User Guide

This report contains a wide range of useful information about the liver transplant program at NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP). 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 47.0 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 death rate (also known as the 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 these tables and figures is to describe risk of death once candidates are listed rather than while they are listed. 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.

Table B6 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 B7 and B8 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 B7 and B8 presents the percent of candidates who received a deceased donor transplant by each time point. Table B9 presents data on the time it took for different percentages of patients to be transplanted for candidates added to the list between 01/01/2013 and 06/30/2018. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this program was 0.2 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 12/31/2018 to calculate a particular percentile of transplant times.

Table B10 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. Figures B7 shows the distribution of program offer acceptance rates as well as the offer acceptance rate for this program. Figures B8 - B12 similarly show offer acceptance rates for subsets 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.

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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

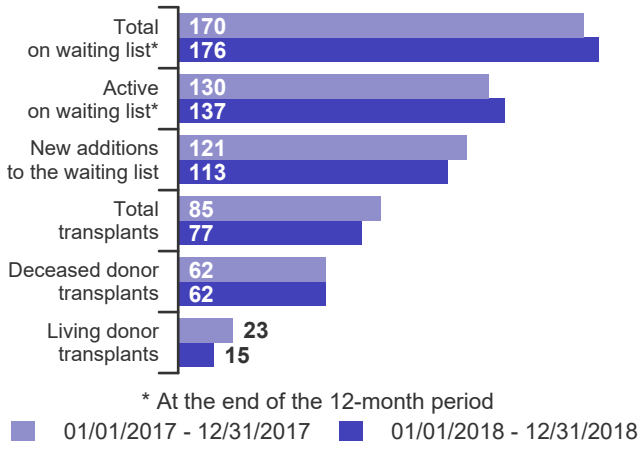


Table A1. Census of transplant recipients

Recipients	01/01/2017-12/31/2017	01/01/2018-12/31/2018
Transplanted at this center	85	77
Followed by this center*	965	909
...transplanted at this program	937	885
...transplanted elsewhere	28	24

* 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 01/01/2017 - 12/31/2018

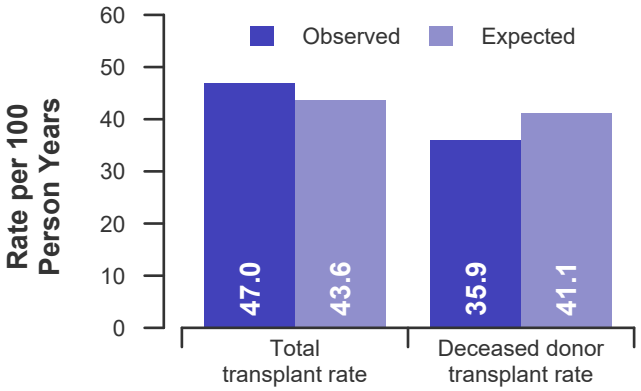


Figure A3. Waiting list mortality rates 01/01/2017 - 12/31/2018

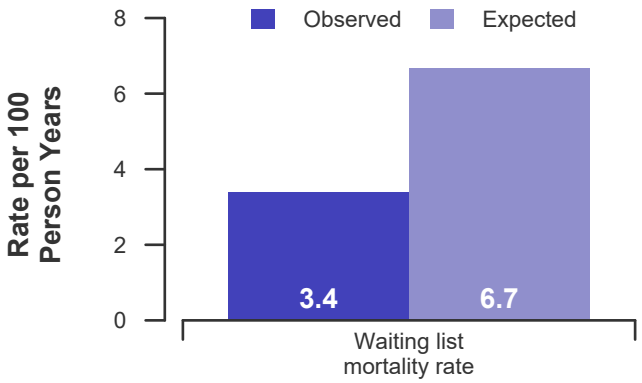


Figure A4. First-year adult graft and patient survival: 01/01/2016 - 06/30/2018

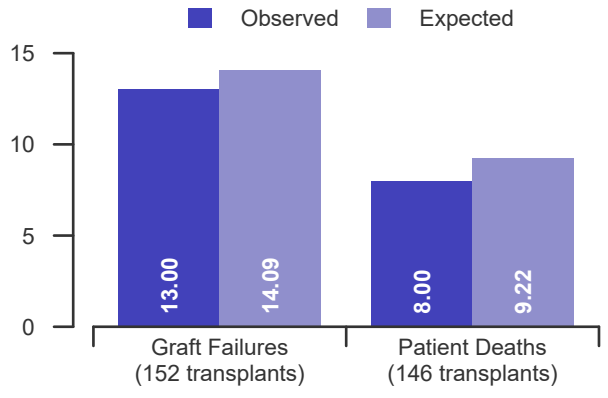
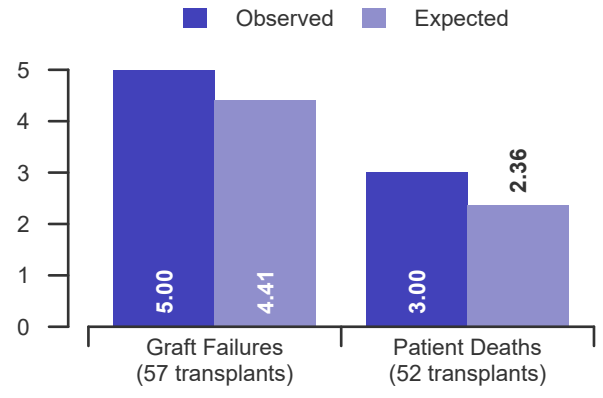


Figure A5. First-year pediatric graft and patient survival: 01/01/2016 - 06/30/2018



B. Waiting List Information

Table B1. Waiting list activity summary: 01/01/2017 - 12/31/2018

Waiting List Registrations	Counts for this center		Activity for 01/01/2018 to 12/31/2018 as percent of registrants on waiting list on 01/01/2018		
	01/01/2017-12/31/2017	01/01/2018-12/31/2018	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	180	170	100.0	100.0	100.0
Additions					
New listings at this center	121	113	66.5	78.9	92.6
Removals					
Transferred to another center	4	1	0.6	0.8	1.1
Received living donor transplant*	23	15	8.8	5.0	2.8
Received deceased donor transplant*	62	62	36.5	36.8	55.3
Died	3	4	2.4	8.8	8.3
Transplanted at another center	3	3	1.8	2.1	2.8
Deteriorated	7	6	3.5	8.3	9.5
Recovered	16	7	4.1	5.4	7.5
Other reasons	13	9	5.3	5.8	9.1
On waiting list at end of period	170	176	103.5	105.8	96.4

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

B. Waiting List Information

Table B2. Demographic characteristics of waiting list candidates
Candidates registered on the waiting list between 01/01/2018 and 12/31/2018

Demographic Characteristic	New Waiting List Registrations 01/01/2018 to 12/31/2018 (%)			All Waiting List Registrations on 12/31/2018 (%)		
	This Center (N=113)	OPTN Region (N=864)	U.S. (N=13,152)	This Center (N=176)	OPTN Region (N=1,159)	U.S. (N=13,680)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	48.7	52.3	68.1	60.8	53.0	67.0
African-American	14.2	11.1	7.9	10.2	10.2	7.4
Hispanic/Latino	20.4	22.5	17.1	22.2	24.4	18.3
Asian	14.2	13.0	5.1	5.7	11.7	5.8
Other	2.7	1.2	1.8	1.1	0.7	1.5
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)						
<2 years	12.4	2.7	2.6	2.8	1.1	1.4
2-11 years	5.3	1.7	1.9	1.7	0.8	1.3
12-17 years	5.3	1.2	1.1	1.1	0.8	1.0
18-34 years	11.5	6.9	6.0	13.1	6.5	6.2
35-49 years	22.1	17.1	17.0	22.2	18.7	18.7
50-64 years	29.2	48.3	49.9	43.2	52.1	54.0
65+ years	14.2	22.1	21.5	15.9	20.0	17.3
Other (includes prenatal)	0.0	0.0	0.0	0.0	0.0	0.0
Gender (%)						
Male	56.6	64.9	62.2	63.1	65.3	60.8
Female	43.4	35.1	37.8	36.9	34.7	39.2

* 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 01/01/2018 and 12/31/2018

Medical Characteristic	New Waiting List Registrations 01/01/2018 to 12/31/2018 (%)			All Waiting List Registrations on 12/31/2018 (%)		
	This Center (N=113)	OPTN Region (N=864)	U.S. (N=13,152)	This Center (N=176)	OPTN Region (N=1,159)	U.S. (N=13,680)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	38.1	48.0	46.9	43.2	50.3	49.1
A	38.1	30.8	36.9	35.8	32.0	37.7
B	17.7	16.2	12.4	17.6	14.7	10.9
AB	6.2	5.0	3.8	3.4	3.0	2.4
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	9.7	5.1	4.5	8.0	3.6	3.2
No	90.3	94.9	95.5	92.0	96.4	96.8
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Primary Disease (%)						
Acute Hepatic Necrosis	6.2	6.6	4.5	5.7	2.5	1.8
Non-Cholestatic Cirrhosis	44.2	47.6	65.4	62.5	57.3	71.2
Cholestatic Liver Disease/Cirrhosis	8.8	7.1	6.9	10.2	7.7	7.8
Biliary Atresia	11.5	2.2	2.4	3.4	1.3	1.8
Metabolic Diseases	5.3	2.2	2.5	2.8	1.6	1.8
Malignant Neoplasms	15.0	27.7	13.1	8.5	24.3	10.2
Other	8.8	6.7	5.2	6.8	5.3	5.3
Missing	0.0	0.0	0.1	0.0	0.0	0.1
Medical Urgency Status/MELD/PELD at Listing (%)*						
Status 1A	3.5	5.2	3.2	0.0	0.1	0.3
Status 1B	0.0	0.3	0.4	0.0	0.0	0.1
Status 2A	0.0	0.0	0.0	0.0	0.0	0.0
Status 2B	0.0	0.0	0.0	0.0	0.0	0.1
Status 3	0.0	0.0	0.0	0.6	0.5	0.7
MELD 6-10	25.7	28.2	19.9	43.8	42.0	29.7
MELD 11-14	17.7	16.1	18.8	27.8	25.8	29.0
MELD 15-20	10.6	17.6	22.6	12.5	19.2	24.7
MELD 21-30	16.8	17.8	17.0	8.0	9.4	8.4
MELD 31-40	7.1	10.0	10.9	0.6	0.7	0.8
PELD less than or equal to 10	7.1	2.1	2.1	3.4	1.3	1.9
PELD 11-14	4.4	0.6	0.3	1.1	0.2	0.2
PELD 15-20	3.5	0.6	0.6	0.0	0.1	0.2
PELD 21-30	0.9	0.5	0.4	0.0	0.2	0.1
PELD 31 or greater	0.9	0.1	0.1	0.0	0.0	0.0
Temporarily Inactive	1.8	0.9	3.8	2.3	0.6	3.9

* MELD/PELD score based on laboratory measures is shown for listings beginning 2/27/2002 unless patient is Status 1 or Temporarily Inactive. MELD/PELD scores based on exception rules are not used. Status 1 separated into 1A and 1B in August 2005.

B. Waiting List Information

Table B4. Transplant rates: 01/01/2017 - 12/31/2018

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	180	1,046	1,088	14,684
Person Years**	345.0	2,129.8	2,209.0	28,486.6
Removals for Transplant	162	795	878	16,332
Adult (18+) Candidates				
Count on waiting list at start*	165	1,015	1,054	14,113
Person Years**	317.9	2,067.7	2,142.4	27,396.5
Removals for transpant	110	709	791	15,145
Pediatric (<18) Candidates				
Count on waiting list at start*	15	31	34	571
Person Years**	27.1	62.0	66.6	1,090.1
Removals for transplant	52	86	87	1,187

* 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: 01/01/2017 - 12/31/2018

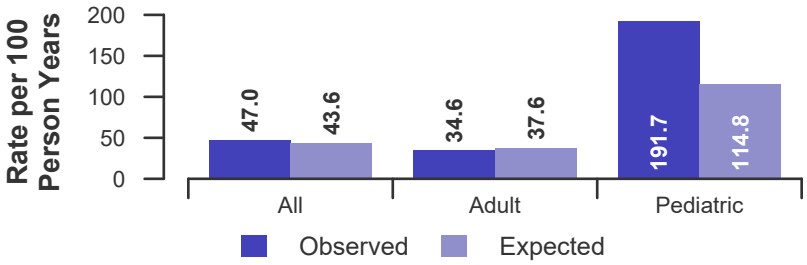


Figure B2. Transplant rate ratio estimate

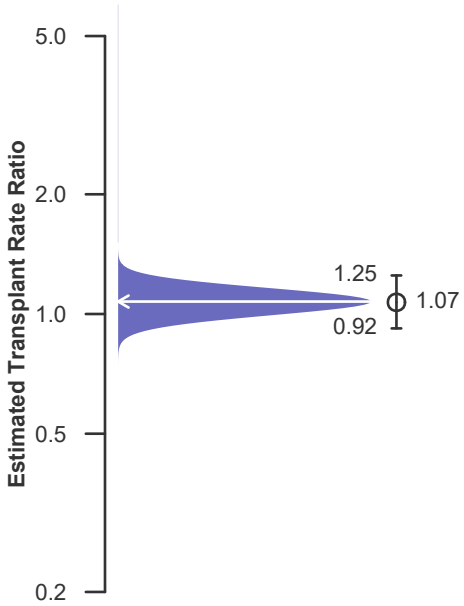
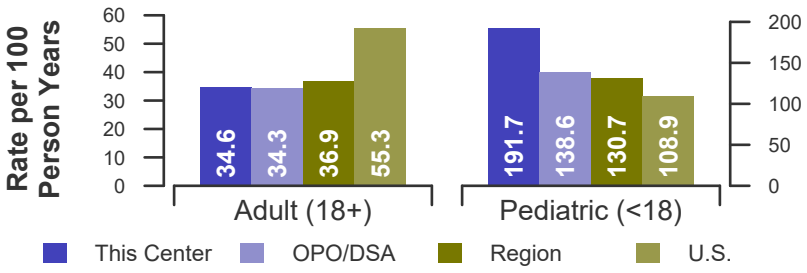


Figure B3. Observed adult (18+) and pediatric (<18) transplant rates: 01/01/2017 - 12/31/2018



B. Waiting List Information

Table B4D. Deceased donor transplant rates: 01/01/2017 - 12/31/2018

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	180	1,046	1,088	14,684
Person Years**	345.0	2,129.8	2,209.0	28,486.6
Removals for Transplant	124	712	788	15,565
Adult (18+) Candidates				
Count on waiting list at start*	165	1,015	1,054	14,113
Person Years**	317.9	2,067.7	2,142.4	27,396.5
Removals for transpant	91	652	727	14,513
Pediatric (<18) Candidates				
Count on waiting list at start*	15	31	34	571
Person Years**	27.1	62.0	66.6	1,090.1
Removals for transplant	33	60	61	1,052

