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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 eligible death conversion rates and 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, 1-year, 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. The reports released in January 2021 made adjustments to transplant program and OPO performance metrics so that data beyond the declaration of a national public health emergency on March 13, 2020, were not included in the metrics.

The SRTR Review Committee (SRC) reviewed the metrics at its meetings on January 20, 2021, and February 9, 2021, with the goal of determining whether continued adjustments are necessary, or if the SRTR should resume regular reporting of transplant program and OPO performance metrics. The committee reviewed data on how the pandemic has affected the nation's transplant system, and the extent to which the effects varied geographically and temporally. The committee made the following recommendations to SRTR. These recommendations were reviewed by the Health Resources and Services Administration's (HRSA's) Division of Transplantation, which oversees the SRTR. HRSA approved of these recommendations which the SRTR will implement for the July 2021 reporting cycle:

Posttransplant Outcomes (including 1-month, 1-year, and 3-year graft and patient survival): Evaluations cohorts will continue to exclude transplants and follow-up time beyond March 12, 2020.

1-month & 1-year Patient and Graft Survival Evaluations: Transplants 1/1/2018-3/12/2020; follow-up through 3/12/2020.

3-year Patient and Graft Survival Evaluations: Transplants 1/1/2015-12/31/2017; follow-up through 3/12/2020.

Pre-Transplant Mortality Rate (formerly called Waitlist Mortality Rate): Evaluation cohorts will be modified on an organ-specific basis:

Kidney and Lung: Candidates on the waitlist 1/1/2019-3/12/2020.

Liver, Heart, Pancreas, and Intestine: Candidates on the waitlist 1/1/2019-12/31/2020.

Transplant Rate: The first quarter following declaration of a national emergency will be excluded from the transplant rate evaluations for all organ types.

Candidates on the waitlist 1/1/2019-3/12/2020 and 6/13/2020-12/31/2020.

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Overall Rate of Mortality After Listing: Patient follow-up will continue to be truncated on 3/12/2020:

Evaluation period: 1/1/2019-3/12/2020.

Offer Acceptance Rate: These evaluations will return to normal reporting cohorts.

Offers received 1/1/2020-12/31/2020.

These decisions will apply to the evaluations released in the SRTR's semi-annual program-specific reports scheduled for release on July 6, 2021. These changes have been communicated to the leadership of the Organ Procurement and Transplantation Network's Membership and Professional Standards Committee (MSPC). These decisions will then be re-evaluated as more information becomes available in preparation for the release scheduled for January 2022.

As with the January 2021 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 kidney transplant program at Hackensack University Medical Center (NJHK). 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 transplant rate at this program was 61.1 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. Transplant rates are also presented excluding transplants from a living donor (Table B4D and Figures B1D-B3D). 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 01/01/2015 and 06/30/2020. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this program was 1.0 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 12/31/2020 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 - B14 similarly show offer acceptance rates for subsets

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of offers.

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-C10 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-C10 present data on graft survival, Tables C11-C16 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 C17 and C18 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.

Table D1 shows the rates of follow-up for living donors.

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

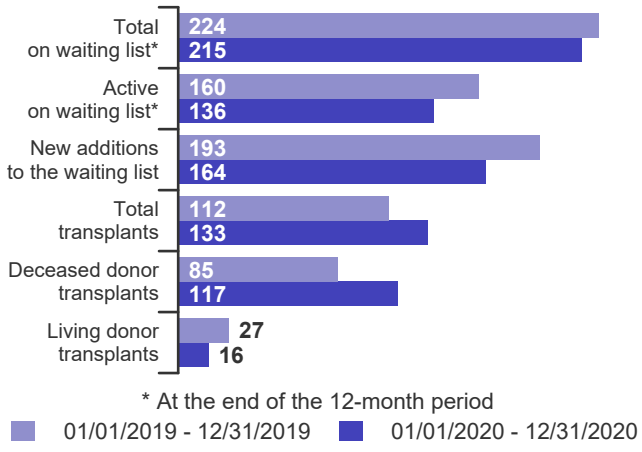


Table A1. Census of transplant recipients

Recipients	01/01/2019-12/31/2019	01/01/2020-12/31/2020
Transplanted at this center	112	133
Followed by this center*	398	428
...transplanted at this program	391	424
...transplanted elsewhere	7	4

* 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 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020

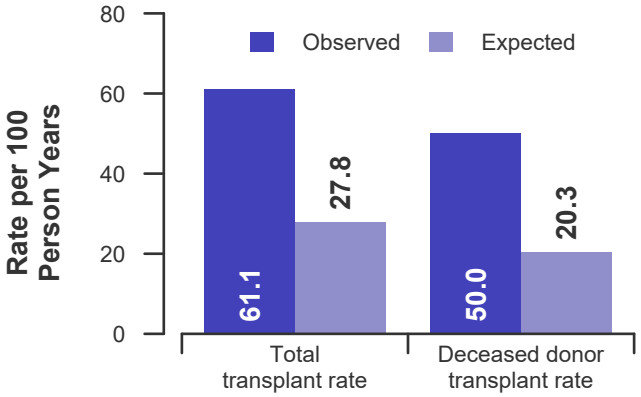


Figure A3. Pre-transplant mortality rates 01/01/2019 - 03/12/2020

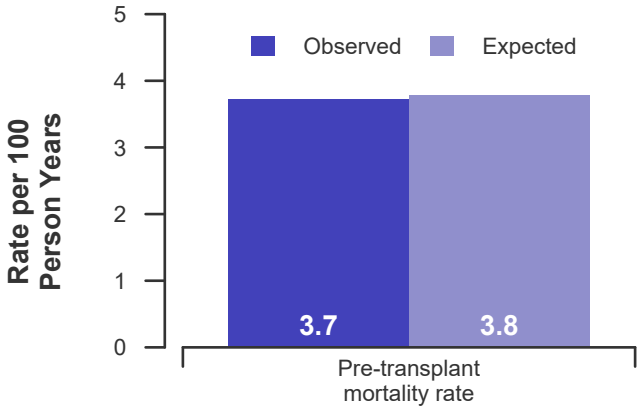


Figure A4. First-year adult graft and patient survival: 01/01/2018 - 03/12/2020

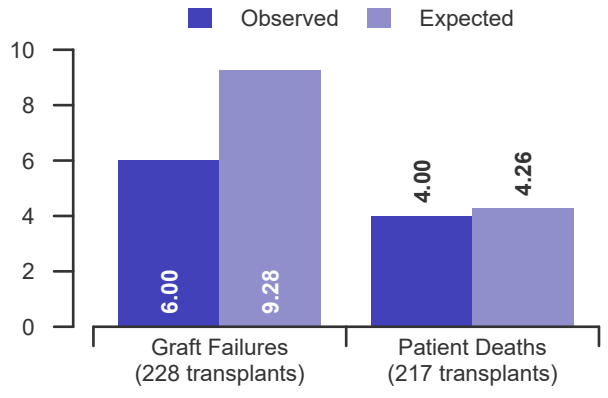
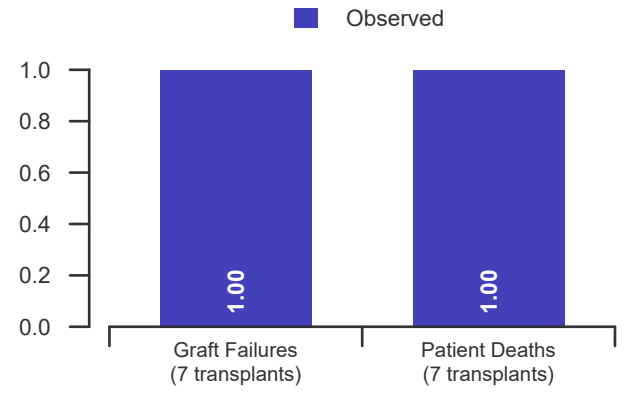


Figure A5. First-year pediatric graft and patient survival: 01/01/2018 - 03/12/2020



B. Waiting List Information

Table B1. Waiting list activity summary: 01/01/2019 - 12/31/2020

Waiting List Registrations	Counts for this center		Activity for 01/01/2020 to 12/31/2020 as percent of registrants on waiting list on 01/01/2020		
	01/01/2019-12/31/2019	01/01/2020-12/31/2020	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	195	224	100.0	100.0	100.0
Additions					
New listings at this center	193	164	73.2	34.5	37.2
Removals					
Transferred to another center	3	0	0.0	0.9	1.5
Received living donor transplant*	27	16	7.1	5.3	5.1
Received deceased donor transplant*	85	115	51.3	15.0	17.3
Died	8	6	2.7	4.8	4.8
Transplanted at another center	12	5	2.2	4.8	3.9
Deteriorated	16	18	8.0	3.3	3.8
Recovered	0	0	0.0	0.1	0.2
Other reasons	13	13	5.8	5.0	4.4
On waiting list at end of period	224	215	96.0	95.4	96.2

* 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 01/01/2020 and 12/31/2020

Demographic Characteristic	New Waiting List Registrations 01/01/2020 to 12/31/2020 (%)			All Waiting List Registrations on 12/31/2020 (%)		
	This Center (N=164)	OPTN Region (N=4,424)	U.S. (N=37,653)	This Center (N=215)	OPTN Region (N=12,233)	U.S. (N=97,493)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	43.3	47.6	42.0	38.1	39.8	35.2
African-American	26.8	34.6	28.4	29.8	43.6	32.0
Hispanic/Latino	18.9	9.7	19.7	19.1	8.5	21.1
Asian	11.0	7.7	8.2	12.1	7.4	9.9
Other	0.0	0.4	1.8	0.9	0.6	1.8
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)						
<2 years	0.0	0.3	0.2	0.0	0.1	0.1
2-11 years	0.6	0.9	1.0	0.0	0.6	0.6
12-17 years	3.7	1.5	1.7	7.4	1.2	1.1
18-34 years	9.8	8.6	10.6	5.6	8.0	10.3
35-49 years	11.0	20.5	24.2	16.7	24.3	26.9
50-64 years	49.4	43.2	41.4	41.9	44.3	43.4
65-69 years	9.8	14.7	13.1	12.1	14.1	12.1
70+ years	15.9	10.3	7.8	16.3	7.5	5.6
Gender (%)						
Male	67.1	64.3	62.5	65.6	64.1	62.0
Female	32.9	35.7	37.5	34.4	35.9	38.0

* 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%.

B. Waiting List Information

Table B3. Medical characteristics of waiting list candidates
Candidates registered on the waiting list between 01/01/2020 and 12/31/2020

Medical Characteristic	New Waiting List Registrations 01/01/2020 to 12/31/2020 (%)			All Waiting List Registrations on 12/31/2020 (%)		
	This Center (N=164)	OPTN Region (N=4,424)	U.S. (N=37,653)	This Center (N=215)	OPTN Region (N=12,233)	U.S. (N=97,493)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	46.3	46.8	49.1	46.5	50.2	53.9
A	29.3	32.9	32.3	21.9	28.4	27.0
B	20.7	15.8	14.8	28.8	18.6	16.6
AB	3.7	4.5	3.7	2.8	2.8	2.4
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	14.0	13.1	12.9	20.9	15.0	13.8
No	86.0	86.9	87.1	79.1	85.0	86.2
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Initial CPRA (%)						
0-9%	77.4	77.2	79.8	67.4	77.5	79.8
10-79%	13.4	14.7	12.8	18.1	14.5	12.8
80+%	9.1	8.1	7.2	14.4	8.0	7.3
Unknown	0.0	0.0	0.1	0.0	0.0	0.1
Primary Disease (%)*						
Glomerular Diseases	22.6	16.6	18.7	24.7	17.4	18.7
Tubular and Interstitial Diseases	4.9	4.3	3.6	6.0	4.1	3.6
Polycystic Kidneys	5.5	7.8	7.2	7.4	7.2	6.8
Congenital, Familial, Metabolic	1.8	2.0	2.4	0.9	1.7	1.9
Diabetes	36.6	32.5	35.0	35.8	32.8	37.0
Renovascular & Vascular Diseases	0.0	0.2	0.1	0.0	0.2	0.1
Neoplasms	0.0	0.2	0.4	0.0	0.3	0.3
Hypertensive Nephrosclerosis	11.6	20.6	19.5	12.6	23.6	21.0
Other	17.1	14.9	12.7	12.6	12.4	10.1
Missing*	0.0	0.9	0.5	0.0	0.4	0.4

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.

B. Waiting List Information

Table B4. Transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	194	2,153	12,839	100,467
Person Years**	377.9	3,988.9	22,516.9	175,201.3
Removals for Transplant	231	1,022	4,875	41,518
Adult (18+) Candidates				
Count on waiting list at start*	187	2,093	12,646	98,920
Person Years**	358.6	3,877.2	22,164.1	172,392.6
Removals for transpant	224	996	4,728	39,982
Pediatric (<18) Candidates				
Count on waiting list at start*	7	60	193	1,547
Person Years**	19.2	111.7	352.8	2,808.7
Removals for transplant	7	26	147	1,536

* 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 January 1 or fron the date of first wait listing until death, transplant, removal from the waiting list or December 31.

Figure B1. Observed and expected transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020

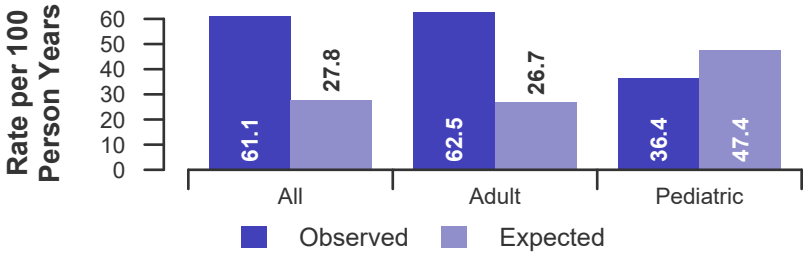


Figure B2. Transplant rate ratio estimate

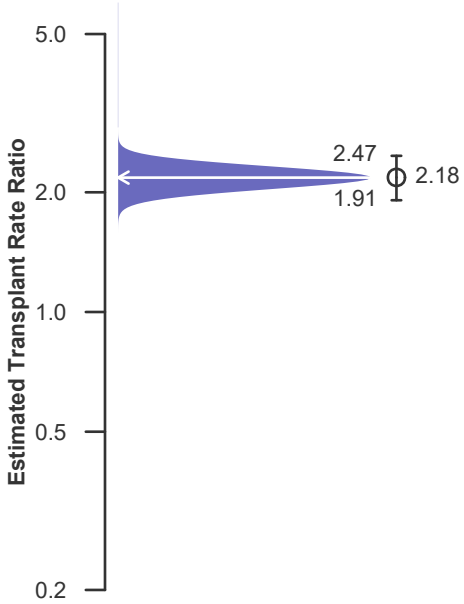
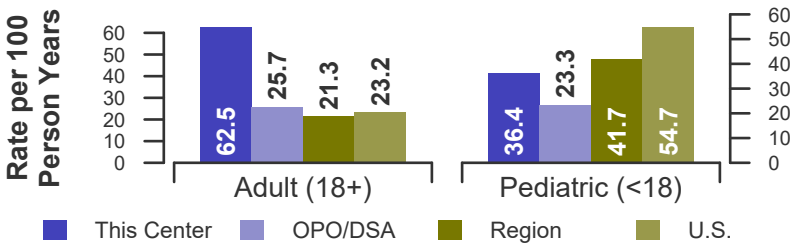


Figure B3. Observed adult (18+) and pediatric (<18) transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020



B. Waiting List Information

Table B4D. Deceased donor transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	194	2,153	12,839	100,467
Person Years**	377.9	3,988.9	22,516.9	175,201.3
Removals for Transplant	189	667	3,399	30,186
Adult (18+) Candidates				
Count on waiting list at start*	187	2,093	12,646	98,920
Person Years**	358.6	3,877.2	22,164.1	172,392.6
Removals for transpant	185	650	3,305	29,130
Pediatric (<18) Candidates				
Count on waiting list at start*	7	60	193	1,547
Person Years**	19.2	111.7	352.8	2,808.7
Removals for transplant	4	17	94	1,056

* 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 January 1 or from the date of first wait listing until death, transplant, removal from the waiting list or December 31.

Figure B1D. Observed and expected deceased donor transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020

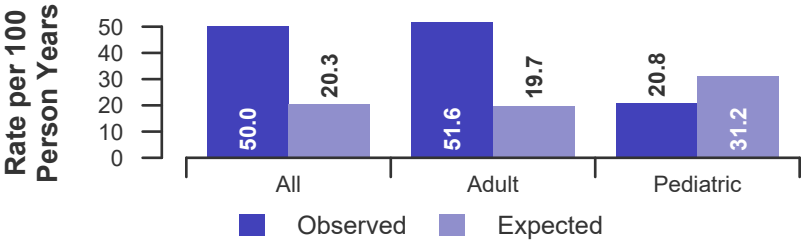


Figure B2D. Deceased donor transplant rate ratio estimate

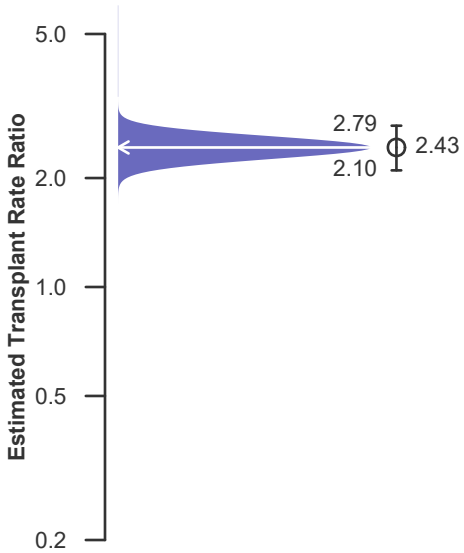
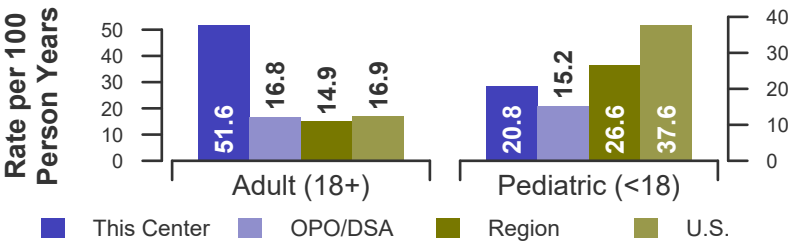


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 01/01/2019 - 03/12/2020, 06/13/2020 - 12/31/2020



B. Waiting List Information

Table B5. Pre-transplant mortality rates: 01/01/2019 - 03/12/2020

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	194	2,153	12,839	100,467
Person Years**	268.1	2,797.6	16,361.6	127,632.2
Number of deaths	10	97	761	5,897
Adult (18+) Candidates				
Count on waiting list at start*	187	2,093	12,646	98,920
Person Years**	256.6	2,724.0	16,123.0	125,703.4
Number of deaths	10	95	758	5,873
Pediatric (<18) Candidates				
Count on waiting list at start*	7	60	193	1,547
Person Years**	11.5	73.6	238.6	1,928.8
Number of deaths	0	2	3	24

* 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 January 1 or from the date of first wait listing until death, transplant, 60 days after recovery, transfer or March 12, 2020.

