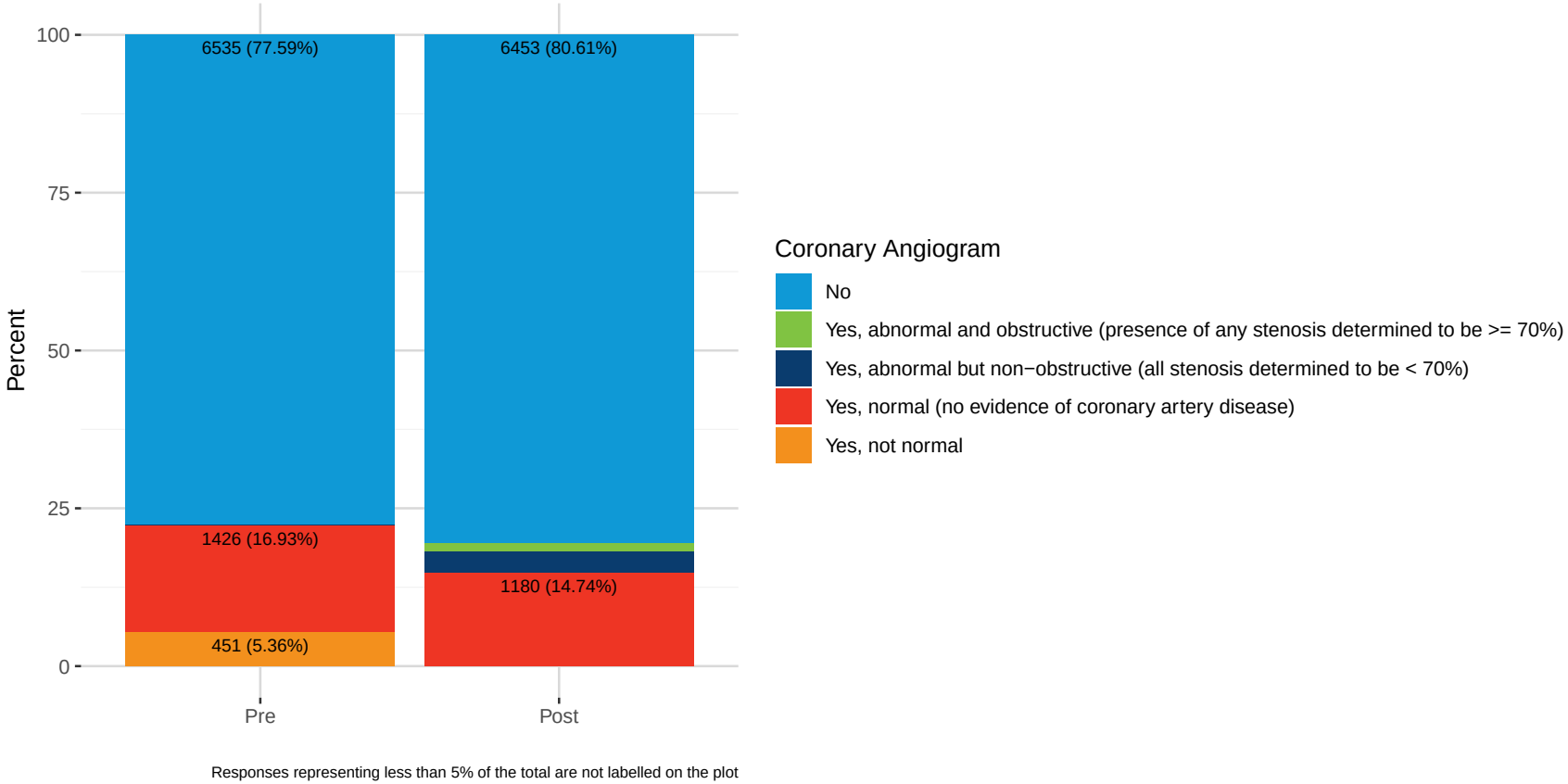


Table 27. Number and Percent of Values Entered for Coronary Angiogram field by Era

Era	Coronary Angiogram	Number of Forms	Percent(%)
Pre	No	6,535	77.59
	Yes, abnormal and obstructive (presence of any stenosis determined to be >= 70%)	1	0.01
	Yes, abnormal but non-obstructive (all stenosis determined to be < 70%)	9	0.11
	Yes, normal (no evidence of coronary artery disease)	1,426	16.93
	Yes, not normal	451	5.36
Post	No	6,453	80.61
	Yes, abnormal and obstructive (presence of any stenosis determined to be >= 70%)	97	1.21
	Yes, abnormal but non-obstructive (all stenosis determined to be < 70%)	275	3.44
	Yes, normal (no evidence of coronary artery disease)	1,180	14.74

Figure 17 and Table 27 show the number and percent of values entered for the Coronary Angiogram field. 5.36% of pre-policy forms had the value "Yes, not normal" entered, compared to 4.65% of post-policy forms with the value "Yes, abnormal but non-obstructive (all stenosis determined to be < 70%)" or "Yes, abnormal and obstructive (presence of any stenosis determined to be > 70%)" entered.