* 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: 01/01/2017 - 12/31/2018

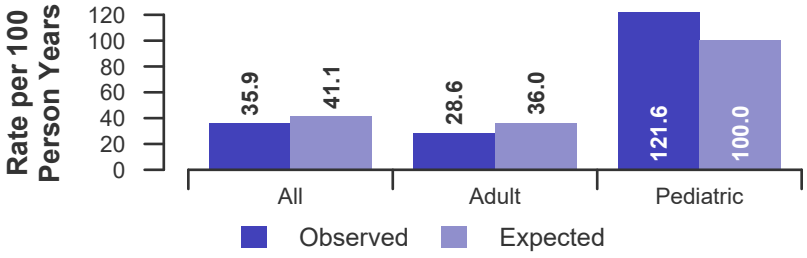


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 01/01/2017 - 12/31/2018

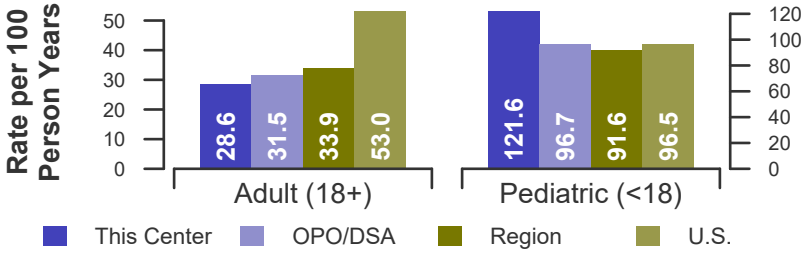
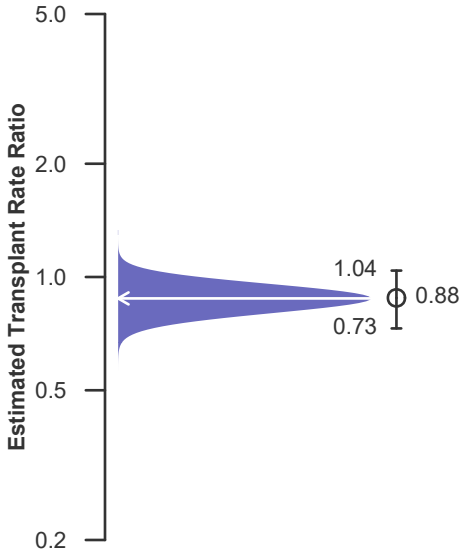


Figure B2D. Deceased donor transplant rate ratio estimate



B. Waiting List Information

Table B5. Waiting list mortality rates: 01/01/2017 - 12/31/2018

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	180	1,046	1,088	14,684
Person Years**	382.1	2,377.6	2,473.0	32,609.4
Number of deaths	13	260	296	3,958
Adult (18+) Candidates				
Count on waiting list at start*	165	1,015	1,054	14,113
Person Years**	352.4	2,311.1	2,402.0	31,432.0
Number of deaths	12	258	292	3,888
Pediatric (<18) Candidates				
Count on waiting list at start*	15	31	34	571
Person Years**	29.8	66.5	71.0	1,177.4
Number of deaths	1	2	4	70

* 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 December 31.

Figure B4. Observed and expected waiting list mortality rates: 01/01/2017 - 12/31/2018

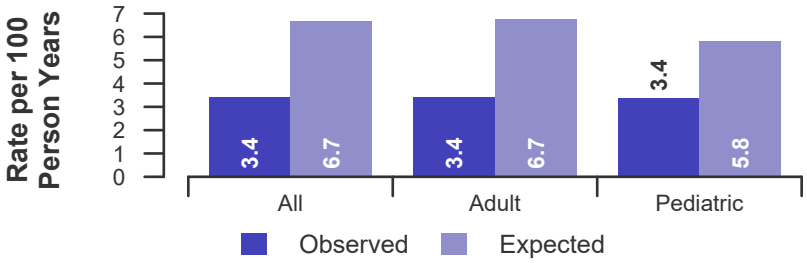


Figure B5. Waiting list mortality rate ratio estimate

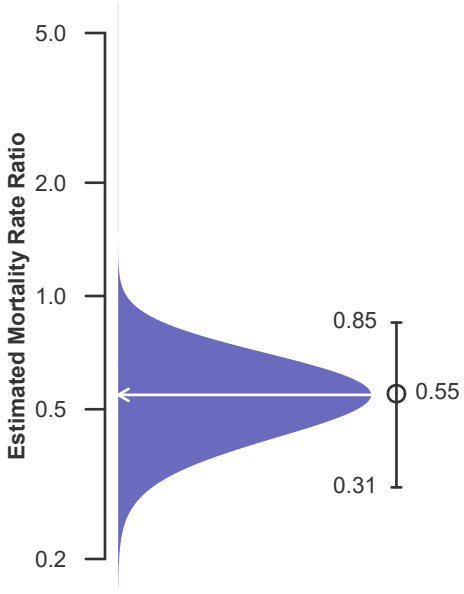
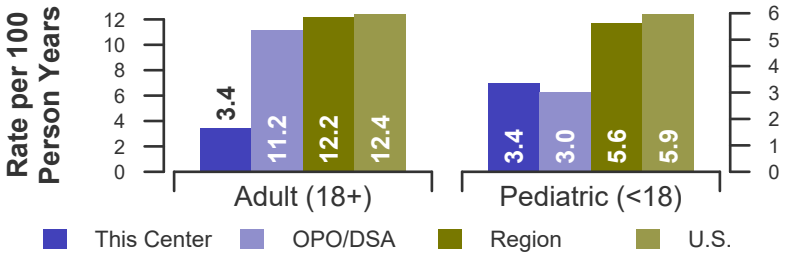


Figure B6. Observed adult (18+) and pediatric (<18) waiting list mortality rates: 01/01/2017 - 12/31/2018



B. Waiting List Information

Table B6. Waiting list candidate status after listing
Candidates registered on waiting list between 07/01/2016 and 06/30/2017

Waiting list status (survival status)	This Center (N=108) Months Since Listing			U.S. (N=13,000) Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	44.4	29.6	14.8	48.3	28.2	18.7
Died on the waiting list without transplant (%)	2.8	2.8	2.8	4.6	6.2	6.8
Removed without transplant (%):						
Condition worsened (status unknown)	0.9	1.9	1.9	4.4	6.6	7.7
Condition improved (status unknown)	0.0	0.0	0.9	1.0	1.7	2.4
Refused transplant (status unknown)	0.0	0.0	0.0	0.2	0.4	0.6
Other	0.9	0.9	1.9	1.5	3.1	4.3
Transplant (living donor from waiting list only) (%):						
Functioning (alive)	12.0	13.0	10.2	1.8	2.2	1.6
Failed-Retransplanted (alive)	1.9	1.9	1.9	0.1	0.1	0.1
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.0	0.0
Died	0.0	0.0	0.0	0.1	0.1	0.1
Status Yet Unknown**	0.9	0.9	6.5	0.0	0.1	0.8
Transplant (deceased donor) (%):						
Functioning (alive)	30.6	38.0	36.1	33.7	42.2	33.7
Failed-Retransplanted (alive)	0.9	0.9	0.9	0.3	0.4	0.6
Failed-alive not retransplanted	0.0	0.0	0.0	0.0	0.0	0.0
Died	3.7	4.6	5.6	2.1	3.3	4.1
Status Yet Unknown*	0.9	2.8	13.9	1.7	4.8	17.7
Lost or Transferred (status unknown) (%)	0.0	2.8	2.8	0.3	0.6	0.8
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	6.5	7.4	8.3	6.7	9.6	11.1
Total % known died or removed as unstable	7.4	9.3	10.2	11.1	16.2	18.8
Total % removed for transplant	50.9	62.0	75.0	39.6	53.2	58.7
Total % with known functioning transplant (alive)	42.6	50.9	46.3	35.5	44.4	35.3

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

B. Waiting List Information

Table B6S1. Medical urgency status 1 candidate status after listing
Candidates registered on the waiting list between 07/01/2016 and 06/30/2017

Waiting list status (survival status)	This Center (N=6) Months Since listing			U.S. (N=434) Months Since listing		
	6	12	18	6	12	18
Alive on waiting list (%)	0.0	0.0	0.0	3.7	1.8	1.4
Died on the waiting list without transplant (%)	0.0	0.0	0.0	6.2	6.2	6.2
Removed without transplant (%):						
Condition worsened (status unknown)	0.0	0.0	0.0	6.5	6.5	6.5
Condition improved (status unknown)	0.0	0.0	0.0	16.1	17.3	17.5
Refused transplant (status unknown)	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.0	1.2	1.4	1.6
Transplant (living donor from waiting list only) (%):						
Functioning (alive)	0.0	0.0	0.0	1.4	1.4	1.2
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	0.0	0.2	0.2	0.2
Status Yet Unknown**	0.0	0.0	0.0	0.0	0.0	0.2
Transplant (deceased donor) (%):						
Functioning (alive)	83.3	66.7	33.3	55.5	49.5	36.4
Failed-Retransplanted (alive)	0.0	0.0	0.0	1.2	1.2	1.2
Failed-alive not retransplanted	0.0	0.0	0.0	0.2	0.0	0.0
Died	16.7	33.3	33.3	6.9	8.5	9.0
Status Yet Unknown*	0.0	0.0	33.3	0.5	5.3	18.0
Lost or Transferred (status unknown) (%)	0.0	0.0	0.0	0.5	0.7	0.7
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	16.7	33.3	33.3	13.4	15.0	15.4
Total % known died or removed as unstable	16.7	33.3	33.3	19.8	21.4	21.9
Total % removed for transplant	100.0	100.0	100.0	65.9	66.1	66.1
Total % with known functioning transplant (alive)	83.3	66.7	33.3	56.9	50.9	37.6

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

B. Waiting List Information

Table B7. Percent of candidates with deceased donor transplants: demographic characteristics
Candidates registered on the waiting list between 01/01/2013 and 12/31/2015

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	519	10.6	42.2	52.2	53.9	35,110	16.9	44.1	52.0	53.9
Ethnicity/Race*										
White	306	9.5	43.8	53.9	54.2	24,068	16.6	44.7	52.1	54.0
African-American	61	16.4	36.1	45.9	49.2	3,467	20.9	49.4	57.0	59.0
Hispanic/Latino	104	13.5	42.3	51.9	56.7	5,385	16.3	39.6	48.2	50.3
Asian	45	4.4	40.0	51.1	53.3	1,710	15.5	40.3	51.6	53.8
Other	3	0.0	33.3	33.3	33.3	480	18.1	44.0	52.9	54.8
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	25	48.0	76.0	76.0	80.0	864	24.3	69.9	75.2	76.4
2-11 years	26	34.6	69.2	76.9	76.9	706	26.6	67.6	73.4	74.5
12-17 years	12	16.7	66.7	75.0	75.0	438	21.7	55.3	64.6	67.1
18-34 years	26	19.2	38.5	42.3	46.2	1,871	26.1	47.8	53.5	56.0
35-49 years	59	11.9	37.3	47.5	47.5	5,407	23.2	45.6	51.7	53.7
50-64 years	278	5.0	36.7	48.9	51.1	20,147	14.8	42.2	50.7	52.8
65+ years	93	6.5	43.0	51.6	52.7	5,677	12.7	40.5	49.0	50.4
Other (includes prenatal)	0	--	--	--	--	0	--	--	--	--
Gender										
Male	332	8.4	39.2	49.7	52.4	22,377	16.5	45.1	53.4	55.3
Female	187	14.4	47.6	56.7	56.7	12,733	17.7	42.4	49.4	51.4

* 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 B8. Percent of candidates with deceased donor transplants: medical characteristics
Candidates registered on the waiting list between 01/01/2013 and 12/31/2015

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	519	10.6	42.2	52.2	53.9	35,110	16.9	44.1	52.0	53.9
Blood Type										
O	247	9.3	38.1	49.0	51.4	16,283	17.0	42.3	50.0	52.1
A	167	9.0	39.5	49.1	50.3	13,014	15.1	42.1	50.7	52.5
B	75	10.7	52.0	61.3	62.7	4,502	18.7	50.5	57.5	59.6
AB	30	30.0	66.7	73.3	73.3	1,311	27.9	65.6	70.2	71.5
Previous Transplant										
Yes	34	20.6	41.2	47.1	50.0	2,003	27.4	49.7	54.0	55.6
No	485	9.9	42.3	52.6	54.2	33,107	16.3	43.8	51.8	53.8
Primary Disease										
Acute Hepatic Necrosis	23	43.5	60.9	60.9	60.9	1,406	47.7	55.9	58.0	58.7
Non-Cholestatic Cirrhosis	311	5.1	30.5	37.0	38.9	23,745	16.4	41.5	48.5	50.4
Cholestatic Liver Disease/Cirrhosis	39	17.9	56.4	69.2	69.2	2,399	14.7	44.5	52.7	56.5
Biliary Atresia	16	31.2	68.8	75.0	75.0	699	15.7	65.2	73.2	74.7
Metabolic Diseases	17	29.4	64.7	70.6	70.6	833	21.4	62.5	68.8	70.3
Malignant Neoplasms	94	10.6	57.4	80.9	83.0	4,159	9.4	47.2	61.5	63.2
Other	19	10.5	63.2	78.9	84.2	1,855	19.3	45.7	53.6	56.2
Missing	0	--	--	--	--	14	7.1	14.3	14.3	14.3
Medical Urgency Status/MELD/PELD at Listing*										
Status 1	0	--	--	--	--	0	--	--	--	--
Status 1A	23	52.2	52.2	52.2	52.2	1,187	60.9	61.4	61.4	61.4
Status 1B	6	83.3	100.0	100.0	100.0	145	53.1	81.4	81.4	81.4
Status 2A	0	--	--	--	--	0	--	--	--	--
Status 2B	0	--	--	--	--	0	--	--	--	--
Status 3	0	--	--	--	--	0	--	--	--	--
MELD 6-10	160	1.2	26.9	41.2	42.5	7,003	3.6	34.7	48.8	51.3
MELD 11-14	127	1.6	32.3	47.2	49.6	6,642	3.0	28.8	39.4	42.7
MELD 15-20	89	9.0	51.7	59.6	62.9	8,028	6.5	38.1	46.6	49.2
MELD 21-30	57	8.8	56.1	57.9	57.9	5,911	25.0	56.8	59.6	60.4
MELD 31-40	21	52.4	61.9	61.9	61.9	3,730	65.2	71.9	72.1	72.1
PELD less than or equal to 10	25	24.0	68.0	76.0	80.0	674	9.5	65.3	74.5	76.3
PELD 11-14	1	0.0	100.0	100.0	100.0	114	17.5	69.3	77.2	77.2
PELD 15-20	7	28.6	85.7	85.7	85.7	174	14.9	75.3	79.9	82.2
PELD 21-30	1	100.0	100.0	100.0	100.0	150	22.7	73.3	76.7	76.7
PELD 31 or greater	2	50.0	50.0	50.0	50.0	55	58.2	74.5	74.5	76.4
Temporarily Inactive	0	--	--	--	--	1,297	7.2	31.1	40.6	41.6

* MELD/PELD score based on laboratory measures is shown for listings beginning 2/27/2002 unless patient is Status 1 or Temporarily Inactive. MELD/PELD scores based on exception rules are not used. Status 1 separated into 1A and 1B in August 2005.