Figure B4. Observed and expected pre-transplant mortality rates: 01/01/2019 - 03/12/2020

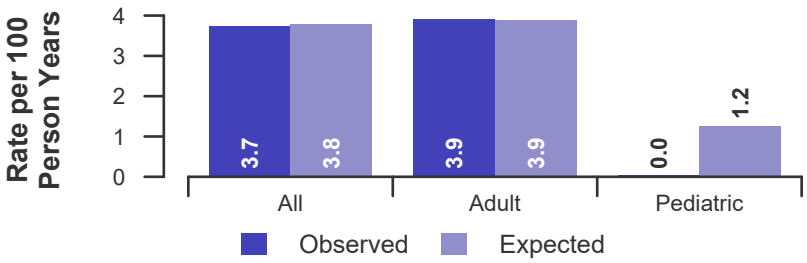


Figure B5. Pre-transplant mortality rate ratio estimate

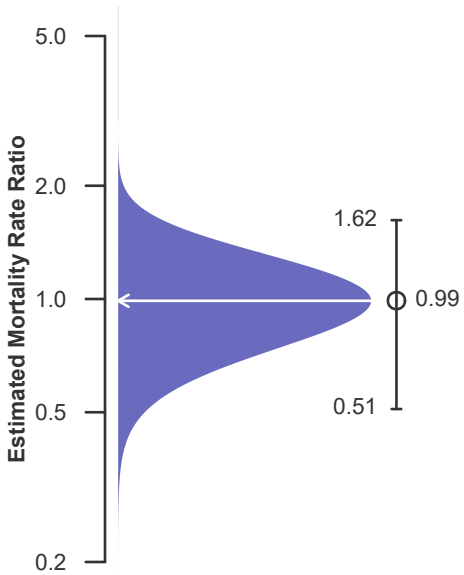
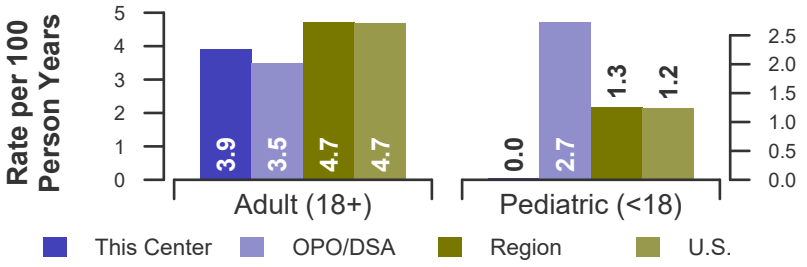


Figure B6. Observed adult (18+) and pediatric (<18) pre-transplant mortality rates: 01/01/2019 - 03/12/2020



B. Waiting List Information

Table B6. Rates of patient mortality after listing: 01/01/2019 - 03/12/2020

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Patients				
Count at risk during the evaluation period	759	6,827	36,312	272,409
Person-years*	720.1	6,630.8	36,083.3	270,487.4
Number of Deaths	35	254	1,673	11,492
Adult (18+) Patients				
Count at risk during the evaluation period	731	6,689	35,454	264,371
Person-years*	693.1	6,490.8	35,201.2	262,258.5
Number of Deaths	34	252	1,666	11,440
Pediatric (<18) Patients				
Count at risk during the evaluation period	28	138	858	8,038
Person-years*	27.0	140.1	882.1	8,229.0
Number of Deaths	1	2	7	52

* Person-years are calculated as days (converted to fractional years). The number of days from 01/01/2019, or from the date of first wait listing until death, reaching 7 years after listing or March 12, 2020.

** 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: 01/01/2019 - 03/12/2020

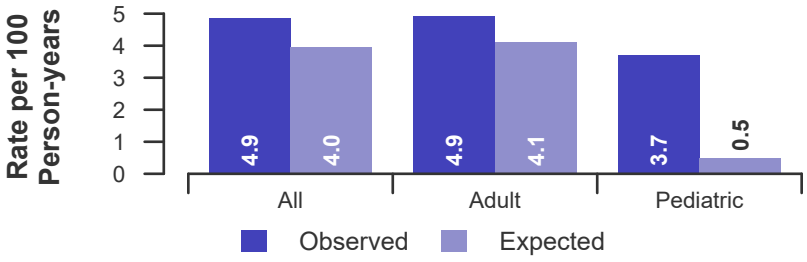


Figure B8. HR estimate of patient mortality after listing

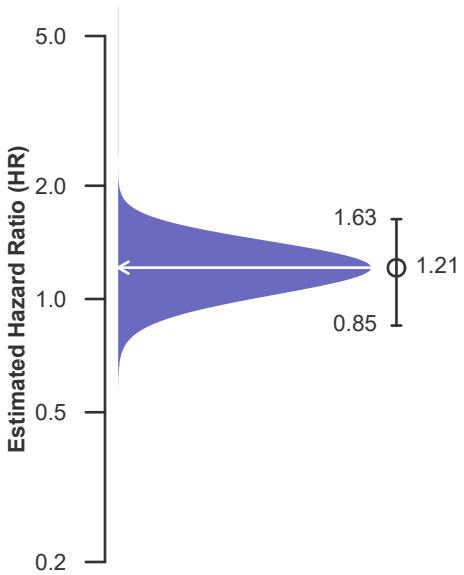
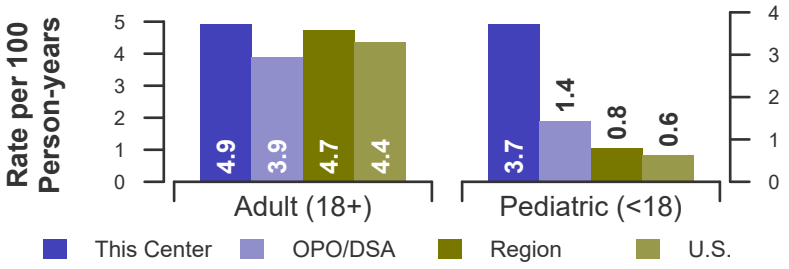


Figure B9. Observed adult (18+) and pediatric (<18) rates of patient mortality after listing: 01/01/2019 - 03/12/2020



B. Waiting List Information

Table B7. Waiting list candidate status after listing
Candidates registered on waiting list between 07/01/2018 and 06/30/2019

Waiting list status (survival status)	This Center (N=168) Months Since Listing			U.S. (N=41,372) Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	56.5	40.5	29.8	76.9	63.7	53.7
Died on the waiting list without transplant (%)	1.2	1.8	2.4	0.9	1.9	3.0
Removed without transplant (%):						
Condition worsened (status unknown)	1.8	3.6	6.0	0.6	1.4	2.4
Condition improved (status unknown)	0.0	0.0	0.0	0.1	0.1	0.2
Refused transplant (status unknown)	0.0	0.0	0.0	0.1	0.1	0.2
Other	2.4	3.6	4.8	0.7	1.5	2.4
Transplant (living donor from waiting list only) (%):						
Functioning (alive)	12.5	16.1	12.5	6.6	9.7	8.0
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.0	0.0	0.0
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.0	0.0
Died	0.0	0.0	0.6	0.0	0.1	0.1
Status Yet Unknown**	0.0	0.0	4.2	0.1	0.6	3.9
Transplant (deceased donor) (%):						
Functioning (alive)	22.6	28.6	19.0	11.5	15.0	13.0
Failed-Retransplanted (alive)	0.0	0.0	0.0	0.0	0.0	0.0
Failed-alive not retransplanted	0.0	0.0	0.0	0.1	0.0	0.1
Died	0.0	1.2	1.2	0.3	0.5	0.8
Status Yet Unknown*	2.4	4.2	19.0	1.8	4.3	10.8
Lost or Transferred (status unknown) (%)	0.6	0.6	0.6	0.3	0.8	1.3
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	1.2	3.0	4.2	1.3	2.6	4.0
Total % known died or removed as unstable	3.0	6.5	10.1	1.9	4.0	6.4
Total % removed for transplant	37.5	50.0	56.5	20.4	30.3	36.8
Total % with known functioning transplant (alive)	35.1	44.6	31.5	18.1	24.6	21.1

* 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 01/01/2015 and 12/31/2017

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	274	1.1	13.5	24.8	34.3	93,221	3.9	17.0	23.7	29.0
Ethnicity/Race*										
White	103	1.0	6.8	15.5	25.2	37,309	4.2	17.8	24.7	30.0
African-American	61	1.6	24.6	31.1	42.6	29,133	4.0	17.4	24.1	29.4
Hispanic/Latino	67	1.5	14.9	31.3	37.3	17,551	4.1	16.4	22.8	28.2
Asian	43	0.0	11.6	27.9	39.5	7,615	2.3	12.0	18.5	24.0
Other	0	--	--	--	--	1,613	5.3	21.0	27.8	33.0
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	0	--	--	--	--	135	4.4	36.3	53.3	71.1
2-11 years	2	0.0	50.0	100.0	100.0	823	8.5	49.0	62.9	71.3
12-17 years	9	0.0	55.6	66.7	77.8	1,380	8.3	51.2	63.5	68.9
18-34 years	25	0.0	8.0	20.0	24.0	9,438	3.8	18.3	26.6	33.5
35-49 years	49	2.0	16.3	28.6	38.8	23,500	3.7	16.3	23.3	29.1
50-64 years	102	1.0	13.7	26.5	34.3	39,832	4.0	15.8	21.9	26.8
65-69 years	41	2.4	9.8	17.1	36.6	12,332	3.8	15.5	21.5	26.3
70+ years	46	0.0	6.5	15.2	21.7	5,781	3.5	16.3	21.8	26.3
Gender										
Male	189	1.6	14.3	24.3	33.3	57,838	4.1	16.4	22.7	27.8
Female	85	0.0	11.8	25.9	36.5	35,383	3.8	18.0	25.4	31.1

* 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 01/01/2015 and 12/31/2017

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	274	1.1	13.5	24.8	34.3	93,221	3.9	17.0	23.7	29.0
Blood Type										
O	146	2.1	12.3	26.0	35.6	46,293	3.7	14.7	20.4	25.0
A	77	0.0	16.9	28.6	35.1	29,320	4.8	20.4	28.3	34.7
B	41	0.0	7.3	7.3	24.4	14,147	2.4	14.0	20.4	25.3
AB	10	0.0	30.0	50.0	50.0	3,461	6.6	31.6	42.7	50.2
Previous Transplant										
Yes	26	0.0	3.8	23.1	26.9	12,661	2.7	17.0	25.2	30.5
No	248	1.2	14.5	25.0	35.1	80,560	4.2	17.0	23.5	28.8
Peak PRA/CPRA										
0-9%	199	1.5	13.6	24.6	36.2	74,476	4.2	16.4	22.6	28.0
10-79%	41	0.0	17.1	26.8	31.7	11,022	2.8	16.5	23.8	29.4
80+%	34	0.0	8.8	23.5	26.5	7,613	2.8	24.0	34.0	39.0
Unknown	0	--	--	--	--	6	100.0	100.0	100.0	100.0
Primary Disease*										
Glomerular Diseases	53	0.0	17.0	39.6	52.8	17,136	3.2	17.7	26.0	32.6
Tubular & Interstitial Diseases	5	0.0	0.0	0.0	20.0	3,551	4.9	20.4	28.0	33.7
Polycystic Kidneys	18	0.0	11.1	33.3	38.9	6,288	2.4	16.0	23.9	30.8
Congenital, Familial, Metabolic	6	0.0	16.7	50.0	66.7	1,845	5.5	30.8	40.2	47.3
Diabetes	107	0.9	9.3	15.0	22.4	32,866	2.7	12.6	17.7	22.0
Renovascular & Vascular Diseases	0	--	--	--	--	141	7.1	22.0	29.8	36.2
Neoplasms	1	0.0	0.0	0.0	0.0	301	7.3	24.9	31.6	36.9
Hypertensive Nephrosclerosis	52	1.9	17.3	28.8	36.5	19,877	3.9	17.0	24.0	29.6
Other	32	3.1	18.8	21.9	34.4	10,863	9.3	26.4	33.5	38.0
Missing*	0	--	--	--	--	353	1.7	11.3	16.7	22.1

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.

B. Waiting List Information

Table B10. Time to transplant for waiting list candidates*
Candidates registered on the waiting list between 01/01/2015 and 06/30/2020

	Months to Transplant**			
Percentile	**Center**	**OPO/DSA**	**Region**	**U.S.**
5th	1.0	1.1	1.1	0.9
10th	2.1	2.5	2.9	2.3
25th	6.1	9.5	10.6	9.3
50th (median time to transplant)	21.0	43.1	44.4	40
75th	Not Observed	Not Observed	Not Observed	Not Observed

* 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 12/31/2020. 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: 01/01/2020 - 12/31/2020

Offers Acceptance Characteristics	This Center	OPO/DSA	Region	U.S.
Overall				
Number of Offers	6,150	66,251	391,077	1,980,795
Number of Acceptances	116	348	1,851	16,412
Expected Acceptances	31.4	322.8	2,308.6	16,389.1
Offer Acceptance Ratio*	3.53	1.08	0.80	1.00
95% Credible Interval**	[2.92, 4.19]	--	--	--
Low-KDRI Donors (KDRI < 1.05)				
Number of Offers	537	4,961	46,430	263,047
Number of Acceptances	23	70	575	5,457
Expected Acceptances	9.0	63.8	683.2	5,460.0
Offer Acceptance Ratio*	2.27	1.09	0.84	1.00
95% Credible Interval**	[1.47, 3.24]	--	--	--
Medium-KDRI Donors (1.05 < KDRI < 1.75)				
Number of Offers	3,191	40,419	246,048	1,265,648
Number of Acceptances	67	203	1,015	9,096
Expected Acceptances	17.0	210.3	1,352.4	9,074.4
Offer Acceptance Ratio*	3.63	0.97	0.75	1.00
95% Credible Interval**	[2.82, 4.53]	--	--	--
High-KDRI Donors (KDRI > 1.75)				
Number of Offers	2,422	20,871	98,599	452,100
Number of Acceptances	26	75	261	1,859
Expected Acceptances	5.4	48.6	272.9	1,854.6
Offer Acceptance Ratio*	3.78	1.52	0.96	1.00
95% Credible Interval**	[2.51, 5.30]	--	--	--
Hard-to-Place Kidneys (Over 100 Offers)				
Number of Offers	5,812	61,301	343,846	1,681,708
Number of Acceptances	92	102	352	2,490
Expected Acceptances	7.5	77.2	493.3	2,486.4
Offer Acceptance Ratio*	9.94	1.31	0.71	1.00
95% Credible Interval**	[8.03, 12.04]	--	--	--

* The offer acceptance ratio estimates the relative offer acceptance practice of Hackensack University Medical Center (NJHK) compared to the national offer acceptance practice. A ratio above one indicates the program is more likely to accept an offer compared to national offer acceptance practices (e.g., an offer acceptance ratio of 1.25 indicates a 25% more likely to accept an offer), while a ratio below one indicates the program is less likely to accept an offer compared to national offer acceptance practices (e.g., an offer acceptance ratio of 0.75 indicates a 25% less likely to accept an offer).
** As an example, the 95% Credible Interval for the overall offer acceptance ratio, [2.92, 4.19], indicates the location of NJHK's true offer acceptance ratio with 95% probability. The best estimate is 253% more likely to accept an offer compared to national acceptance behavior, but NJHK's performance could plausibly range from 192% higher acceptance up to 319% higher acceptance.

B. Waiting List Information

Figure B10. Offer acceptance: Overall

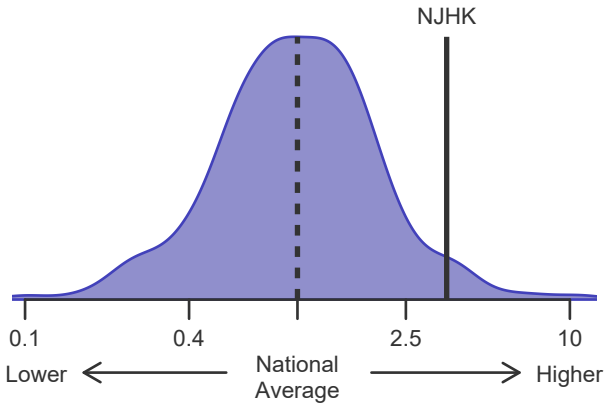


Figure B11. Offer acceptance: Low-KDRI

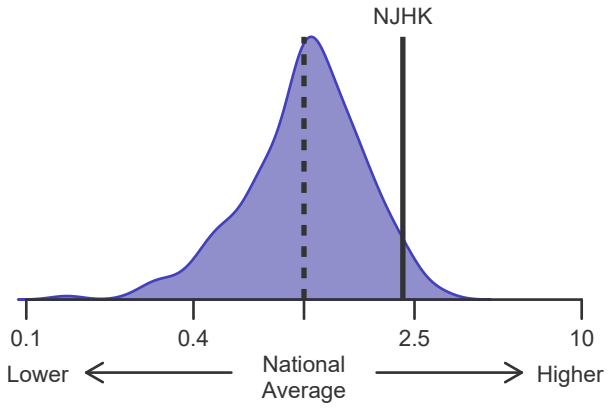


Figure B12. Offer acceptance: Medium-KDRI

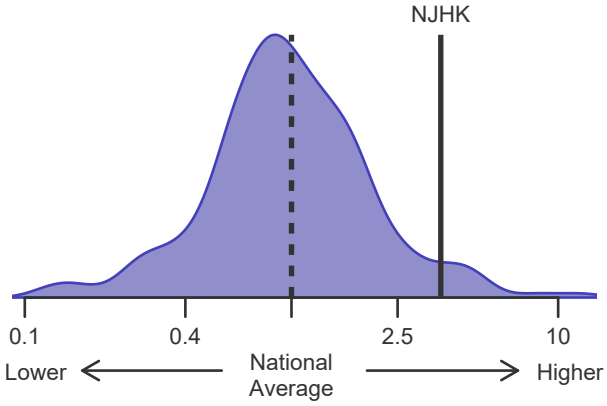


Figure B13. Offer acceptance: High-KDRI

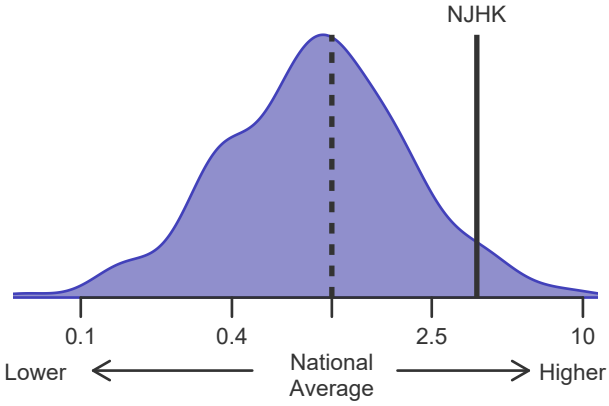
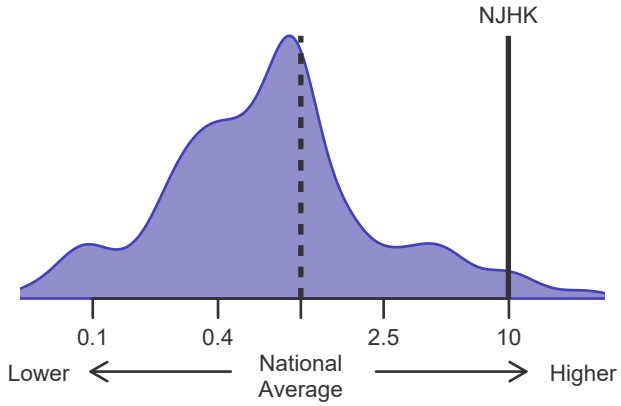


Figure B14. Offer acceptance: Offer number > 100



C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics
Patients transplanted between 01/01/2020 and 12/31/2020

Characteristic	Percentage in each category		
	Center (N=117)	Region (N=1,929)	U.S. (N=17,581)
Ethnicity/Race (%)*			
White	36.8	43.3	39.0
African-American	28.2	39.4	32.1
Hispanic/Latino	25.6	10.0	19.1
Asian	9.4	7.1	7.9
Other	0.0	0.3	1.9
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.1
2-11 years	0.0	1.1	1.2
12-17	0.0	0.8	1.5
18-34	7.7	7.6	10.4
35-49 years	12.0	20.4	23.8
50-64 years	41.0	41.8	39.9
65-69 years	16.2	16.0	13.4
70+ years	23.1	12.3	9.6
Gender (%)			
Male	70.9	62.5	61.0
Female	29.1	37.5	39.0

* 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 C1L. Living donor transplant recipient demographic characteristics
Patients transplanted between 01/01/2020 and 12/31/2020

Characteristic	Percentage in each category		
	Center (N=16)	Region (N=683)	U.S. (N=5,234)
Ethnicity/Race (%)*			
White	68.8	65.6	64.3
African-American	12.5	16.1	11.4
Hispanic/Latino	12.5	8.8	16.2
Asian	6.2	9.4	6.7
Other	0.0	0.1	1.4
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.3	0.3
2-11 years	6.2	1.9	2.0
12-17	6.2	1.5	2.0
18-34	25.0	16.4	15.6
35-49 years	12.5	23.1	25.5
50-64 years	37.5	36.7	35.8
65-69 years	0.0	9.1	10.4
70+ years	12.5	11.0	8.5
Gender (%)			
Male	68.8	63.0	63.1
Female	31.2	37.0	36.9

* 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 01/01/2020 and 12/31/2020

Characteristic	Percentage in each category		
	Center (N=117)	Region (N=1,929)	U.S. (N=17,581)
Blood Type (%)			
O	50.4	44.8	46.2
A	36.8	34.8	34.8
B	8.5	13.9	14.1
AB	4.3	6.5	5.0
Previous Transplant (%)			
Yes	4.3	13.6	12.5
No	95.7	86.4	87.5
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	82.9	59.0	62.1
10-79%	10.3	23.1	22.9
80+ %	6.8	17.9	15.0
Unknown	0.0	0.0	0.0
Body Mass Index (%)			
0-20	3.4	7.3	8.9
21-25	35.0	26.1	26.9
26-30	33.3	28.3	30.8
31-35	18.8	21.0	21.3
36-40	9.4	8.3	8.6
41+	0.0	1.5	1.5
Unknown	0.0	7.5	2.2
Primary Disease (%)*			
Glomerular Diseases	22.2	19.0	21.5
Tubular and Interstitial Disease	5.1	4.7	4.0
Polycystic Kidneys	6.0	7.4	7.3
Congenital, Familial, Metabolic	0.9	2.2	2.6
Diabetes	37.6	29.0	29.7
Renovascular & Vascular Diseases	0.0	0.2	0.2
Neoplasms	0.0	0.6	0.4
Hypertensive Nephrosclerosis	17.1	26.5	22.7
Other Kidney	11.1	10.1	11.4
Missing*	0.0	0.2	0.3

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.