***Data Element**: Was a pulmonary artery catheter placed? If yes, initial and final preoperative measurements*
***Change**: Were advanced hemodynamic parameter data obtained? If yes, indicate the method (pulmonary artery catheter or minimally invasive monitoring) and report one set of measurements.*

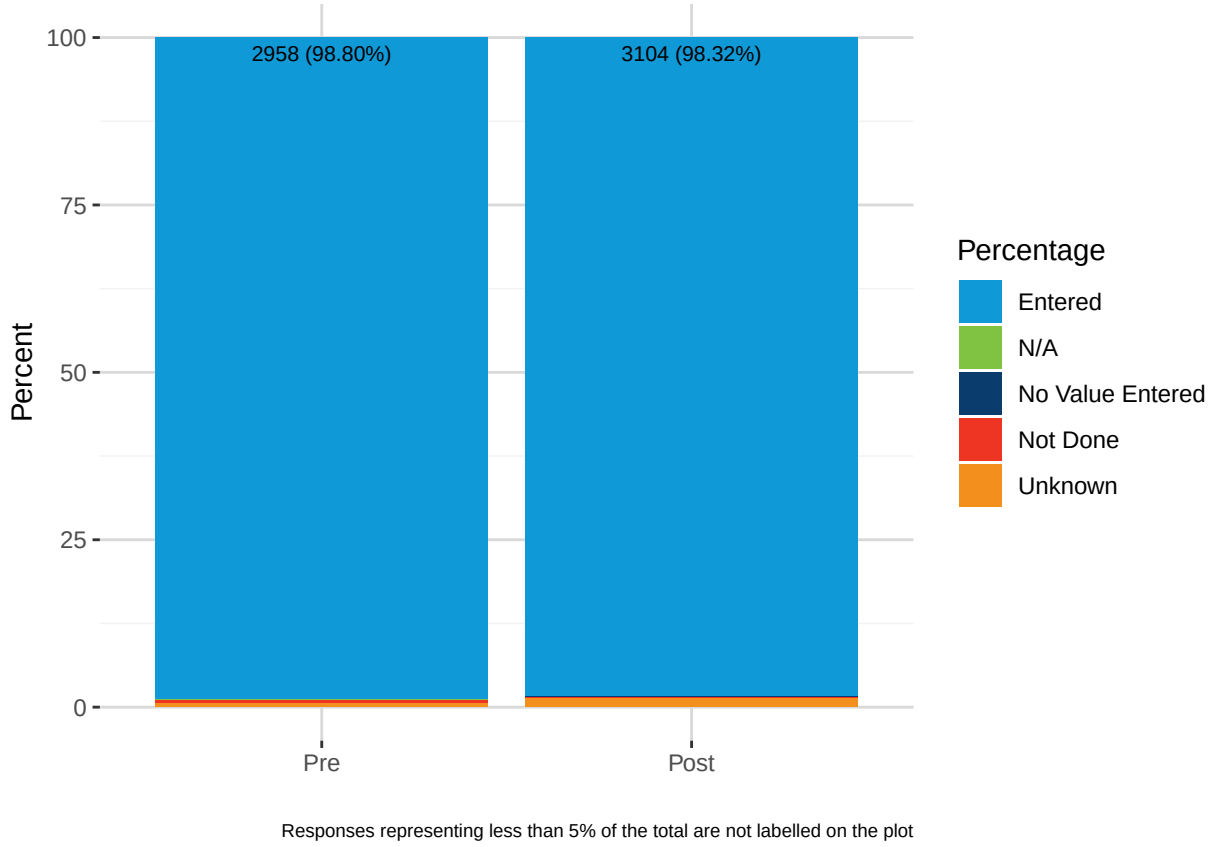
Table 28. Number and Percent of Values Entered for Advanced Hemodynamic Parameter Data and Method fields by Era

Era	Data Obtained	Method	Number of Forms	Percent(%)
Pre	No	No Value Entered	283	3.36
	No Value Entered	No Value Entered	8,130	96.53
	Yes	Minimally Invasive Monitoring	2	0.02
		Pulmonary Artery Catheter	7	0.08
Post	No	No Value Entered	7,100	88.69
	Yes	Minimally Invasive Monitoring	782	9.77
		Pulmonary Artery Catheter	123	1.54

Table 28 shows the number and percent of values entered for Advanced Hemodynamic Parameter fields. All forms post-implementation had a value of either "Yes" or "No" entered for the field indicating whether or not Advanced Hemodynamic Parameter data was obtained. Furthermore, all post-policy forms that indicated that Advanced Hemodynamic Parameter data was obtained also had the method used to obtain the data entered.