B. Waiting List Information

Table B9. Time to transplant for waiting list candidates*
Candidates registered on the waiting list between 01/01/2013 and 06/30/2018

	Months to Transplant**			
Percentile	**Center**	**OPO/DSA**	**Region**	**U.S.**
5th	0.2	0.2	0.2	0.2
10th	0.5	0.7	0.6	0.3
25th	2.1	5.1	5.0	1.9
50th (median time to transplant)	10.6	27.4	26.0	11.2
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 12/31/2018. 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 B10. Offer Acceptance Practices: 01/01/2018 - 12/31/2018

Offers Acceptance Characteristics	This Center	OPO/DSA	Region	U.S.
Overall				
Number of Offers	1,378	12,493	12,901	168,159
Number of Acceptances	55	310	344	7,003
Expected Acceptances	26.9	287.9	302.2	6,993.9
Offer Acceptance Ratio*	1.97	1.08	1.14	1.00
95% Credible Interval**	[1.49, 2.52]	--	--	--
PHS increased infectious risk				
Number of Offers	182	2,552	2,646	38,585
Number of Acceptances	10	111	118	1,979
Expected Acceptances	6.0	101.0	105.1	1,976.5
Offer Acceptance Ratio*	1.51	1.10	1.12	1.00
95% Credible Interval**	[0.78, 2.47]	--	--	--
DCD donor				
Number of Offers	390	3,490	3,572	34,675
Number of Acceptances	2	10	16	505
Expected Acceptances	1.9	20.3	21.0	509.0
Offer Acceptance Ratio*	1.04	0.54	0.78	0.99
95% Credible Interval**	[0.28, 2.28]	--	--	--
HCV+ donor				
Number of Offers	7	666	666	5,645
Number of Acceptances	0	28	28	356
Expected Acceptances	0.2	24.0	24.0	355.7
Offer Acceptance Ratio*	0.92	1.15	1.15	1.00
95% Credible Interval**	[0.11, 2.56]	--	--	--
Hard-to-Place Livers (Over 50 Offers)				
Number of Offers	1,020	9,249	9,510	97,991
Number of Acceptances	6	27	30	576
Expected Acceptances	3.8	35.3	37.2	581.8
Offer Acceptance Ratio*	1.39	0.78	0.82	0.99
95% Credible Interval**	[0.60, 2.50]	--	--	--
Donor more than 500 miles away				
Number of Offers	639	6,115	6,226	50,819
Number of Acceptances	7	43	47	704
Expected Acceptances	2.7	28.3	29.1	656.1
Offer Acceptance Ratio*	1.90	1.49	1.58	1.07
95% Credible Interval**	[0.87, 3.34]	--	--	--

* The offer acceptance ratio estimates the relative offer acceptance practice of NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP) 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, [1.49, 2.52], indicates the location of NYCP's true offer acceptance ratio with 95% probability. The best estimate is 97% more likely to accept an offer compared to national acceptance behavior, but NYCP's performance could plausibly range from 49% higher acceptance up to 152% higher acceptance.

B. Waiting List Information

Figure B7. Offer acceptance: Overall

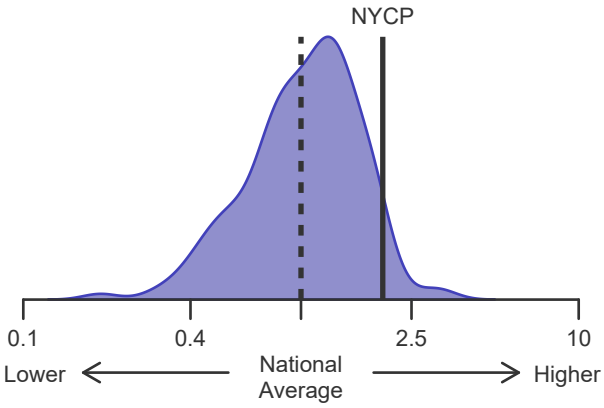


Figure B8. Offer acceptance: PHS increased infectious risk

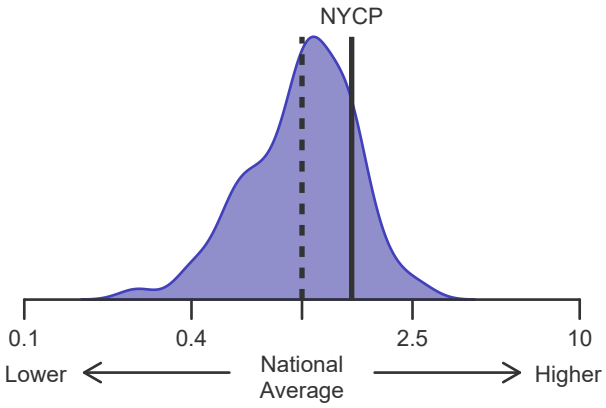


Figure B9. Offer acceptance: DCD Donor

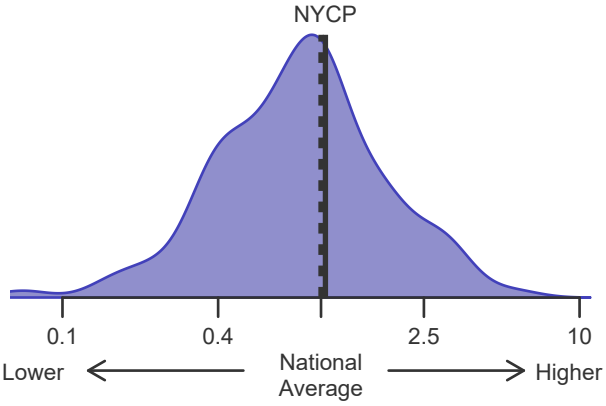


Figure B10. Offer acceptance: HCV+ Donor

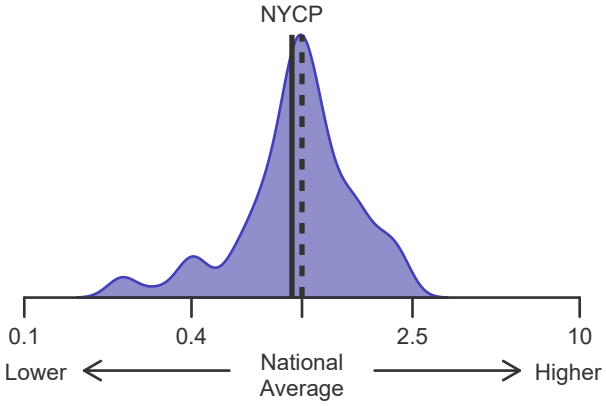


Figure B11. Offer acceptance: Offer number > 50

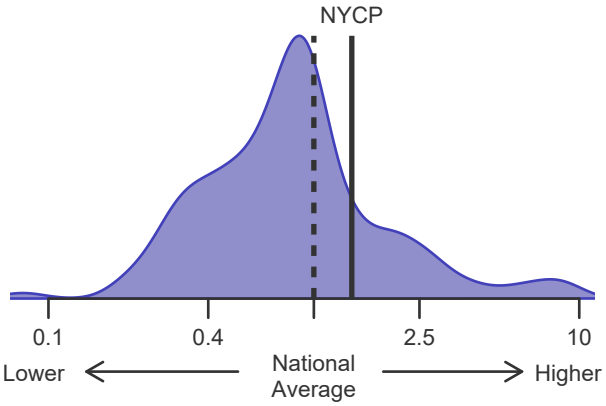
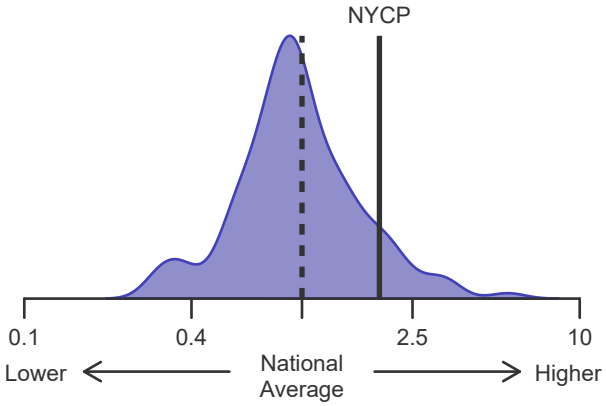


Figure B12. Offer acceptance: Donor more than 500 miles away



C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics
Patients transplanted between 01/01/2018 and 12/31/2018

Characteristic	Percentage in each category		
	Center (N=62)	Region (N=403)	U.S. (N=7,849)
Ethnicity/Race (%)*			
White	45.2	54.6	68.6
African-American	21.0	14.1	8.8
Hispanic/Latino	16.1	17.4	16.0
Asian	17.7	13.6	4.8
Other	0.0	0.2	1.8
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	11.3	2.5	2.6
2-11 years	6.5	2.5	2.6
12-17	4.8	1.7	1.2
18-34	9.7	6.5	6.0
35-49 years	19.4	17.4	16.5
50-64 years	35.5	46.9	49.3
65+ years	12.9	22.6	21.8
Unknown	0.0	0.0	0.0
Gender (%)			
Male	61.3	66.5	64.5
Female	38.7	33.5	35.5

* 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 01/01/2018 and 12/31/2018

Characteristic	Percentage in each category		
	Center (N=15)	Region (N=55)	U.S. (N=401)
Ethnicity/Race (%)*			
White	46.7	63.6	76.6
African-American	0.0	1.8	3.7
Hispanic/Latino	40.0	27.3	14.7
Asian	6.7	5.5	4.2
Other	6.7	1.8	0.7
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	46.7	16.4	9.2
2-11 years	6.7	3.6	4.5
12-17	13.3	3.6	1.7
18-34	0.0	1.8	7.0
35-49 years	6.7	10.9	20.4
50-64 years	26.7	41.8	37.4
65+ years	0.0	21.8	19.7
Unknown	0.0	0.0	0.0
Gender (%)			
Male	46.7	50.9	54.6
Female	53.3	49.1	45.4

* 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 01/01/2018 and 12/31/2018

Characteristic	Percentage in each category		
	Center (N=62)	Region (N=403)	U.S. (N=7,849)
Blood Type (%)			
O	35.5	41.9	44.9
A	40.3	31.5	36.2
B	17.7	18.4	14.1
AB	6.5	8.2	4.8
Previous Transplant (%)			
Yes	4.8	5.7	4.9
No	95.2	94.3	95.1
Body Mass Index (%)			
0-20	33.9	14.9	12.4
21-25	29.0	29.3	27.4
26-30	21.0	30.0	29.7
31+	16.1	23.6	29.6
Unknown	0.0	2.2	0.9
Primary Disease (%)			
Acute Hepatic Necrosis	3.2	7.7	4.9
Non-Cholestatic Cirrhosis	33.9	40.9	61.2
Cholestatic Liver Disease/Cirrhosis	9.7	7.9	6.8
Biliary Atresia	9.7	2.2	2.9
Metabolic Diseases	6.5	3.2	3.1
Malignant Neoplasms	25.8	30.8	17.5
Other	9.7	6.9	3.6
Missing	1.6	0.2	0.1
Medical Urgency Statust/MELD/PELD at Transplant (%)*			
Status 1A	3.2	6.0	3.6
Status 1B	0.0	1.2	1.4
MELD 6-10	22.6	18.4	14.7
MELD 11-14	17.7	13.9	13.1
MELD 15-20	4.8	9.7	20.0
MELD 21-30	21.0	22.1	22.4
MELD 31-40	14.5	25.3	21.5
PELD less than or equal to 10	8.1	2.2	1.8
PELD 11-14	0.0	0.0	0.3
PELD 15-20	3.2	0.5	0.5
PELD 21-30	3.2	0.5	0.5
PELD 31 or greater	1.6	0.2	0.2
Temporarily Inactive	0.0	0.0	0.0
Recipient Medical Condition at Transplant (%)			
Not Hospitalized	71.0	55.6	66.0
Hospitalized	12.9	24.8	18.1
ICU	16.1	18.6	15.6
Unknown	0.0	1.0	0.2

* MELD/PELD score based on laboratory measures at the time of transplant is shown unless recipient is Status 1 or Temporarily Inactive. MELD/PELD scores based on exception rules are not used. Status 1 separated into 1A and 1B in August 2005

C. Transplant Information

Table C2L. Living donor transplant recipient medical characteristics
Patients transplanted between 01/01/2018 and 12/31/2018

Characteristic	Percentage in each category		
	Center (N=15)	Region (N=55)	U.S. (N=401)
Blood Type (%)			
O	46.7	56.4	50.4
A	33.3	30.9	37.4
B	20.0	10.9	10.7
AB	0.0	1.8	1.5
Previous Transplant (%)			
Yes	0.0	0.0	1.5
No	100.0	100.0	98.5
Body Mass Index (%)			
0-20	60.0	29.1	22.9
21-25	13.3	25.5	27.2
26-30	6.7	29.1	28.9
31+	20.0	16.4	19.7
Unknown	0.0	0.0	1.2
Primary Disease (%)			
Acute Hepatic Necrosis	0.0	0.0	2.7
Non-Cholestatic Cirrhosis	26.7	41.8	50.1
Cholestatic Liver Disease/Cirrhosis	13.3	14.5	20.2
Biliary Atresia	40.0	14.5	9.5
Metabolic Diseases	13.3	5.5	3.5
Malignant Neoplasms	6.7	23.6	11.7
Other	0.0	0.0	2.2
Missing	0.0	0.0	0.0
Medical Urgency Statust/MELD/PELD at Transplant (%)*			
Status 1A	0.0	0.0	0.2
Status 1B	0.0	1.8	2.2
MELD 6-10	13.3	20.0	19.5
MELD 11-14	13.3	23.6	19.7
MELD 15-20	13.3	29.1	27.4
MELD 21-30	6.7	7.3	16.2
MELD 31-40	0.0	0.0	1.7
PELD less than or equal to 10	20.0	5.5	4.2
PELD 11-14	6.7	5.5	2.5
PELD 15-20	13.3	3.6	2.5
PELD 21-30	6.7	1.8	1.2
PELD 31 or greater	6.7	1.8	0.7
Temporarily Inactive	0.0	0.0	1.7
Recipient Medical Condition at Transplant (%)			
Not Hospitalized	66.7	70.9	84.8
Hospitalized	20.0	20.0	11.7
ICU	13.3	9.1	3.5
Unknown	0.0	0.0	0.0

* MELD/PELD score based on laboratory measures at the time of transplant is shown unless recipient is Status 1 or Temporarily Inactive. MELD/PELD scores based on exception rules are not used. Status 1 separated into 1A and 1B in August 2005