C. Transplant Information

Table C2L. Living donor transplant recipient medical characteristics
Patients transplanted between 01/01/2020 and 12/31/2020

Characteristic	Percentage in each category		
	Center (N=16)	Region (N=683)	U.S. (N=5,234)
Blood Type (%)			
O	31.2	41.6	43.5
A	43.8	38.7	39.5
B	25.0	16.1	13.6
AB	0.0	3.7	3.3
Previous Transplant (%)			
Yes	0.0	11.0	10.8
No	100.0	89.0	89.2
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	87.5	73.6	75.2
10-79%	12.5	20.6	19.4
80+ %	0.0	5.6	5.3
Unknown	0.0	0.1	0.0
Body Mass Index (%)			
0-20	12.5	11.0	12.2
21-25	25.0	30.0	28.5
26-30	31.2	29.9	31.2
31-35	31.2	17.1	19.1
36-40	0.0	7.9	6.8
41+	0.0	0.9	1.1
Unknown	0.0	3.2	1.1
Primary Disease (%)*			
Glomerular Diseases	37.5	29.0	28.7
Tubular and Interstitial Disease	12.5	6.0	5.9
Polycystic Kidneys	0.0	12.3	12.5
Congenital, Familial, Metabolic	12.5	3.5	3.8
Diabetes	31.2	23.6	23.8
Renovascular & Vascular Diseases	0.0	0.6	0.6
Neoplasms	0.0	0.4	0.4
Hypertensive Nephrosclerosis	0.0	16.1	15.3
Other Kidney	6.2	8.3	8.6
Missing*	0.0	0.1	0.3

* When "retransplant" is indicated, the primary disease is passed forward from the prior transplant in order to indicate the initial primary disease causing organ failure. "Missing" may include some patients for whom retransplant is indicated but no prior diagnosis can be found.

C. Transplant Information

Table C3D. Deceased donor characteristics
Transplants performed between 01/01/2020 and 12/31/2020

Donor Characteristic	Percentage in each category		
	Center (N=117)	Region (N=1,929)	U.S. (N=17,581)
Cause of Death (%)			
Deceased: Stroke	27.4	20.8	21.5
Deceased: MVA	9.4	9.7	13.4
Deceased: Other	63.2	69.5	65.1
Ethnicity/Race (%)*			
White	57.3	68.5	66.5
African-American	24.8	17.5	14.1
Hispanic/Latino	13.7	10.8	15.3
Asian	2.6	2.5	2.9
Other	1.7	0.6	1.2
Not Reported	0.0	0.0	0.0
Age (%)			
<2 years	5.1	1.0	0.8
2-11 years	0.0	1.9	2.2
12-17	0.0	2.4	3.7
18-34	32.5	34.2	33.6
35-49 years	23.9	30.4	32.6
50-64 years	34.2	26.5	24.6
65-69 years	2.6	2.7	2.0
70+ years	1.7	0.8	0.4
Gender (%)			
Male	50.4	63.7	63.3
Female	49.6	36.3	36.7
Blood Type (%)			
O	50.4	46.5	47.9
A	37.6	38.4	36.9
B	8.5	11.1	11.6
AB	3.4	3.9	3.6
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 C3L. Living donor characteristics
Transplants performed between 01/01/2020 and 12/31/2020

Donor Characteristic	Percentage in each category		
	Center (N=16)	Region (N=683)	U.S. (N=5,234)
Ethnicity/Race (%)*			
White	62.5	74.4	71.4
African-American	12.5	10.2	7.3
Hispanic/Latino	12.5	8.2	14.8
Asian	12.5	6.0	4.8
Other	0.0	1.2	1.8
Not Reported	0.0	0.0	0.0
Age (%)			
0-11 years	0.0	0.0	0.0
12-17	0.0	0.0	0.0
18-34	43.8	25.9	26.5
35-49 years	25.0	34.7	36.8
50-64 years	25.0	33.2	30.9
65-69 years	6.2	5.6	4.3
70+ years	0.0	0.6	1.4
Gender (%)			
Male	43.8	35.7	34.8
Female	56.2	64.3	65.2
Blood Type (%)			
O	68.8	61.2	62.8
A	25.0	27.1	27.9
B	6.2	10.4	8.2
AB	0.0	1.3	1.1
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 01/01/2020 and 12/31/2020

Transplant Characteristic	Percentage in each category		
	Center (N=117)	Region (N=1,929)	U.S. (N=17,581)
Cold Ischemic Time (Hours): Local (%)			
Deceased: 0-11 hr	22.9	40.1	33.4
Deceased: 12-21 hr	62.9	49.5	48.4
Deceased: 22-31 hr	14.3	9.2	14.7
Deceased: 32-41 hr	0.0	0.4	1.7
Deceased: 42+ hr	0.0	0.0	0.4
Not Reported	0.0	0.7	1.4
Cold Ischemic Time (Hours): Shared (%)			
Deceased: 0-11 hr	2.4	10.3	10.3
Deceased: 12-21 hr	14.6	45.5	35.0
Deceased: 22-31 hr	48.8	34.2	37.6
Deceased: 32-41 hr	28.0	6.4	13.1
Deceased: 42+ hr	6.1	1.2	2.7
Not Reported	0.0	2.5	1.3
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	4.3	11.4	11.4
1	51.3	37.5	39.0
2	44.4	51.1	49.3
Not Reported	0.0	0.0	0.2
B Locus Mismatches (%)			
0	1.7	7.0	6.7
1	27.4	24.2	24.9
2	70.9	68.8	68.1
Not Reported	0.0	0.0	0.2
DR Locus Mismatches (%)			
0	5.1	16.2	15.7
1	46.2	45.6	47.3
2	48.7	38.3	36.8
Not Reported	0.0	0.0	0.2
Total Mismatches (%)			
0	0.9	4.1	4.3
1	0.0	1.3	1.2
2	3.4	4.8	4.5
3	12.8	12.6	14.0
4	25.6	27.8	27.1
5	38.5	32.2	33.0
6	18.8	17.1	15.7
Not Reported	0.0	0.0	0.2
Procedure Type (%)			
Single organ	100.0	96.2	93.8
Multi organ	0.0	3.8	6.2
Dialysis in First Week After Transplant (%)			
Yes	35.0	34.6	28.5
No	65.0	64.6	71.2
Not Reported	0.0	0.8	0.3
Donor Location (%)			
Local Donation Service Area (DSA)	29.9	69.2	70.4
Another Donation Service Area (DSA)	70.1	30.8	29.6
Median Time in Hospital After Transplant*	4.0 Days	5.0 Days	5.0 Days

* Multi organ transplants are excluded from this statistic.

C. Transplant Information

Table C4L. Living donor transplant characteristics
Transplants performed between 01/01/2020 and 12/31/2020

Transplant Characteristic	Percentage in each category		
	Center (N=16)	Region (N=683)	U.S. (N=5,234)
Relation with Donor (%)			
Related	56.2	38.8	39.1
Unrelated	43.8	61.2	60.7
Not Reported	0.0	0.0	0.2
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	18.8	16.4	16.2
1	50.0	48.6	48.1
2	31.2	34.3	31.0
Not Reported	0.0	0.7	4.7
B Locus Mismatches (%)			
0	6.2	9.2	9.8
1	56.2	42.6	40.3
2	37.5	47.4	45.2
Not Reported	0.0	0.7	4.7
DR Locus Mismatches (%)			
0	12.5	16.4	15.7
1	68.8	48.0	46.2
2	18.8	34.8	33.3
Not Reported	0.0	0.7	4.7
Total Mismatches (%)			
0	0.0	4.2	4.5
1	6.2	4.4	4.1
2	18.8	11.9	11.7
3	25.0	20.9	21.2
4	31.2	21.8	18.7
5	6.2	22.0	22.8
6	12.5	14.1	12.3
Not Reported	0.0	0.7	4.7
Procedure Type (%)			
Single organ	100.0	100.0	100.0
Multi organ	0.0	0.0	0.0
Dialysis in First Week After Transplant (%)			
Yes	0.0	3.4	2.9
No	100.0	95.5	96.9
Not Reported	0.0	1.2	0.2
Median Time in Hospital After Transplant*	3.0 Days	4.0 Days	4.0 Days

* Multi organ transplants are excluded from this statistic.

C. Transplant Information

Table C5. Adult (18+) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	228	45,553
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	99.11%	98.68%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.47%	--
Number of observed graft failures (including deaths) during the first month after transplant	2	596
Number of expected graft failures (including deaths) during the first month after transplant	3.42	--
Estimated hazard ratio*	0.74	--
95% credible interval for the hazard ratio**	[0.20, 1.62]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.20, 1.62], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 26% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 80% reduced risk up to 62% increased risk.

Figure C1. Adult (18+) 1-month graft failure HR estimate

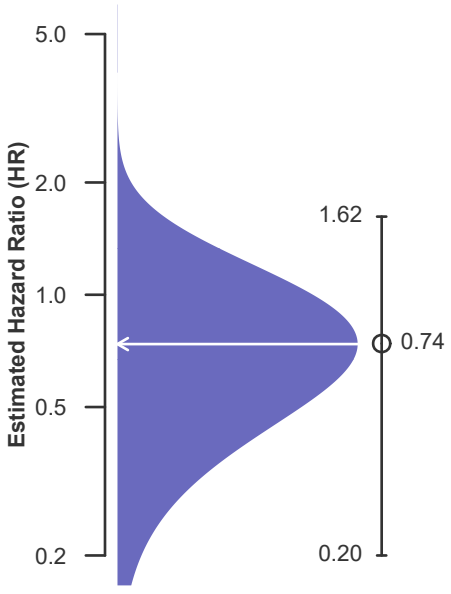
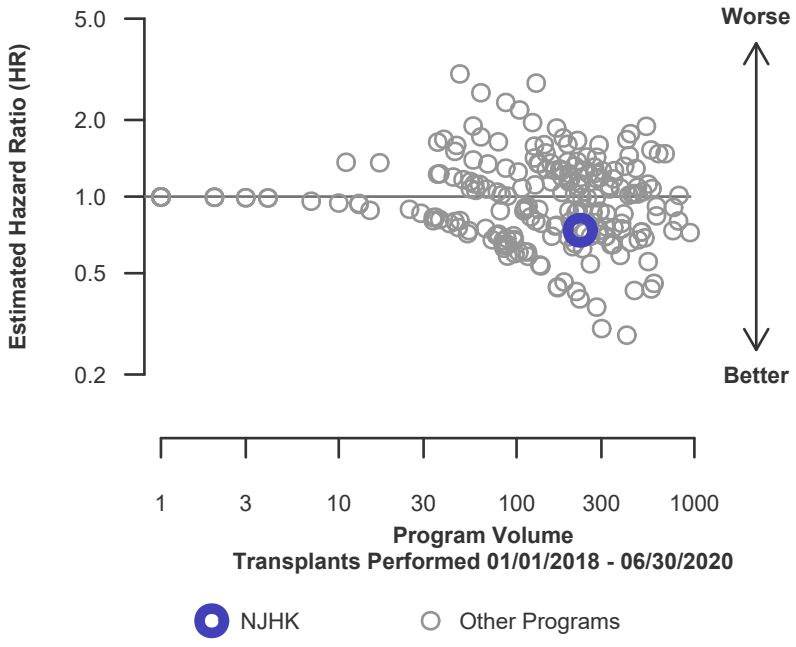


Figure C2. Adult (18+) 1-month graft failure HR program comparison



C. Transplant Information

Table C5D. Adult (18+) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	177	31,532
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	98.85%	98.45%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.25%	--
Number of observed graft failures (including deaths) during the first month after transplant	2	483
Number of expected graft failures (including deaths) during the first month after transplant	3.03	--
Estimated hazard ratio*	0.79	--
95% credible interval for the hazard ratio**	[0.22, 1.74]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.22, 1.74], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 21% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 78% reduced risk up to 74% increased risk.

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

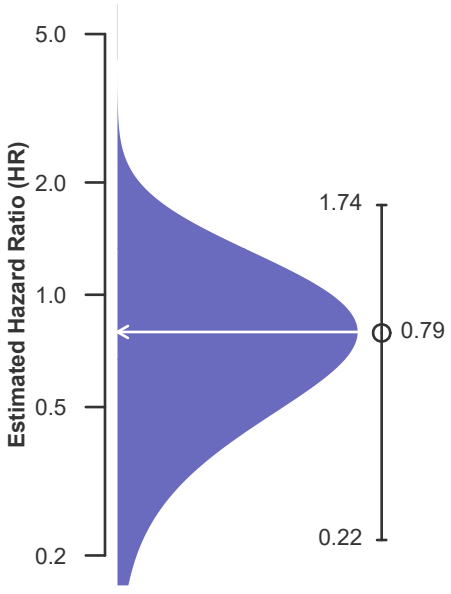
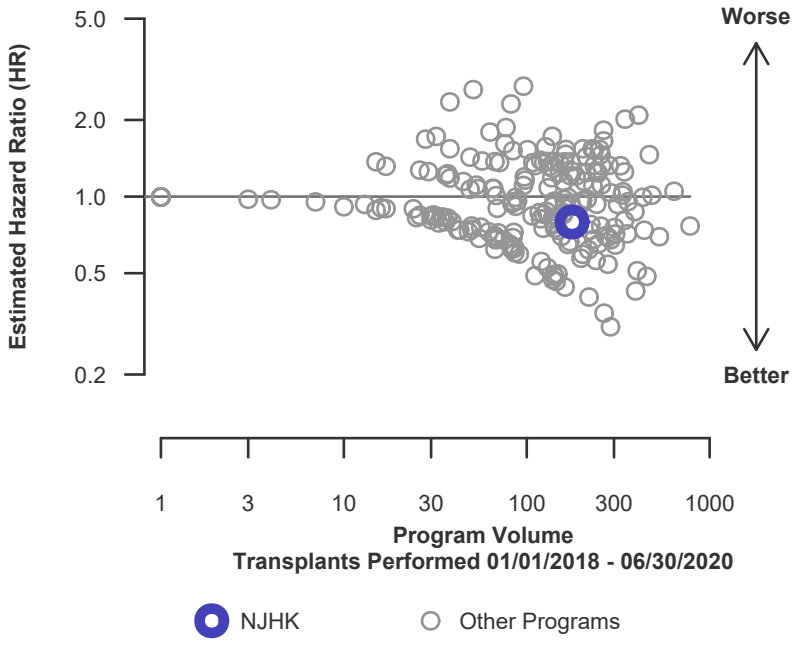


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C5L. Adult (18+) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	51	14,021
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.18%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.24%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	113
Number of expected graft failures (including deaths) during the first month after transplant	0.39	--
Estimated hazard ratio*	0.84	--
95% credible interval for the hazard ratio**	[0.10, 2.33]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.33], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 16% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 90% reduced risk up to 133% increased risk.

Figure C1L. Adult (18+) 1-month living donor graft failure HR estimate

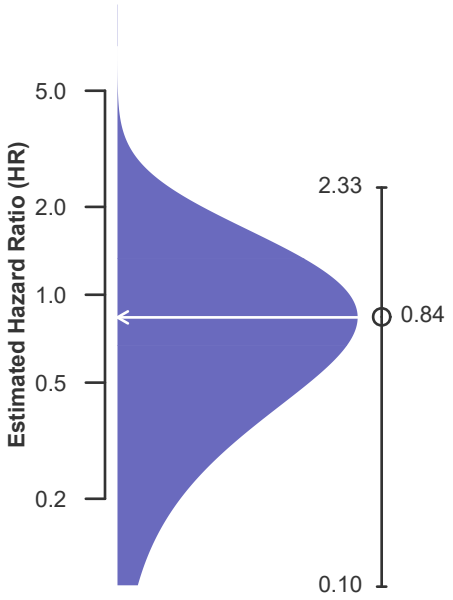
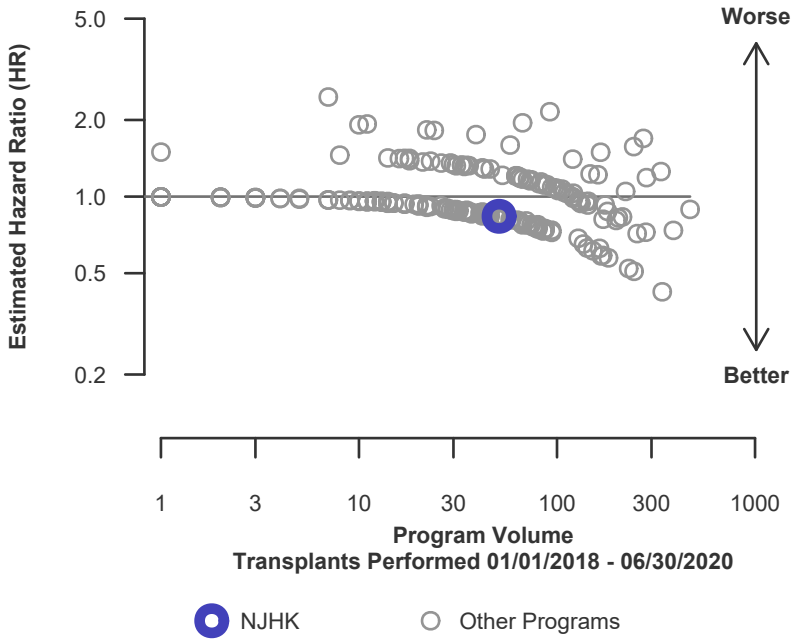


Figure C2L. Adult (18+) 1-month living donor graft failure HR program comparison



C. Transplant Information

Table C6. Adult (18+) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	228	45,553
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	96.77%	95.68%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	94.85%	--
Number of observed graft failures (including deaths) during the first year after transplant	6	1,651
Number of expected graft failures (including deaths) during the first year after transplant	9.28	--
Estimated hazard ratio*	0.71	--
95% credible interval for the hazard ratio**	[0.31, 1.28]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 1.28], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 29% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 28% increased risk.