Data Element *: Liver Biopsy: % macro vesicular fat*
Change*: Align the terminology with the recent programming for the expedited placement of livers, which included the collection of macrosteatosis percentage, if available. This will remain an open numeric field in both DonorNet and the DDR.*

Figure 18. Distribution of Values Entered for Macrosteatosis Percentage field by Era (Biopsied Livers Only)



Responses representing less than 5% of the total are not labelled on the plot

Table 29. Number and Percent of Values Entered for Macrosteatosis Percentage field by Era (Biopsied Livers Only)

Era	Macrosteatosis Percentage	Number of Forms	Percent(%)
Pre	Entered	2,958	98.80
	N/A	5	0.17
	No Value Entered	1	0.03
	Not Done	13	0.43
	Unknown	17	0.57
Post	Entered	3,104	98.32
	N/A	4	0.13
	No Value Entered	1	0.03
	Not Done	7	0.22
	Unknown	41	1.30

Figure 18 and Table 29 show the number and percent of values entered for the Macrosteatosis Percentage field for biopsied livers. There was very little change in the proportion of each value type entered from the pre-policy period to the post-policy period.

***Data Element**: Lung (right and left) bronchoscopy*
***Change**:*

- *No Bronchoscopy*
- *Bronchoscopy Results normal*
- *Bronchoscopy Results, Abnormal-other*
- *Bronchoscopy Results, Abnormal-purulent secretions*
- *Bronchoscopy Results, Abnormal-aspiration of foreign body*
- *Bronchoscopy Results, Abnormal-blood*
- *Bronchoscopy Results, Abnormal-anatomy/other lesion*
- *Bronchoscopy Results, Unknown*
- *~~Unknown if bronchoscopy performed~~*

Update data definitions, as shown below, to specify that when multiple bronchoscopies are performed, enter the last results prior to the donor entering the operating room.

If a lung was recovered or transplanted, select the results of the bronchoscopy procedure from the drop-down list. If multiple bronchoscopies are performed, enter the results from the last bronchoscopy performed prior to the donor entering the operating room. If the results were abnormal, select Abnormal with the type of abnormality. If a bronchoscopy was not performed, select No Bronchoscopy. ~~If unknown, select Unknown if bronchoscopy performed.~~ This field is required.

Figure 19. Distribution of Values Entered for Right and Left Lung Bronchoscopy fields by Era (Lung Donors Only)