C. Transplant Information

Table C3D. Deceased donor characteristics
Transplants performed between 01/01/2018 and 12/31/2018

Donor Characteristic	Percentage in each category		
	Center (N=62)	Region (N=403)	U.S. (N=7,849)
Cause of Death (%)			
Deceased: Stroke	21.0	27.8	27.4
Deceased: MVA	12.9	7.4	13.7
Deceased: Other	66.1	64.8	58.9
Ethnicity/Race (%)*			
White	46.8	56.1	63.2
African-American	24.2	20.8	18.9
Hispanic/Latino	25.8	20.3	14.2
Asian	3.2	2.7	2.7
Other	0.0	0.0	1.1
Not Reported	0.0	0.0	0.0
Age (%)			
<2 years	3.2	0.5	1.3
2-11 years	6.5	4.0	2.8
12-17	6.5	2.5	4.7
18-34	25.8	28.8	33.2
35-49 years	21.0	26.8	26.6
50-64 years	16.1	24.8	23.3
65+ years	21.0	12.7	8.0
Unknown	0.0	0.0	0.0
Gender (%)			
Male	46.8	57.8	60.5
Female	53.2	42.2	39.5
Blood Type (%)			
O	40.3	46.2	48.6
A	40.3	31.8	36.6
B	16.1	15.9	12.1
AB	3.2	6.2	2.7
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 01/01/2018 and 12/31/2018

Donor Characteristic	Percentage in each category		
	Center (N=15)	Region (N=55)	U.S. (N=401)
Ethnicity/Race (%)*			
White	46.7	63.6	74.8
African-American	6.7	5.5	3.7
Hispanic/Latino	40.0	27.3	14.5
Asian	6.7	3.6	4.7
Other	0.0	0.0	2.2
Not Reported	0.0	0.0	0.0
Age (%)			
0-11 years	0.0	0.0	0.0
12-17	6.7	1.8	0.2
18-34	53.3	52.7	45.6
35-49 years	20.0	32.7	41.1
50-64 years	13.3	10.9	12.2
65+ years	0.0	0.0	0.5
Unknown	6.7	1.8	0.2
Gender (%)			
Male	26.7	36.4	44.9
Female	73.3	63.6	55.1
Blood Type (%)			
O	46.7	61.8	66.3
A	40.0	29.1	26.2
B	13.3	9.1	7.5
AB	0.0	0.0	0.0
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 01/01/2018 and 12/31/2018

Transplant Characteristic	Percentage in each category		
	Center (N=62)	Region (N=403)	U.S. (N=7,849)
Cold Ischemic Time (Hours): Local (%)			
Deceased: 0-5 hr	75.0	70.7	63.5
Deceased: 6-10 hr	25.0	26.4	34.3
Deceased: 11-15 hr	0.0	0.5	1.3
Deceased: 16-20 hr	0.0	0.0	0.1
Deceased: 21+ hr	0.0	0.0	0.1
Not Reported	0.0	2.4	0.6
Cold Ischemic Time (Hours): Shared (%)			
Deceased: 0-5 hr	33.3	47.2	41.5
Deceased: 6-10 hr	60.0	48.2	54.9
Deceased: 11-15 hr	3.3	3.6	2.6
Deceased: 16-20 hr	0.0	0.0	0.1
Deceased: 21+ hr	0.0	0.0	0.0
Not Reported	3.3	1.0	0.9
Procedure Type (%)			
Liver alone	88.7	86.1	89.9
Liver and another organ	11.3	13.9	10.1
Sharing (%)			
Local	51.6	51.6	63.2
Shared	48.4	48.4	36.8
Median Time in Hospital After Transplant*	12.5 Days	13.0 Days	9.0 Days

* Multiple organ transplants are excluded from this statistic.

C. Transplant Information

Table C4L. Living donor transplant characteristics
Transplants performed between 01/01/2018 and 12/31/2018

Transplant Characteristic	Percentage in each category		
	Center (N=15)	Region (N=55)	U.S. (N=401)
Relation with Donor (%)			
Related	80.0	70.9	57.1
Unrelated	20.0	29.1	42.6
Not Reported	0.0	0.0	0.2
Procedure Type (%)			
Liver alone	100.0	100.0	99.5
Liver and another organ	0.0	0.0	0.5
Median Time in Hospital After Transplant*	11.0 Days	14.0 Days	11.0 Days

* Multiple 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 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	152	16,600
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	96.71%	96.20%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	96.04%	--
Number of observed graft failures (including deaths) during the first month after transplant	5	631
Number of expected graft failures (including deaths) during the first month after transplant	6.06	--
Estimated hazard ratio*	0.87	--
95% credible interval for the hazard ratio**	[0.35, 1.62]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.35, 1.62], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 13% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 65% reduced risk up to 62% increased risk.

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

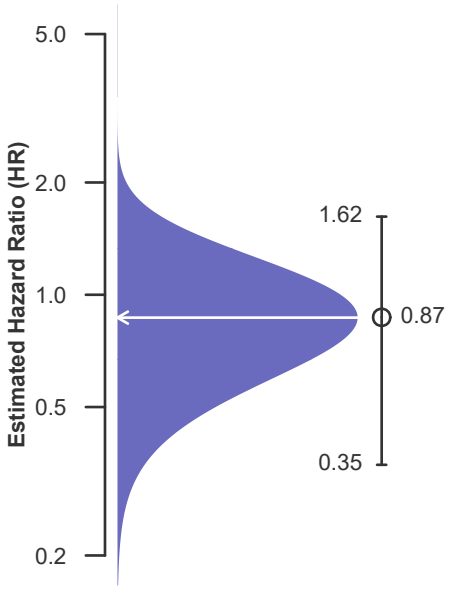
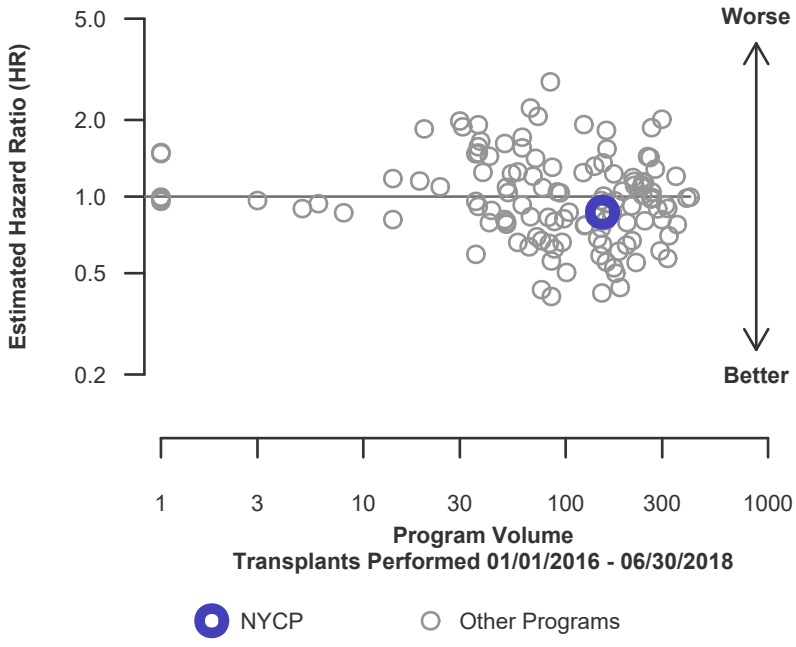


Figure C2. Adult (18+) 1-month graft failure HR program comparison



C. Transplant Information

Table C5D. Adult (18+) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	120	15,876
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	97.50%	96.20%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	95.97%	--
Number of observed graft failures (including deaths) during the first month after transplant	3	604
Number of expected graft failures (including deaths) during the first month after transplant	4.91	--
Estimated hazard ratio*	0.72	--
95% credible interval for the hazard ratio**	[0.24, 1.48]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.24, 1.48], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 28% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 76% reduced risk up to 48% increased risk.

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

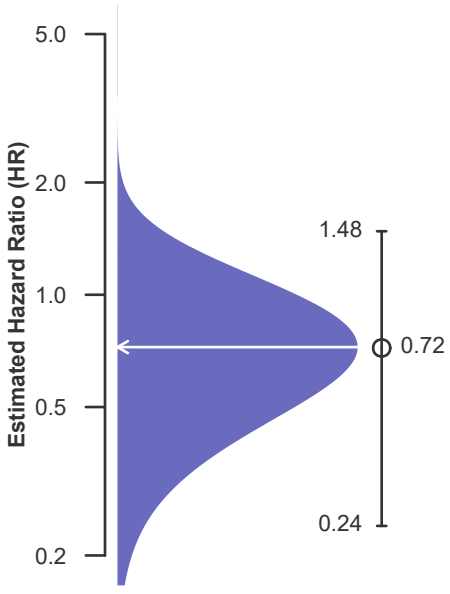
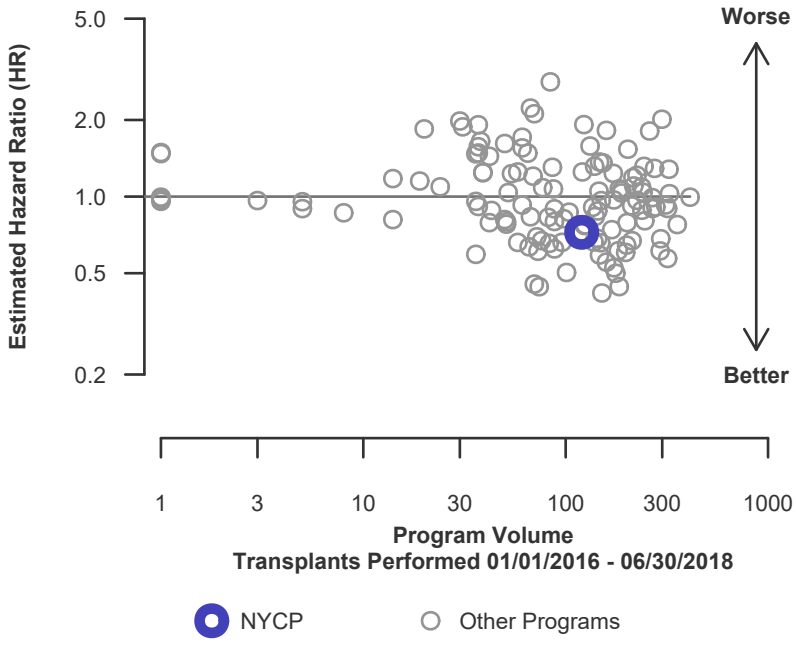


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C5L. Adult (18+) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	32	724
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	93.75%	96.27%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	96.28%	--
Number of observed graft failures (including deaths) during the first month after transplant	2	27
Number of expected graft failures (including deaths) during the first month after transplant	1.15	--
Estimated hazard ratio*	1.27	--
95% credible interval for the hazard ratio**	[0.35, 2.78]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.35, 2.78], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 27% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 65% reduced risk up to 178% increased risk.

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

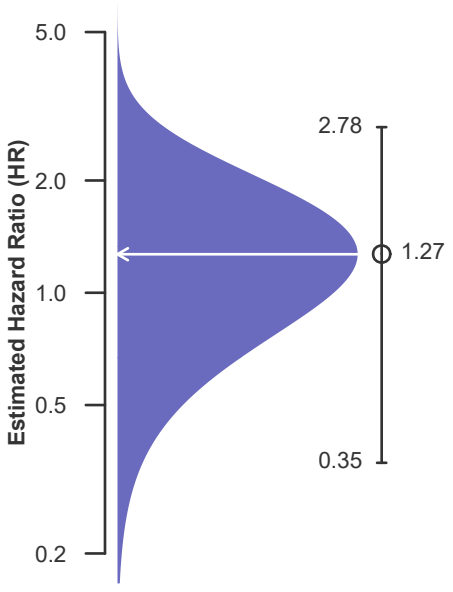
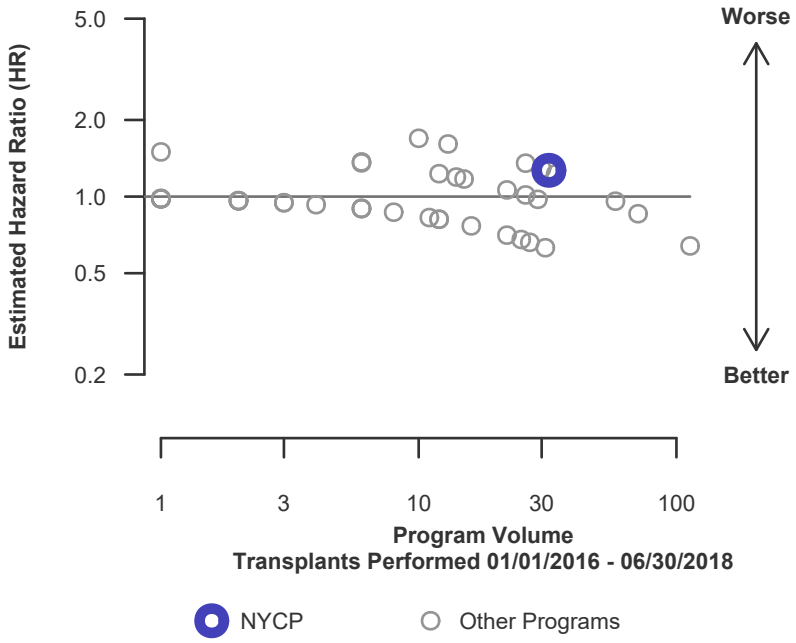


Figure C2L. Adult (18+) 1-month living donor graft failure HR program comparison



C. Transplant Information

Table C6. Adult (18+) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	152	16,600
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	90.76%	91.04%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	90.48%	--
Number of observed graft failures (including deaths) during the first year after transplant	13	1,413
Number of expected graft failures (including deaths) during the first year after transplant	14.09	--
Estimated hazard ratio*	0.93	--
95% credible interval for the hazard ratio**	[0.52, 1.46]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.52, 1.46], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 7% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 48% reduced risk up to 46% increased risk.