Figure C3. Adult (18+) 1-year graft failure HR estimate

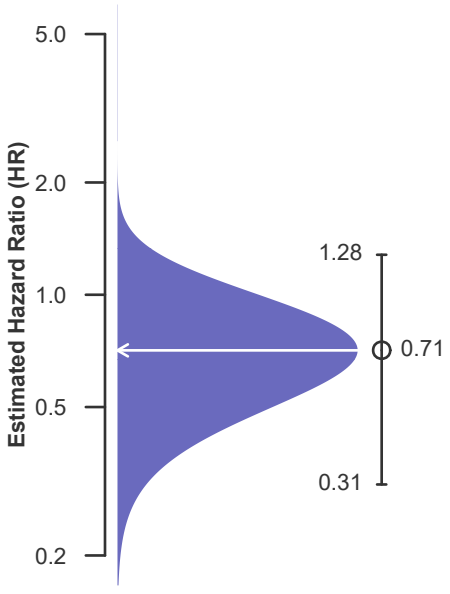
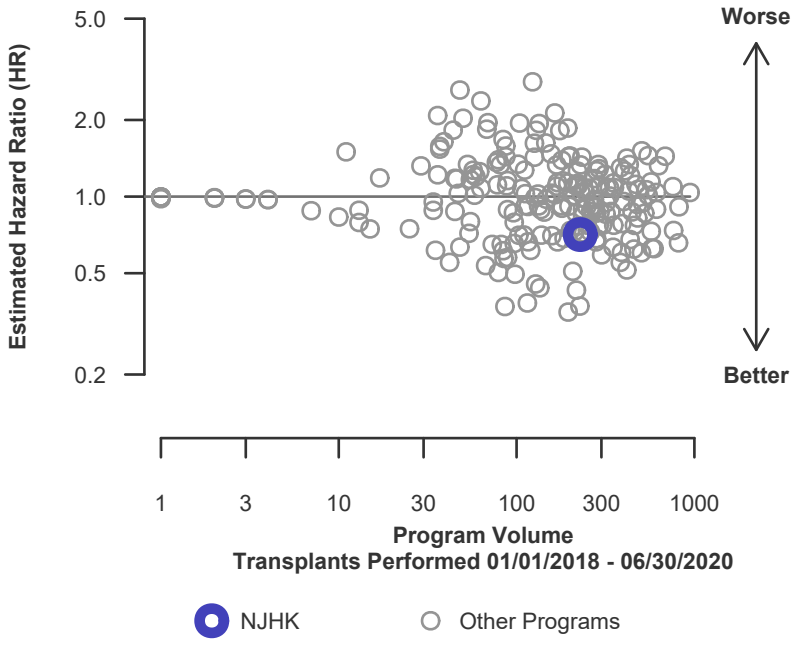


Figure C4. Adult (18+) 1-year graft failure HR program comparison



C. Transplant Information

Table C6D. Adult (18+) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	177	31,532
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	95.70%	94.58%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	93.88%	--
Number of observed graft failures (including deaths) during the first year after transplant	6	1,418
Number of expected graft failures (including deaths) during the first year after transplant	8.44	--
Estimated hazard ratio*	0.77	--
95% credible interval for the hazard ratio**	[0.33, 1.38]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.33, 1.38], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 23% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 67% reduced risk up to 38% increased risk.

Figure C3D. Adult (18+) 1-year deceased donor graft failure HR estimate

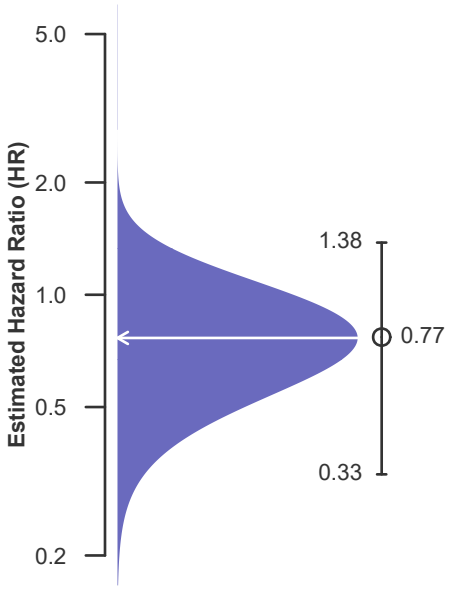
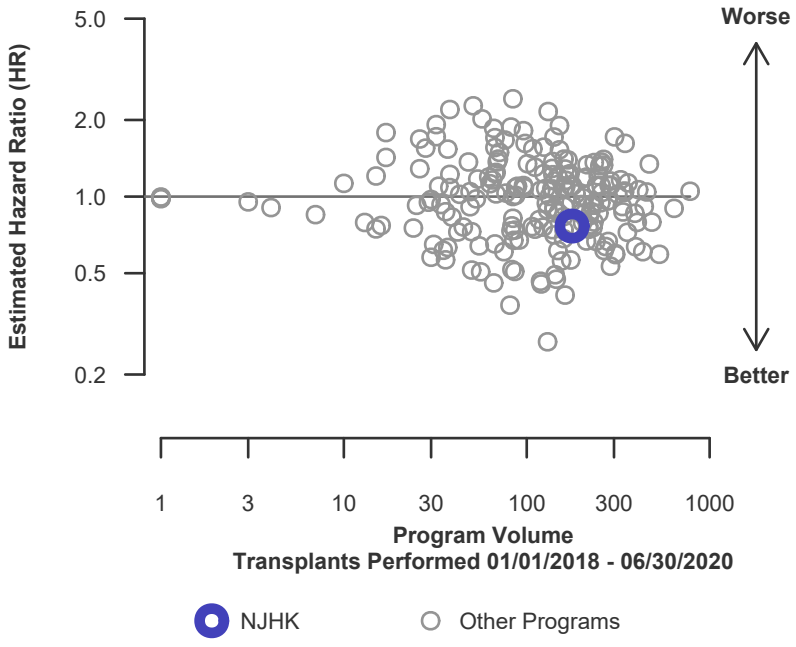


Figure C4D. Adult (18+) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C6L. Adult (18+) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	51	14,021
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	98.09%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	98.21%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	233
Number of expected graft failures (including deaths) during the first year after transplant	0.83	--
Estimated hazard ratio*	0.71	--
95% credible interval for the hazard ratio**	[0.09, 1.97]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.09, 1.97], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 29% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 91% reduced risk up to 97% increased risk.

Figure C3L. Adult (18+) 1-year living donor graft failure HR estimate

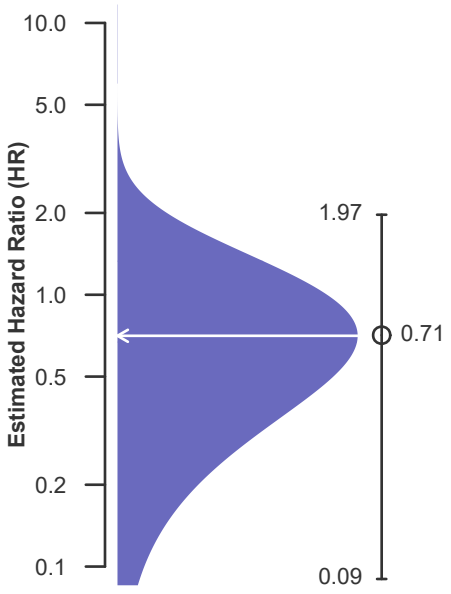
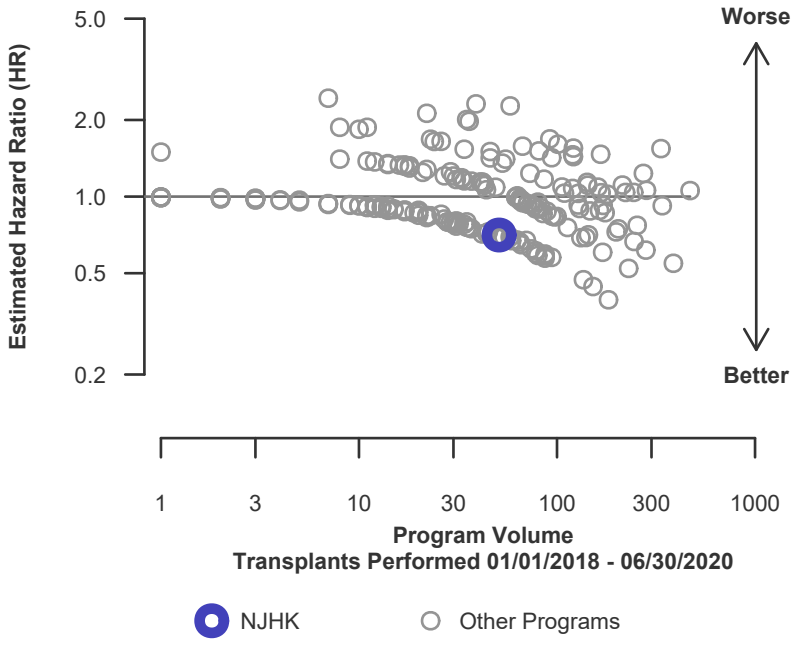


Figure C4L. Adult (18+) 1-year living donor graft failure HR program comparison



C. Transplant Information

Table C7. Adult (18+) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	105	43,863
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	91.43%	90.02%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	90.89%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	9	4,203
Number of expected graft failures (including deaths) during the first 3 years after transplant	9.15	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.49, 1.65]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.49, 1.65], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 1% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 51% reduced risk up to 65% increased risk.

Figure C5. Adult (18+) 3-year graft failure HR estimate

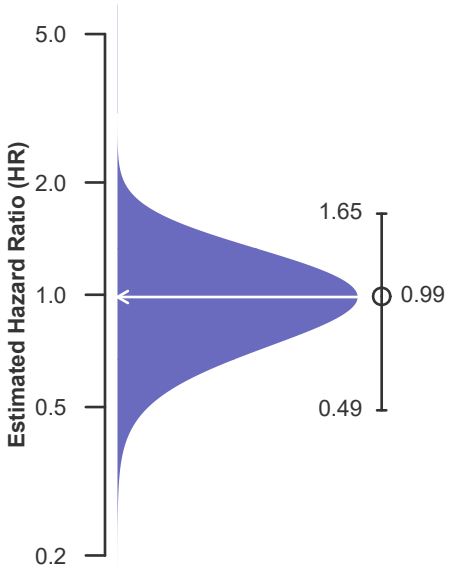
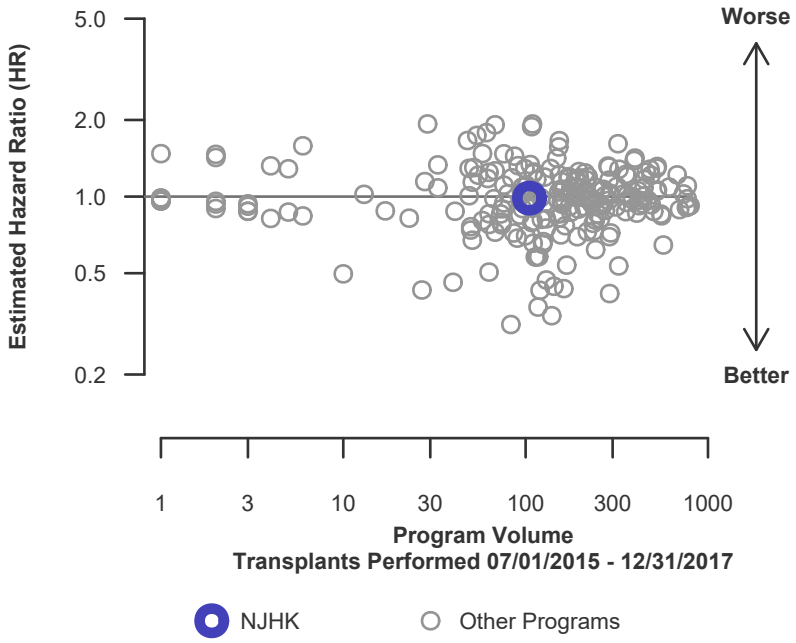


Figure C6. Adult (18+) 3-year graft failure HR program comparison



C. Transplant Information

Table C7D. Adult (18+) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	72	30,147
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	91.67%	88.09%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	89.29%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	6	3,457
Number of expected graft failures (including deaths) during the first 3 years after transplant	7.46	--
Estimated hazard ratio*	0.85	--
95% credible interval for the hazard ratio**	[0.37, 1.52]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.37, 1.52], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 15% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 63% reduced risk up to 52% increased risk.

Figure C5D. Adult (18+) 3-year deceased donor graft failure HR estimate

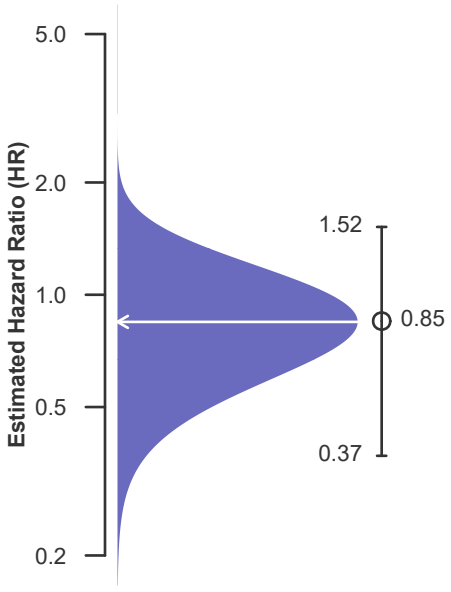
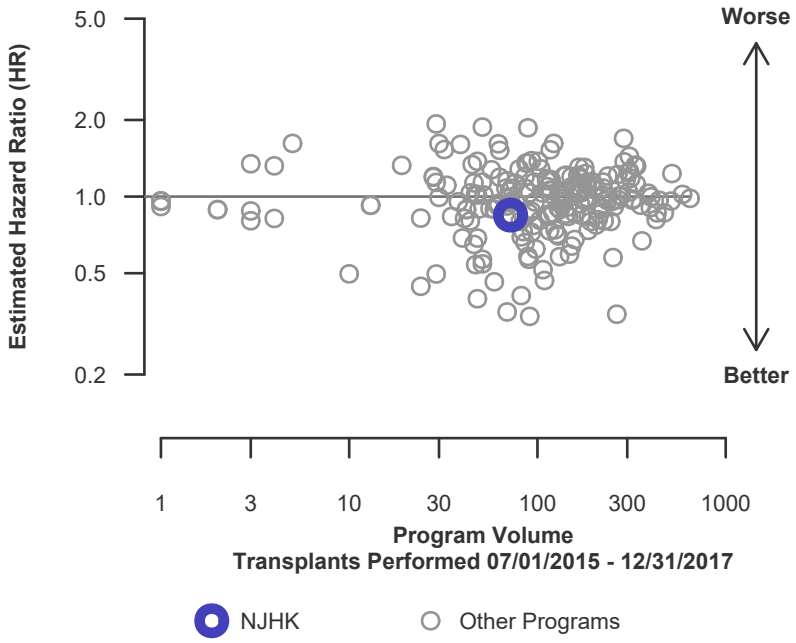


Figure C6D. Adult (18+) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C7L. Adult (18+) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	33	13,716
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	90.91%	94.27%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	94.38%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	3	746
Number of expected graft failures (including deaths) during the first 3 years after transplant	1.69	--
Estimated hazard ratio*	1.35	--
95% credible interval for the hazard ratio**	[0.44, 2.77]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.44, 2.77], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 35% higher risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 56% reduced risk up to 177% increased risk.

Figure C5L. Adult (18+) 3-year living donor graft failure HR estimate

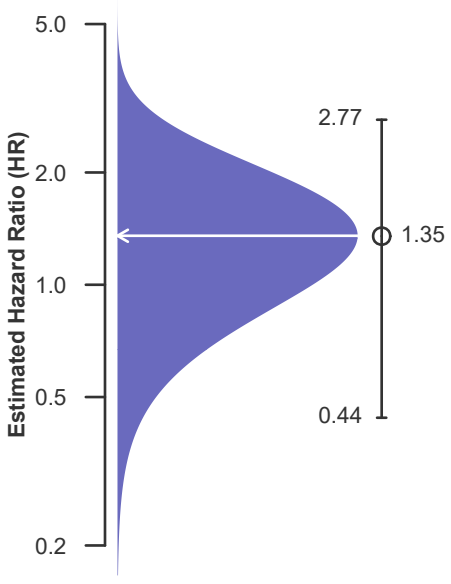
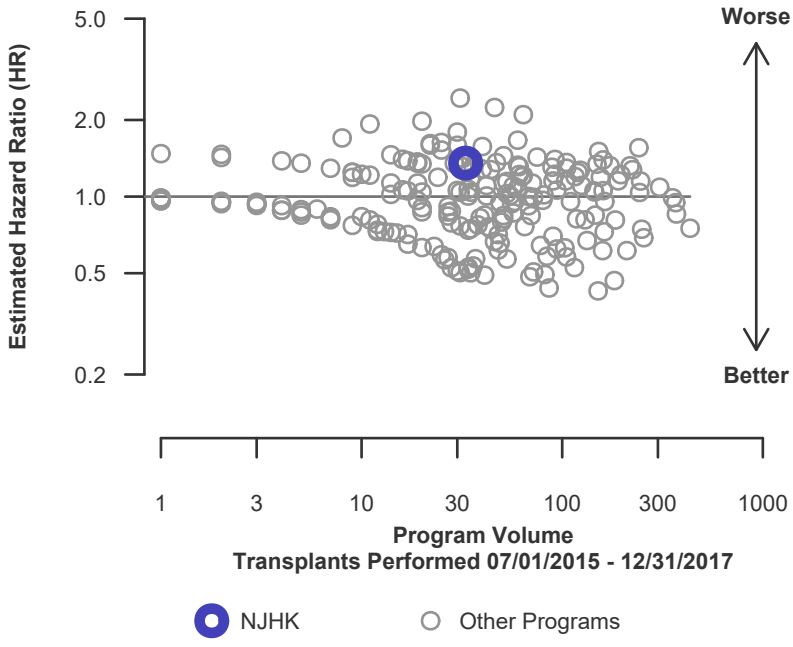


Figure C6L. Adult (18+) 3-year living donor graft failure HR program comparison



C. Transplant Information

Table C8. Pediatric (<18) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	7	1,840
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	85.71%	98.91%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.89%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	20
Number of expected graft failures (including deaths) during the first month after transplant	0.07	--
Estimated hazard ratio*	1.45	--
95% credible interval for the hazard ratio**	[0.30, 3.49]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.30, 3.49], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 45% higher risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 70% reduced risk up to 249% increased risk.

Figure C7. Pediatric (<18) 1-month graft failure HR estimate

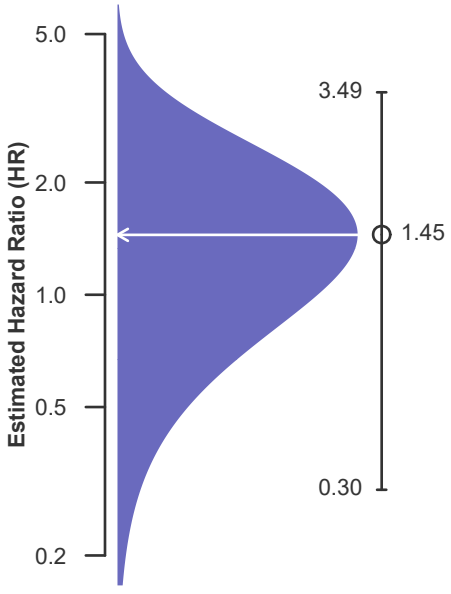
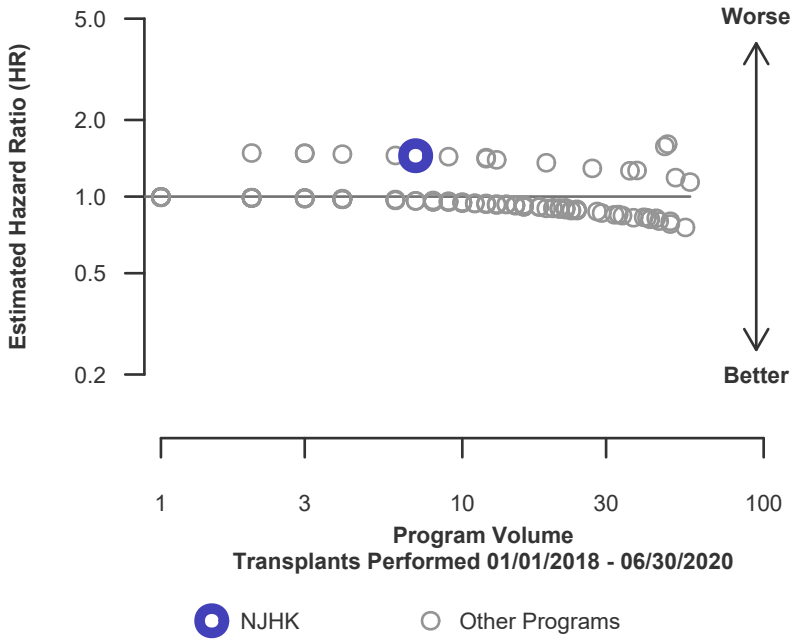


Figure C8. Pediatric (<18) 1-month graft failure HR program comparison



C. Transplant Information

Table C8D. Pediatric (<18) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	5	1,237
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	98.78%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.79%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	15
Number of expected graft failures (including deaths) during the first month after transplant	0.06	--
Estimated hazard ratio*	0.97	--
95% credible interval for the hazard ratio**	[0.12, 2.70]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.70], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 3% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 170% increased risk.

