COVID-19 Guide

Adjustments to Transplant Program and OPO Evaluation Metrics

The Scientific Registry of Transplant Recipients (SRTR), under contract from the Health Resources and Services Administration (HRSA), is charged with evaluating the performance of the nation's transplant system through publication of semi-annual transplant program-specific reports (PSRs) and organ procurement organization (OPO)-specific reports (OSRs). These reports contain performance metrics covering various time periods. For OPOs, these metrics include deceased donor organ yield. For transplant programs, they include pre-transplant mortality rates (formerly called waitlist mortality rates), transplant rates, organ offer acceptance rates, patient mortality after listing, and 1-month, 90-day, 1-year, 1-year conditional on 90-day, and 3-year posttransplant outcomes including graft survival and patient survival.

In response to the current global pandemic, SRTR modified the evaluation metrics for transplant programs and OPOs for the reports released in January 2021, July 2021, January 2022, July 2022, January 2023, July 2023, January 2024, July 2024, January 2025 and July 2025. These reports made adjustments to transplant program and OPO performance metrics so that data during the time around the declaration of a national public health emergency on March 13, 2020, were not included in the metrics.

Modifications for the January 2026 reporting cycle were considered at the Analytic Methods Subcommittee of the SRTR Review Committee (SRC) at its meeting on March 24, 2021, and the full SRC meetings April 27, 2021 and on January 11, 2022. Both the Analytic Methods Subcommittee and the full SRC recommended an ongoing carve out of the first quarter of the pandemic (March 13, 2020 through June 12, 2020) from adjusted performance metrics, as detailed below. These recommendations were reviewed by HRSA's Division of Transplantation, which oversees SRTR. HRSA approved these recommendations, which SRTR will implement for the January 2026 reporting cycle:

Posttransplant Outcomes (including 1-month, 90-day, 1-year, 1-year conditional on 90-day, and 3-year graft and patient survival): Evaluation cohorts will exclude transplants performed between March 13, 2020 and June 12, 2020, inclusive of March 13 and June 12. Patients given transplants before March 13, 2020 will have follow-up censored on March 12, 2020. Patients given transplants after June 12, 2020 will resume normal follow-up. Follow-up will not resume for patients given transplants before March 13, 2020 who are alive with function on June 12, 2020; however, this may be reconsidered as SRTR continues to explore moving to a period-prevalent methodology:

1-month, 90-day, 1-year & 1-year conditional on 90-day Patient and Graft Survival Evaluations: Transplants 7/1/2022-12/31/2024, follow-up through 6/30/2025.

3-year Patient and Graft Survival Evaluations: Transplants 1/1/2020-3/12/2020, follow-up through 3/12/2020. Transplants 6/13/2020-6/30/2022; follow-up through 6/30/2025.

Pre-Transplant Mortality Rate (formerly called Waitlist Mortality Rate): These evaluations are based on normal reporting cohorts.

Days after listing (and before transplant) between 7/1/2023 and 6/30/2025.

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Transplant Rate: These evaluations are based on normal reporting cohorts.

Candidates on the waitlist 7/1/2023-6/30/2025.

Overall Rate of Mortality After Listing: These evaluations are based on normal reporting cohorts.

Evaluation period: 7/1/2023-6/30/2025.

Offer Acceptance Rate: These evaluations are based on normal reporting cohorts.

Offers received 7/1/2024-6/30/2025.

These decisions will apply to the evaluations released in the SRTR's semi-annual program-specific reports scheduled for release on January 6, 2026. These changes have been communicated to the leadership of the Organ Procurement and Transplantation Network's (OPTN) Membership and Professional Standards Committee (MSPC).

As with the July 2025 reports, SRTR will continue to report descriptive data beyond March 12, 2020, e.g., waitlist counts, transplant counts, recipient characteristics, donor counts, donor characteristics, etc., but will alter data for performance evaluation metrics as described above.

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This report contains a wide range of useful information about the heart transplant program at UPMC Children's Hospital of Pittsburgh. The report has three main sections:

A. Program Summary
B. Waiting List Information
C. Transplant Information

The Program Summary is a one-page summary highlighting characteristics of the program, including the number of candidates on the waiting list, the number of transplants performed at the program, the number of patients being cared for by the program, and patient outcomes, including outcomes while on the waiting list (the transplant rate and the death rate while on the waiting list) and outcomes after transplant (patient and graft survival probabilities). If the program performed transplants in both adults and children, survival probabilities for adults and children (pediatrics) are provided separately. For each of the outcomes measures presented, a comparison is provided showing what would be expected at this program if it were performing as similar programs around the country perform when treating similar patients. More details regarding these outcome measures are provided in Sections B and C of the report.

The Waiting List Information section contains more detailed information on how many candidates are on the waiting list at the program, the types of candidates on the waiting list, how long candidates typically have to wait for a transplant at this program, how frequently candidates successfully receive a transplant, and how often candidates on the waiting list die before receiving a transplant.

Table B1 shows the activity on this program's waiting list during two recent 1-year periods and provides comparisons to all programs within this program's OPTN region (see http://optn.transplant.hrsa.gov/members/regions.asp for information on OPTN regions) and the nation as a whole. Tables B2 and B3 describe the candidates on the waiting list at this program, with comparisons to candidates waiting in the same donor service area (OPO/DSA) the OPTN region, and the nation as a whole.

Table B4 shows how many candidates were removed from the waiting list because they received a transplant. The program's transplant rate is calculated as the number of candidates who received a transplant divided by the person-years observed at the program (person-years is a combination of how many candidates were on the waiting list along with how long each candidate was followed since some candidates are not on the waiting list for the entire year). The transplant rate and comparisons to what would be expected at this program are presented in Figures B1 and B2. Figure B1 shows the transplant rate compared to what was expected at this program. The expected transplant rate is an estimate of what we would expect at this program if it were performing transplants at rates similar to other programs in the US with similar candidates on their waiting lists. The expected rate is only an estimate, and is made with a certain level of uncertainty. This uncertainty is shown in Figure B2. Figure B2 displays the ratio of the observed to the expected transplant rate. A ratio of 1 indicates that the observed transplant rate was equal to the expected transplant rate, while a ratio less than 1 indicates the observed rate was lower than expected rate and a ratio greater than 1 indicates the observed rate was higher than the expected rate. However, the level of uncertainty must be considered when interpreting these numbers. The 95% interval is also shown on Figure B2. This interval provides a range within which the true ratio of observed to expected transplant rates is likely to be. If this

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confidence interval includes (crosses) 1.0, then we cannot say that this program's observed transplant rate is different from what would be expected. The observed deceased donor transplant rate at this program was 96.8 per 100 person-years. Transplant rates are also provided for adult and pediatric patients separately along with comparisons to adult and pediatric rates in the DSA, the OPTN region, and the nation. Please refer to the PSR Technical Methods documentation available at http://www.srtr.org for more detail regarding how expected rates are calculated.

The pre-transplant mortality rate (previously called the waiting list mortality rate) for candidates on the waiting list is presented in Table B5 and Figures B4-B6. These data are presented in the same way as the transplant rate data in the previous section. The intent of this table and figures is to describe risk of death once candidates are listed rather than while they are listed, but before they are transplanted. Therefore, time at risk and deaths after removal from the waiting list for reasons other than transplant, transfer to another transplant program, or recovery (no longer needing a transplant), and before any subsequent transplant, are included. As with transplant rates, mortality rates should be interpreted carefully taking into consideration the interval displayed in Figure B5. For a complete description of how observed and expected mortality rates are calculated, please refer to the technical documentation available at http://www.srtr.org.

Survival from listing is presented in Table B6 and Figures B7-B9. These data are presented in the same way as the pre-transplant mortality rate data in the previous section. The intent of this table and figures is to describe risk of death once candidates are listed rather than while they are listed, including after a transplant. As with transplant rates, mortality rates should be interpreted carefully taking into consideration the interval displayed in Figure B8. For a complete description of how observed and expected mortality rates are calculated, please refer to the technical documentation available at http://www.srtr.org.

Table B7 presents information on what happens to candidates on the waiting list by three different time points after listing: 6 months, 12 months, and 18 months. The table displays percentages of candidates who have died, been removed from the waiting list, been transplanted, or been transferred or lost-to-follow-up. Tables B8 and B9 provide more detail regarding how many candidates have received a deceased donor transplant by certain time points during the first 3 years after being put on the transplant waiting list. Each row of Tables B8 and B9 presents the percent of candidates who received a deceased donor transplant by each time point. Table B10 presents data on the time it took for different percentages of patients to be transplanted for candidates added to the list between 07/01/2019 and 12/31/2024. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this program was 0.2 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 06/30/2025 to calculate a particular percentile of transplant times.

Table B11 contains a summary of the offer acceptance practices of the program. The offer acceptance ratio indicates whether the program is more or less likely to accept offers than the average program. If the offer acceptance ratio is greater than 1.0, then the program tends to accept more offers than average; if the offer acceptance ratio is less than 1.0, then the program tends to accept fewer offers than average. Figure B10 shows the distribution of program offer acceptance rates as well as the offer acceptance rate for this program. Figures B11 - B15 similarly show offer acceptance rates for subsets of offers.

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The Transplant Information section begins with descriptions of transplant recipients in Tables C1 and C2. Data on recipients of deceased donor transplants are presented (Tables C1D and C2D); if applicable, data on recipients of living donor transplants are presented separately (Tables C1L and C2L). Comparisons to the region and the nation as a whole are provided. A description of the deceased donors used at this program is provided in Table C3D, along with characteristics of living donors in Table C3L, if applicable. Finally, information on the transplant procedure for deceased and living donor transplants is presented in Tables C4D and C4L, respectively.

Starting with Table C5, transplant outcomes are presented along with comparisons to what would be expected at this program and what happened in the nation as a whole. Tables C5-C14 (tables C5-C10 for Pancreas) present information on graft survival (survival of the transplanted organ), with data presented separately for adult and pediatric recipients. Patients are followed from the time of transplant until either failure of the transplanted organ or death, whichever comes first. Please refer to the technical methods for more information on these calculations (http://www.srtr.org).

While Tables C5-C14 present data on graft survival, Tables C15-C20 (tables C11-C20 for Pancreas) present information on patient survival. For these tables, patients are followed from the time of transplant until death, regardless of whether the transplant is functioning or the patient required another transplant to survive.

Tables C21 and C22 summarize the multiorgan transplant outcomes at this program. The summary statistics in these tables are descriptive and are not risk-adjusted for different donor and candidate characteristics.

Additional information regarding the technical methods and the risk adjustment models used to estimate expected event rates is available on the SRTR website at http://www.srtr.org. We welcome and encourage feedback on these reports. Please feel free to share feedback with the SRTR at the following e-mail: srtr@srtr.org.

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A. Program Summary

Figure A1. Waiting list and transplant activity

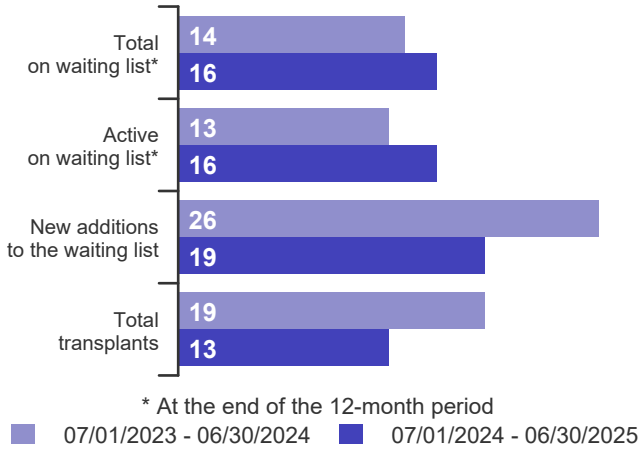


Table A1. Census of transplant recipients

Recipients	07/01/2023-06/30/2024	07/01/2024-06/30/2025
Transplanted at this center	19	13
Followed by this center*	124	125
...transplanted at this program	117	115
...transplanted elsewhere	7	10

* Recipients followed are transplant recipients for whom the center has submitted a post-transplant follow-up form for a transplant that took place before the 12-month interval for each column.