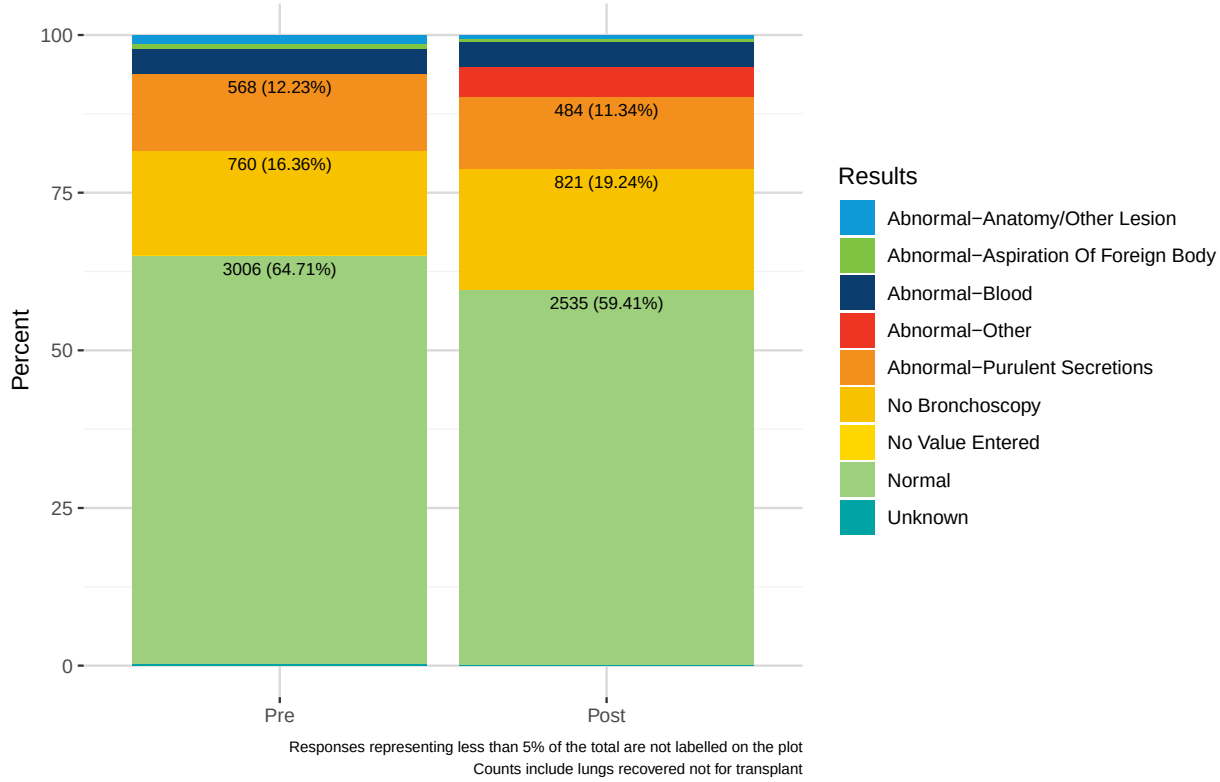


Table 30. Number and Percent of Values Entered for Right and Left Lung Bronchoscopy fields by Era (Lung Donors Only)

Era	Bronchoscopy Results	Number of Fields	Percent(%)
Pre	Abnormal-Anatomy/Other Lesion	72	1.55
	Abnormal-Aspiration Of Foreign Body	30	0.65
	Abnormal-Blood	189	4.07
	Abnormal-Purulent Secretions	568	12.23
	No Bronchoscopy	760	16.36
	No Value Entered	11	0.24
	Normal	3,006	64.71
	Unknown	9	0.19
Post	Abnormal-Anatomy/Other Lesion	31	0.73
	Abnormal-Aspiration Of Foreign Body	16	0.37
	Abnormal-Blood	173	4.05
	Abnormal-Other	204	4.78
	Abnormal-Purulent Secretions	484	11.34
	No Bronchoscopy	821	19.24
	Normal	2,535	59.41
	Unknown	3	0.07

Note:
Counts include lungs recovered not for transplant

Figure 19 and Table 30 show the number and percent of values entered for Right and Left Lung Bronchoscopy fields. There was a decrease in the percent of fields with "Unknown" entered in the post-policy era (0.07%) compared to the percent of fields with "Unknown" entered in the pre-policy period (0.19%).

***Data Element**: Lung machine perfusion intended or performed*
***Change**: Lung machine perfusion ~~intended or~~ performed.*

Figure 20. Distribution of Values Entered for Lung Perfusion field by Era (Lung Donors Only)