Figure C7D. Pediatric (<18) 1-month deceased donor graft failure HR estimate

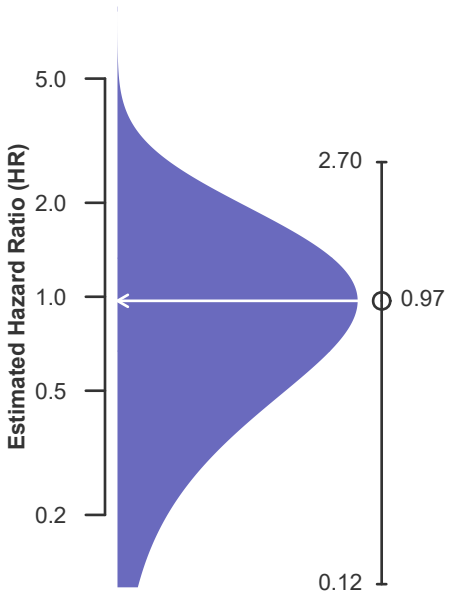
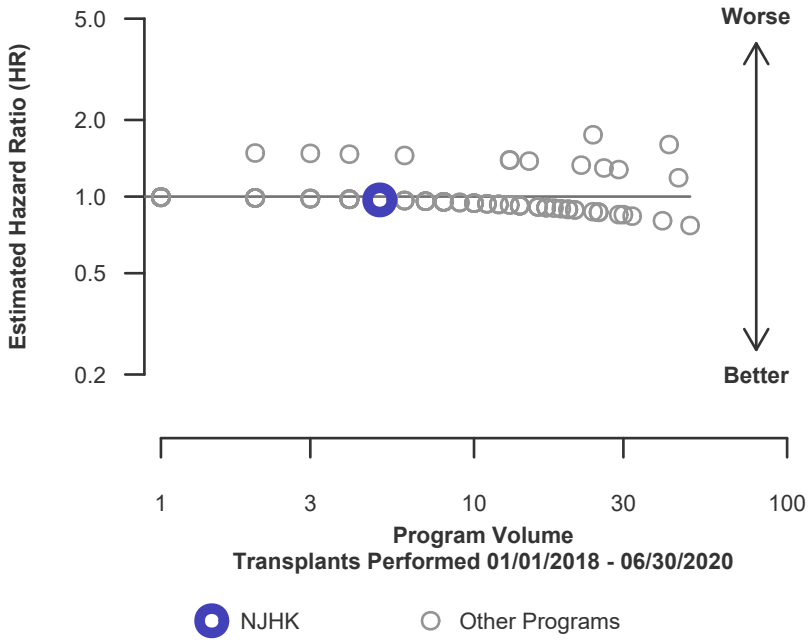


Figure C8D. Pediatric (<18) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C8L. Pediatric (<18) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	2	603
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	50.00%	99.16%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.16%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	5
Number of expected graft failures (including deaths) during the first month after transplant	0.01	--
Estimated hazard ratio*	1.49	--
95% credible interval for the hazard ratio**	[0.31, 3.59]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.59], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 49% higher risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 259% increased risk.

Figure C7L. Pediatric (<18) 1-month living donor graft failure HR estimate

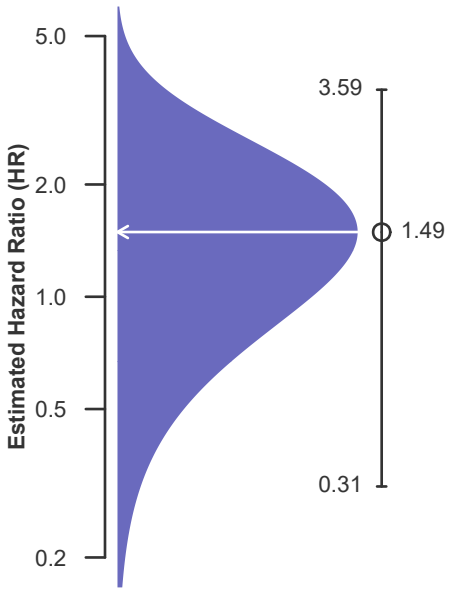
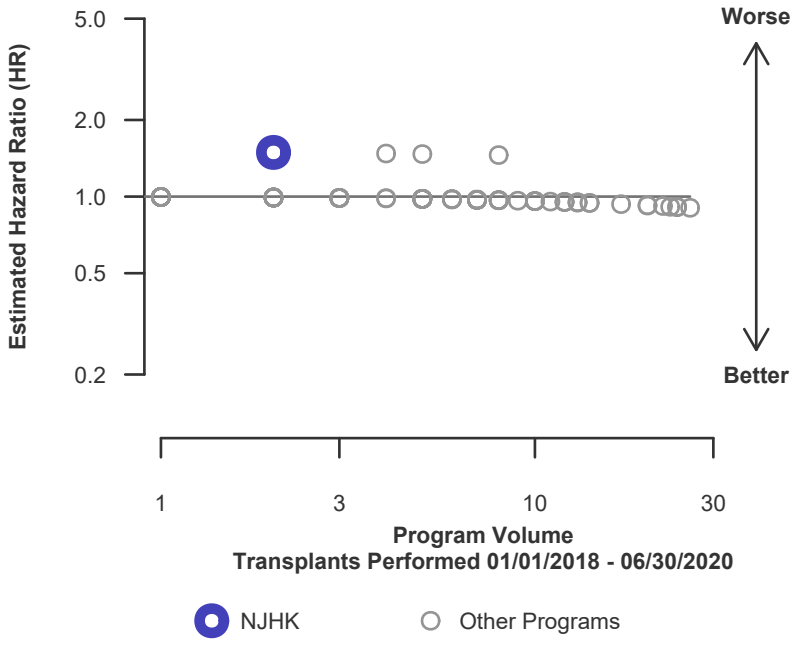


Figure C8L. Pediatric (<18) 1-month living donor graft failure HR program comparison



C. Transplant Information

Table C9. Pediatric (<18) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	7	1,840
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	85.71%	98.08%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	98.03%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	31
Number of expected graft failures (including deaths) during the first year after transplant	0.10	--
Estimated hazard ratio*	1.43	--
95% credible interval for the hazard ratio**	[0.29, 3.43]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.29, 3.43], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 43% higher risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 71% reduced risk up to 243% increased risk.

Figure C9. Pediatric (<18) 1-year graft failure HR estimate

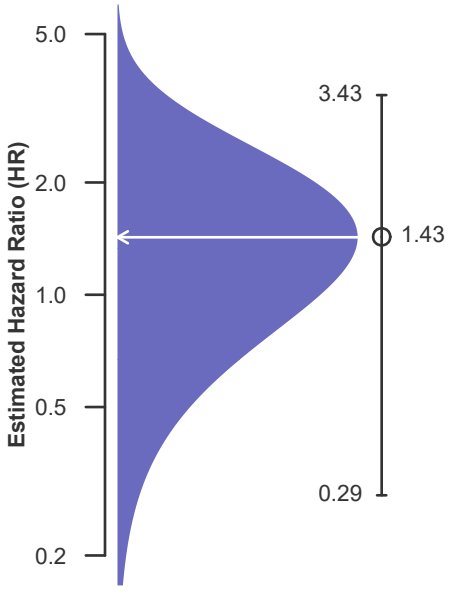
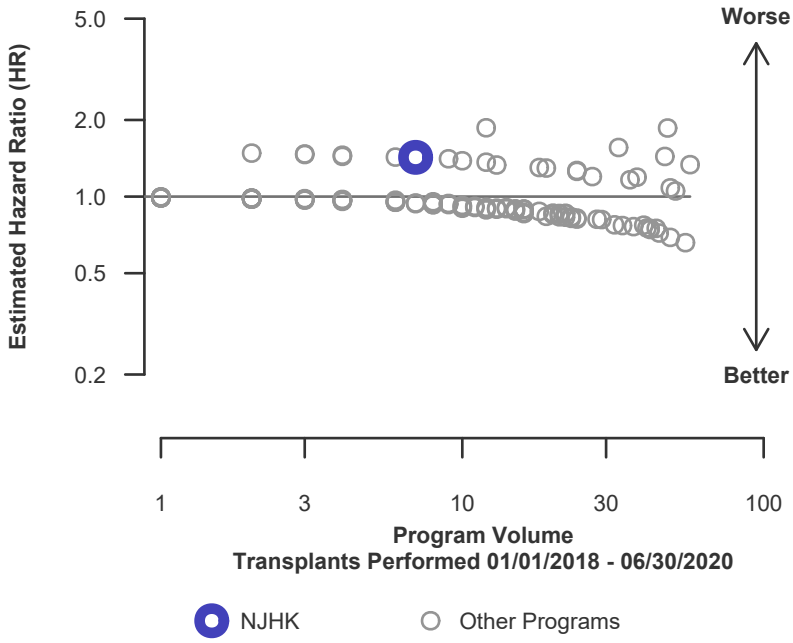


Figure C10. Pediatric (<18) 1-year graft failure HR program comparison



C. Transplant Information

Table C9D. Pediatric (<18) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	5	1,237
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	97.75%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	97.75%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	24
Number of expected graft failures (including deaths) during the first year after transplant	0.09	--
Estimated hazard ratio*	0.96	--
95% credible interval for the hazard ratio**	[0.12, 2.67]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.67], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 4% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 167% increased risk.

Figure C9D. Pediatric (<18) 1-year deceased donor graft failure HR estimate

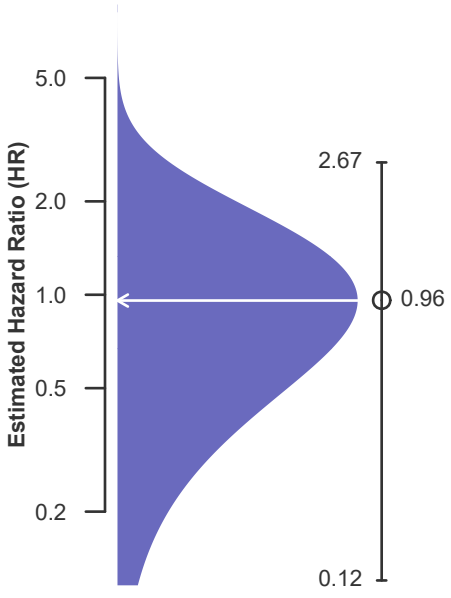
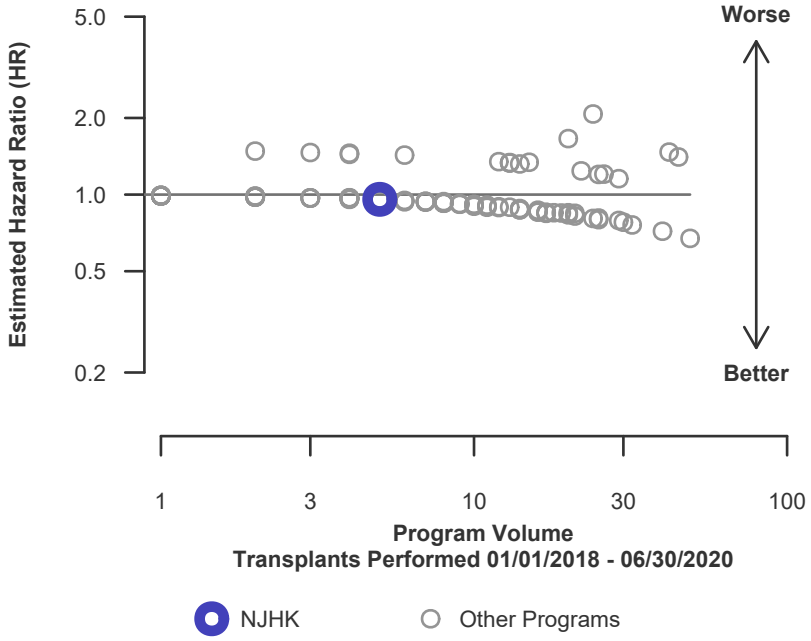


Figure C10D. Pediatric (<18) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C9L. Pediatric (<18) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2018 and 03/12/2020
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	2	603
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	50.00%	98.74%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	98.74%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	7
Number of expected graft failures (including deaths) during the first year after transplant	0.02	--
Estimated hazard ratio*	1.49	--
95% credible interval for the hazard ratio**	[0.31, 3.58]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.58], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 49% higher risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 258% increased risk.

Figure C9L. Pediatric (<18) 1-year living donor graft failure HR estimate

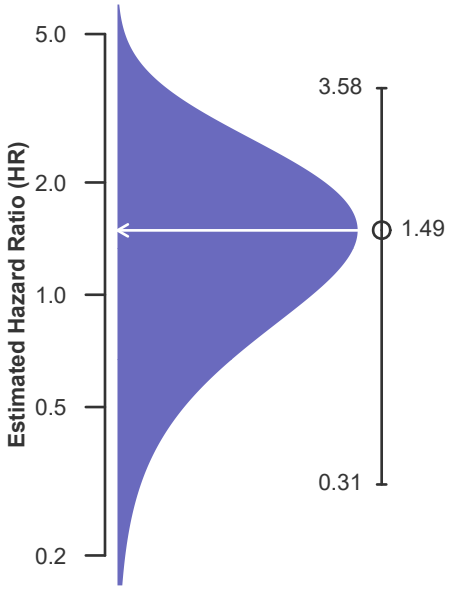
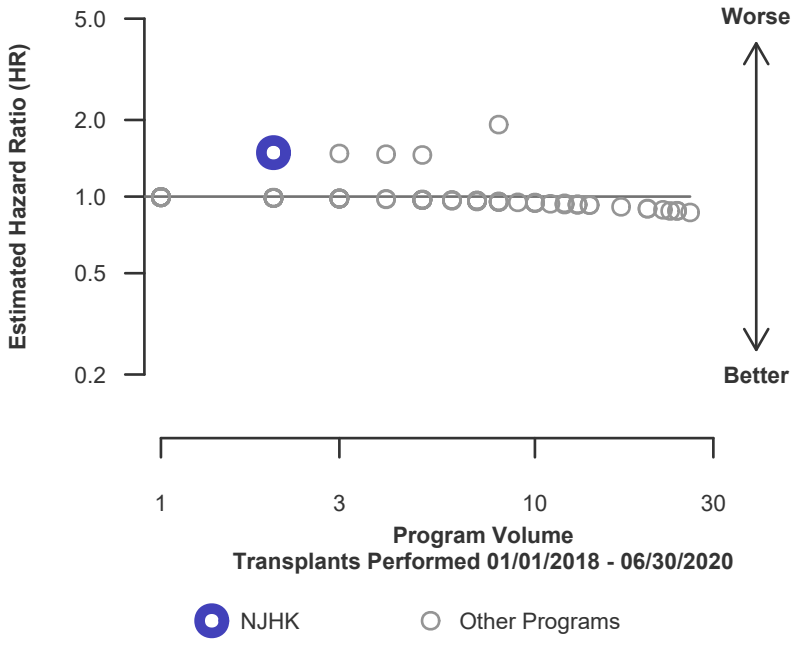


Figure C10L. Pediatric (<18) 1-year living donor graft failure HR program comparison



C. Transplant Information

Table C10. Pediatric (<18) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	6	2,053
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	93.86%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	93.58%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	121
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.36	--
Estimated hazard ratio*	0.85	--
95% credible interval for the hazard ratio**	[0.10, 2.36]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.36], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 15% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 90% reduced risk up to 136% increased risk.

Figure C11. Pediatric (<18) 3-year graft failure HR estimate

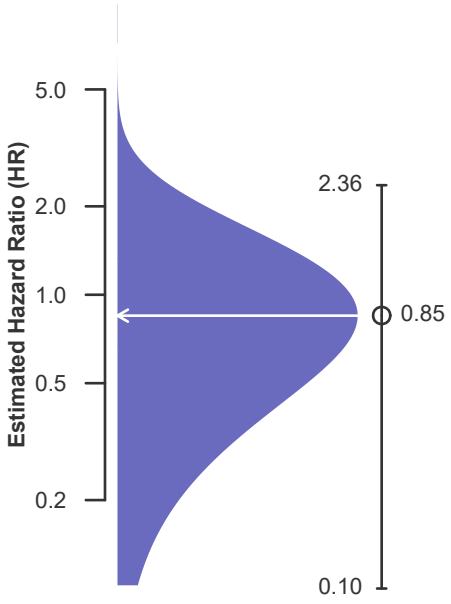
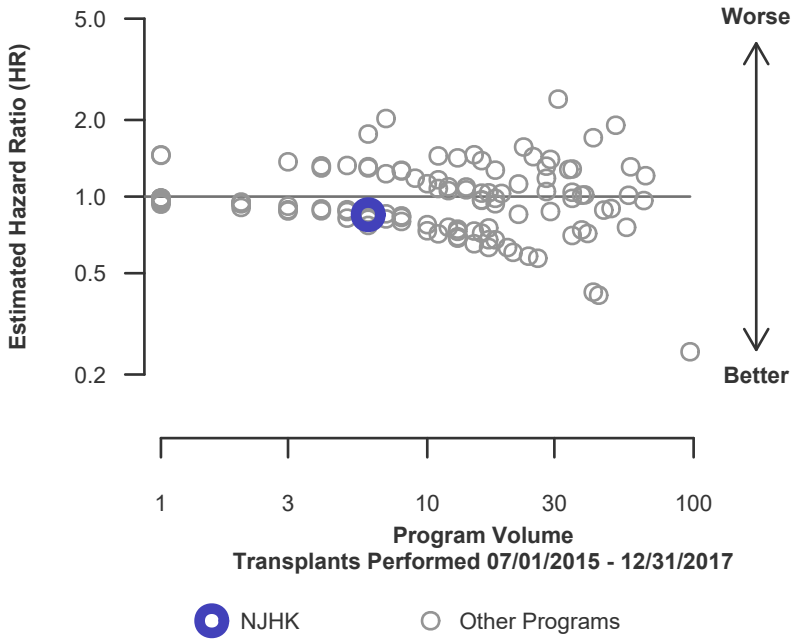


Figure C12. Pediatric (<18) 3-year graft failure HR program comparison



C. Transplant Information

Table C10D. Pediatric (<18) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	5	1,397
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	92.57%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	92.98%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	100
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.32	--
Estimated hazard ratio*	0.86	--
95% credible interval for the hazard ratio**	[0.10, 2.40]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.40], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 14% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 90% reduced risk up to 140% increased risk.

Figure C11D. Pediatric (<18) 3-year deceased donor graft failure HR estimate

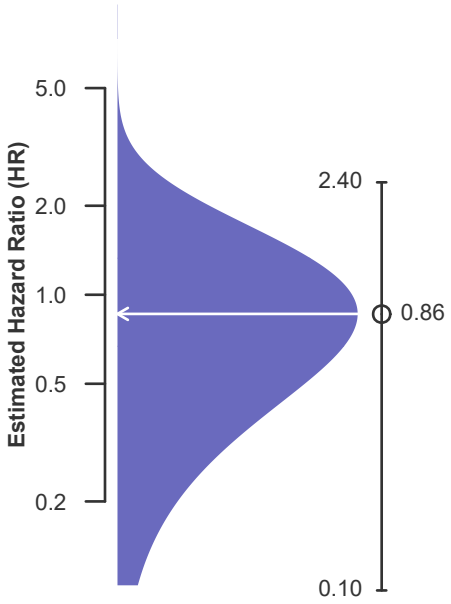
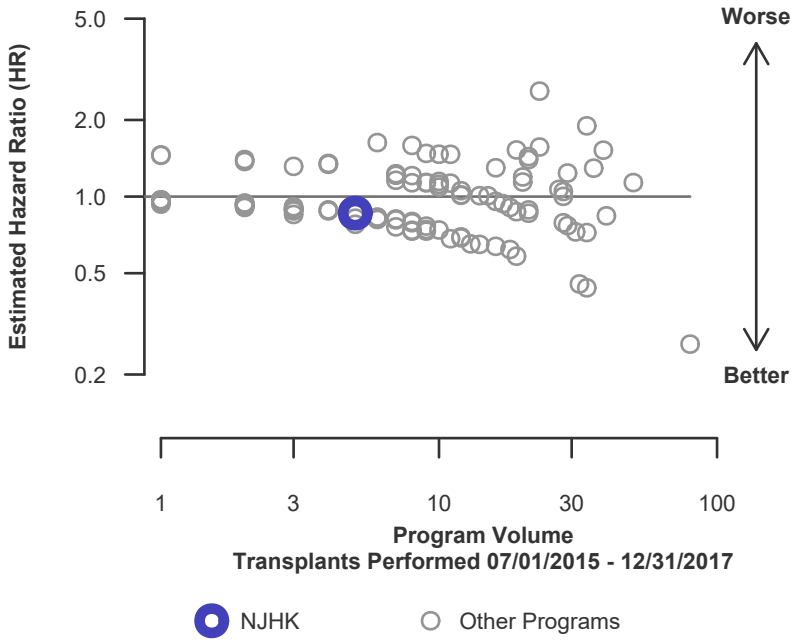


Figure C12D. Pediatric (<18) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C10L. Pediatric (<18) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2015 and 12/31/2017
Deaths and retransplants are considered graft failures

	NJHK	U.S.
Number of transplants evaluated	1	656
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	96.62%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	96.63%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	21
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.03	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.74]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.74], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 2% lower risk of graft failure compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 174% increased risk.