Figure A2. Transplant rates 07/01/2023 - 06/30/2025

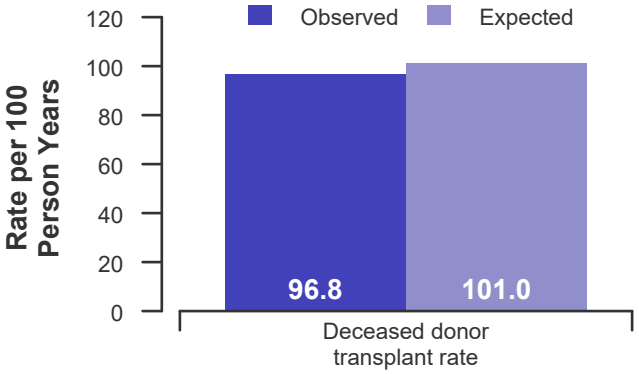


Figure A3. Pre-transplant mortality rates 07/01/2023 - 06/30/2025

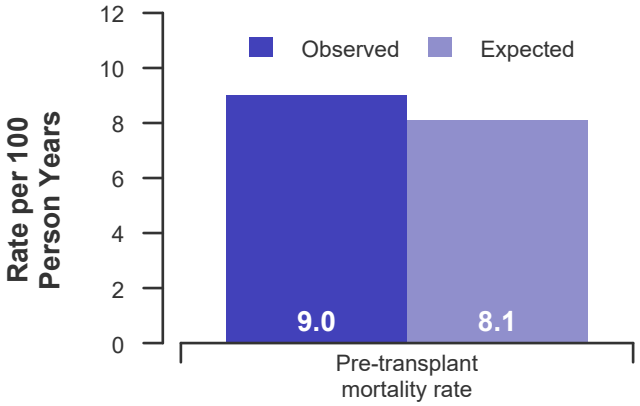


Figure A4. First-year adult graft and patient survival: 07/01/2022 - 12/31/2024

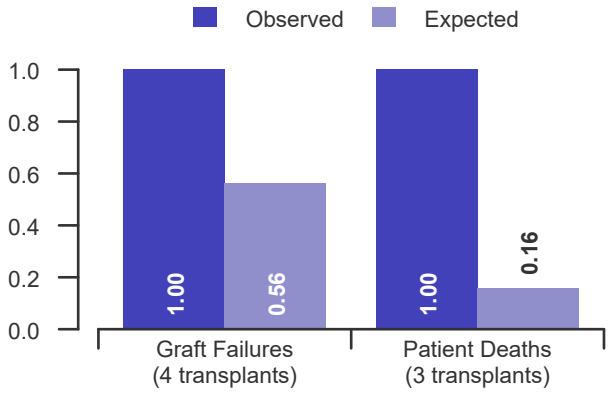
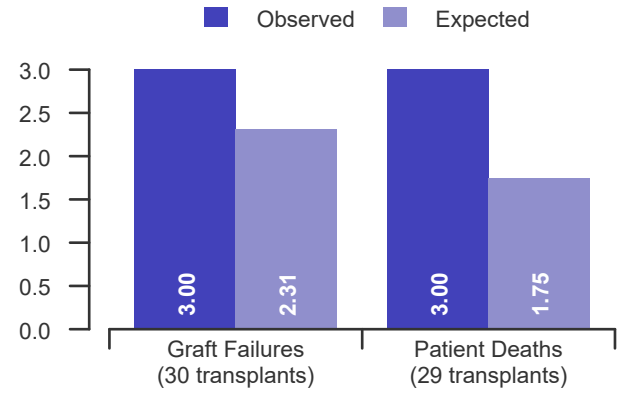


Figure A5. First-year pediatric graft and patient survival: 07/01/2022 - 12/31/2024



B. Waiting List Information

Table B1. Waiting list activity summary: 07/01/2023 - 06/30/2025

Waiting List Registrations	Counts for this center		Activity for 07/01/2024 to 06/30/2025 as percent of registrants on waiting list on 07/01/2024		
	07/01/2023-06/30/2024	07/01/2024-06/30/2025	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	12	14	100.0	100.0	100.0
Additions					
New listings at this center	26	19	135.7	194.8	175.7
Removals					
Transferred to another center	1	0	0.0	3.0	2.8
Received living donor transplant*	0	0	0.0	0.0	0.0
Received deceased donor transplant*	19	13	92.9	135.7	133.1
Died	2	0	0.0	5.2	6.2
Transplanted at another center	0	0	0.0	0.4	1.3
Deteriorated	0	1	7.1	11.2	6.9
Recovered	0	3	21.4	5.6	5.8
Other reasons	2	0	0.0	14.9	10.2
On waiting list at end of period	14	16	114.3	119.0	109.4

* These patients were removed from waiting list with removal code indicating transplant; this may not equal the number of transplants performed at this center during the specified period.

B. Waiting List Information

Table B2. Demographic characteristics of waiting list candidates
Candidates registered on the waiting list between 07/01/2024 and 06/30/2025

Demographic Characteristic	New Waiting List Registrations 07/01/2024 to 06/30/2025 (%)			All Waiting List Registrations on 06/30/2025 (%)		
	This Center (N=19)	OPTN Region (N=524)	U.S. (N=6,033)	This Center (N=16)	OPTN Region (N=320)	U.S. (N=3,756)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	57.9	50.4	51.5	56.2	49.7	51.5
African-American	26.3	34.4	26.6	18.8	35.0	28.7
Hispanic/Latino	5.3	8.6	12.9	6.2	8.8	13.7
Asian	0.0	3.8	4.5	0.0	3.1	2.8
Other	5.3	1.0	1.6	6.2	1.6	1.9
Unknown	5.3	1.9	3.0	12.5	1.9	1.4
Age (%)						
<2 years	31.6	3.2	4.3	0.0	4.7	5.6
2-11 years	36.8	3.6	3.5	56.2	10.3	6.8
12-17 years	21.1	2.3	3.4	31.2	4.4	3.2
18-34 years	10.5	9.9	8.6	12.5	6.9	9.0
35-49 years	0.0	19.1	18.7	0.0	19.4	20.6
50-64 years	0.0	45.2	42.7	0.0	45.3	44.0
65-69 years	0.0	13.2	15.1	0.0	7.5	9.6
70+ years	0.0	3.4	3.7	0.0	1.6	1.1
Gender (%)						
Male	47.4	71.8	71.6	56.2	76.9	75.2
Female	52.6	28.2	28.4	43.8	23.1	24.8

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

B. Waiting List Information

Table B3. Medical characteristics of waiting list candidates
Candidates registered on the waiting list between 07/01/2024 and 06/30/2025

Medical Characteristic	New Waiting List Registrations 07/01/2024 to 06/30/2025 (%)			All Waiting List Registrations on 06/30/2025 (%)		
	This Center (N=19)	OPTN Region (N=524)	U.S. (N=6,033)	This Center (N=16)	OPTN Region (N=320)	U.S. (N=3,756)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	31.6	42.2	45.2	43.8	56.9	60.3
A	31.6	35.7	35.6	31.2	27.8	27.2
B	36.8	18.3	14.9	25.0	14.1	10.6
AB	0.0	3.8	4.3	0.0	1.2	1.8
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	5.3	2.7	3.2	0.0	2.5	3.6
No	94.7	97.3	96.8	100.0	97.5	96.4
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Primary Disease (%)						
Cardiomyopathy	42.1	63.9	59.6	18.8	60.6	57.5
Coronary Artery Disease	0.0	23.3	25.0	0.0	18.4	23.0
Retransplant/Graft Failure	5.3	2.1	2.9	0.0	1.9	3.1
Valvular Heart Disease	0.0	0.2	0.9	0.0	0.9	0.8
Congenital Heart Disease	47.4	7.8	9.7	75.0	17.2	14.2
Other	5.3	2.7	2.0	6.2	0.9	1.5
Missing	0.0	0.0	0.0	0.0	0.0	0.0
Medical Urgency Status at Listing (%)						
Status 1A	36.8	5.0	7.1	12.5	6.9	6.4
Status 1B	31.6	2.5	2.3	31.2	7.8	5.5
Status 2	21.1	1.3	1.5	37.5	4.7	5.7
Adult Status 1	10.5	9.9	6.8	0.0	0.9	0.6
Adult Status 2	0.0	35.9	32.7	0.0	10.0	7.3
Adult Status 3	0.0	4.6	8.1	0.0	1.9	4.7
Adult Status 4	0.0	30.0	25.4	12.5	49.7	44.7
Adult Status 5	0.0	1.3	2.8	0.0	2.8	4.3
Adult Status 6	0.0	8.6	12.5	0.0	12.8	19.6
Temporarily Inactive	0.0	1.0	0.7	6.2	2.5	1.3

B. Waiting List Information

Table B4D. Deceased donor transplant rates: 07/01/2023 - 06/30/2025

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	12	41	301	3,392
Person Years**	33.1	87.6	593.2	7,017.9
Removals for Transplant	32	162	747	9,260
Adult (18+) Candidates				
Count on waiting list at start*	0	29	256	2,858
Person Years**	3.7	58.2	491.0	5,915.6
Removals for transpant	3	133	677	8,250
Pediatric (<18) Candidates				
Count on waiting list at start*	12	12	45	534
Person Years**	29.4	29.4	102.2	1,102.3
Removals for transplant	29	29	70	1,010

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from July 1 or from the date of first wait listing until death, transplant, removal from the waiting list or June 30.

Figure B1D. Observed and expected deceased donor transplant rates: 07/01/2023 - 06/30/2025

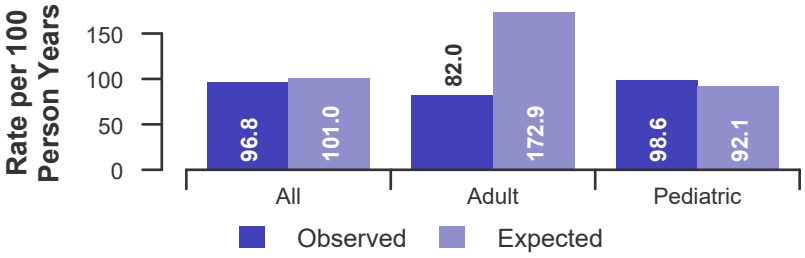


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 07/01/2023 - 06/30/2025

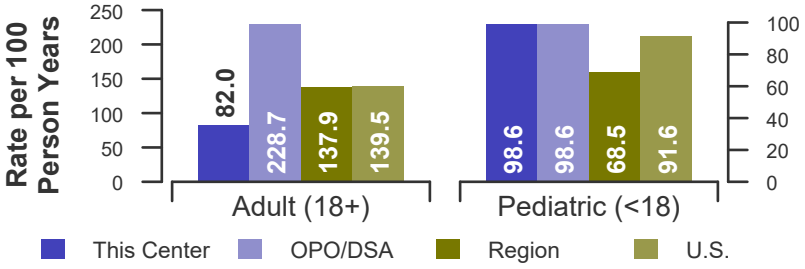
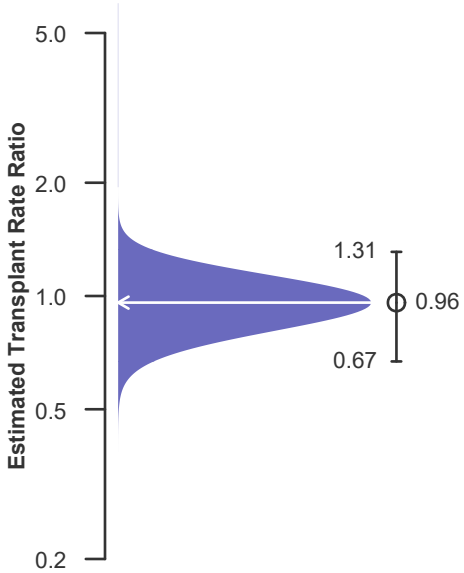


Figure B2D. Deceased donor transplant rate ratio estimate



B. Waiting List Information

Table B5. Pre-transplant mortality rates: 07/01/2023 - 06/30/2025

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	12	41	301	3,392
Person Years**	33.3	95.8	691.6	7,866.4
Number of deaths	3	8	55	630
Adult (18+) Candidates				
Count on waiting list at start*	0	29	256	2,858
Person Years**	3.7	66.1	588.5	6,679.6
Number of deaths	0	5	49	521
Pediatric (<18) Candidates				
Count on waiting list at start*	12	12	45	534
Person Years**	29.7	29.7	103.1	1,186.7
Number of deaths	3	3	6	109

* Counts in this table may be lower than similar counts in other waiting list tables, such as Table B1. A small percentage (~1%) of patients are found to have died or been transplanted before being removed from the waiting list, so these patients are excluded if the event occurs prior to the start of the study period. Inactive time on the waiting list is included in the calculations for this table.

** Person years are calculated as days (converted to fractional years). The number of days from July 1 or from the date of first wait listing until death, transplant, 60 days after recovery, transfer or June 30.