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

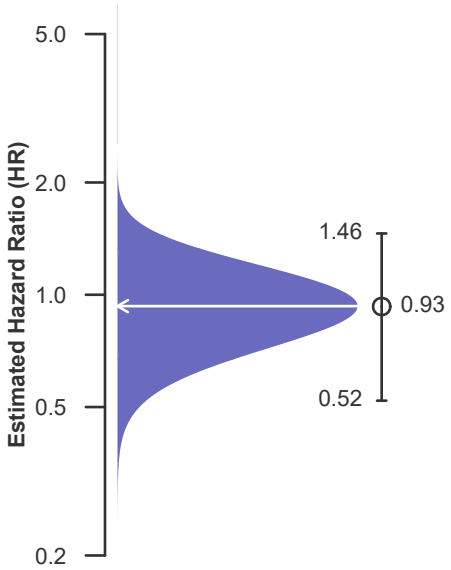
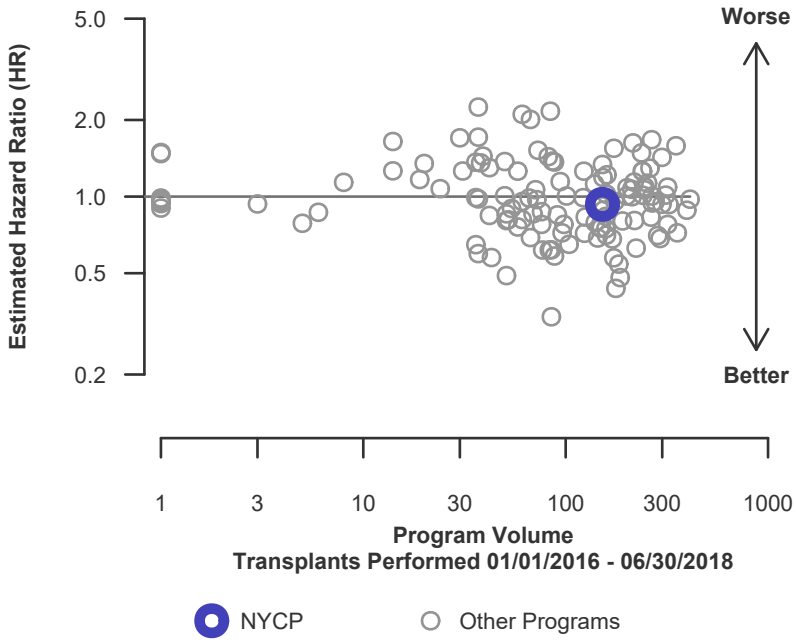


Figure C4. Adult (18+) 1-year graft failure HR program comparison



C. Transplant Information

Table C6D. Adult (18+) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	120	15,876
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	90.91%	91.04%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	90.31%	--
Number of observed graft failures (including deaths) during the first year after transplant	10	1,352
Number of expected graft failures (including deaths) during the first year after transplant	11.38	--
Estimated hazard ratio*	0.90	--
95% credible interval for the hazard ratio**	[0.46, 1.47]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.46, 1.47], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 10% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 54% reduced risk up to 47% increased risk.

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

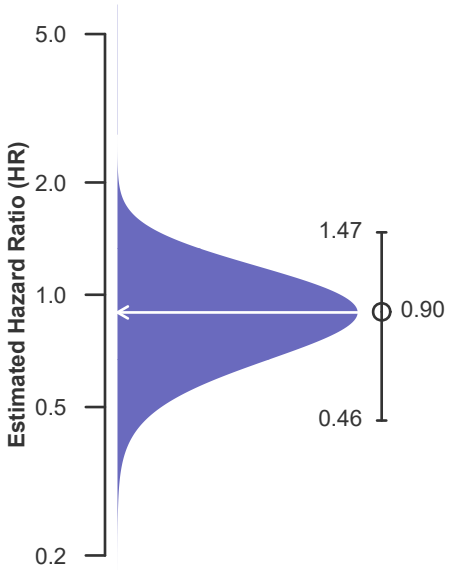
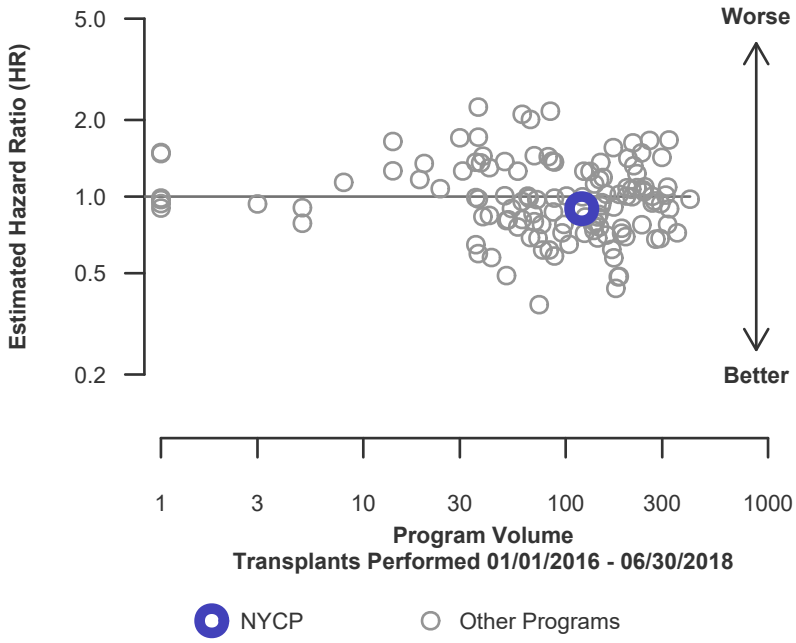


Figure C4D. Adult (18+) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C6L. Adult (18+) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	32	724
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	90.14%	91.12%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	91.13%	--
Number of observed graft failures (including deaths) during the first year after transplant	3	61
Number of expected graft failures (including deaths) during the first year after transplant	2.70	--
Estimated hazard ratio*	1.06	--
95% credible interval for the hazard ratio**	[0.35, 2.18]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.35, 2.18], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 6% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 65% reduced risk up to 118% increased risk.

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

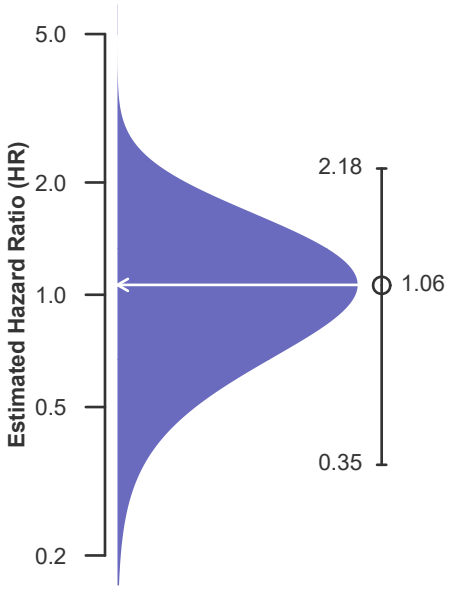
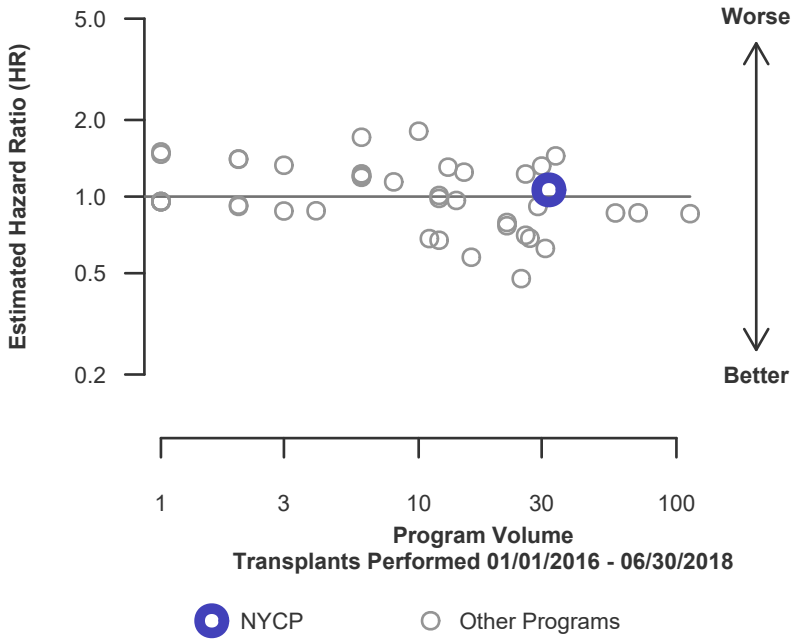


Figure C4L. Adult (18+) 1-year living donor graft failure HR program comparison



C. Transplant Information

Table C7. Adult (18+) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	249	14,203
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	86.35%	83.29%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	82.97%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	34	2,373
Number of expected graft failures (including deaths) during the first 3 years after transplant	42.39	--
Estimated hazard ratio*	0.81	--
95% credible interval for the hazard ratio**	[0.57, 1.10]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.57, 1.10], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 19% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 43% reduced risk up to 10% increased risk.

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

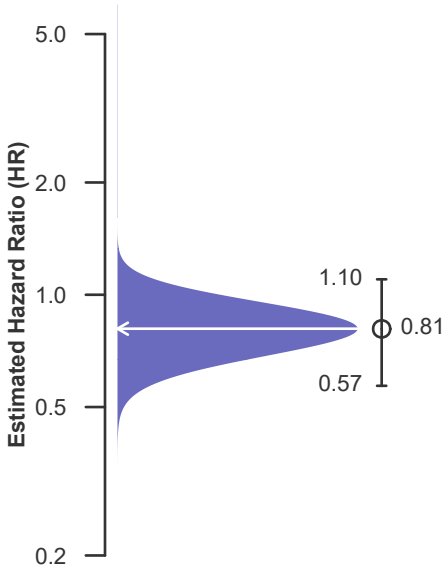
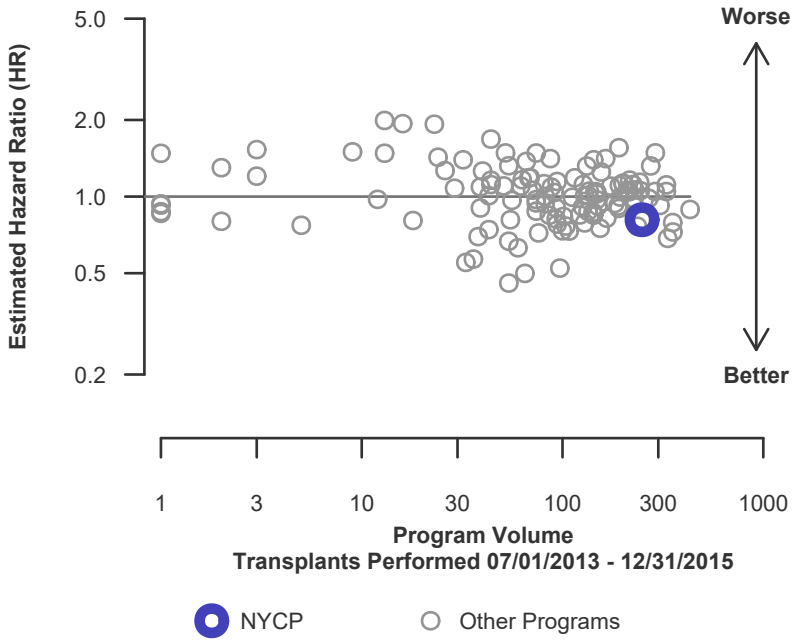


Figure C6. Adult (18+) 3-year graft failure HR program comparison



C. Transplant Information

Table C7D. Adult (18+) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	212	13,595
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	86.32%	83.34%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	83.10%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	29	2,265
Number of expected graft failures (including deaths) during the first 3 years after transplant	35.78	--
Estimated hazard ratio*	0.82	--
95% credible interval for the hazard ratio**	[0.56, 1.13]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.56, 1.13], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 18% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 44% reduced risk up to 13% increased risk.

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

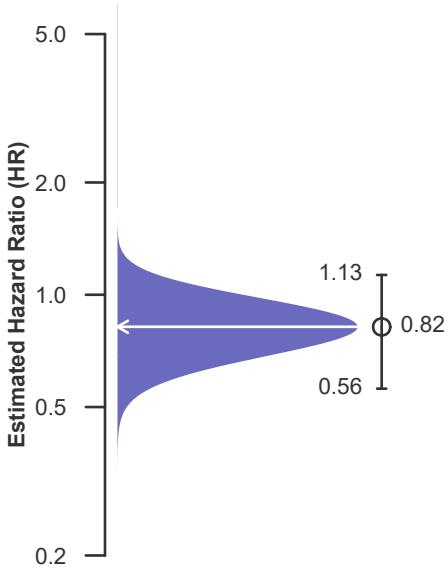
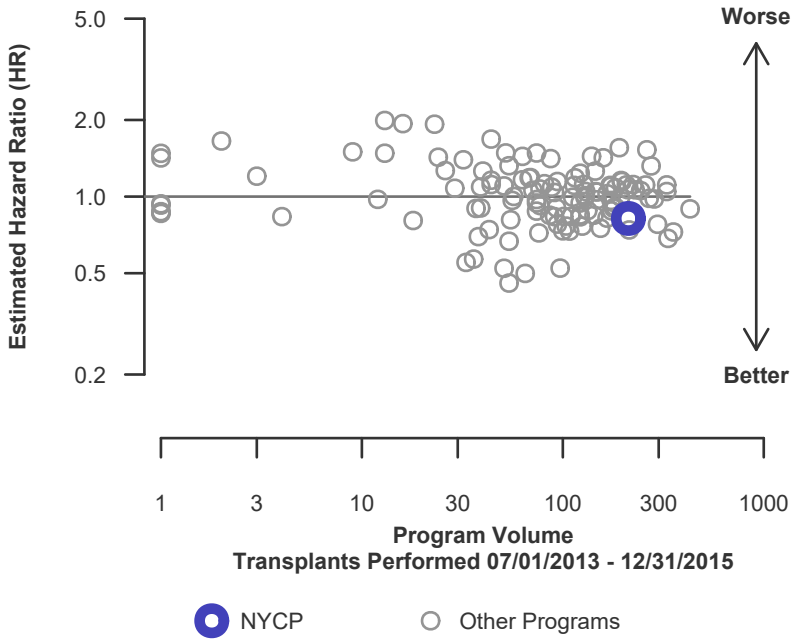


Figure C6D. Adult (18+) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C7L. Adult (18+) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	37	608
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	86.49%	82.24%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	82.26%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	5	108
Number of expected graft failures (including deaths) during the first 3 years after transplant	6.61	--
Estimated hazard ratio*	0.81	--
95% credible interval for the hazard ratio**	[0.33, 1.52]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.33, 1.52], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 19% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 67% reduced risk up to 52% increased risk.