Figure C11L. Pediatric (<18) 3-year living donor graft failure HR estimate

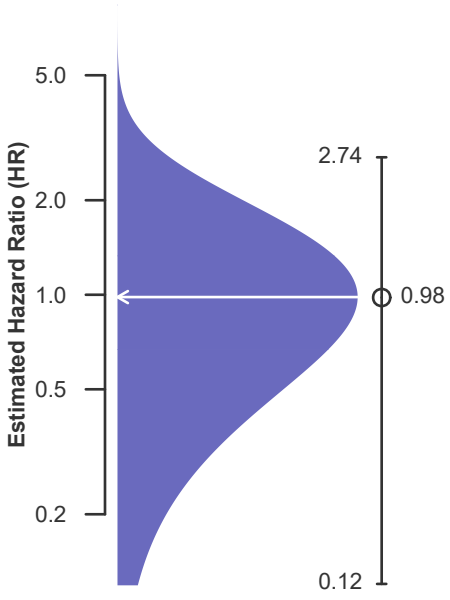
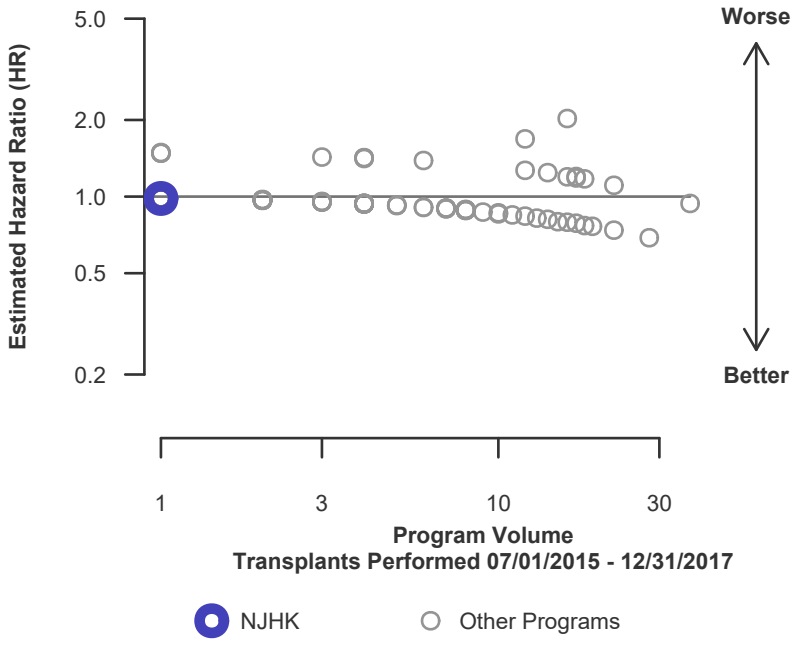


Figure C12L. Pediatric (<18) 3-year living donor graft failure HR program comparison



C. Transplant Information

Table C11. Adult (18+) 1-month patient survival
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	217	40,563
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	99.53%	99.59%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.54%	--
Number of observed deaths during the first month after transplant	1	165
Number of expected deaths during the first month after transplant	0.95	--
Estimated hazard ratio*	1.02	--
95% credible interval for the hazard ratio**	[0.21, 2.45]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.21, 2.45], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 2% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 79% reduced risk up to 145% increased risk.

Figure C13. Adult (18+) 1-month patient death HR estimate

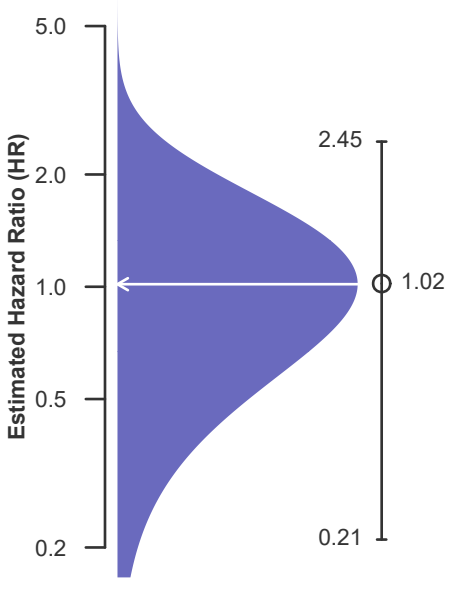
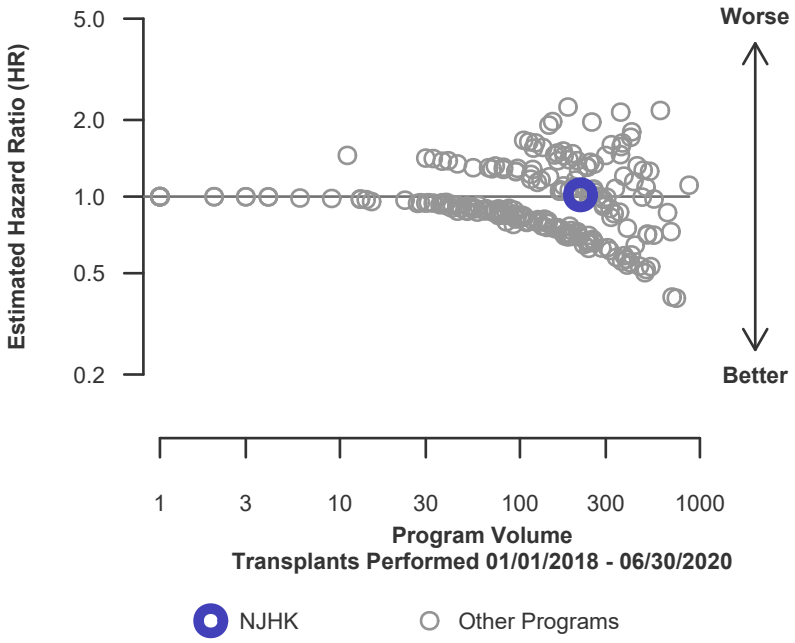


Figure C14. Adult (18+) 1-month patient death HR program comparison



C. Transplant Information

Table C11D. Adult (18+) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	168	27,861
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	99.39%	99.49%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.47%	--
Number of observed deaths during the first month after transplant	1	140
Number of expected deaths during the first month after transplant	0.85	--
Estimated hazard ratio*	1.05	--
95% credible interval for the hazard ratio**	[0.22, 2.53]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.22, 2.53], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 5% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 78% reduced risk up to 153% increased risk.

Figure C13D. Adult (18+) 1-month patient death HR estimate (deceased donor grafts)

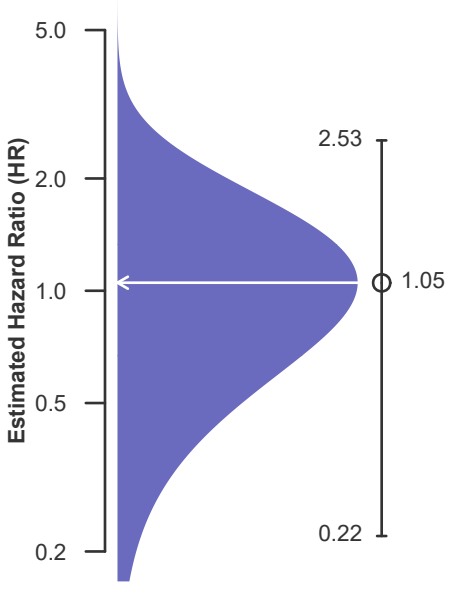
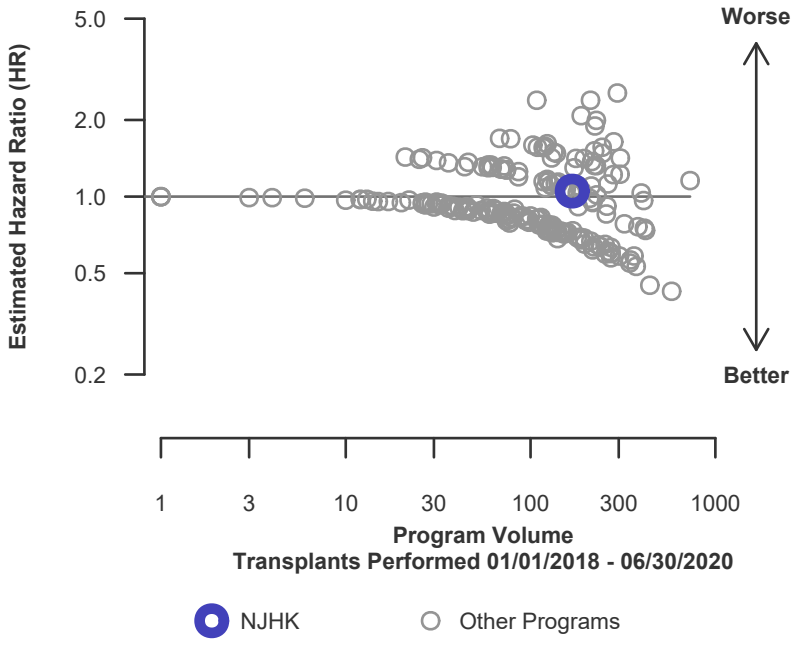


Figure C14D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C11L. Adult (18+) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	49	12,702
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.80%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.80%	--
Number of observed deaths during the first month after transplant	0	25
Number of expected deaths during the first month after transplant	0.10	--
Estimated hazard ratio*	0.95	--
95% credible interval for the hazard ratio**	[0.12, 2.66]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.66], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 5% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 166% increased risk.

Figure C13L. Adult (18+) 1-month patient death HR estimate (living donor grafts)

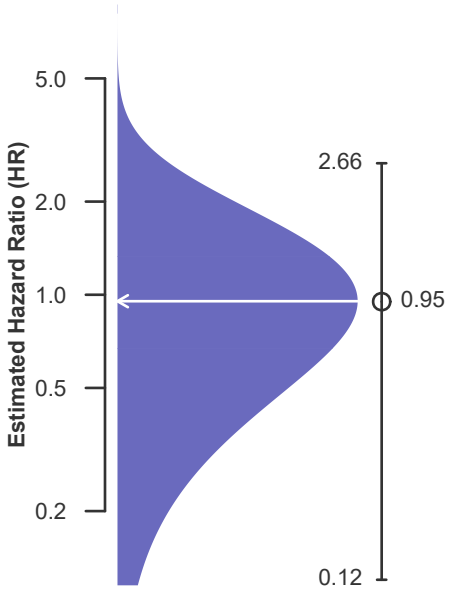
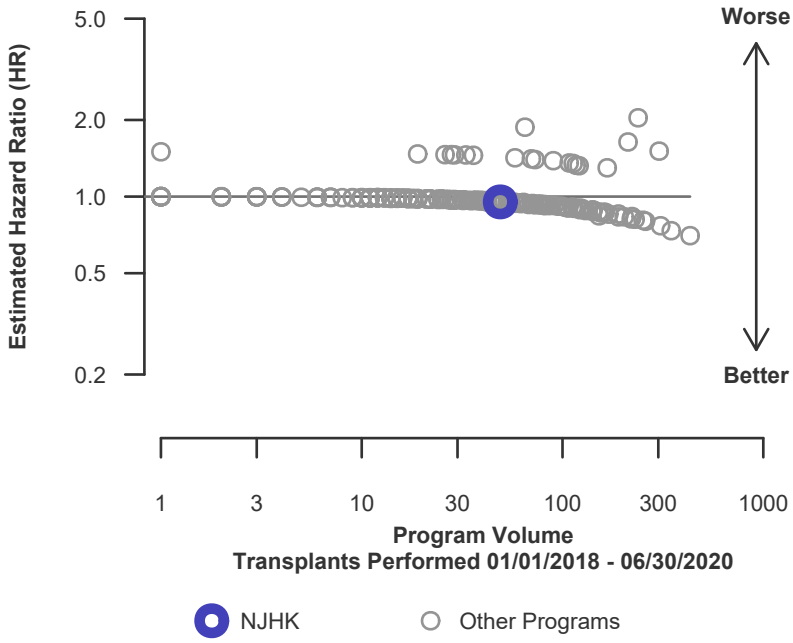


Figure C14L. Adult (18+) 1-month patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C12. Adult (18+) 1-year patient survival
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	217	40,563
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	97.57%	97.62%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	97.32%	--
Number of observed deaths during the first year after transplant	4	769
Number of expected deaths during the first year after transplant	4.26	--
Estimated hazard ratio*	0.96	--
95% credible interval for the hazard ratio**	[0.35, 1.86]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.35, 1.86], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 4% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 65% reduced risk up to 86% increased risk.

Figure C15. Adult (18+) 1-year patient death HR estimate

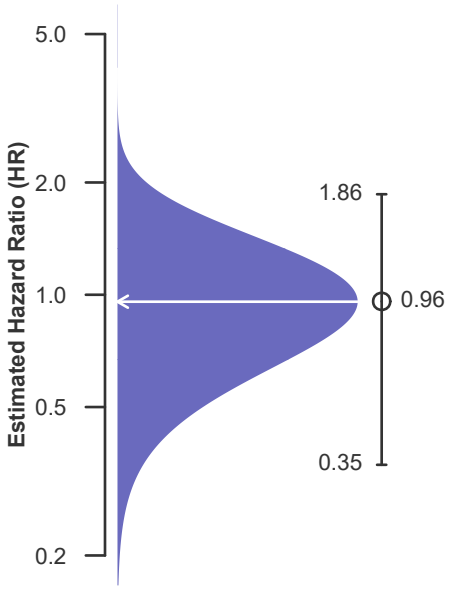
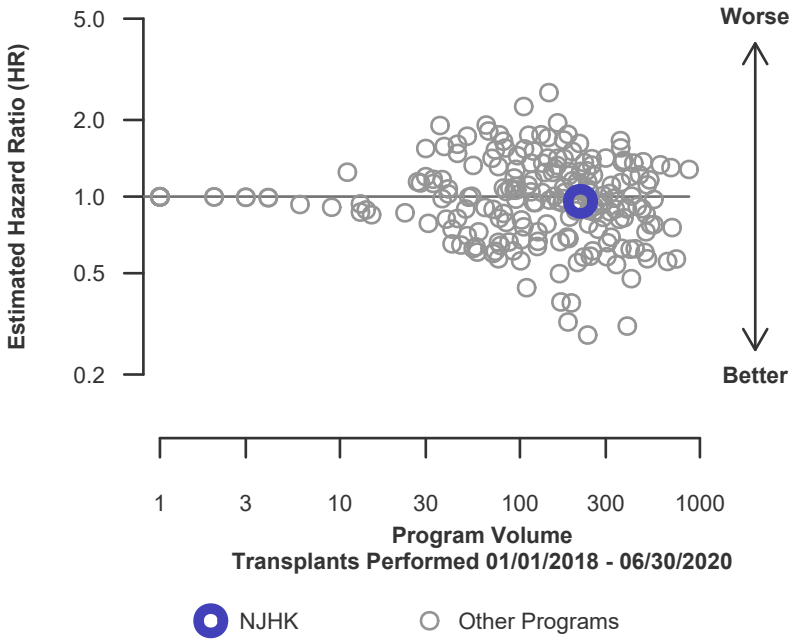


Figure C16. Adult (18+) 1-year patient death HR program comparison



C. Transplant Information

Table C12D. Adult (18+) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	168	27,861
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	96.70%	96.93%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	96.81%	--
Number of observed deaths during the first year after transplant	4	675
Number of expected deaths during the first year after transplant	3.88	--
Estimated hazard ratio*	1.02	--
95% credible interval for the hazard ratio**	[0.37, 1.99]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.37, 1.99], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 2% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 63% reduced risk up to 99% increased risk.

Figure C15D. Adult (18+) 1-year patient death HR estimate (deceased donor grafts)

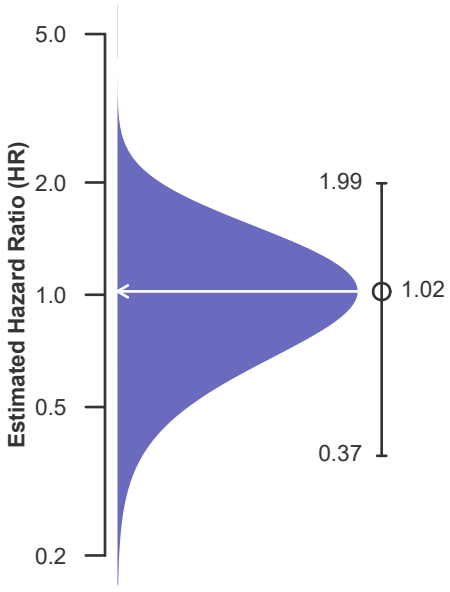
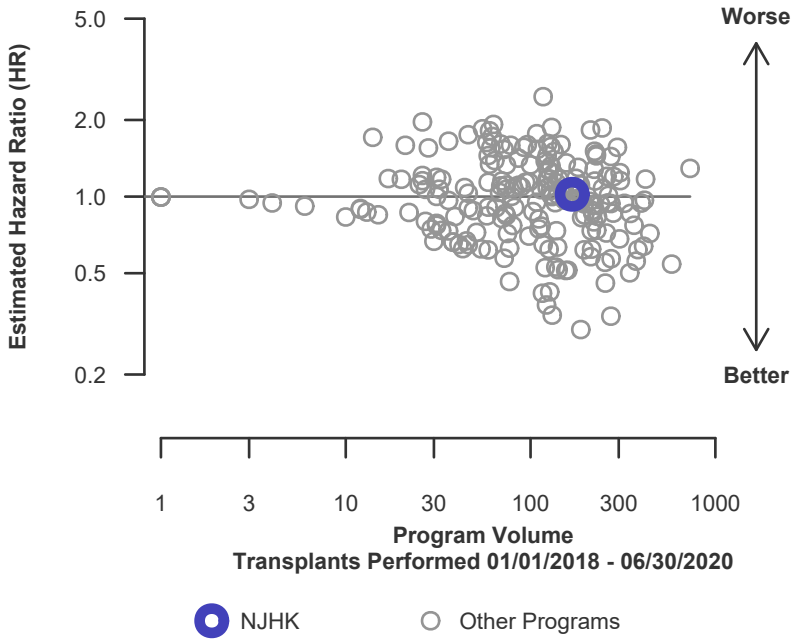


Figure C16D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C12L. Adult (18+) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	49	12,702
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.09%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.09%	--
Number of observed deaths during the first year after transplant	0	94
Number of expected deaths during the first year 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 Hackensack University Medical Center (NJHK)'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 NJHK'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 NJHK's true hazard ratio with 95% probability. The best estimate is 16% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 90% reduced risk up to 134% increased risk.