Figure B4. Observed and expected pre-transplant mortality rates: 07/01/2023 - 06/30/2025

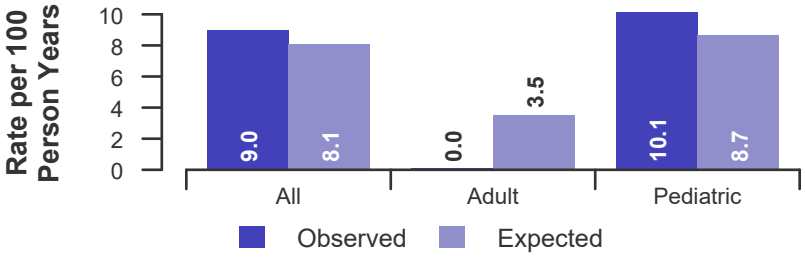


Figure B6. Observed adult (18+) and pediatric (<18) pre-transplant mortality rates: 07/01/2023 - 06/30/2025

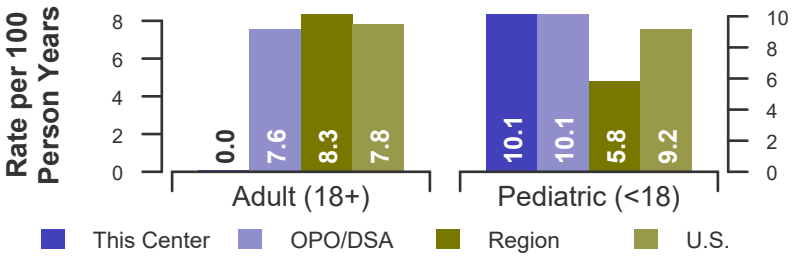
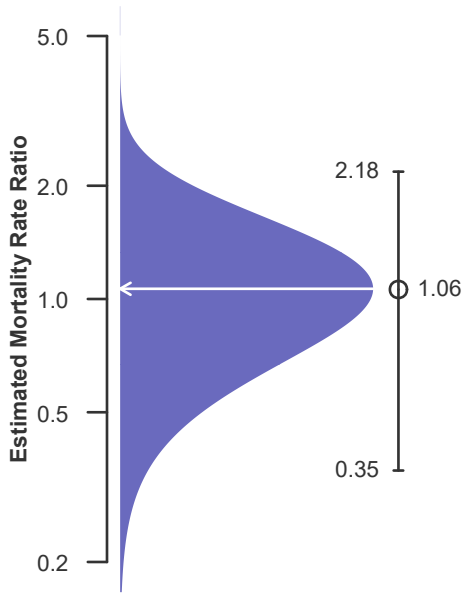


Figure B5. Pre-transplant mortality rate ratio estimate



B. Waiting List Information

Table B6. Rates of patient mortality after listing: 07/01/2023 - 06/30/2025

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Patients				
Count at risk during the evaluation period	106	564	2,830	32,082
Person-years*	144.5	775.1	3,788.8	43,418.8
Number of Deaths	7	45	203	2,177
Adult (18+) Patients				
Count at risk during the evaluation period	9	467	2,516	27,802
Person-years*	12.6	643.1	3,358.8	37,520.4
Number of Deaths	1	39	183	1,915
Pediatric (<18) Patients				
Count at risk during the evaluation period	97	97	314	4,280
Person-years*	132.0	132.0	430.0	5,898.4
Number of Deaths	6	6	20	262

* Person-years are calculated as days (converted to fractional years). The number of days from 07/01/2023, or from the date of first wait listing until death, reaching 5 years after listing or June 30, 2025.

** Patient mortality after listing describes the relative survival experience of patients after listing. It depends on many factors, some of which are outside of the control of the transplant program. For example, availability of organs may not be the same in every part of the country.

Figure B7. Observed and expected rates of patient mortality after listing: 07/01/2023 - 06/30/2025

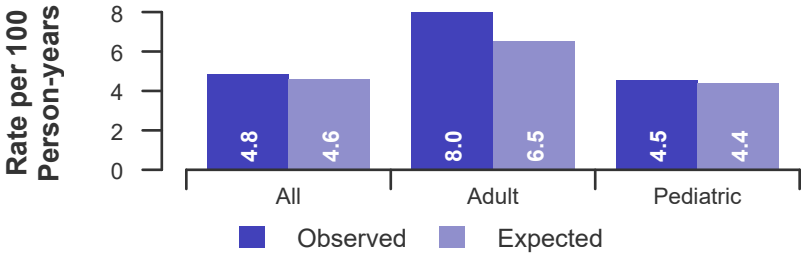


Figure B8. HR estimate of patient mortality after listing

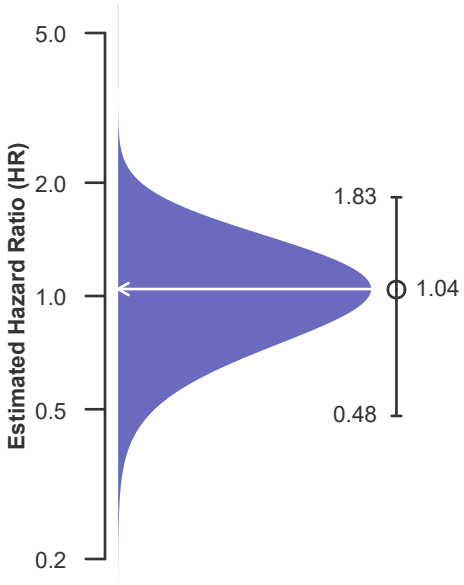
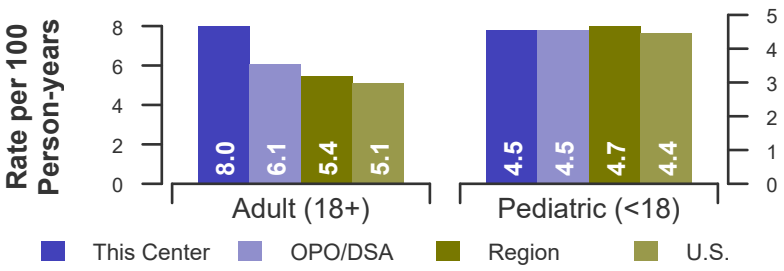


Figure B9. Observed adult (18+) and pediatric (<18) rates of patient mortality after listing: 07/01/2023 - 06/30/2025



B. Waiting List Information

Table B7. Waiting list candidate status after listing
Candidates registered on waiting list between 01/01/2023 and 12/31/2023

Waiting list status (survival status)	This Center (N=29) Months Since Listing			U.S. (N=5,726) Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	34.5	27.6	17.2	25.3	16.1	12.2
Died on the waiting list without transplant (%)	6.9	6.9	6.9	2.5	2.9	3.0
Removed without transplant (%):						
Condition worsened (status unknown)	0.0	0.0	0.0	2.7	3.2	3.5
Condition improved (status unknown)	3.4	3.4	3.4	1.1	1.7	2.3
Refused transplant (status unknown)	0.0	0.0	0.0	0.1	0.3	0.3
Other	6.9	6.9	6.9	2.3	3.1	3.6
Transplant (living or deceased donor) (%):						
Functioning (alive)	48.3	48.3	41.4	60.8	63.4	42.4
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.1	0.2	0.2
Failed-alive not retransplanted	0.0	0.0	0.0	0.1	0.1	0.1
Died	0.0	6.9	6.9	4.0	5.6	6.8
Status Yet Unknown*	0.0	0.0	17.2	0.4	2.8	24.7
Lost or Transferred (status unknown) (%)	0.0	0.0	0.0	0.5	0.8	0.9
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	6.9	13.8	13.8	6.6	8.5	9.9
Total % known died or removed as unstable	6.9	13.8	13.8	9.2	11.7	13.4
Total % removed for transplant	48.3	55.2	65.5	65.5	72.0	74.2
Total % with known functioning transplant (alive)	48.3	48.3	41.4	60.8	63.4	42.4

* Follow-up form covering specified time period not yet completed, and possibly has not become due.

B. Waiting List Information

Table B8. Percent of candidates with deceased donor transplants: demographic characteristics
Candidates registered on the waiting list between 07/01/2019 and 06/30/2022

Characteristic	Percent transplanted at time periods since listing									
	This Center					United States				
	N	30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	35	20.0	77.1	85.7	85.7	14,481	35.7	67.5	72.6	74.6
Ethnicity/Race*										
White	25	16.0	80.0	88.0	88.0	8,272	36.1	68.6	73.8	75.7
African-American	5	40.0	60.0	80.0	80.0	3,741	34.8	65.2	70.2	72.3
Hispanic/Latino	4	25.0	100.0	100.0	100.0	1,691	33.6	66.6	72.2	74.5
Asian	0	--	--	--	--	593	43.7	71.8	76.1	77.7
Other	1	0.0	0.0	0.0	0.0	184	28.8	59.8	62.0	64.1
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	12	8.3	66.7	66.7	66.7	816	8.3	60.4	62.4	62.7
2-11 years	11	18.2	90.9	100.0	100.0	640	19.1	64.4	71.7	75.6
12-17 years	9	44.4	77.8	88.9	88.9	637	39.4	75.7	82.1	83.2
18-34 years	3	0.0	66.7	100.0	100.0	1,409	38.3	67.6	73.2	74.8
35-49 years	0	--	--	--	--	2,596	35.3	64.4	70.0	72.0
50-64 years	0	--	--	--	--	5,940	37.8	67.5	72.8	75.0
65-69 years	0	--	--	--	--	2,015	39.9	70.4	75.1	77.2
70+ years	0	--	--	--	--	428	52.6	79.0	80.6	80.8
Gender										
Male	21	19.0	81.0	95.2	95.2	10,290	36.1	66.8	72.0	74.1
Female	14	21.4	71.4	71.4	71.4	4,191	34.9	69.2	74.2	75.8

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

B. Waiting List Information

Table B9. Percent of candidates with deceased donor transplants: medical characteristics
Candidates registered on the waiting list between 07/01/2019 and 06/30/2022

Characteristic	Percent transplanted at time periods since listing									
	This Center					United States				
	N	30 day	1 year	2 years	3 years	N	30 day	1 year	2 years	3 years
All	35	20.0	77.1	85.7	85.7	14,481	35.7	67.5	72.6	74.6
Blood Type										
O	10	0.0	70.0	80.0	80.0	6,434	27.9	58.9	65.2	68.0
A	14	35.7	85.7	85.7	85.7	5,313	42.6	73.9	78.0	79.5
B	9	11.1	66.7	88.9	88.9	2,101	37.7	72.4	77.4	78.7
AB	2	50.0	100.0	100.0	100.0	633	50.4	84.8	86.9	87.4
Previous Transplant										
Yes	1	0.0	0.0	100.0	100.0	549	26.2	61.2	67.6	69.2
No	34	20.6	79.4	85.3	85.3	13,932	36.1	67.8	72.8	74.8
Primary Disease										
Cardiomyopathy	18	33.3	83.3	83.3	83.3	8,426	39.6	70.5	75.4	77.3
Coronary Artery Disease	0	--	--	--	--	3,424	37.1	66.1	70.9	73.0
Retransplant/Graft Failure	1	0.0	0.0	100.0	100.0	473	27.7	64.7	71.0	72.3
Valvular Heart Disease	0	--	--	--	--	146	38.4	63.0	67.1	67.8
Congenital Heart Disease	16	6.2	75.0	87.5	87.5	1,660	16.9	59.5	66.3	68.9
Other	0	--	--	--	--	352	28.4	52.6	58.0	58.5
Missing	0	--	--	--	--	0	--	--	--	--
Medical Urgency Status at Listing										
Status 1A	16	31.2	81.2	81.2	81.2	1,227	27.5	73.2	74.4	74.7
Status 1B	9	11.1	88.9	88.9	88.9	457	18.4	67.8	75.7	78.3
Status 2	7	14.3	57.1	85.7	85.7	369	4.1	43.4	57.5	62.3
Unknown	0	--	--	--	--	240	16.7	45.8	50.8	51.7

B. Waiting List Information

Table B10. Time to transplant for waiting list candidates*
Candidates registered on the waiting list between 07/01/2019 and 12/31/2024

	Months to Transplant**			
Percentile	**Center**	**OPO/DSA**	**Region**	**U.S.**
5th	0.2	0.1	0.2	0.1
10th	0.3	0.2	0.2	0.2
25th	1.9	0.4	0.6	0.5
50th (median time to transplant)	5.3	1.6	2.8	2.2
75th	16.8	10.6	31.5	22.2

* If cells contain "Not Observed" fewer than that percentile of patients had received a transplant. For example, the 50th percentile of time to transplant is the time when 50% of candidates have received transplants. If waiting times are long, then the 50th percentile may not be observed during the follow-up period for this table. Also, if more than 50% of candidates are removed from the list due to death or other reasons before receiving transplants, then the 50th percentile of time to transplant will not be observed.

** Censored on 06/30/2025. Calculated as the months after listing, during which the corresponding percent of all patients initially listed had received a transplant.