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

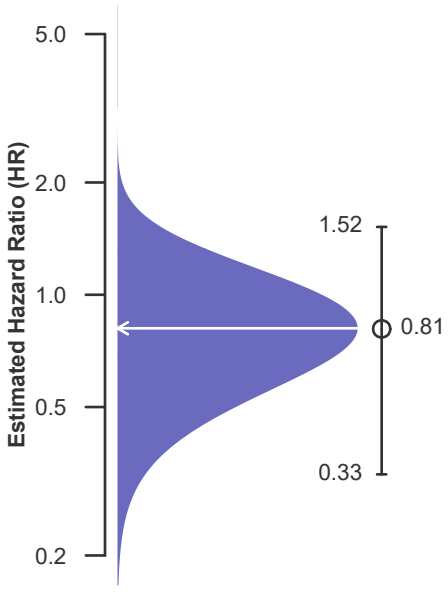
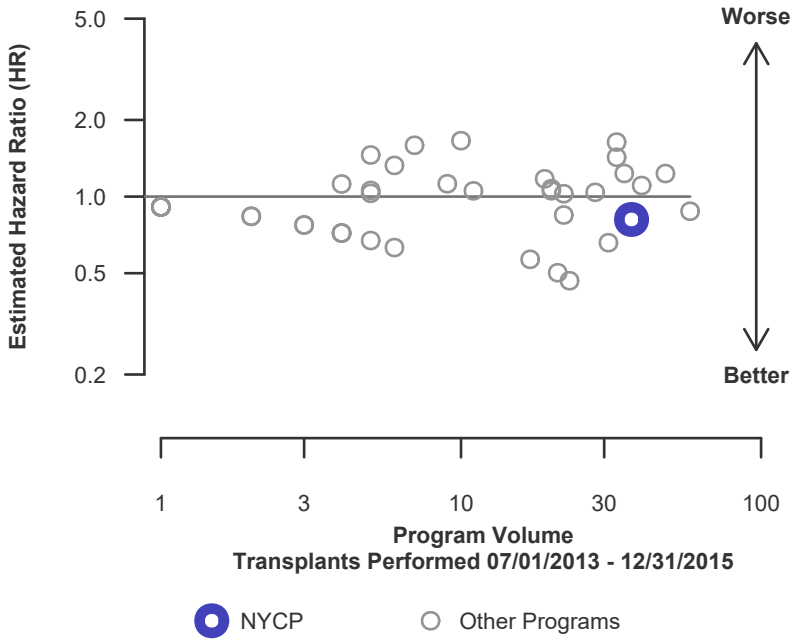


Figure C6L. Adult (18+) 3-year living donor graft failure HR program comparison



C. Transplant Information

Table C8. Pediatric (<18) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	57	1,378
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	98.25%	95.72%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	96.07%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	59
Number of expected graft failures (including deaths) during the first month after transplant	2.26	--
Estimated hazard ratio*	0.70	--
95% credible interval for the hazard ratio**	[0.15, 1.70]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.15, 1.70], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 30% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 85% reduced risk up to 70% increased risk.

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

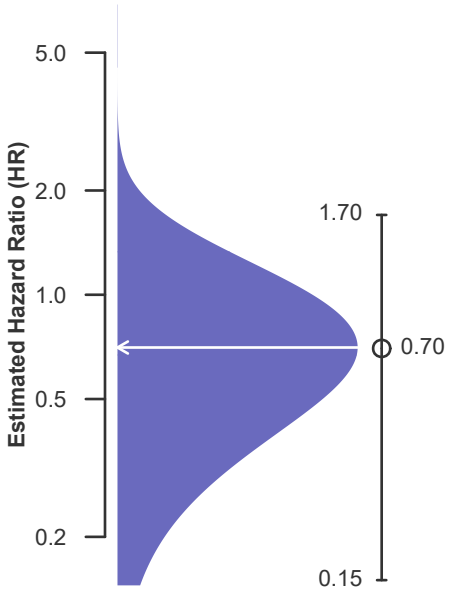
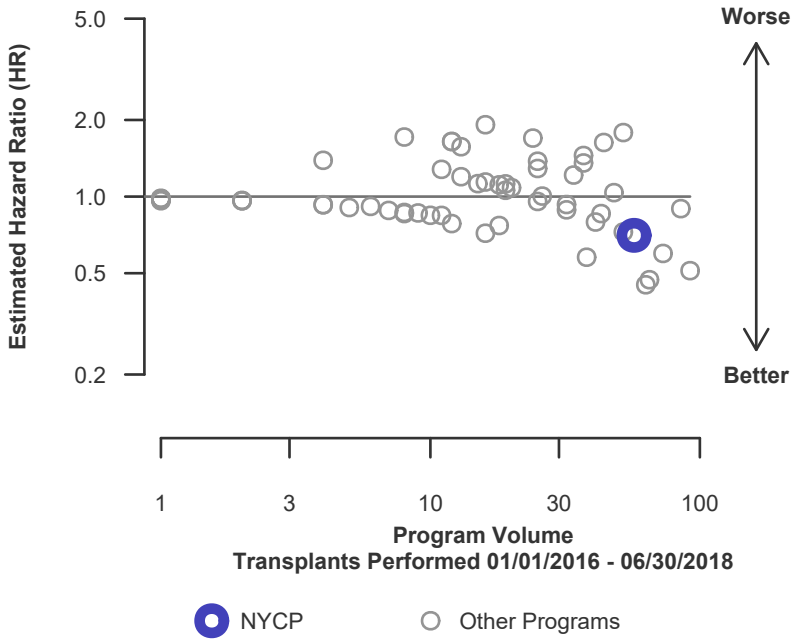


Figure C8. Pediatric (<18) 1-month graft failure HR program comparison



C. Transplant Information

Table C8D. Pediatric (<18) 1-month survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	41	1,214
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	97.56%	95.55%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	95.73%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	54
Number of expected graft failures (including deaths) during the first month after transplant	1.77	--
Estimated hazard ratio*	0.80	--
95% credible interval for the hazard ratio**	[0.16, 1.92]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.16, 1.92], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 20% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 84% reduced risk up to 92% increased risk.

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

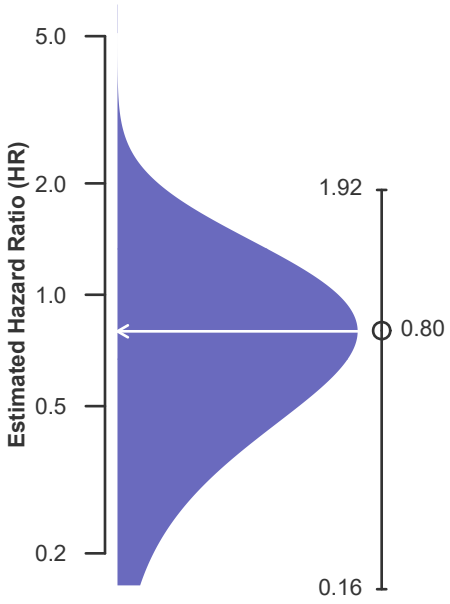
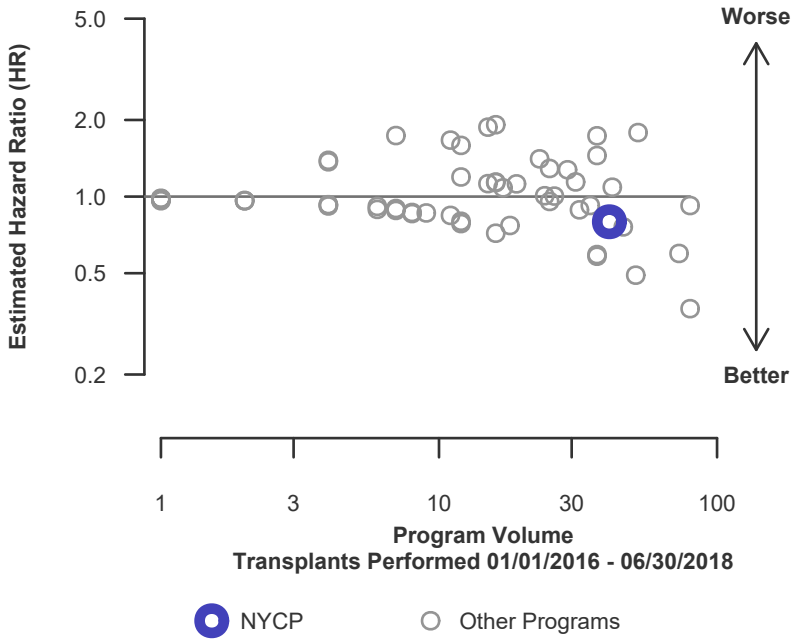


Figure C8D. Pediatric (<18) 1-month deceased donor graft failure HR program comparison



C. Transplant Information

Table C8L. Pediatric (<18) 1-month survival with a functioning living donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	16	164
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	96.95%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	96.96%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	5
Number of expected graft failures (including deaths) during the first month after transplant	0.49	--
Estimated hazard ratio*	0.80	--
95% credible interval for the hazard ratio**	[0.10, 2.23]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.23], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 20% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 90% reduced risk up to 123% increased risk.

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

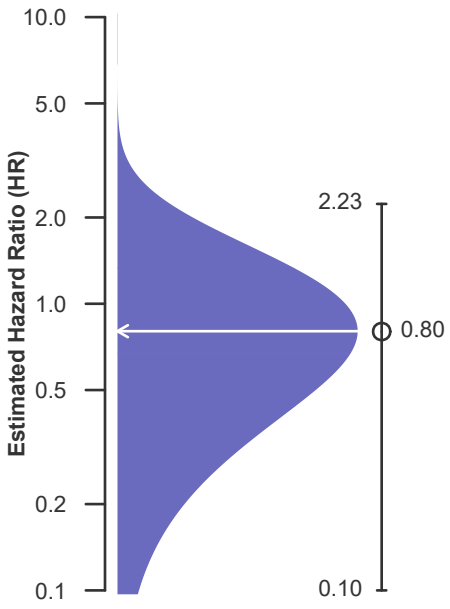
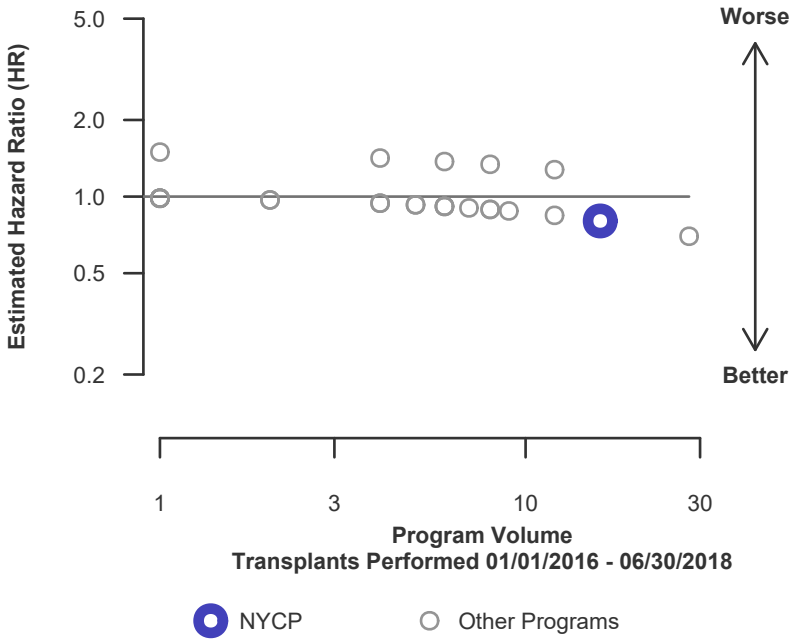


Figure C8L. Pediatric (<18) 1-month living donor graft failure HR program comparison



C. Transplant Information

Table C9. Pediatric (<18) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	57	1,378
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	90.66%	92.15%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	92.10%	--
Number of observed graft failures (including deaths) during the first year after transplant	5	105
Number of expected graft failures (including deaths) during the first year after transplant	4.41	--
Estimated hazard ratio*	1.09	--
95% credible interval for the hazard ratio**	[0.44, 2.04]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.44, 2.04], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 9% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 56% reduced risk up to 104% increased risk.

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

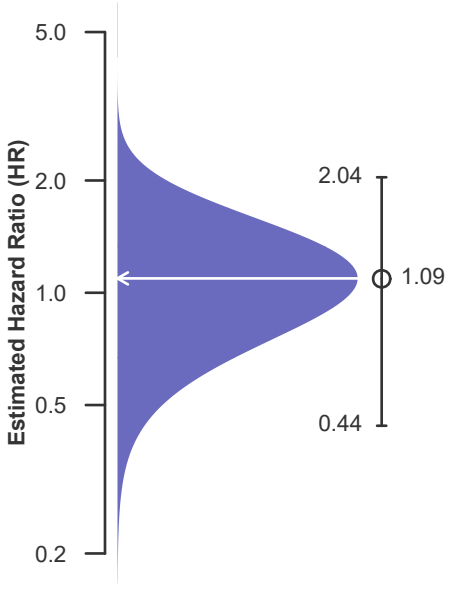
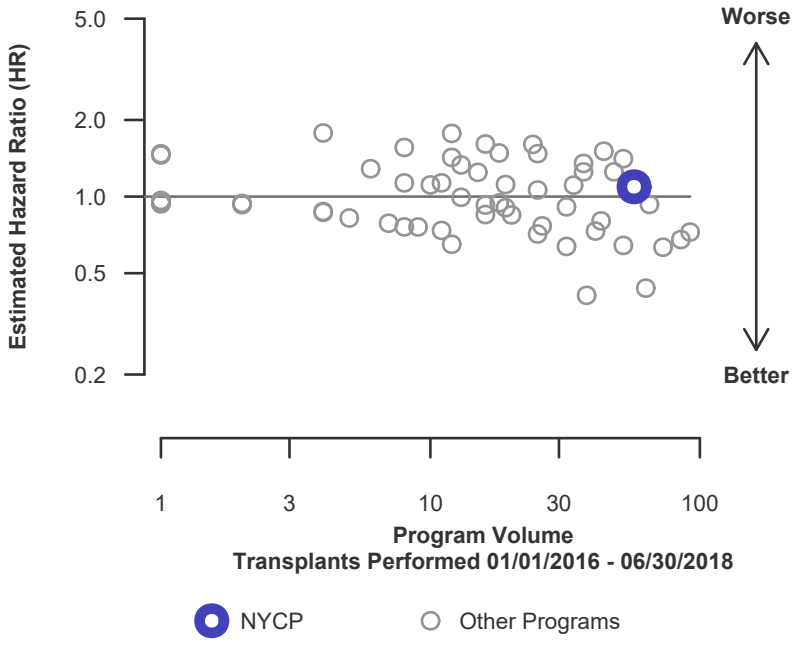


Figure C10. Pediatric (<18) 1-year graft failure HR program comparison



C. Transplant Information

Table C9D. Pediatric (<18) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	41	1,214
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	89.59%	91.95%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	91.49%	--
Number of observed graft failures (including deaths) during the first year after transplant	4	95
Number of expected graft failures (including deaths) during the first year after transplant	3.45	--
Estimated hazard ratio*	1.10	--
95% credible interval for the hazard ratio**	[0.40, 2.14]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.40, 2.14], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 10% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 60% reduced risk up to 114% increased risk.