Figure C15L. Adult (18+) 1-year patient death HR estimate (living donor grafts)

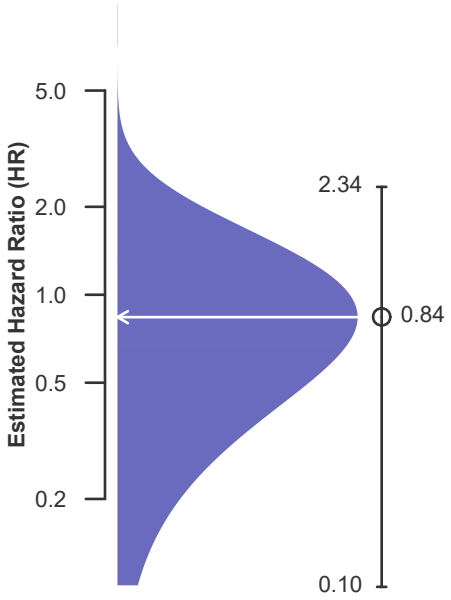
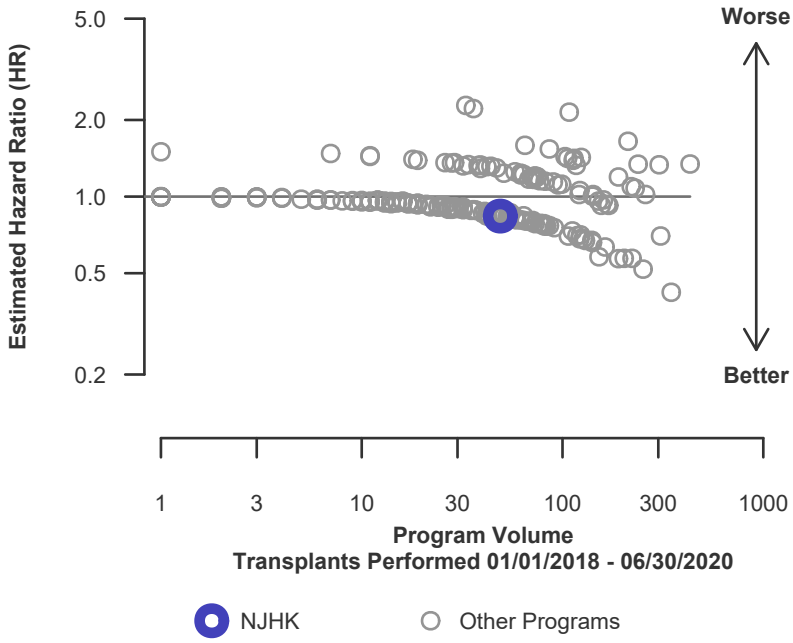


Figure C16L. Adult (18+) 1-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C13. Adult (18+) 3-year patient survival
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	93	38,241
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	93.55%	94.20%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	94.54%	--
Number of observed deaths during the first 3 years after transplant	6	2,123
Number of expected deaths during the first 3 years after transplant	4.83	--
Estimated hazard ratio*	1.17	--
95% credible interval for the hazard ratio**	[0.51, 2.11]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.51, 2.11], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 17% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 49% reduced risk up to 111% increased risk.

Figure C17. Adult (18+) 3-year patient death HR estimate

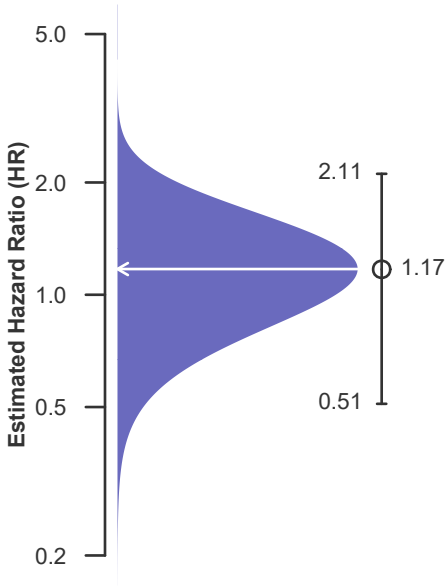
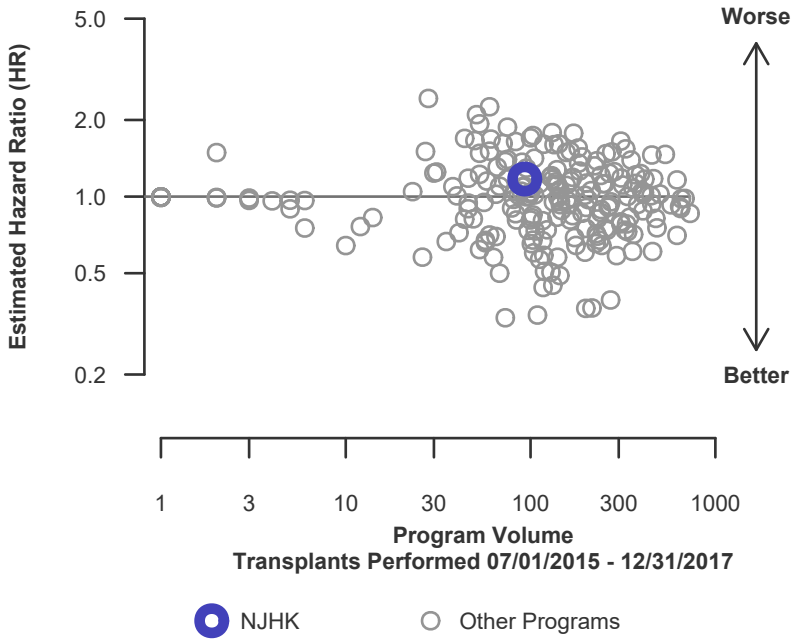


Figure C18. Adult (18+) 3-year patient death HR program comparison



C. Transplant Information

Table C13D. Adult (18+) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	63	25,865
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	95.24%	92.89%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	93.48%	--
Number of observed deaths during the first 3 years after transplant	3	1,766
Number of expected deaths during the first 3 years after transplant	3.94	--
Estimated hazard ratio*	0.84	--
95% credible interval for the hazard ratio**	[0.27, 1.73]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.27, 1.73], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 16% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 73% reduced risk up to 73% increased risk.

Figure C17D. Adult (18+) 3-year patient death HR estimate (deceased donor grafts)

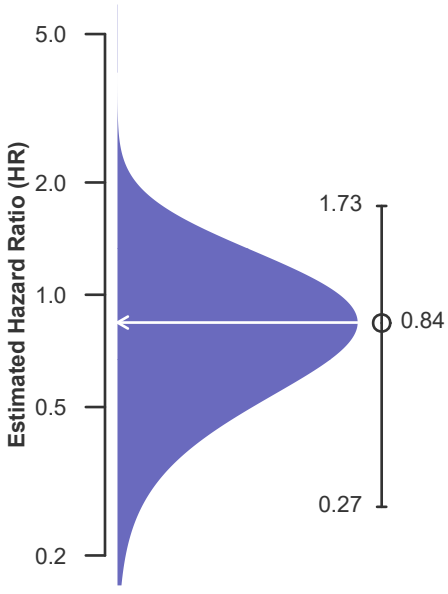
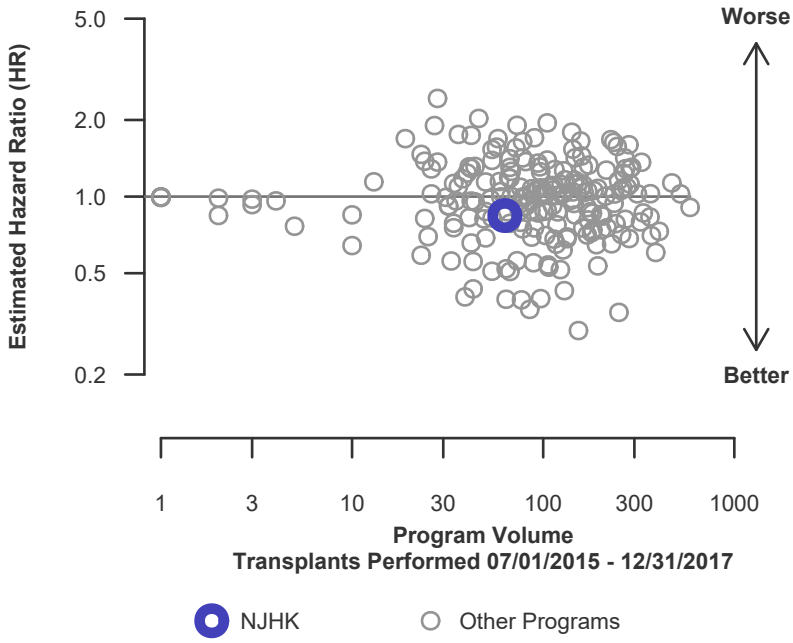


Figure C18D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C13L. Adult (18+) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	30	12,376
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	90.00%	96.95%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	96.75%	--
Number of observed deaths during the first 3 years after transplant	3	357
Number of expected deaths during the first 3 years after transplant	0.89	--
Estimated hazard ratio*	1.73	--
95% credible interval for the hazard ratio**	[0.56, 3.54]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.56, 3.54], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 73% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 44% reduced risk up to 254% increased risk.

Figure C17L. Adult (18+) 3-year patient death HR estimate (living donor grafts)

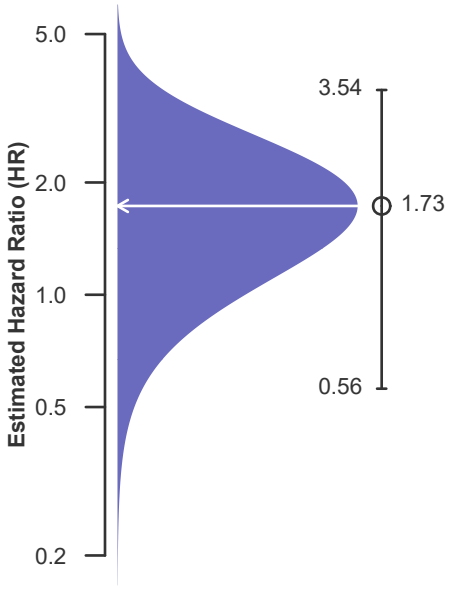
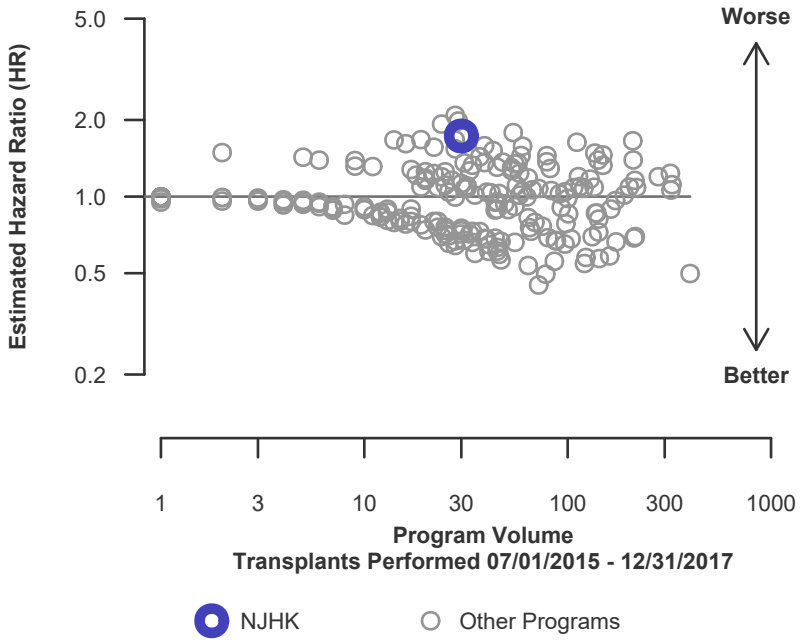


Figure C18L. Adult (18+) 3-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C14. Pediatric (<18) 1-month patient survival
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	7	1,679
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	83.33%	99.76%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.78%	--
Number of observed deaths during the first month after transplant	1	4
Number of expected deaths during the first month after transplant	0.02	--
Estimated hazard ratio*	1.49	--
95% credible interval for the hazard ratio**	[0.31, 3.58]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.58], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 49% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 258% increased risk.

Figure C19. Pediatric (<18) 1-month patient death HR estimate

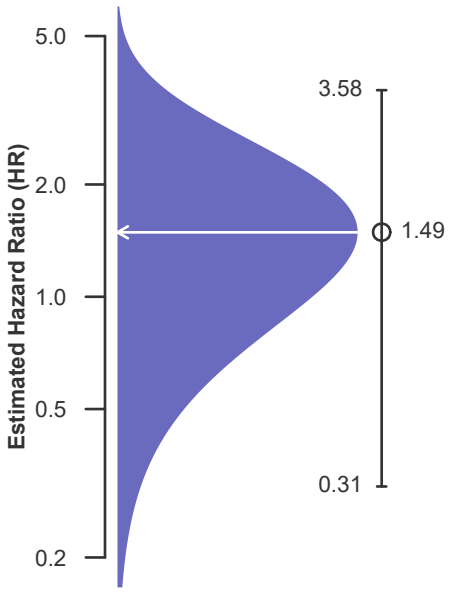
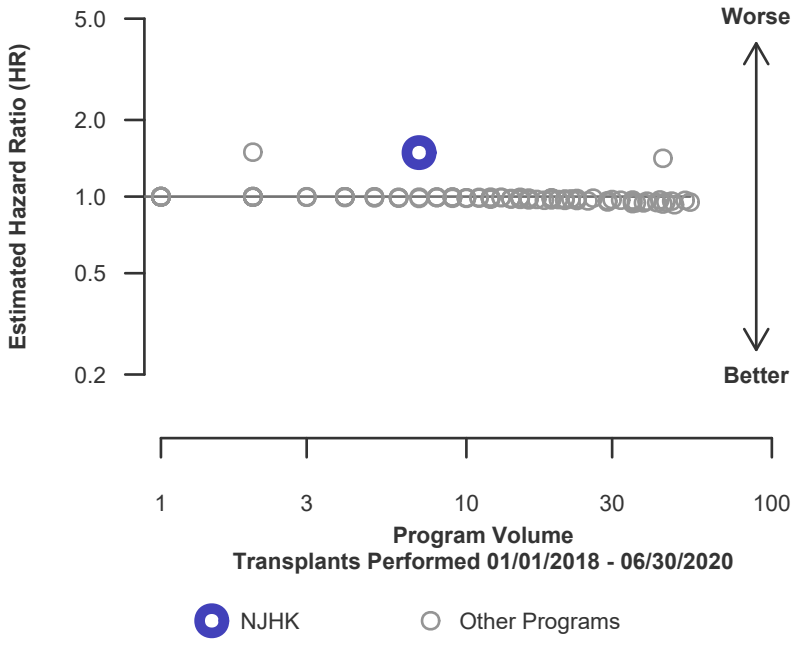


Figure C20. Pediatric (<18) 1-month patient death HR program comparison



C. Transplant Information

Table C14D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	5	1,123
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.91%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.91%	--
Number of observed deaths during the first month after transplant	0	1
Number of expected deaths during the first month after transplant	0.00	--
Estimated hazard ratio*	1.00	--
95% credible interval for the hazard ratio**	[0.12, 2.78]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.78], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 0% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 178% increased risk.

Figure C19D. Pediatric (<18) 1-month patient death HR estimate (deceased donor grafts)

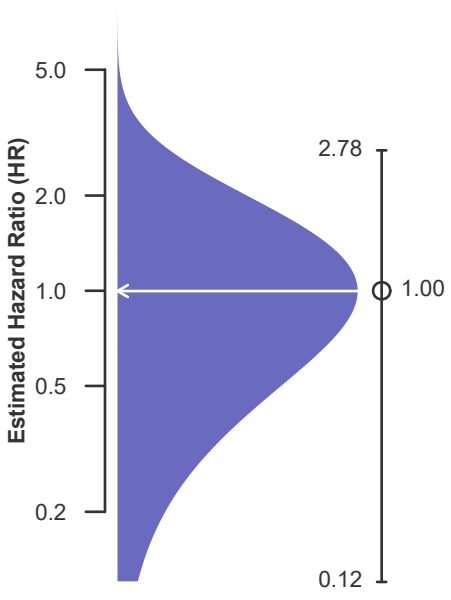
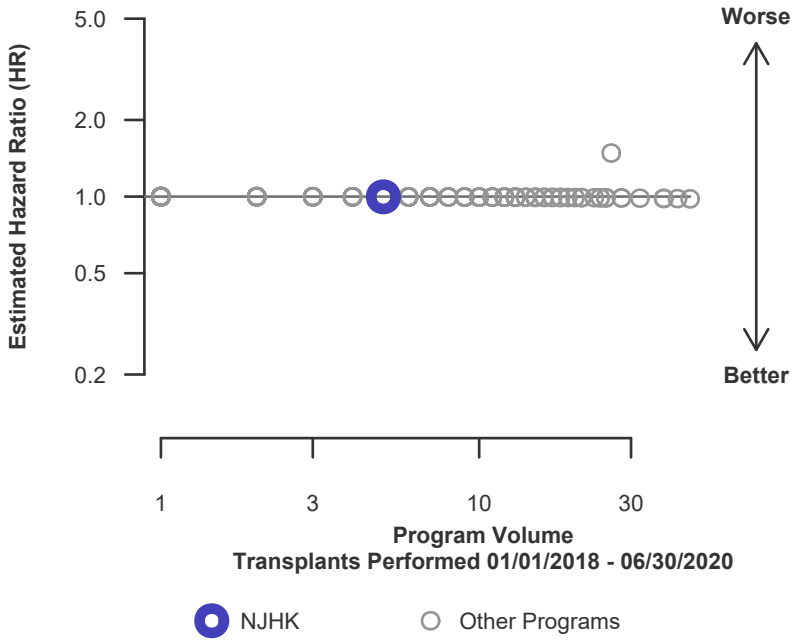


Figure C20D. Pediatric (<18) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C14L. Pediatric (<18) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	2	556
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	50.00%	99.45%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.45%	--
Number of observed deaths during the first month after transplant	1	3
Number of expected deaths during the first month after transplant	0.01	--
Estimated hazard ratio*	1.49	--
95% credible interval for the hazard ratio**	[0.31, 3.59]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.59], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 49% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 259% increased risk.

Figure C19L. Pediatric (<18) 1-month patient death HR estimate (living donor grafts)

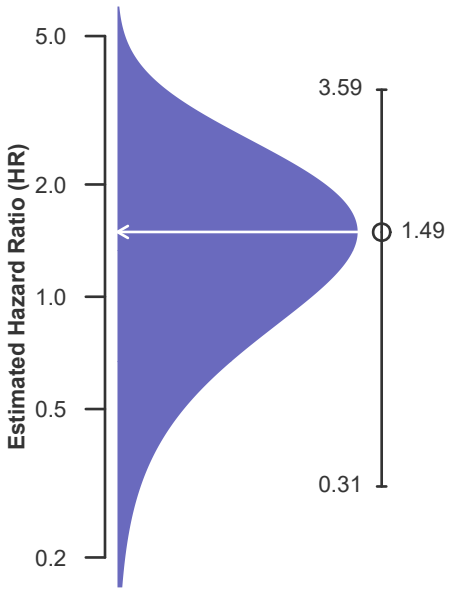
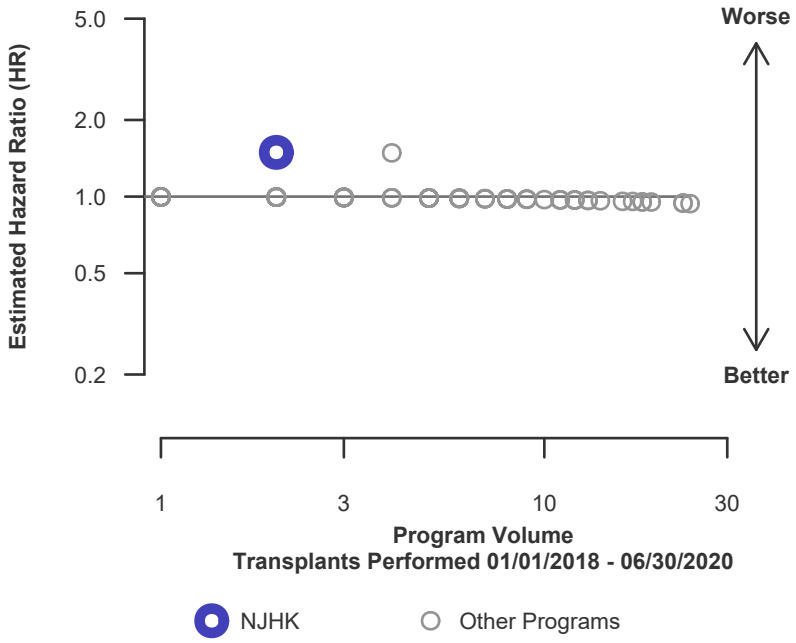


Figure C20L. Pediatric (<18) 1-month patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C15. Pediatric (<18) 1-year patient survival
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	7	1,679
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	83.33%	99.51%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.51%	--
Number of observed deaths during the first year after transplant	1	7
Number of expected deaths during the first year after transplant	0.03	--
Estimated hazard ratio*	1.48	--
95% credible interval for the hazard ratio**	[0.31, 3.56]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.56], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 48% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 256% increased risk.