B. Waiting List Information

Table B11. Offer Acceptance Practices: 07/01/2024 - 06/30/2025

Offers Acceptance Characteristics	This Center	OPO/DSA	Region	U.S.
Overall				
Number of Offers	73	861	6,310	59,838
Number of Acceptances	12	58	318	3,987
Expected Acceptances	13.5	48.5	392.9	3,986.4
Offer Acceptance Ratio*	0.90	1.19	0.81	1.00
95% Credible Interval**	[0.49, 1.43]	--	--	--
PHS increased infectious risk				
Number of Offers	5	177	1,369	12,869
Number of Acceptances	0	9	62	767
Expected Acceptances	0.5	8.0	76.2	765.9
Offer Acceptance Ratio*	0.79	1.10	0.82	1.00
95% Credible Interval**	[0.10, 2.20]	--	--	--
Ejection fraction < 60				
Number of Offers	34	428	3,216	28,281
Number of Acceptances	4	26	150	1,806
Expected Acceptances	4.8	20.7	191.9	1,793.9
Offer Acceptance Ratio*	0.89	1.23	0.78	1.01
95% Credible Interval**	[0.33, 1.72]	--	--	--
Donor Age >= 40				
Number of Offers	0	544	3,651	33,934
Number of Acceptances	0	19	99	1,271
Expected Acceptances	0.0	18.0	131.5	1,271.1
Offer Acceptance Ratio*	--	1.05	0.76	1.00
95% Credible Interval**	[--, --]	--	--	--
Hard-to-Place Hearts (Over 50 Offers)				
Number of Offers	7	344	1,998	18,936
Number of Acceptances	0	8	20	266
Expected Acceptances	0.0	6.7	30.8	270.8
Offer Acceptance Ratio*	0.99	1.15	0.67	0.98
95% Credible Interval**	[0.12, 2.76]	--	--	--
Donor more than 500 miles away				
Number of Offers	15	253	1,881	23,530
Number of Acceptances	2	12	72	1,092
Expected Acceptances	2.3	10.6	84.3	1,107.3
Offer Acceptance Ratio*	0.92	1.11	0.86	0.99
95% Credible Interval**	[0.25, 2.03]	--	--	--

* The offer acceptance ratio estimates the relative offer acceptance practice of UPMC Children's Hospital of Pittsburgh compared to the national offer acceptance practice. A ratio above one indicates the program accepts more offers compared to national offer acceptance practices (e.g., an offer acceptance ratio of 1.25 indicates a center accepts 25% more offers than is expected based on national offer acceptance practices), while a ratio below one indicates the program accepts fewer offers compared to national offer acceptance practices (e.g., an offer acceptance ratio of 0.75 indicates a center accepts 25% fewer offers than is expected based on national offer acceptance practices).
** As an example, the 95% Credible Interval for the overall offer acceptance ratio, [0.49, 1.43], indicates the location of PACH's true offer acceptance ratio with 95% probability. The best estimate is 10% less likely to accept an offer compared to nationalacceptance behavior, but PACH's performance could plausibly range from 51% reduced acceptance up to 43% higher acceptance.

B. Waiting List Information

Figure B10. Offer acceptance: Overall

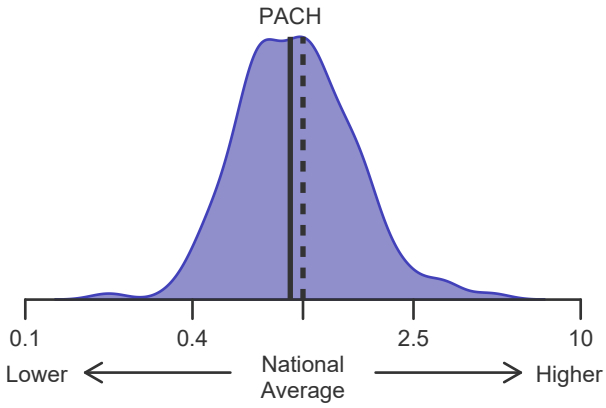


Figure B11. Offer acceptance: PHS increased infectious risk

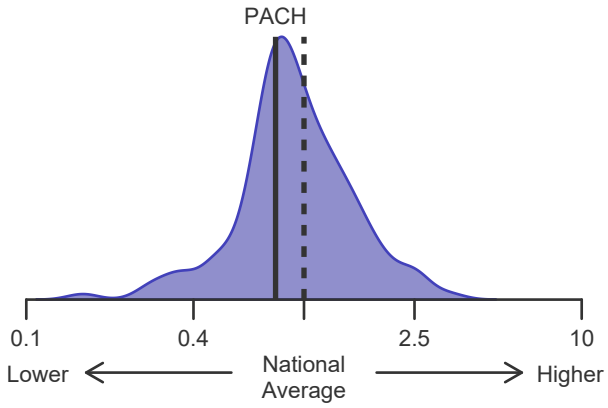


Figure B12. Offer acceptance: Ejection fraction < 60

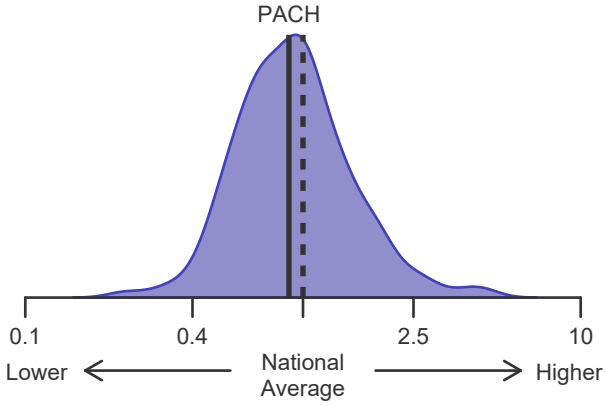


Figure B13. Offer acceptance: Donor age >= 40

This program received no offers.

Figure B14. Offer acceptance: Offer number > 50

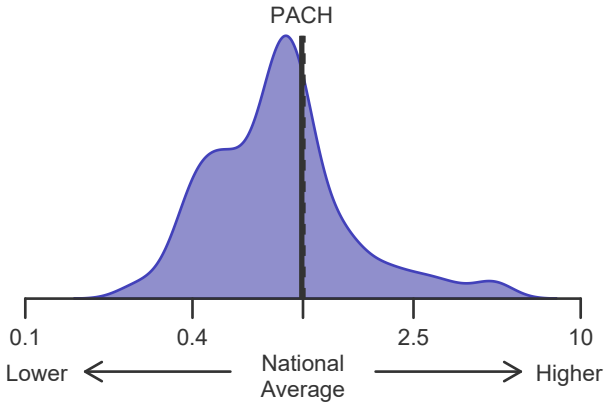
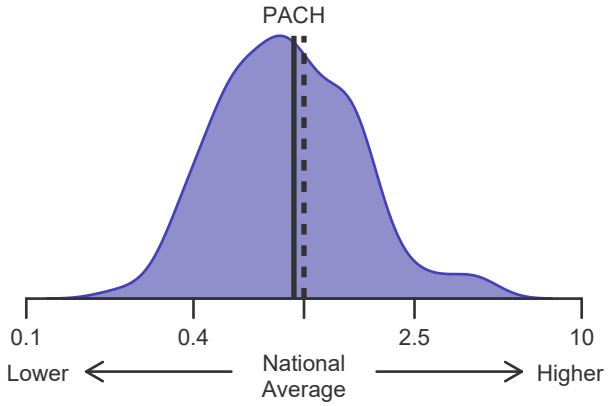


Figure B15. Offer acceptance: Donor more than 500 miles away



C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics
Patients transplanted between 07/01/2024 and 06/30/2025

Characteristic	Percentage in each category		
	Center (N=13)	Region (N=365)	U.S. (N=4,569)
Ethnicity/Race (%)*			
White	84.6	50.1	52.3
African-American	7.7	36.4	26.3
Hispanic/Latino	7.7	5.5	12.2
Asian	0.0	4.7	4.8
Other	0.0	1.6	1.3
Unknown	0.0	1.6	3.0
Age (%)			
<2 years	30.8	2.5	2.9
2-11 years	30.8	2.7	3.0
12-17	23.1	2.5	3.9
18-34	15.4	11.8	8.9
35-49 years	0.0	19.5	18.0
50-64 years	0.0	43.6	42.4
65-69 years	0.0	13.2	15.8
70+ years	0.0	4.4	5.2
Gender (%)			
Male	46.2	73.4	71.7
Female	53.8	26.6	28.3

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

C. Transplant Information

Table C2D. Deceased donor transplant recipient medical characteristics
Patients transplanted between 07/01/2024 and 06/30/2025

Characteristic	Percentage in each category		
	Center (N=13)	Region (N=365)	U.S. (N=4,569)
Blood Type (%)			
O	30.8	37.8	41.8
A	38.5	38.6	37.8
B	30.8	18.6	15.6
AB	0.0	4.9	4.9
Previous Transplant (%)			
Yes	7.7	2.2	3.1
No	92.3	97.8	96.9
Body Mass Index (%)			
0-20	92.3	13.7	14.6
21-25	7.7	35.3	29.1
26-30	0.0	27.9	30.9
31-35	0.0	18.1	18.3
36-40	0.0	4.1	4.8
41+	0.0	0.8	1.1
Unknown	0.0	0.0	1.2
Primary Disease (%)			
Cardiomyopathy	46.2	66.8	62.7
Coronary Artery Disease	0.0	23.3	25.3
Retransplant/Graft Failure	0.0	0.0	0.0
Valvular Heart Disease	0.0	0.0	1.0
Congenital Heart Disease	53.8	8.2	9.4
Other	0.0	1.6	1.5
Missing	0.0	0.0	0.1
Medical Urgency Status at Transplant (%)			
Status 1A	61.5	6.6	8.9
Status 1B	15.4	0.8	1.0
Status 2	7.7	0.5	0.2
Adult Status 1	7.7	21.9	15.3
Adult Status 2	0.0	54.0	51.0
Adult Status 3	0.0	5.5	8.7
Adult Status 4	0.0	6.3	9.7
Adult Status 5	0.0	0.8	1.0
Adult Status 6	7.7	3.6	4.2
Recipient Medical Condition at Transplant (%)			
Not Hospitalized	23.1	13.4	17.5
Hospitalized	30.8	20.5	19.2
ICU	46.2	66.0	63.0
Unknown	0.0	0.0	0.2
Recipient Circulatory Support Status at Transplant (%)			
No Support Mechanism	38.5	16.2	19.4
Devices*	53.8	76.4	65.4
Other Support Mechanism	7.7	7.4	15.0
Unknown	0.0	0.0	0.2

* Devices include ventricular assist devices (VAD), extracorporeal membrane oxygenation (ECMO), intraaortic balloon pump (IABP), and total artificial heart (TAH).

C. Transplant Information

Table C3D. Deceased donor characteristics
Transplants performed between 07/01/2024 and 06/30/2025

Donor Characteristic	Percentage in each category		
	Center (N=13)	Region (N=365)	U.S. (N=4,569)
Cause of Death (%)			
Deceased: Stroke	7.7	16.2	15.4
Deceased: MVA	7.7	17.0	17.8
Deceased: Other	84.6	66.8	66.8
Ethnicity/Race (%)*			
White	61.5	64.1	60.0
African-American	38.5	19.5	17.3
Hispanic/Latino	0.0	12.6	17.6
Asian	0.0	2.2	2.5
Other	0.0	0.8	1.5
Not Reported	0.0	0.8	0.9
Age (%)			
<2 years	15.4	1.6	2.0
2-11 years	38.5	3.0	2.9
12-17	7.7	6.6	5.7
18-34	30.8	40.8	41.7
35-49 years	7.7	39.5	40.2
50-64 years	0.0	8.5	7.6
65-69 years	0.0	0.0	0.0
70+ years	0.0	0.0	0.0
Gender (%)			
Male	69.2	68.8	68.5
Female	30.8	31.2	31.5
Blood Type (%)			
O	38.5	49.6	52.8
A	46.2	36.4	34.3
B	15.4	13.2	10.7
AB	0.0	0.8	2.1
Unknown	0.0	0.0	0.0

* Race and ethnicity are reported together as a single data element, reflecting their data collection (either race or ethnicity is required, but not both). Patients formerly coded as white and Hispanic are coded as Hispanic. Race and ethnicity sum to 100%.

C. Transplant Information

Table C4D. Deceased donor transplant characteristics
Transplants performed between 07/01/2024 and 06/30/2025

Transplant Characteristic	Percentage in each category		
	Center (N=13)	Region (N=365)	U.S. (N=4,569)
Total Ischemic Time (Minutes): Local (%)			
Deceased: 0-90 min	33.3	5.0	6.9
Deceased: 91-180 min	33.3	65.0	51.8
Deceased: 181-270 min	33.3	25.0	27.1
Deceased: 271-360 min	0.0	2.5	9.0
Deceased: 361+ min	0.0	2.5	4.5
Not Reported	0.0	0.0	0.6
Total Ischemic Time (Minutes): Shared (%)			
Deceased: 0-90 min	0.0	0.3	1.0
Deceased: 91-180 min	0.0	12.9	10.0
Deceased: 181-270 min	90.0	61.2	54.8
Deceased: 271-360 min	10.0	16.3	20.1
Deceased: 361+ min	0.0	8.9	13.5
Not Reported	0.0	0.3	0.6
Procedure Type (%)			
Single organ	92.3	90.4	89.7
Multi organ	7.7	9.6	10.3
Donor Location (%)			
Local Donation Service Area (DSA)	23.1	11.0	17.7
Another Donation Service Area (DSA)	76.9	89.0	82.3
Median Time in Hospital After Transplant	40.0 Days	21.0 Days	18.0 Days

C. Transplant Information

Table C5D. Adult (18+) 1-month survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	4	8,830
Estimated probability of surviving with a functioning graft at 1 month & [95% CI] (unadjusted for patient and donor characteristics)	75.00% [42.59%-100.00%]	97.16% [96.81%-97.50%]
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	94.69%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	251
Number of expected graft failures (including deaths) during the first month after transplant	0.20	--
Estimated hazard ratio*	1.36	--
95% credible interval for the hazard ratio**	[0.28, 3.28]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.28, 3.28], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 36% higher risk of graft failure compared to an average program, but PACH's performance could plausibly range from 72% reduced risk up to 228% increased risk.