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

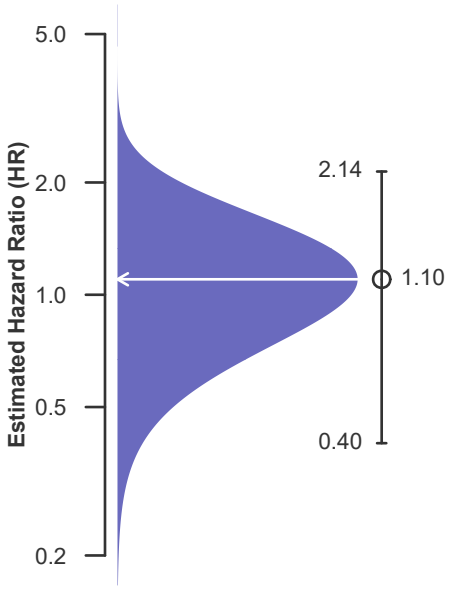
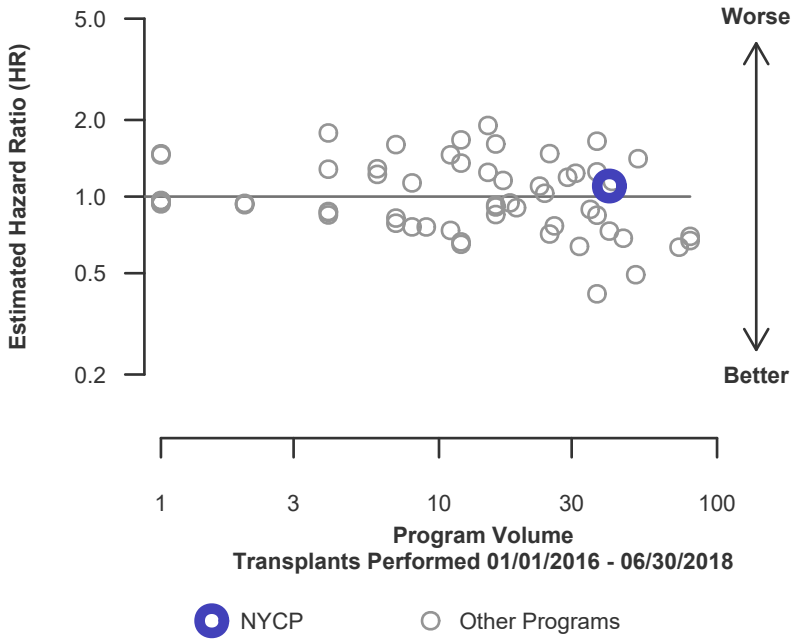


Figure C10D. Pediatric (<18) 1-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C9L. Pediatric (<18) 1-year survival with a functioning living donor graft
Single organ transplants performed between 01/01/2016 and 06/30/2018
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	16	164
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	93.75%	93.65%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	93.67%	--
Number of observed graft failures (including deaths) during the first year after transplant	1	10
Number of expected graft failures (including deaths) during the first year 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 NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure 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 NYCP's true hazard ratio with 95% probability. The best estimate is 2% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 79% reduced risk up to 145% increased risk.

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

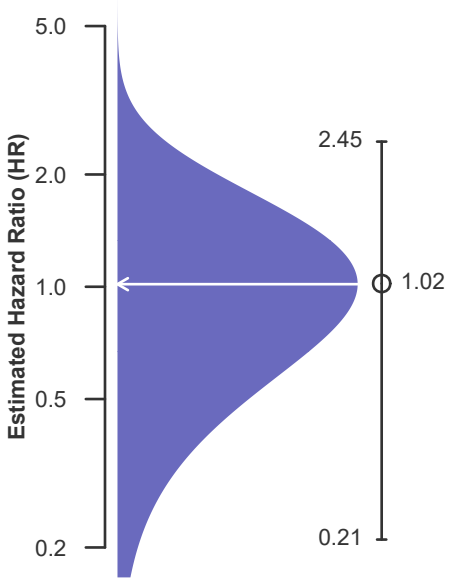
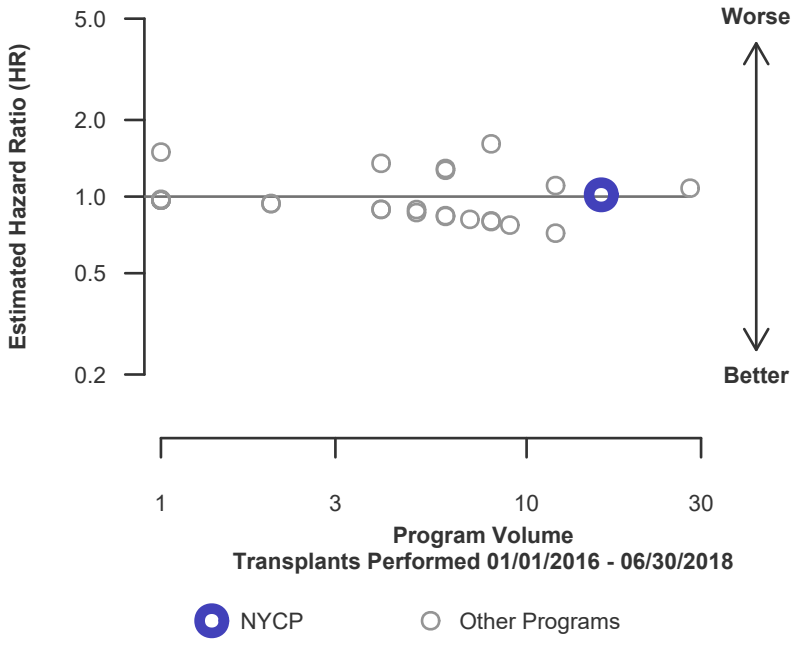


Figure C10L. Pediatric (<18) 1-year living donor graft failure HR program comparison



C. Transplant Information

Table C10. Pediatric (<18) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	53	1,258
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	86.79%	87.60%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	88.14%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	7	156
Number of expected graft failures (including deaths) during the first 3 years after transplant	6.33	--
Estimated hazard ratio*	1.08	--
95% credible interval for the hazard ratio**	[0.49, 1.89]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.49, 1.89], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 8% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 51% reduced risk up to 89% increased risk.

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

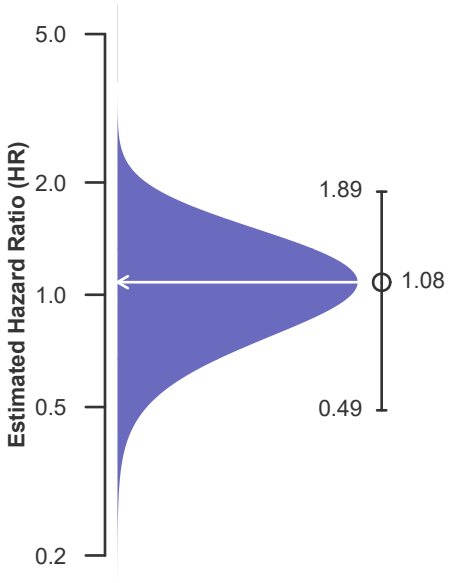
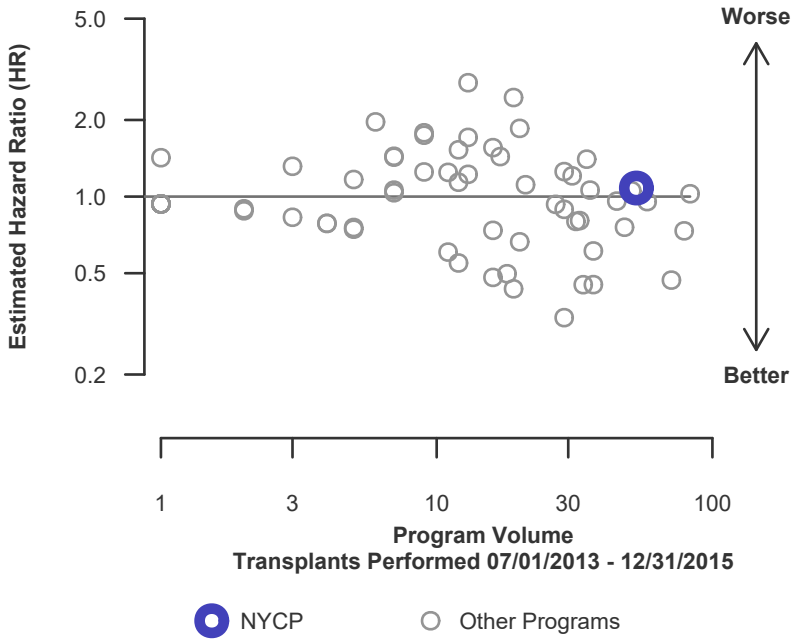


Figure C12. Pediatric (<18) 3-year graft failure HR program comparison



C. Transplant Information

Table C10D. Pediatric (<18) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	39	1,106
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	82.05%	87.16%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	87.18%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	7	142
Number of expected graft failures (including deaths) during the first 3 years after transplant	4.98	--
Estimated hazard ratio*	1.29	--
95% credible interval for the hazard ratio**	[0.59, 2.26]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.59, 2.26], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 29% higher risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 41% reduced risk up to 126% increased risk.

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

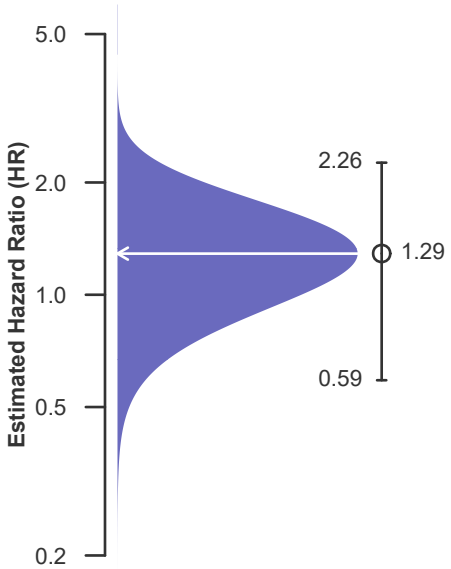
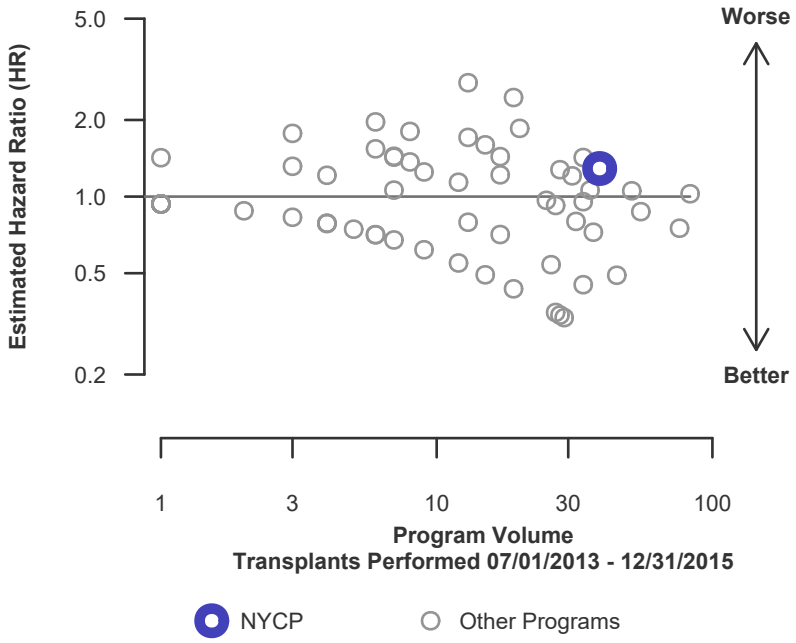


Figure C12D. Pediatric (<18) 3-year deceased donor graft failure HR program comparison



C. Transplant Information

Table C10L. Pediatric (<18) 3-year survival with a functioning living donor graft
Single organ transplants performed between 07/01/2013 and 12/31/2015
Deaths and retransplants are considered graft failures

	NYCP	U.S.
Number of transplants evaluated	14	152
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	90.79%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	90.82%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	14
Number of expected graft failures (including deaths) during the first 3 years after transplant	1.35	--
Estimated hazard ratio*	0.60	--
95% credible interval for the hazard ratio**	[0.07, 1.66]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.07, 1.66], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 40% lower risk of graft failure compared to an average program, but NYCP's performance could plausibly range from 93% reduced risk up to 66% increased risk.

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

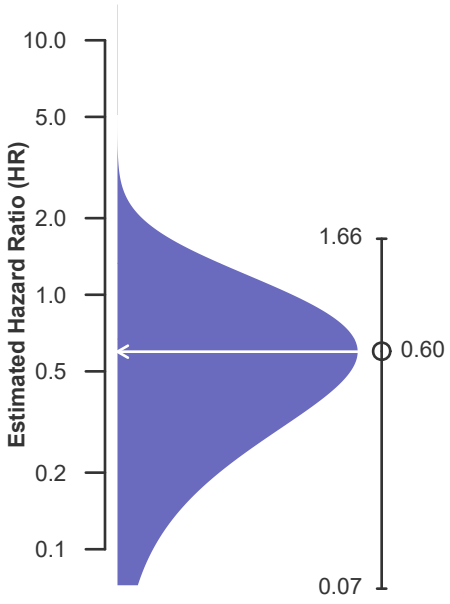
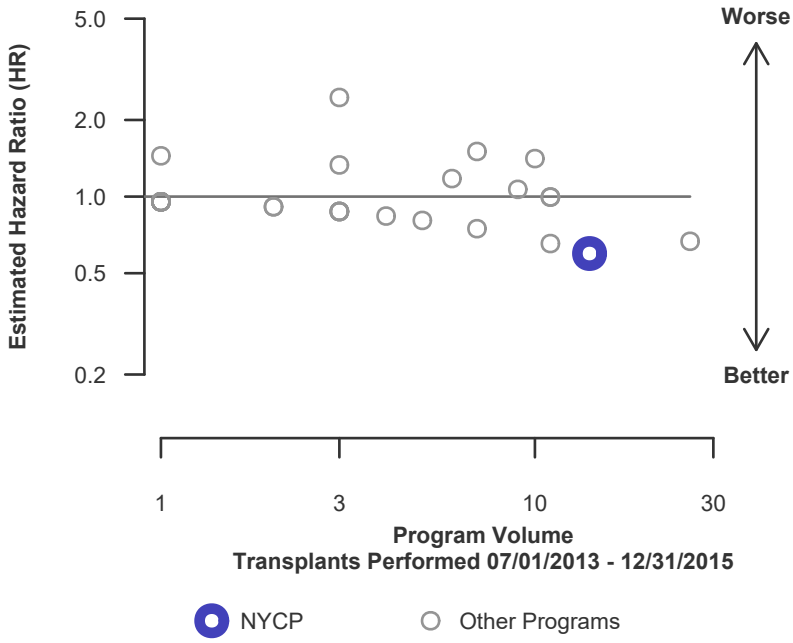


Figure C12L. Pediatric (<18) 3-year living donor graft failure HR program comparison



C. Transplant Information

Table C11. Adult (18+) 1-month patient survival
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	146	15,950
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	97.55%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	97.80%	--
Number of observed deaths during the first month after transplant	0	390
Number of expected deaths during the first month after transplant	3.26	--
Estimated hazard ratio*	0.38	--
95% credible interval for the hazard ratio**	[0.05, 1.06]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.05, 1.06], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 62% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 95% reduced risk up to 6% increased risk.