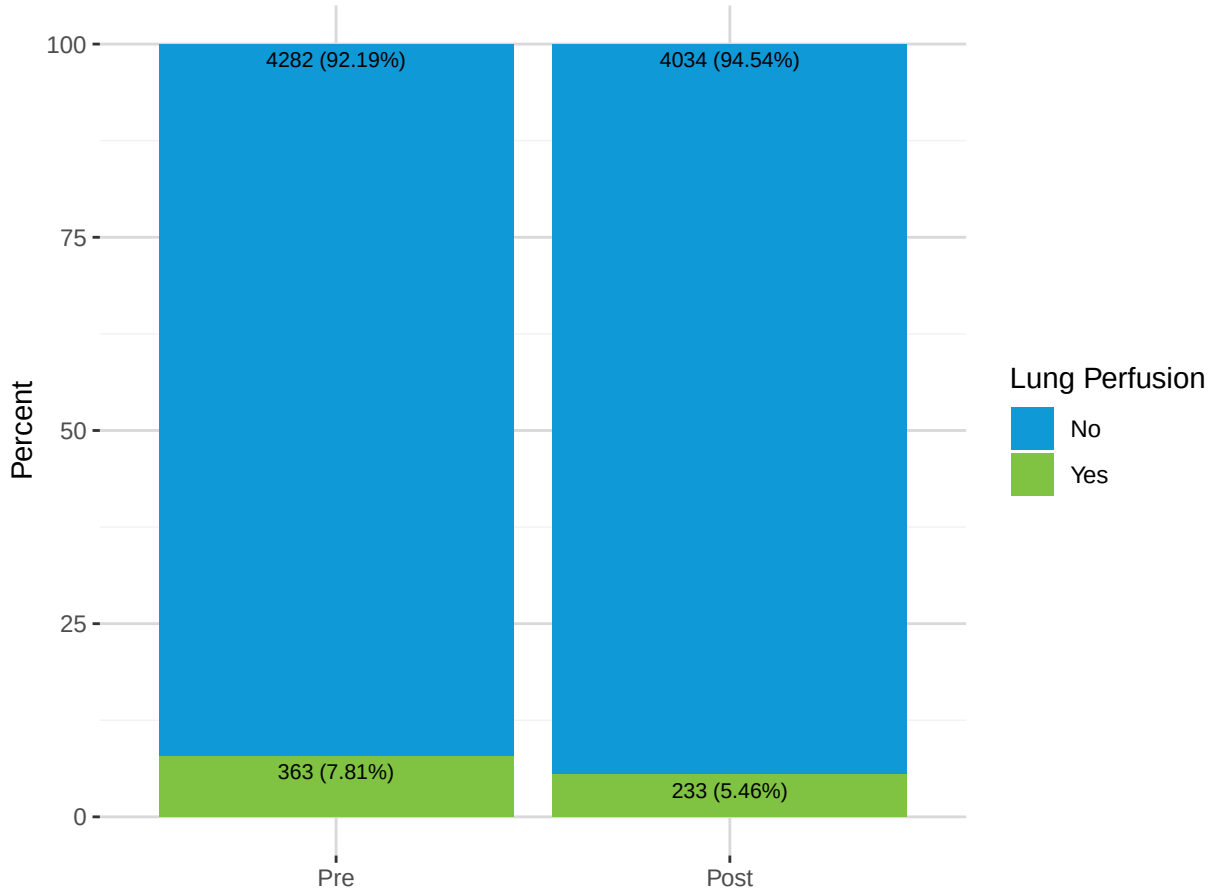


Table 31. Number and Percent of Values Entered for Lung Perfusion field by Era (Lung Donors Only)

Era	Lung Perfusion	Number of Fields	Percent(%)
Pre	No	4,282	92.19
	Yes	363	7.81
Post	No	4,034	94.54
	Yes	233	5.46

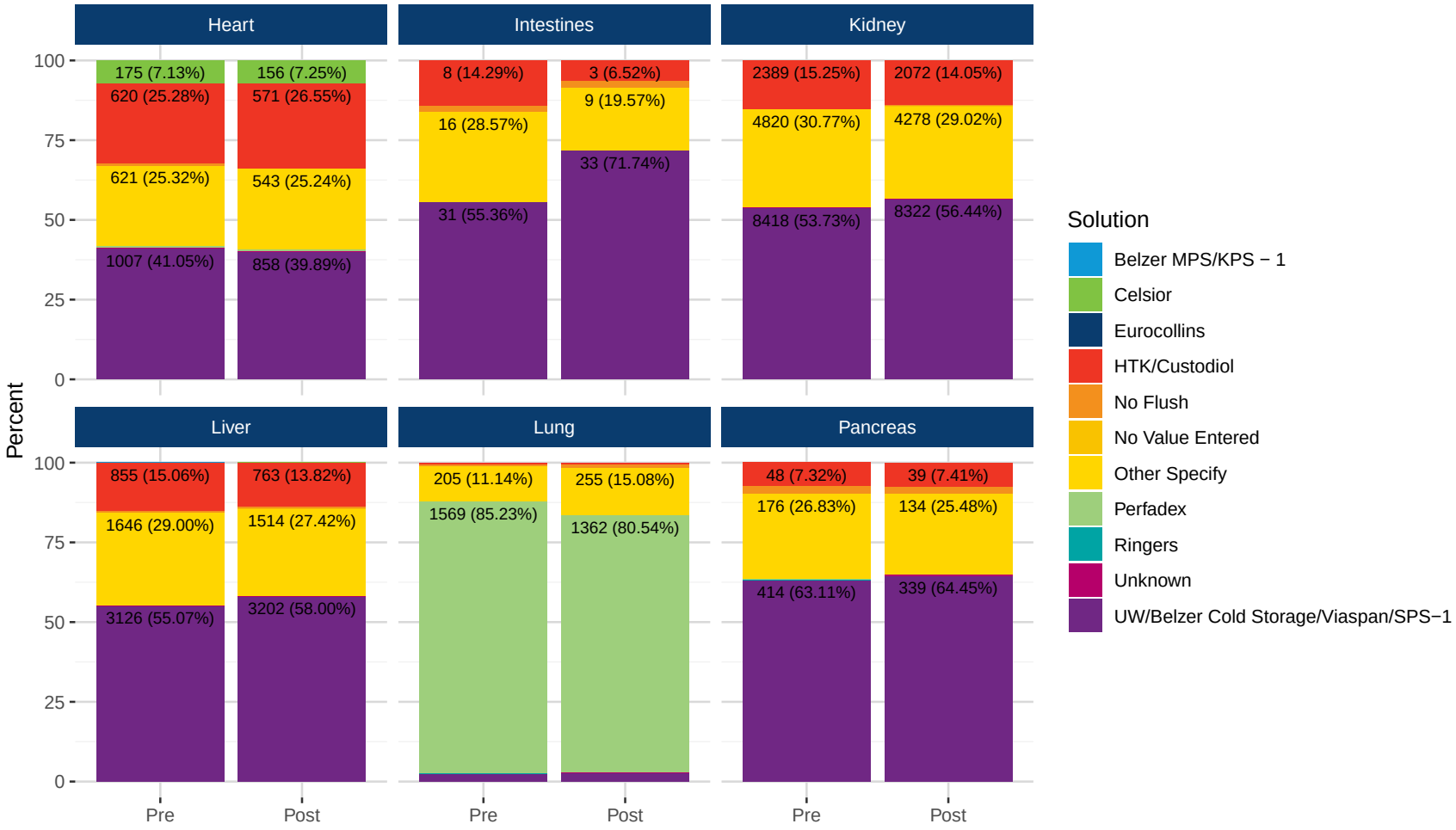
Note:
Counts include lungs recovered not for transplant