Figure C1D. Adult (18+) 1-month deceased donor graft failure HR estimate

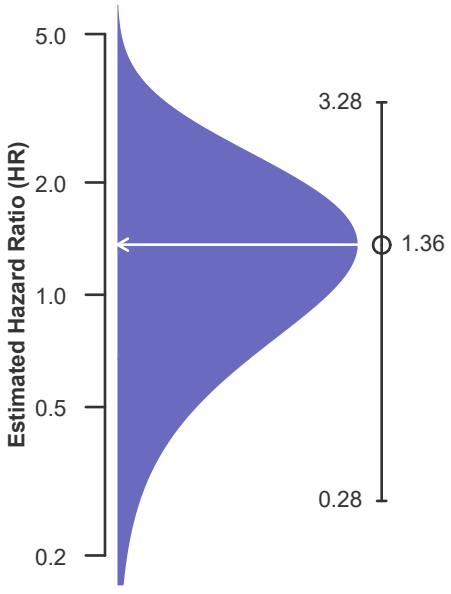
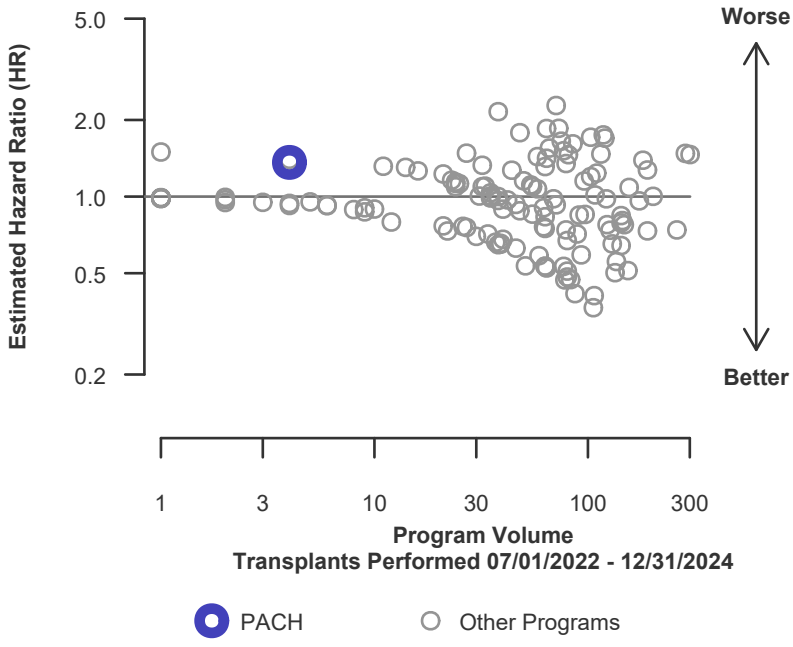


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C6D. Adult (18+) 90-Day survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	4	8,830
Estimated probability of surviving with a functioning graft at 90 days & [95% CI] (unadjusted for patient and donor characteristics)	75.00% [42.59%-100.00%]	95.23% [94.79%-95.68%]
Expected probability of surviving with a functioning graft at 90 days (adjusted for patient and donor characteristics)	91.28%	--
Number of observed graft failures (including deaths) during the first 90 days after transplant	1	421
Number of expected graft failures (including deaths) during the first 90 days after transplant	0.34	--
Estimated hazard ratio*	1.28	--
95% credible interval for the hazard ratio**	[0.26, 3.09]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.26, 3.09], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 28% higher risk of graft failure compared to an average program, but PACH's performance could plausibly range from 74% reduced risk up to 209% increased risk.

Figure C3D. Adult (18+) 90-Day deceased donor graft failure HR estimate

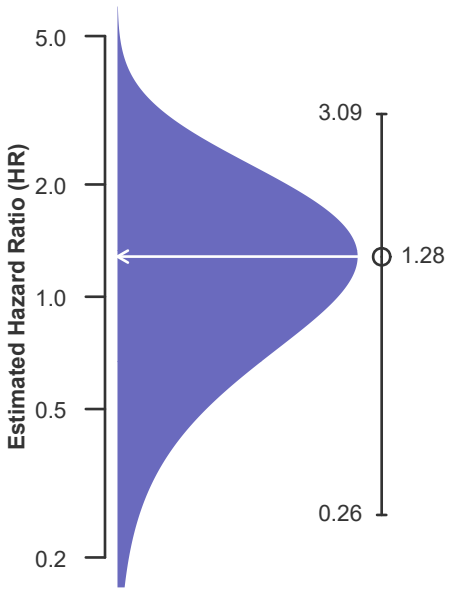
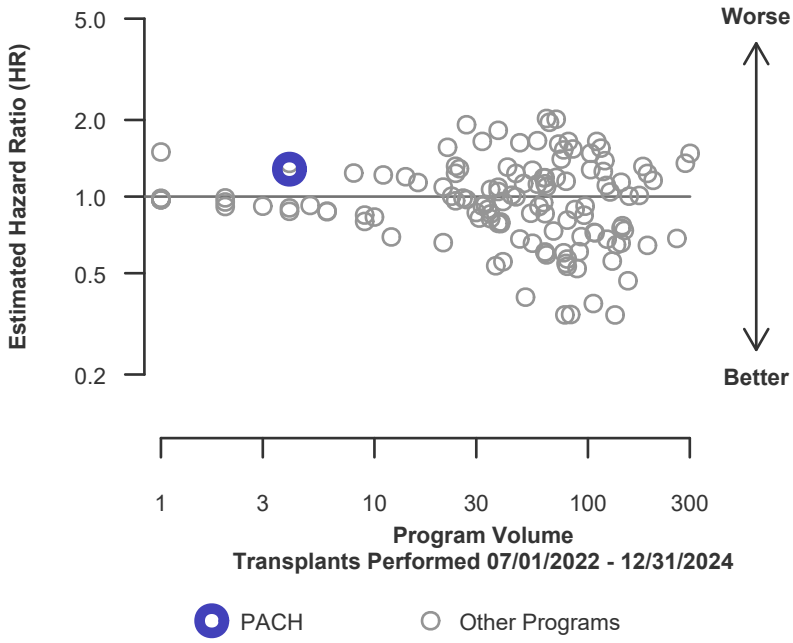


Figure C4D. Adult (18+) 90-Day deceased donor graft failure HR program comparison



C. Transplant Information

Table C7D. Adult (18+) 1-year survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	4	8,830
Estimated probability of surviving with a functioning graft at 1 year & [95% CI] (unadjusted for patient and donor characteristics)	75.00% [42.59%-100.00%]	92.16% [91.58%-92.74%]
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	86.13%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	665
Number of expected graft failures (including deaths) during the first year after transplant	0.56	--
Estimated hazard ratio*	1.17	--
95% credible interval for the hazard ratio**	[0.24, 2.82]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.24, 2.82], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 17% higher risk of graft failure compared to an average program, but PACH's performance could plausibly range from 76% reduced risk up to 182% increased risk.

Figure C5D. Adult (18+) 1-year deceased donor graft failure HR estimate

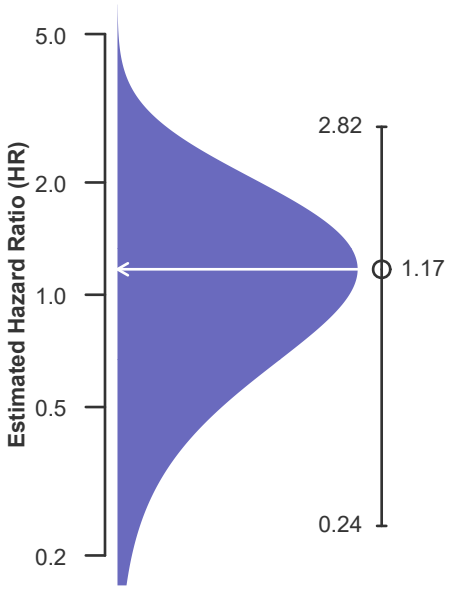
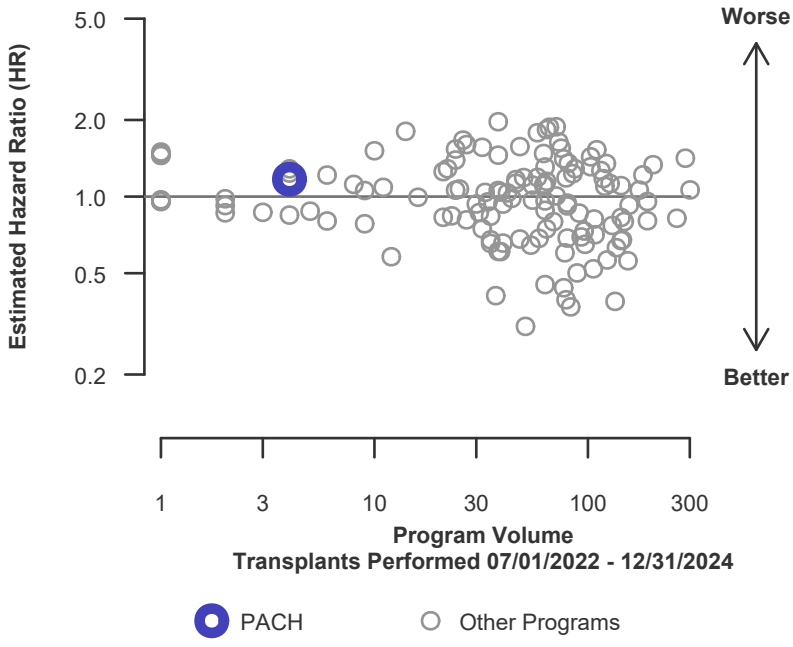


Figure C6D. Adult (18+) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C8D. Adult (18+) 1-year Conditional survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	3	8,409
Estimated probability of surviving with a functioning graft at 1 year, among patients with a functioning graft at day 90 & [95% CI] (unadjusted for patient and donor characteristics)	100.00% [100.00%-100.00%]	96.77% [96.62%-96.92%]
Expected probability of surviving with a functioning graft at 1 year, among patients with a functioning graft at day 90 (adjusted for patient and donor characteristics)	94.36%	--
Number of observed graft failures (including deaths) from day 91 through day 365 after transplant	0	244
Number of expected graft failures (including deaths) from day 91 through day 365 after transplant	0.22	--
Estimated hazard ratio*	0.90	--
95% credible interval for the hazard ratio**	[0.11, 2.51]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.11, 2.51], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 10% lower risk of graft failure compared to an average program, but PACH's performance could plausibly range from 89% reduced risk up to 151% increased risk.

Figure C7D. Adult (18+) 1-year Conditional deceased donor graft failure HR estimate

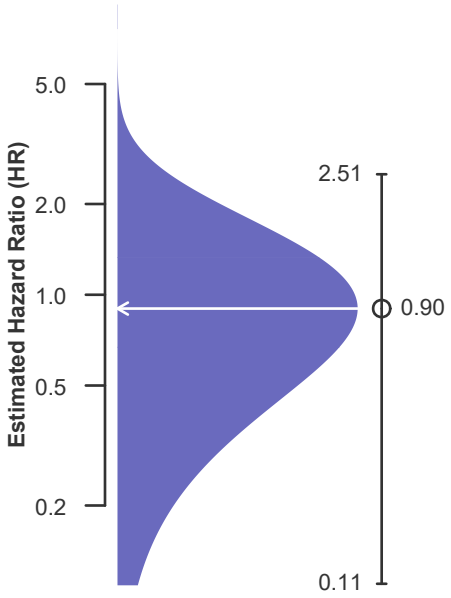
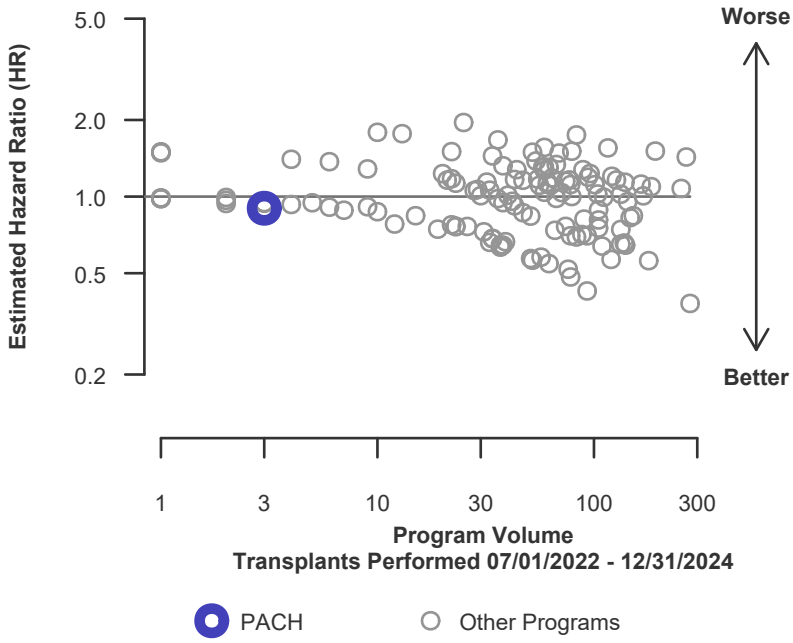


Figure C8D. Adult (18+) 1-year Conditional deceased donor graft failure HR program comparison



C. Transplant Information

Table C9D. Adult (18+) 3-year survival with a functioning deceased donor graft

Single organ transplants performed between 01/01/2020 and 03/12/2020, and 06/13/2020 and 06/30/2022
Deaths and retransplants are considered graft failures
Follow-up ends on 3/12/2020 for recipients transplanted prior to 3/13/2020

This center did not perform any transplants relevant to this table during 01/01/2020-06/30/2022

Figure C9D. Adult (18+) 3-year deceased donor graft failure HR estimate

This center did not perform any transplants relevant to this figure during 01/01/2020-06/30/2022

Figure C10D. Adult (18+) 3-year deceased donor graft failure HR program comparison

This center did not perform any transplants relevant to this figure during 01/01/2020-06/30/2022

C. Transplant Information

Table C10D. Pediatric (<18) 1-month survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	30	1,271
Estimated probability of surviving with a functioning graft at 1 month & [95% CI] (unadjusted for patient and donor characteristics)	100.00% [100.00%-100.00%]	98.43% [97.74%-99.11%]
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.41%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	20
Number of expected graft failures (including deaths) during the first month after transplant	0.48	--
Estimated hazard ratio*	0.81	--
95% credible interval for the hazard ratio**	[0.10, 2.24]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.24], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 19% lower risk of graft failure compared to an average program, but PACH's performance could plausibly range from 90% reduced risk up to 124% increased risk.