Figure C21. Pediatric (<18) 1-year patient death HR estimate

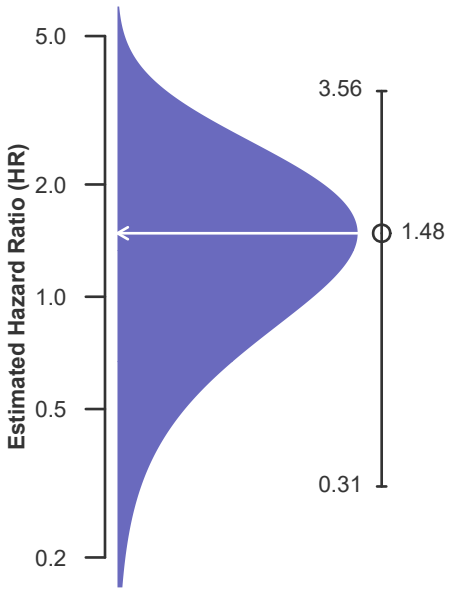
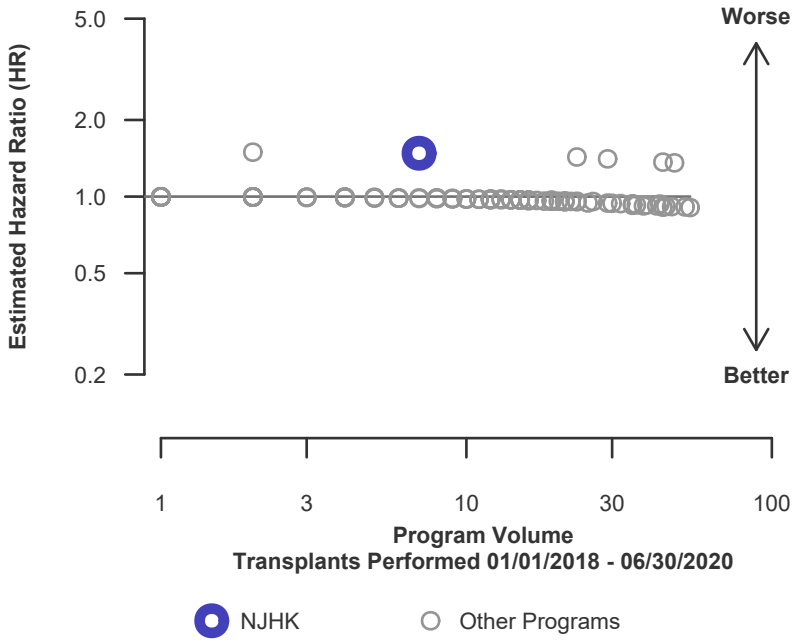


Figure C22. Pediatric (<18) 1-year patient death HR program comparison



C. Transplant Information

Table C15D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	5	1,123
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.54%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.54%	--
Number of observed deaths during the first year after transplant	0	4
Number of expected deaths during the first year after transplant	0.02	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.76]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.76], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 176% increased risk.

Figure C21D. Pediatric (<18) 1-year patient death HR estimate (deceased donor grafts)

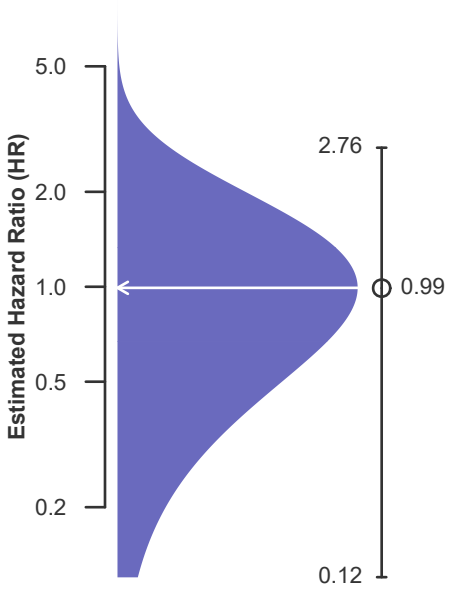
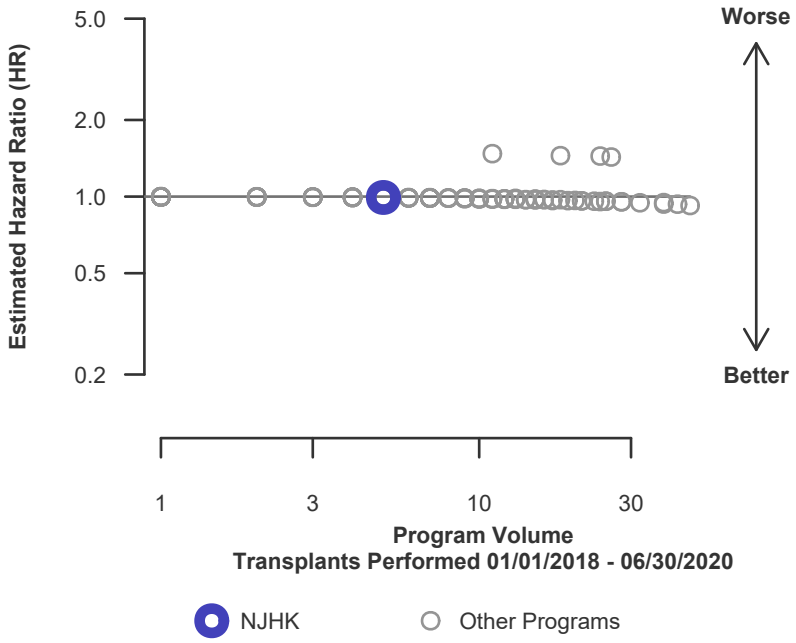


Figure C22D. Pediatric (<18) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C15L. Pediatric (<18) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2018 and 03/12/2020
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	2	556
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	50.00%	99.45%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.45%	--
Number of observed deaths during the first year after transplant	1	3
Number of expected deaths during the first year after transplant	0.01	--
Estimated hazard ratio*	1.49	--
95% credible interval for the hazard ratio**	[0.31, 3.59]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.31, 3.59], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 49% higher risk of patient death compared to an average program, but NJHK's performance could plausibly range from 69% reduced risk up to 259% increased risk.

Figure C21L. Pediatric (<18) 1-year patient death HR estimate (living donor grafts)

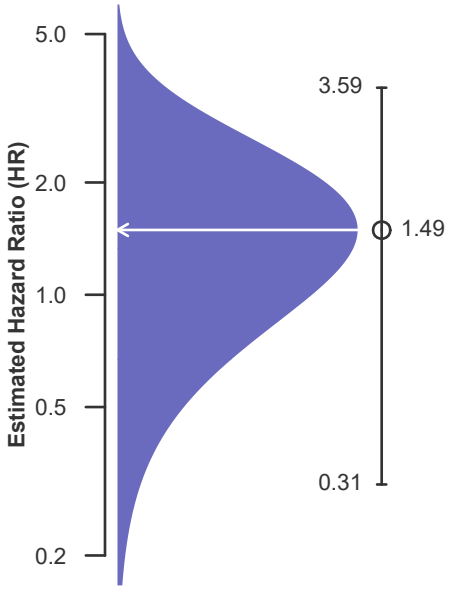
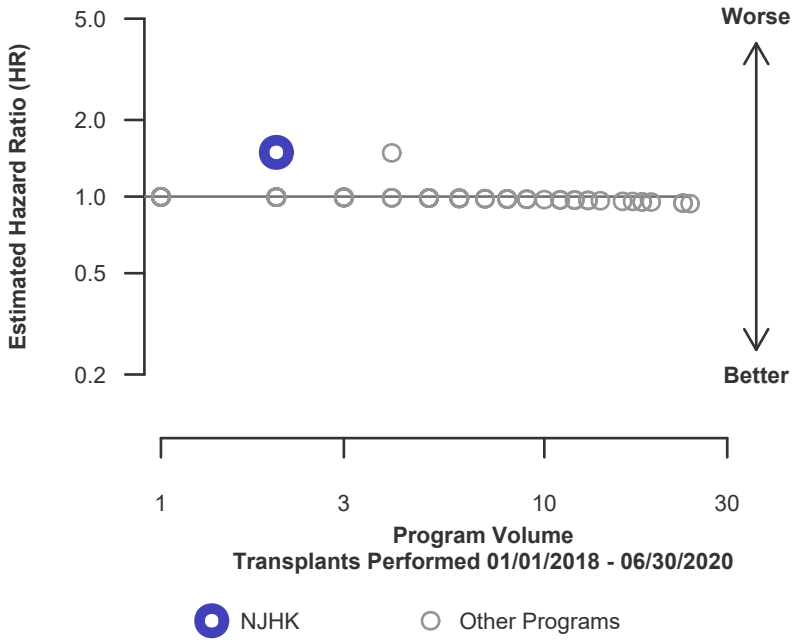


Figure C22L. Pediatric (<18) 1-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C16. Pediatric (<18) 3-year patient survival
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	6	1,843
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	98.99%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	99.01%	--
Number of observed deaths during the first 3 years after transplant	0	18
Number of expected deaths during the first 3 years after transplant	0.06	--
Estimated hazard ratio*	0.97	--
95% credible interval for the hazard ratio**	[0.12, 2.71]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.71], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 3% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 171% increased risk.

Figure C23. Pediatric (<18) 3-year patient death HR estimate

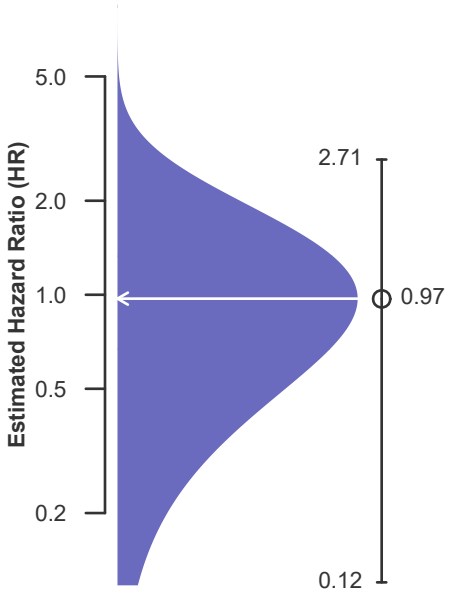
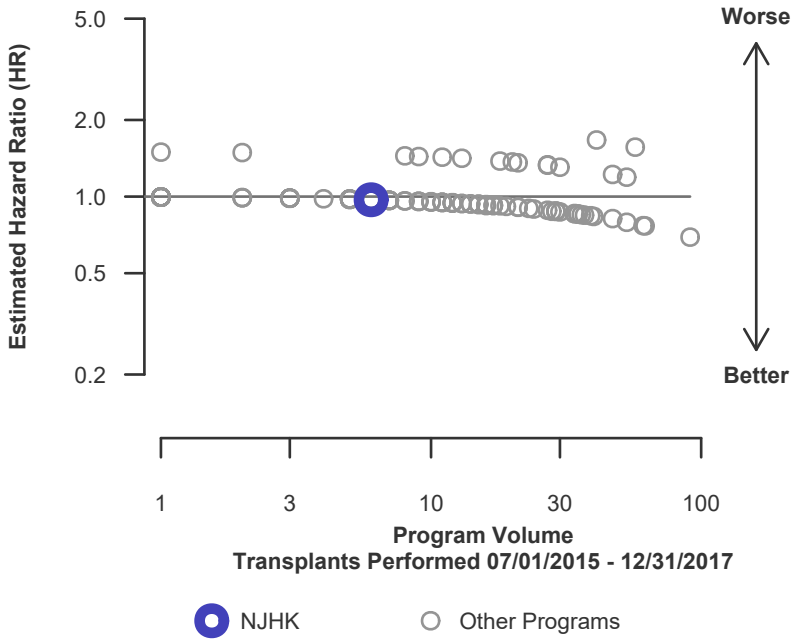


Figure C24. Pediatric (<18) 3-year patient death HR program comparison



C. Transplant Information

Table C16D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	5	1,235
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	99.02%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	99.02%	--
Number of observed deaths during the first 3 years after transplant	0	12
Number of expected deaths during the first 3 years after transplant	0.05	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.72]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.72], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 2% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 172% increased risk.

Figure C23D. Pediatric (<18) 3-year patient death HR estimate (deceased donor grafts)

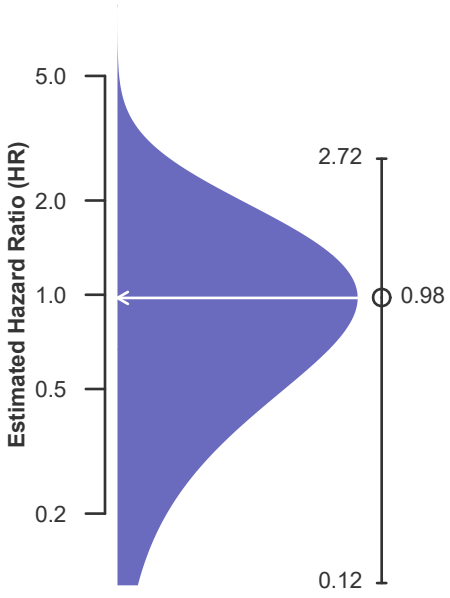
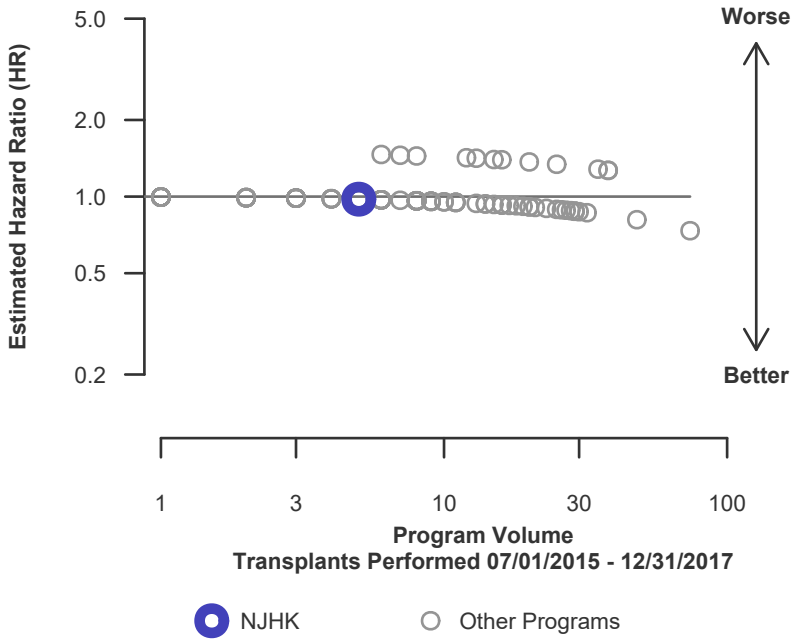


Figure C24D. Pediatric (<18) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C16L. Pediatric (<18) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2015 and 12/31/2017
Retransplants excluded

	NJHK	U.S.
Number of transplants evaluated	1	608
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	98.93%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	98.93%	--
Number of observed deaths during the first 3 years after transplant	0	6
Number of expected deaths during the first 3 years after transplant	0.01	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.77]	--

* The hazard ratio provides an estimate of how Hackensack University Medical Center (NJHK)'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 NJHK's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.12, 2.77], indicates the location of NJHK's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but NJHK's performance could plausibly range from 88% reduced risk up to 177% increased risk.

Figure C23L. Pediatric (<18) 3-year patient death HR estimate (living donor grafts)

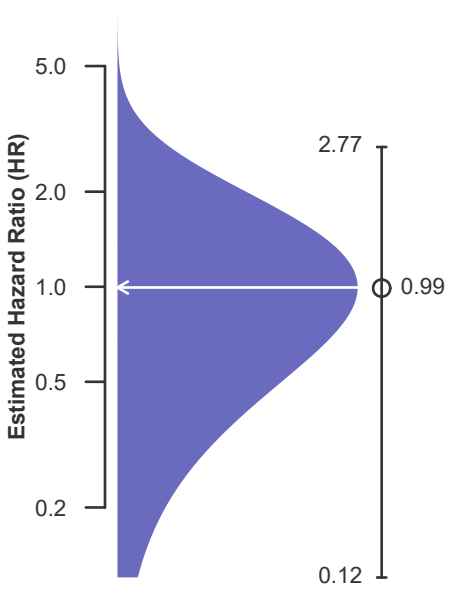
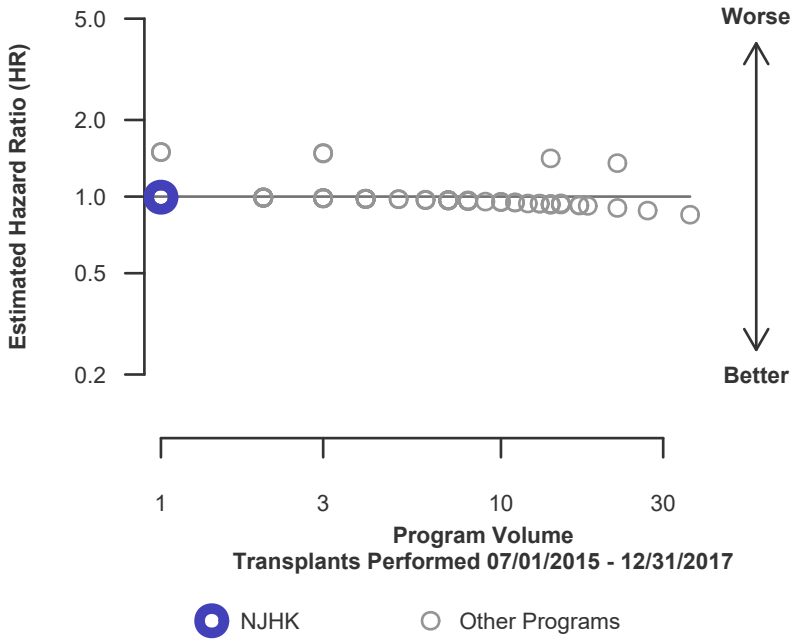


Figure C24L. Pediatric (<18) 3-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C17. Multi-organ transplant graft survival: 01/01/2018 - 06/30/2020

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Kidney Graft Failures		First-Year Outcomes: Estimated Kidney Graft Survival	
	NJHK-TX1	USA	NJHK-TX1	USA	NJHK-TX1	USA
Kidney-Pancreas	2	2,064	0	92	100.0%	95.5%

Pediatric (<18) Transplants

No pediatric (<18) multi-organ transplants were performed

Table C18. Multi-organ transplant patient survival: 01/01/2018 - 06/30/2020

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Patient Deaths		First-Year Outcomes: Estimated Patient Survival	
	NJHK-TX1	USA	NJHK-TX1	USA	NJHK-TX1	USA
Kidney-Pancreas	2	2,064	0	63	100.0%	96.9%

Pediatric (<18) Transplants

No pediatric (<18) multi-organ transplants were performed

D. Living Donor Information

Table D1. Living donor summary: 01/01/2018 - 12/31/2020

Living Donor Follow-Up	This Center			United States		
	01/2018-12/2018	01/2019-12/2019	01/2020-06/2020	01/2018-12/2018	01/2019-12/2019	01/2020-06/2020
Number of Living Donors	25	27	3	6,443	6,866	2,300
6-Month Follow-Up						
Donors due for follow-up	25	27	2	6,442	6,863	2,250
Timely clinical data	23 92.0%	25 92.6%	2 100.0%	5,613 87.1%	5,680 82.8%	1,769 78.6%
Timely lab data	22 88.0%	25 92.6%	2 100.0%	5,388 83.6%	5,292 77.1%	1,715 76.2%
12-Month Follow-Up						
Donors due for follow-up	25	26		6,440	6,833	
Timely clinical data	22 88.0%	23 88.5%		5,365 83.3%	5,121 74.9%	
Timely lab data	22 88.0%	21 80.8%		5,051 78.4%	4,515 66.1%	
24-Month Follow-Up						
Donors due for follow-up	25			6,434		
Timely clinical data	22 88.0%			4,306 66.9%		
Timely lab data	22 88.0%			3,612 56.1%		

Follow-up completion standards through 2 years post-donation were implemented in policy on February 1, 2013.