Figure 20 and Table 31 show the number and percent of values entered for the Lung Perfusion field. There was little change in the proportion of each value type entered from the pre-policy period to the post-policy period.

Organ Disposition

***Data Element**: Initial flush solution and volume*
***Change**: Initial flush solution ~~and volume~~*

Figure 21. Distribution of Values Entered for Initial Flush Solution field by Organ and Era



Responses representing less than 5% of the total are not labelled on the plot

Table 32. Number and Percent of Values Entered for Initial Flush Solution field by Organ and Era

Organ	Era	Initial Flush Solution	Number of Fields	Percent(%)
Heart	Pre	Belzer MPS/KPS - 1	1	0.04
		Celsior	175	7.13
		HTK/Custodiol	620	25.28
		No Flush	14	0.57
		Other Specify	621	25.32
		Perfadex	14	0.57
		UW/Belzer Cold Storage/Viaspan/SPS-1	1,007	41.05
		Unknown	1	0.04
	Post	Belzer MPS/KPS - 1	1	0.05
		Celsior	156	7.25
		HTK/Custodiol	571	26.55
		No Flush	4	0.19
		Other Specify	543	25.24
		Perfadex	16	0.74
		UW/Belzer Cold Storage/Viaspan/SPS-1	858	39.89
		Unknown	2	0.09
Intestines	Pre	HTK/Custodiol	8	14.29
		No Flush	1	1.79
		Other Specify	16	28.57
		UW/Belzer Cold Storage/Viaspan/SPS-1	31	55.36
	Post	HTK/Custodiol	3	6.52
		No Flush	1	2.17
		Other Specify	9	19.57
		UW/Belzer Cold Storage/Viaspan/SPS-1	33	71.74
		Belzer MPS/KPS - 1	4	0.03
		Celsior	2	0.01
		Eurocollins	1	0.01