Figure C11D. Pediatric (<18) 1-month deceased donor graft failure HR estimate

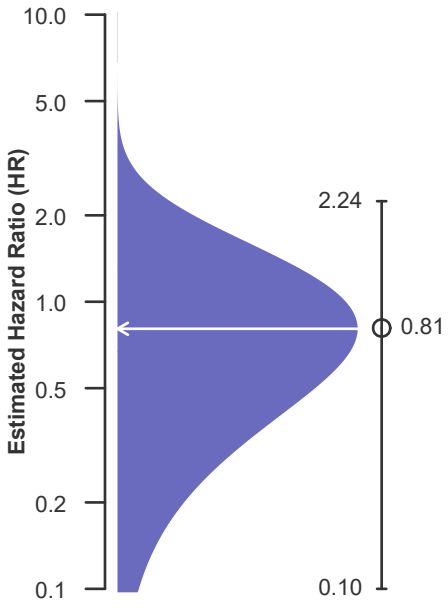
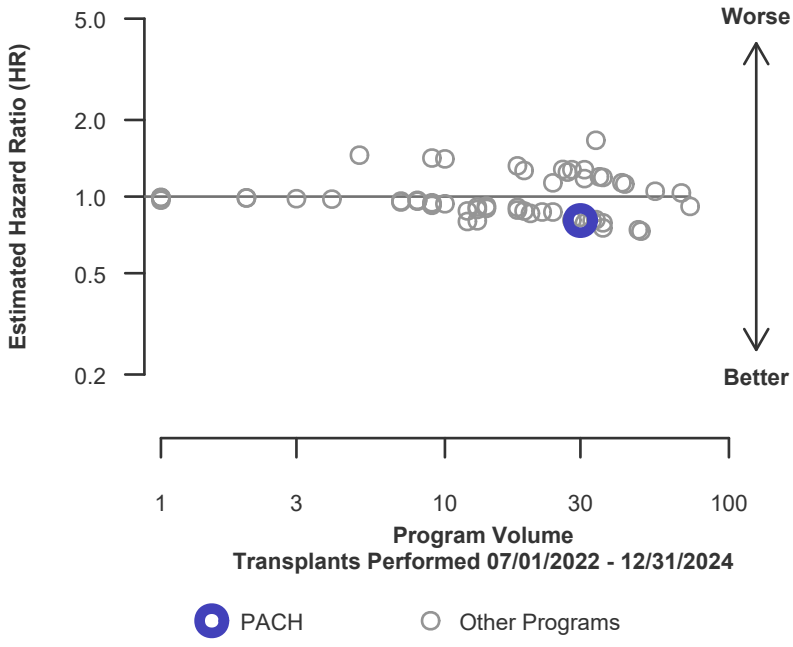


Figure C12D. Pediatric (<18) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C11D. Pediatric (<18) 90-Day survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	30	1,271
Estimated probability of surviving with a functioning graft at 90 days & [95% CI] (unadjusted for patient and donor characteristics)	93.33% [84.82%-100.00%]	96.62% [95.63%-97.62%]
Expected probability of surviving with a functioning graft at 90 days (adjusted for patient and donor characteristics)	96.58%	--
Number of observed graft failures (including deaths) during the first 90 days after transplant	2	43
Number of expected graft failures (including deaths) during the first 90 days after transplant	1.04	--
Estimated hazard ratio*	1.31	--
95% credible interval for the hazard ratio**	[0.36, 2.88]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.36, 2.88], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 31% higher risk of graft failure compared to an average program, but PACH's performance could plausibly range from 64% reduced risk up to 188% increased risk.

Figure C13D. Pediatric (<18) 90-Day deceased donor graft failure HR estimate

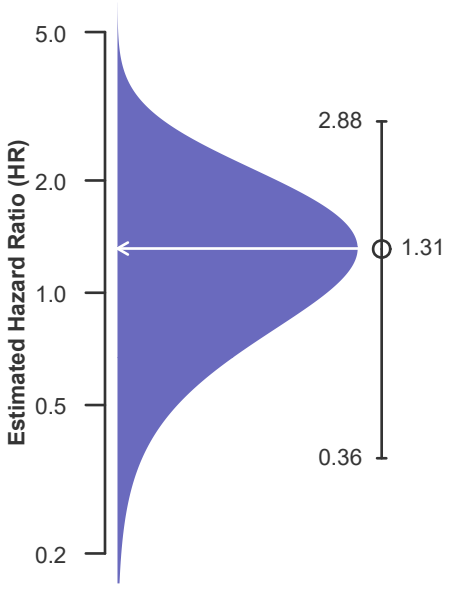
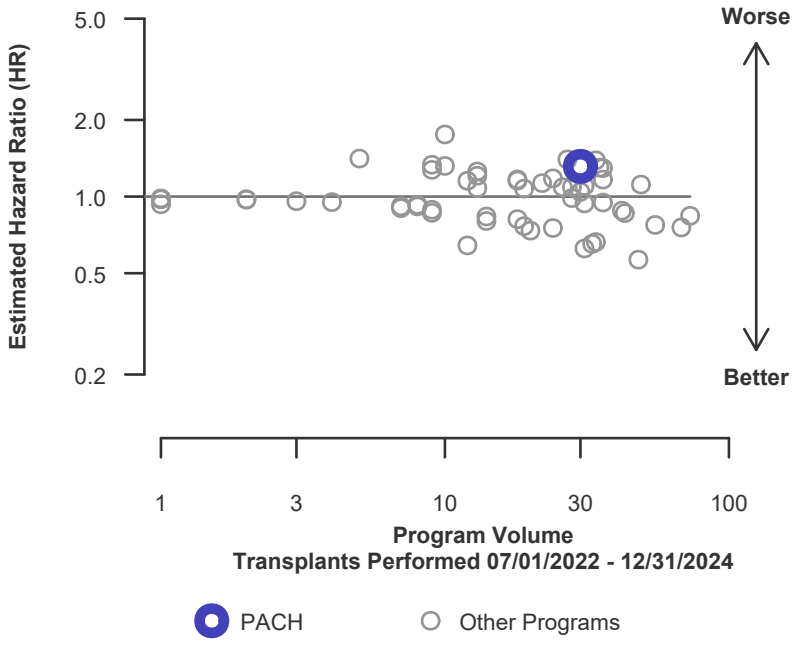


Figure C14D. Pediatric (<18) 90-Day deceased donor graft failure HR program comparison



C. Transplant Information

Table C12D. Pediatric (<18) 1-year survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	30	1,271
Estimated probability of surviving with a functioning graft at 1 year & [95% CI] (unadjusted for patient and donor characteristics)	90.00% [79.88%-100.00%]	92.14% [90.62%-93.69%]
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	91.94%	--
Number of observed graft failures (including deaths) during the first year after transplant	3	94
Number of expected graft failures (including deaths) during the first year after transplant	2.31	--
Estimated hazard ratio*	1.16	--
95% credible interval for the hazard ratio**	[0.38, 2.38]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.38, 2.38], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 16% higher risk of graft failure compared to an average program, but PACH's performance could plausibly range from 62% reduced risk up to 138% increased risk.

Figure C15D. Pediatric (<18) 1-year deceased donor graft failure HR estimate

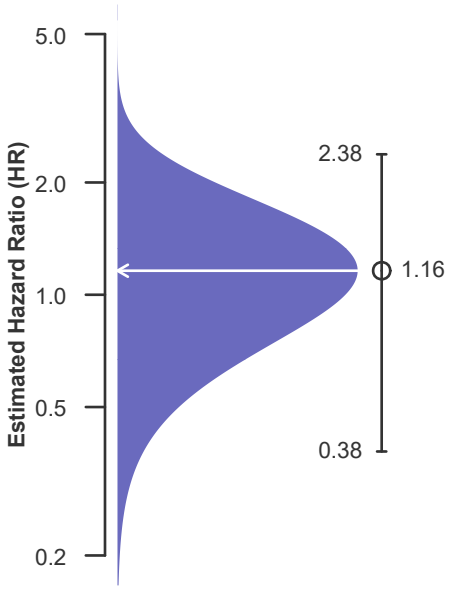
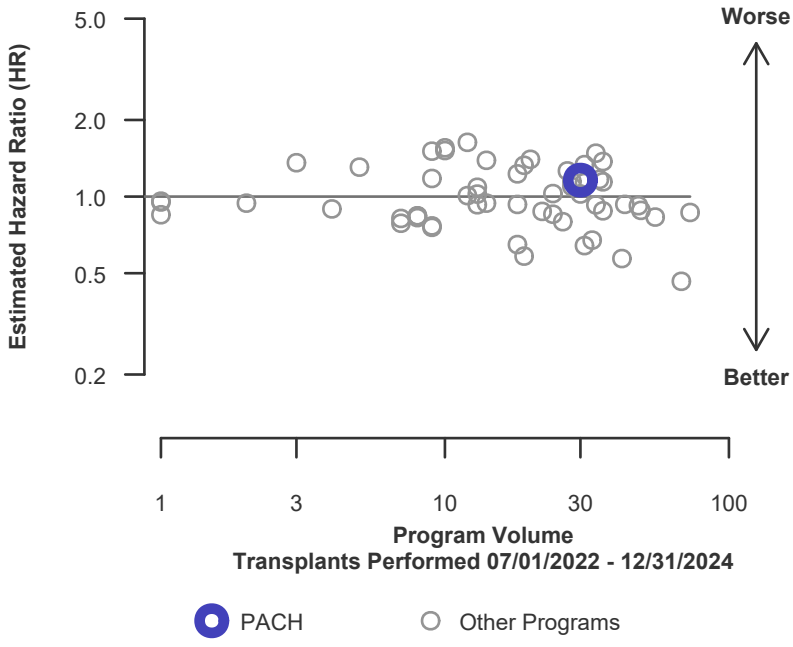


Figure C16D. Pediatric (<18) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C13D. Pediatric (<18) 1-year Conditional survival with a functioning deceased donor graft

Single organ transplants performed between 07/01/2022 and 12/31/2024
Deaths and retransplants are considered graft failures

	PACH	U.S.
Number of transplants evaluated	28	1,228
Estimated probability of surviving with a functioning graft at 1 year, among patients with a functioning graft at day 90 & [95% CI] (unadjusted for patient and donor characteristics)	96.43% [94.18%-100.00%]	95.37% [94.77%-95.98%]
Expected probability of surviving with a functioning graft at 1 year, among patients with a functioning graft at day 90 (adjusted for patient and donor characteristics)	95.20%	--
Number of observed graft failures (including deaths) from day 91 through day 365 after transplant	1	51
Number of expected graft failures (including deaths) from day 91 through day 365 after transplant	1.27	--
Estimated hazard ratio*	0.92	--
95% credible interval for the hazard ratio**	[0.19, 2.21]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.19, 2.21], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 8% lower risk of graft failure compared to an average program, but PACH's performance could plausibly range from 81% reduced risk up to 121% increased risk.

Figure C17D. Pediatric (<18) 1-year Conditional deceased donor graft failure HR estimate

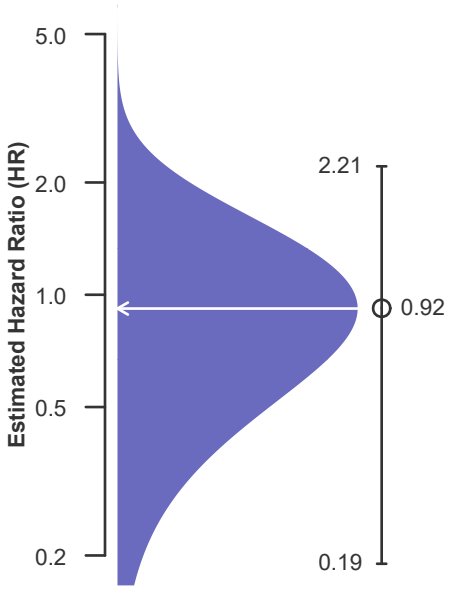
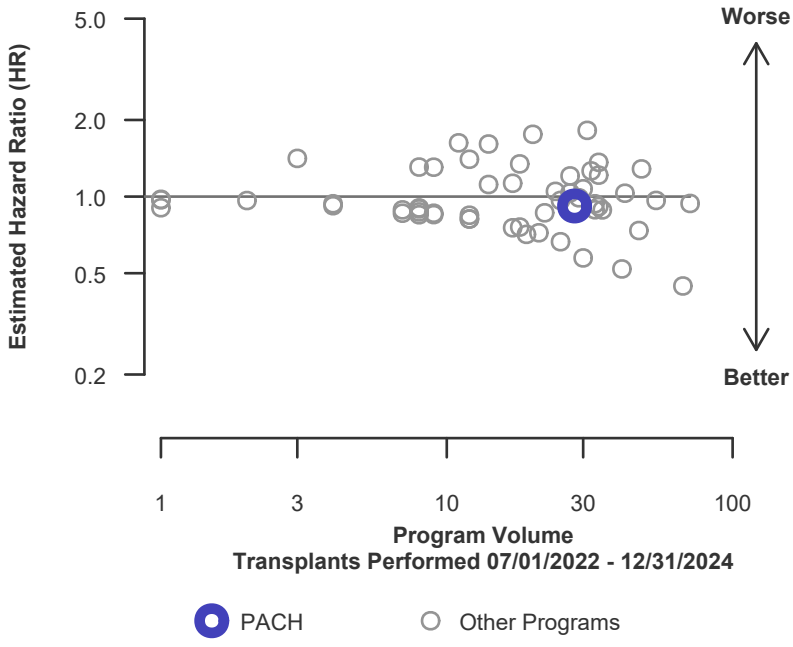


Figure C18D. Pediatric (<18) 1-year Conditional deceased donor graft failure HR program comparison



C. Transplant Information

Table C14D. Pediatric (<18) 3-year survival with a functioning deceased donor graft

Single organ transplants performed between 01/01/2020 and 03/12/2020, and 06/13/2020 and 06/30/2022
Deaths and retransplants are considered graft failures
Follow-up ends on 3/12/2020 for recipients transplanted prior to 3/13/2020

	PACH	U.S.
Number of transplants evaluated	20	1,103
Estimated probability of surviving with a functioning graft at 3 years & [95% CI] (unadjusted for patient and donor characteristics)	90.00% [77.77%-100.00%]	86.93% [84.89%-89.01%]
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	88.96%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	2	135
Number of expected graft failures (including deaths) during the first 3 years after transplant	2.32	--
Estimated hazard ratio*	0.93	--
95% credible interval for the hazard ratio**	[0.25, 2.03]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected graft failure rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected graft failure rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.25, 2.03], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 7% lower risk of graft failure compared to an average program, but PACH's performance could plausibly range from 75% reduced risk up to 103% increased risk.

Figure C19D. Pediatric (<18) 3-year deceased donor graft failure HR estimate

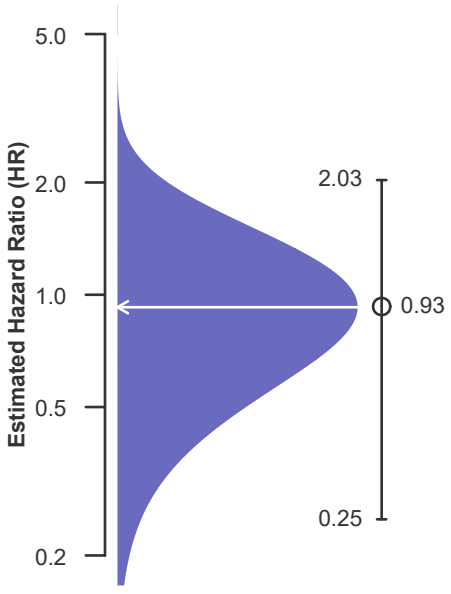
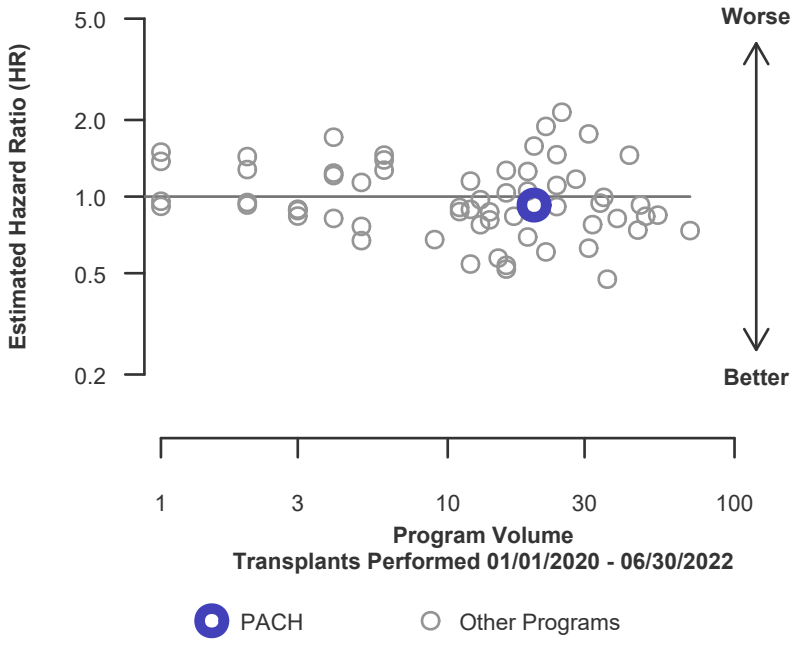


Figure C20D. Pediatric (<18) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C15D. Adult (18+) 1-month patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2022 and 12/31/2024
Retransplants excluded

	PACH	U.S.
Number of transplants evaluated	3	8,619
Estimated probability of surviving at 1 month & [95% CI] (unadjusted for patient and donor characteristics)	66.67% [29.95%-100.00%]	97.37% [97.03%-97.70%]
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	97.20%	--
Number of observed deaths during the first month after transplant	1	227
Number of expected deaths during the first month after transplant	0.06	--
Estimated hazard ratio*	1.46	--
95% credible interval for the hazard ratio**	[0.30, 3.51]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.30, 3.51], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 46% higher risk of patient death compared to an average program, but PACH's performance could plausibly range from 70% reduced risk up to 251% increased risk.

Figure C21D. Adult (18+) 1-month patient death HR estimate (deceased donor grafts)

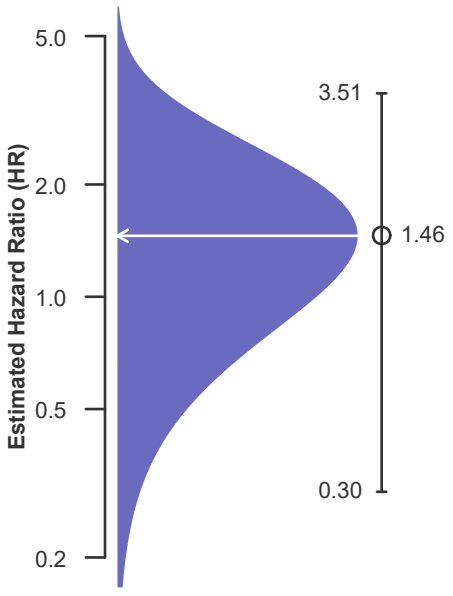
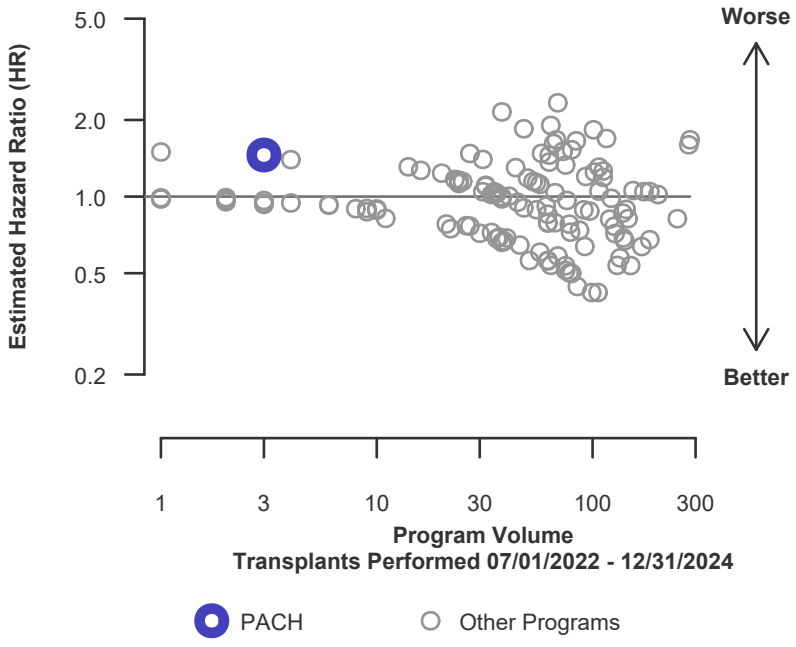


Figure C22D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C16D. Adult (18+) 1-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2022 and 12/31/2024
Retransplants excluded

	PACH	U.S.
Number of transplants evaluated	3	8,619
Estimated probability of surviving at 1 year & [95% CI] (unadjusted for patient and donor characteristics)	66.67% [29.95%-100.00%]	92.41% [91.84%-92.99%]
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	91.89%	--
Number of observed deaths during the first year after transplant	1	627
Number of expected deaths during the first year after transplant	0.16	--
Estimated hazard ratio*	1.39	--
95% credible interval for the hazard ratio**	[0.29, 3.35]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.29, 3.35], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 39% higher risk of patient death compared to an average program, but PACH's performance could plausibly range from 71% reduced risk up to 235% increased risk.

Figure C23D. Adult (18+) 1-year patient death HR estimate (deceased donor grafts)

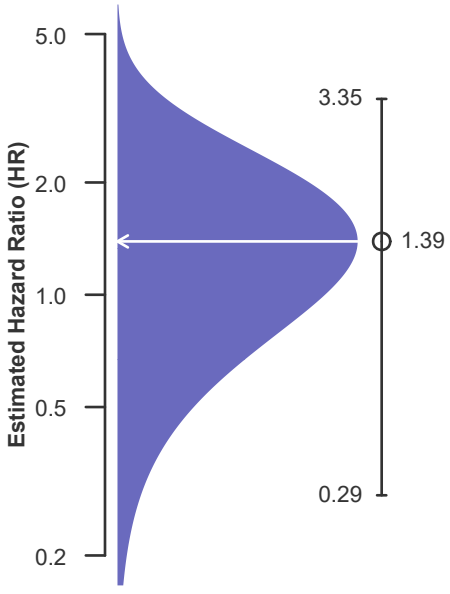
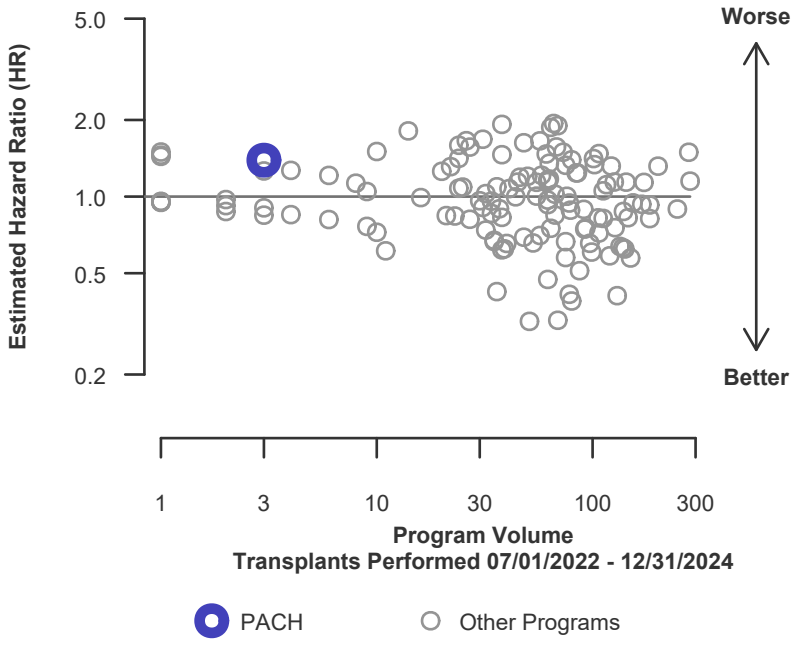


Figure C24D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C17D. Adult (18+) 3-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 01/01/2020 and 03/12/2020, and 06/13/2020 and 06/30/2022
Retransplants excluded
Follow-up ends on 3/12/2020 for recipients transplanted prior to 3/13/2020

This center did not perform any transplants relevant to this table during 01/01/2020-06/30/2022

Figure C25D. Adult (18+) 3-year patient death HR estimate (deceased donor grafts)

This center did not perform any transplants relevant to this figure during 01/01/2020-06/30/2022

Figure C26D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)

This center did not perform any transplants relevant to this figure during 01/01/2020-06/30/2022

C. Transplant Information

Table C18D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2022 and 12/31/2024
Retransplants excluded

	PACH	U.S.
Number of transplants evaluated	29	1,223
Estimated probability of surviving at 1 month & [95% CI] (unadjusted for patient and donor characteristics)	100.00% [100.00%-100.00%]	98.45% [97.76%-99.14%]
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	98.69%	--
Number of observed deaths during the first month after transplant	0	19
Number of expected deaths during the first month after transplant	0.39	--
Estimated hazard ratio*	0.84	--
95% credible interval for the hazard ratio**	[0.10, 2.34]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.34], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 16% lower risk of patient death compared to an average program, but PACH's performance could plausibly range from 90% reduced risk up to 134% increased risk.