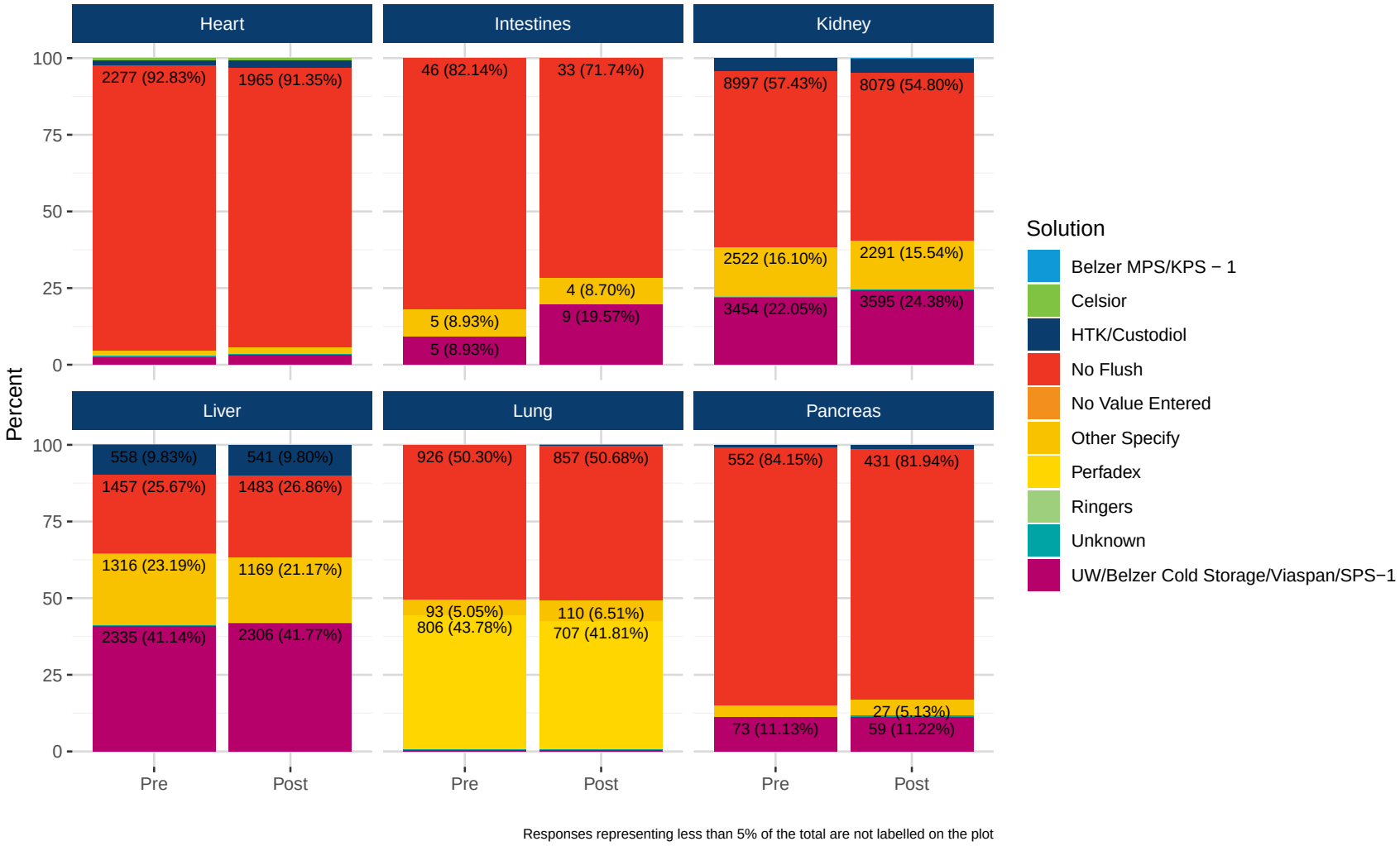
	Pre	HTK/Custodiol	2,389	15.25
		No Flush	20	0.13
		Other Specify	4,820	30.77
		Perfadex	4	0.03
		Ringers	8	0.05
		UW/Belzer Cold Storage/Viaspan/SPS-1	8,418	53.73
		Unknown	1	0.01
Kidney	Post	Belzer MPS/KPS - 1	7	0.05
		Celsior	4	0.03
		HTK/Custodiol	2,072	14.05
		No Flush	46	0.31
		No Value Entered	5	0.03
		Other Specify	4,278	29.02
		Ringers	9	0.06
		UW/Belzer Cold Storage/Viaspan/SPS-1	8,322	56.44
		Unknown	1	0.01
	Pre	Belzer MPS/KPS - 1	1	0.02
		HTK/Custodiol	855	15.06
		No Flush	39	0.69
		No Value Entered	1	0.02
		Other Specify	1,646	29.00
		Perfadex	2	0.04
		Ringers	3	0.05
		UW/Belzer Cold Storage/Viaspan/SPS-1	3,126	55.07
		Unknown	3	0.05
	Post	Celsior	2	0.04
		HTK/Custodiol	763	13.82
		No Flush	35	0.63
		No Value Entered	2	0.04
		Other Specify	1,514	27.42

Liver				
	Post			
		UW/Belzer Cold Storage/Viaspan/SPS-1	3,202	58.00
		Unknown	3	0.05
Lung	Pre	Celsior	1	0.05
		HTK/Custodiol	10	0.54
		No Flush	9	0.49
		No Value Entered	1	0.05
		Other Specify	205	11.14
		Perfadex	1,569	85.23
		Ringers	2	0.11
		UW/Belzer Cold Storage/Viaspan/SPS-1	44	2.39
	Post	HTK/Custodiol	12	0.71
		No Flush	14	0.83
		Other Specify	255	15.08
		Perfadex	1,362	80.54
		UW/Belzer Cold Storage/Viaspan/SPS-1	46	2.72
		Unknown	2	0.12
Pancreas	Pre	HTK/Custodiol	48	7.32
		No Flush	16	2.44
		Other Specify	176	26.83
		Perfadex	1	0.15
		Ringers	1	0.15
		UW/Belzer Cold Storage/Viaspan/SPS-1	414	63.11
	Post	Belzer MPS/KPS - 1	1	0.19
		HTK/Custodiol	39	7.41
		No Flush	11	2.09
		Other Specify	134	25.48
		UW/Belzer Cold Storage/Viaspan/SPS-1	339	64.45
		Unknown	2	0.38

Figure 21 and Table 32 show the number and percent of values entered for the Initial Flush Solution field. There was little change in the proportion of each flush solution used for each organ from the pre-policy period to the post-policy period.