Figure C27D. Pediatric (<18) 1-month patient death HR estimate (deceased donor grafts)

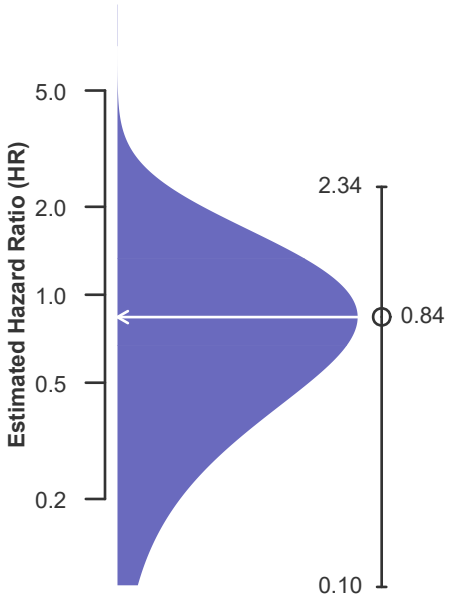
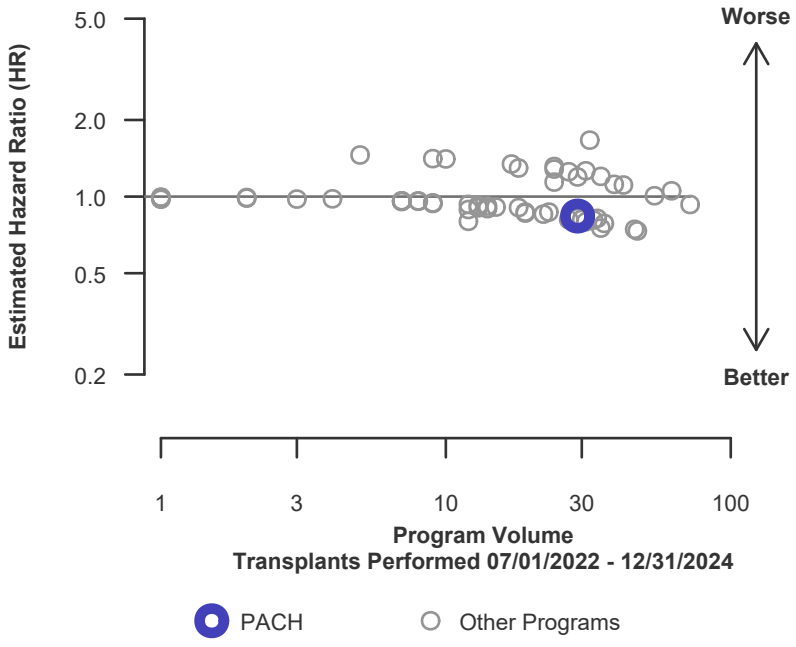


Figure C28D. Pediatric (<18) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C19D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2022 and 12/31/2024
Retransplants excluded

	PACH	U.S.
Number of transplants evaluated	29	1,223
Estimated probability of surviving at 1 year & [95% CI] (unadjusted for patient and donor characteristics)	89.66% [79.23%-100.00%]	92.63% [91.12%-94.16%]
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	93.70%	--
Number of observed deaths during the first year after transplant	3	85
Number of expected deaths during the first year after transplant	1.75	--
Estimated hazard ratio*	1.33	--
95% credible interval for the hazard ratio**	[0.43, 2.73]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.43, 2.73], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 33% higher risk of patient death compared to an average program, but PACH's performance could plausibly range from 57% reduced risk up to 173% increased risk.

Figure C29D. Pediatric (<18) 1-year patient death HR estimate (deceased donor grafts)

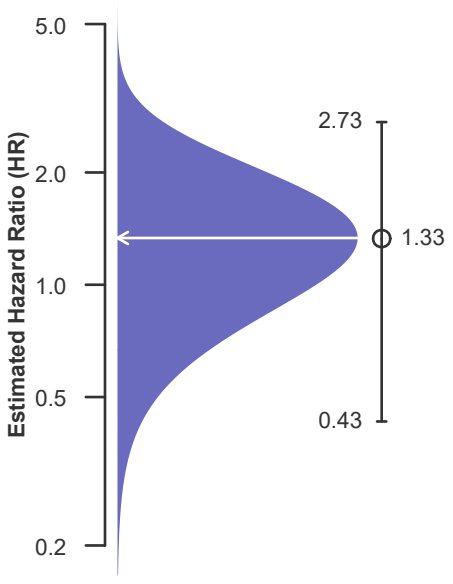
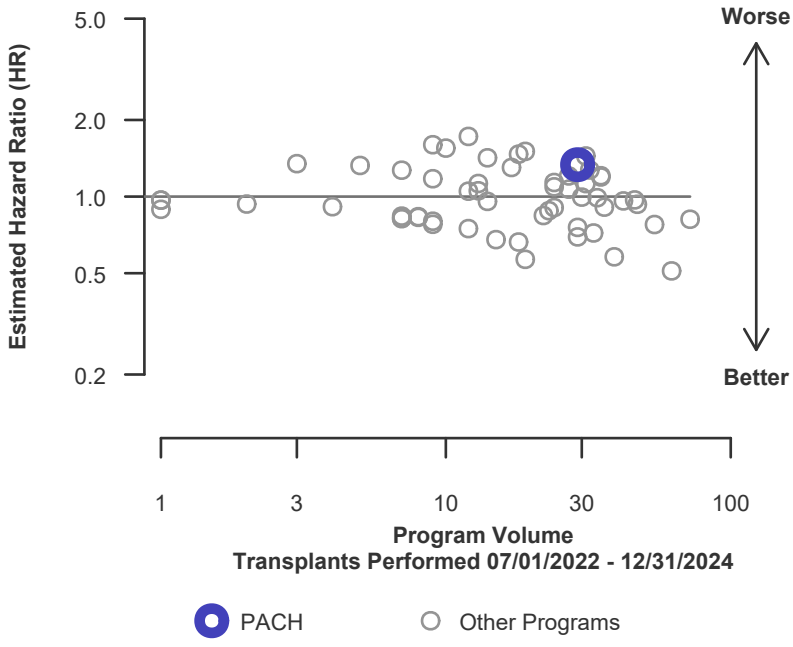


Figure C30D. Pediatric (<18) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C20D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 01/01/2020 and 03/12/2020, and 06/13/2020 and 06/30/2022
Retransplants excluded
Follow-up ends on 3/12/2020 for recipients transplanted prior to 3/13/2020

	PACH	U.S.
Number of transplants evaluated	20	1,052
Estimated probability of surviving at 3 years & [95% CI] (unadjusted for patient and donor characteristics)	90.00% [77.77%-100.00%]	87.10% [85.03%-89.22%]
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	88.05%	--
Number of observed deaths during the first 3 years after transplant	2	127
Number of expected deaths during the first 3 years after transplant	2.52	--
Estimated hazard ratio*	0.89	--
95% credible interval for the hazard ratio**	[0.24, 1.94]	--

* The hazard ratio provides an estimate of how UPMC Children's Hospital of Pittsburgh's results compare with what was expected based on modeling the transplant outcomes from all U.S. programs. A ratio above 1 indicates higher than expected patient death rates (e.g., a hazard ratio of 1.5 would indicate 50% higher risk), and a ratio below 1 indicates lower than expected patient death rates (e.g., a hazard ratio of 0.75 would indicate 25% lower risk). If PACH's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.24, 1.94], indicates the location of PACH's true hazard ratio with 95% probability. The best estimate is 11% lower risk of patient death compared to an average program, but PACH's performance could plausibly range from 76% reduced risk up to 94% increased risk.

Figure C31D. Pediatric (<18) 3-year patient death HR estimate (deceased donor grafts)

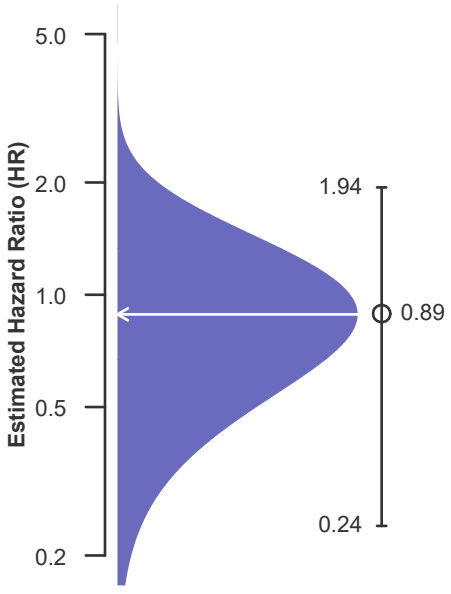
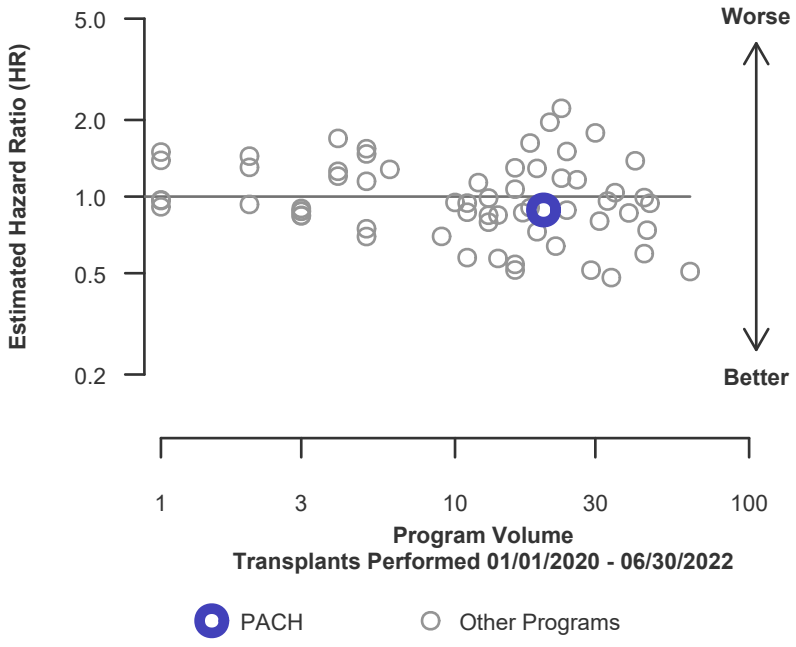


Figure C32D. Pediatric (<18) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C21. Multi-organ transplant graft survival: 07/01/2022 - 12/31/2024

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Heart Graft Failures		First-Year Outcomes: Estimated Heart Graft Survival	
	PACH-TX1	USA	PACH-TX1	USA	PACH-TX1	USA
Liver-Heart	1	171	0	31	100.0%	81.9%

Pediatric (<18) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Heart Graft Failures		First-Year Outcomes: Estimated Heart Graft Survival	
	PACH-TX1	USA	PACH-TX1	USA	PACH-TX1	USA
Heart-Lung	1	6	0	3	100.0%	50.0%

Table C22. Multi-organ transplant patient survival: 07/01/2022 - 12/31/2024

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Patient Deaths		First-Year Outcomes: Estimated Patient Survival	
	PACH-TX1	USA	PACH-TX1	USA	PACH-TX1	USA
Liver-Heart	1	171	0	31	100.0%	81.9%

Pediatric (<18) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Patient Deaths		First-Year Outcomes: Estimated Patient Survival	
	PACH-TX1	USA	PACH-TX1	USA	PACH-TX1	USA
Heart-Lung	1	6	0	3	100.0%	50.0%