***Data Element**: Back table flush solution and volume*
***Change**: Back table flush solution ~~and volume~~*

Figure 22. Distribution of Values Entered for Back Table Flush Solution field by Organ and Era



Responses representing less than 5% of the total are not labelled on the plot

Table 33. Number and Percent of Values Entered for Back Table Flush Solution field by Organ and Era

Organ	Era	Back Table Flush Solution	Number of Fields	Percent(%)
Heart	Pre	Belzer MPS/KPS - 1	1	0.04
		Celsior	18	0.73
		HTK/Custodiol	43	1.75
		No Flush	2,277	92.83
		Other Specify	36	1.47
		Perfadex	4	0.16
		UW/Belzer Cold Storage/Viaspan/SPS-1	64	2.61
		Unknown	10	0.41
	Post	Celsior	19	0.88
		HTK/Custodiol	48	2.23
		No Flush	1,965	91.35
		Other Specify	42	1.95
		UW/Belzer Cold Storage/Viaspan/SPS-1	72	3.35
		Unknown	5	0.23
Intestines	Pre	No Flush	46	82.14
		Other Specify	5	8.93
		UW/Belzer Cold Storage/Viaspan/SPS-1	5	8.93
	Post	No Flush	33	71.74
		Other Specify	4	8.70
		UW/Belzer Cold Storage/Viaspan/SPS-1	9	19.57
Kidney	Pre	Belzer MPS/KPS - 1	24	0.15
		HTK/Custodiol	636	4.06
		No Flush	8,997	57.43
		Other Specify	2,522	16.10
		Ringers	26	0.17
		UW/Belzer Cold Storage/Viaspan/SPS-1	3,454	22.05
		Unknown	8	0.05

Kidney	Post	Belzer MPS/KPS - 1	30	0.20
		Celsior	2	0.01
		HTK/Custodiol	677	4.59
		No Flush	8,079	54.80
		No Value Entered	5	0.03
		Other Specify	2,291	15.54
		Ringers	60	0.41
		UW/Belzer Cold Storage/Viaspan/SPS-1	3,595	24.38
		Unknown	5	0.03
	Pre	Belzer MPS/KPS - 1	2	0.04
		HTK/Custodiol	558	9.83
		No Flush	1,457	25.67
		No Value Entered	1	0.02
		Other Specify	1,316	23.19
		Perfadex	1	0.02
		Ringers	2	0.04
		UW/Belzer Cold Storage/Viaspan/SPS-1	2,335	41.14
		Unknown	4	0.07
Liver	Post	Belzer MPS/KPS - 1	6	0.11
		Celsior	1	0.02
		HTK/Custodiol	541	9.80
		No Flush	1,483	26.86
		No Value Entered	2	0.04
		Other Specify	1,169	21.17
		Perfadex	1	0.02
		Ringers	3	0.05
		UW/Belzer Cold Storage/Viaspan/SPS-1	2,306	41.77
		Unknown	9	0.16
		Celsior	1	0.05
		HTK/Custodiol	2	0.11

Lung	Pre	No Flush	926	50.30
		No Value Entered	1	0.05
		Other Specify	93	5.05
		Perfadex	806	43.78
		UW/Belzer Cold Storage/Viaspan/SPS-1	10	0.54
		Unknown	2	0.11
	Post	Celsior	1	0.06
		HTK/Custodiol	4	0.24
		No Flush	857	50.68
		Other Specify	110	6.51
		Perfadex	707	41.81
		Ringers	2	0.12
		UW/Belzer Cold Storage/Viaspan/SPS-1	8	0.47
		Unknown	2	0.12
Pancreas	Pre	HTK/Custodiol	6	0.91
		No Flush	552	84.15
		Other Specify	25	3.81
		UW/Belzer Cold Storage/Viaspan/SPS-1	73	11.13
	Post	HTK/Custodiol	7	1.33
		No Flush	431	81.94
		Other Specify	27	5.13
		UW/Belzer Cold Storage/Viaspan/SPS-1	59	11.22
		Unknown	2	0.38

Figure 22 and Table 33 show the number and percent of values entered for the Back Table Flush Solution field. There was little change in the proportion of each flush solution used for each organ from the pre-policy period to the post-policy period.

Conclusion

In the post-policy period, OPOs utilized the "Unknown" entry option for donor address fields, leading to a reduction in the proportion of forms where no value was entered for the Zip Code field. Furthermore, all forms in the post-policy period had a value entered for the Donor Weight, Pronouncement of Death Date, and Agonal Phase Date/Time fields. Compared to the pre-policy era, the proportion of "Unknown" entries for the Inotropic Medications field increased for DCD donors in the post-policy era. There was also a substantial increase in the proportion of forms with a Recovery Date entered for DBD donors post-implementation. Forms with no value entered for the Core Cooling Flush field decreased significantly from the pre-policy period to the post-policy period for DBD donors. There were no "Unknown" entries for the Controlled field in the post-policy era. The proportion of forms in which the Cardiac Arrest Since Neurological Event field had no value entered increased post-implementation. The proportion of each value type entered remained fairly constant in the pre and post-policy periods for the Risk Factors for Blood-Borne Transmissions, Controlled, History of Myocardial Infarction, Macrosteatosis Percentage, and Lung Perfusion fields.