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

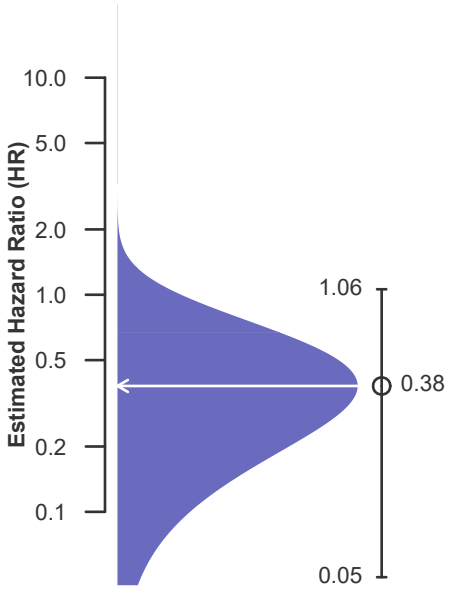
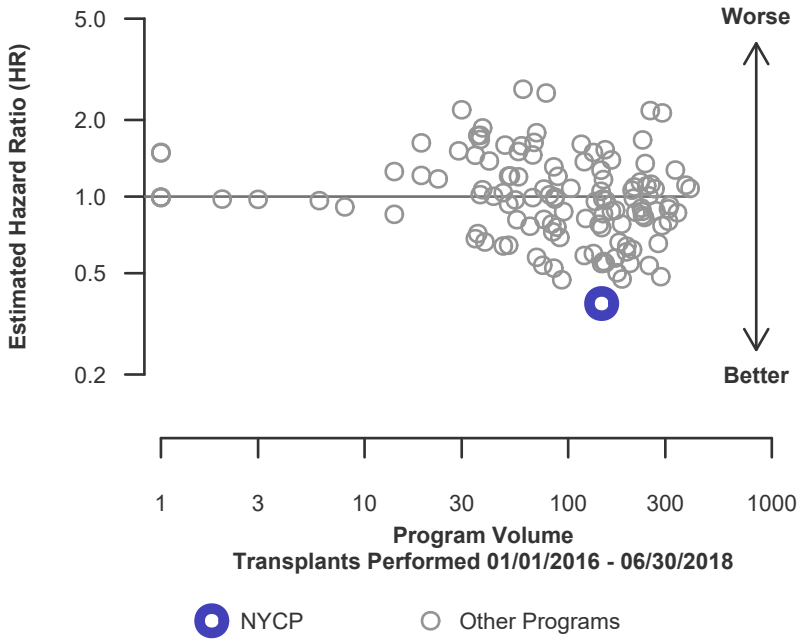


Figure C14. Adult (18+) 1-month patient death HR program comparison



C. Transplant Information

Table C11D. Adult (18+) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	114	15,233
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	97.50%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	97.53%	--
Number of observed deaths during the first month after transplant	0	381
Number of expected deaths during the first month after transplant	2.86	--
Estimated hazard ratio*	0.41	--
95% credible interval for the hazard ratio**	[0.05, 1.15]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.05, 1.15], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 59% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 95% reduced risk up to 15% increased risk.

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

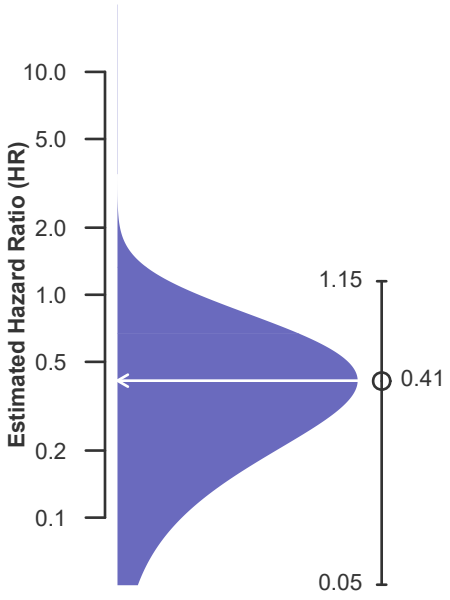
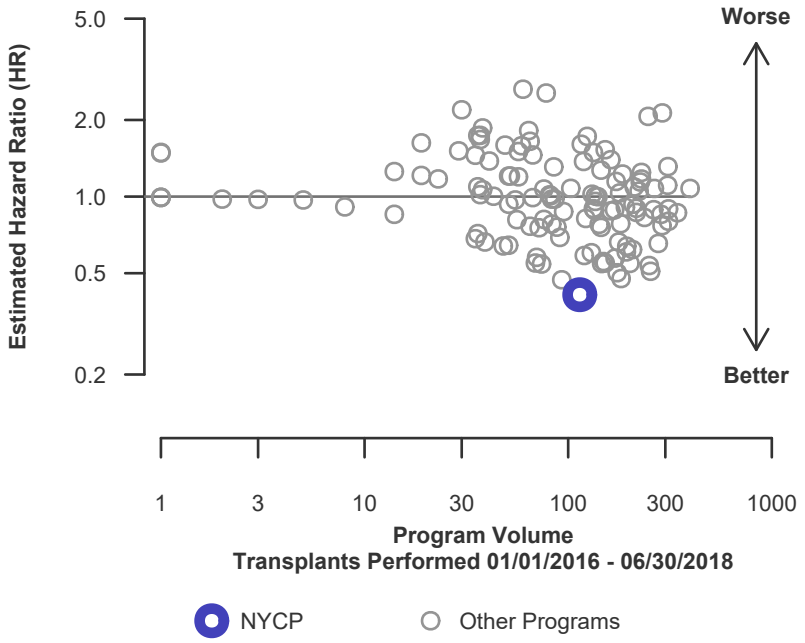


Figure C14D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C11L. Adult (18+) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	32	717
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	98.74%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	98.75%	--
Number of observed deaths during the first month after transplant	0	9
Number of expected deaths during the first month after transplant	0.40	--
Estimated hazard ratio*	0.83	--
95% credible interval for the hazard ratio**	[0.10, 2.32]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.32], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 17% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 90% reduced risk up to 132% increased risk.

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

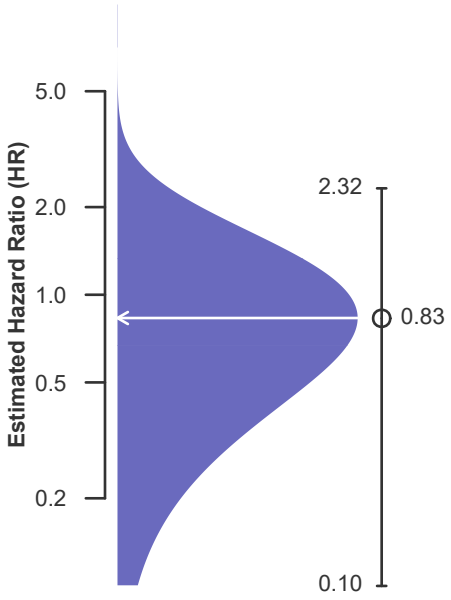
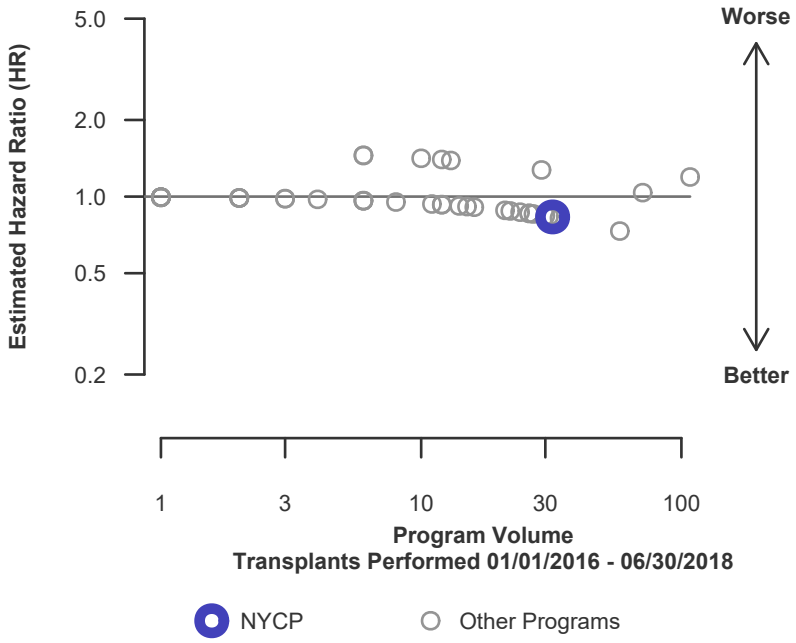


Figure C14L. Adult (18+) 1-month patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C12. Adult (18+) 1-year patient survival
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	146	15,950
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	93.76%	93.04%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	93.44%	--
Number of observed deaths during the first year after transplant	8	1,045
Number of expected deaths during the first year after transplant	9.22	--
Estimated hazard ratio*	0.89	--
95% credible interval for the hazard ratio**	[0.43, 1.52]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.43, 1.52], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 11% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 57% reduced risk up to 52% increased risk.

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

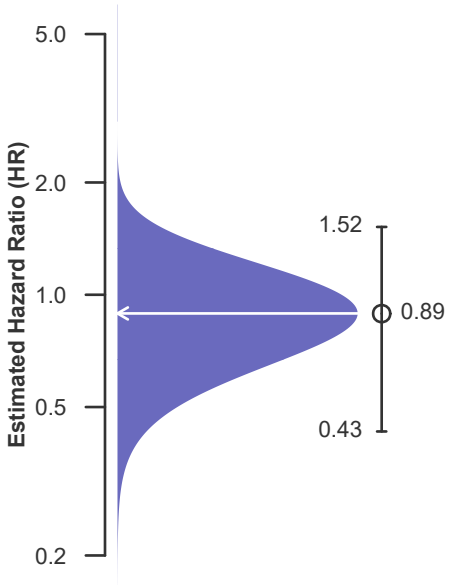
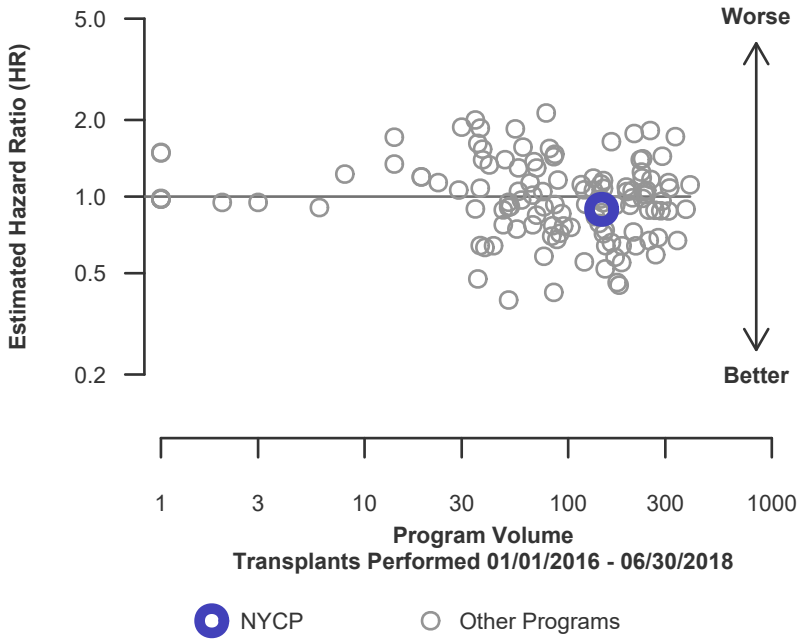


Figure C16. Adult (18+) 1-year patient death HR program comparison



C. Transplant Information

Table C12D. Adult (18+) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	114	15,233
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	92.99%	92.92%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	92.83%	--
Number of observed deaths during the first year after transplant	7	1,016
Number of expected deaths during the first year after transplant	7.86	--
Estimated hazard ratio*	0.91	--
95% credible interval for the hazard ratio**	[0.42, 1.60]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.42, 1.60], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 9% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 58% reduced risk up to 60% increased risk.

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

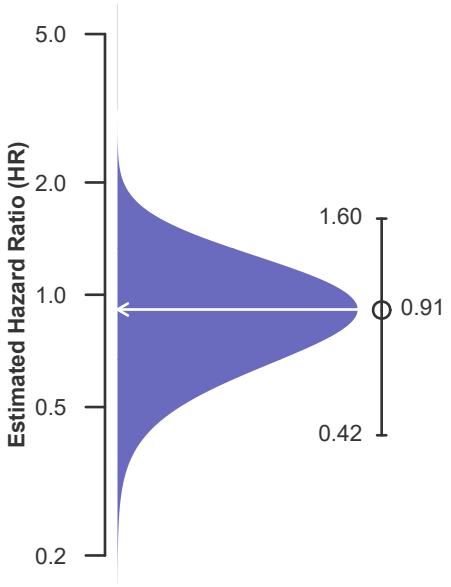
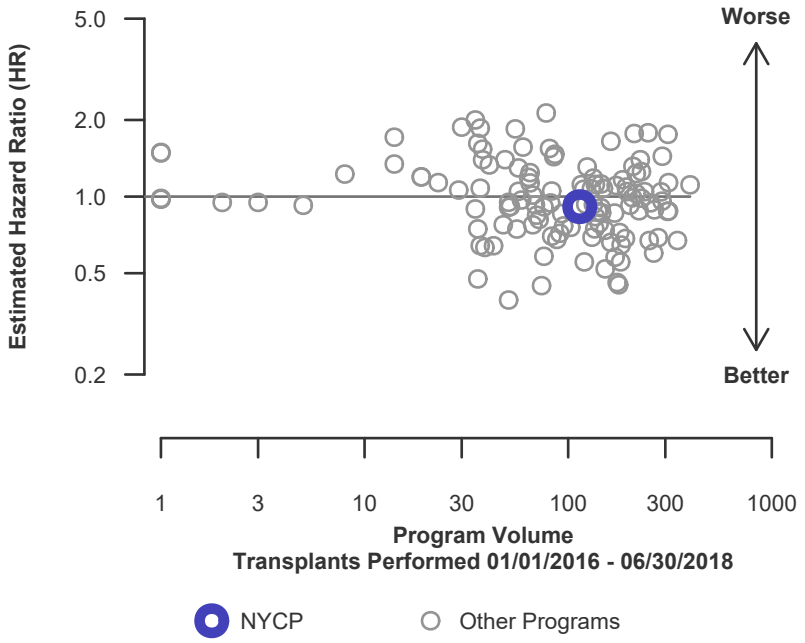


Figure C16D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C12L. Adult (18+) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	32	717
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	96.43%	95.61%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	95.61%	--
Number of observed deaths during the first year after transplant	1	29
Number of expected deaths during the first year after transplant	1.36	--
Estimated hazard ratio*	0.89	--
95% credible interval for the hazard ratio**	[0.18, 2.15]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.18, 2.15], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 11% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 82% reduced risk up to 115% increased risk.

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

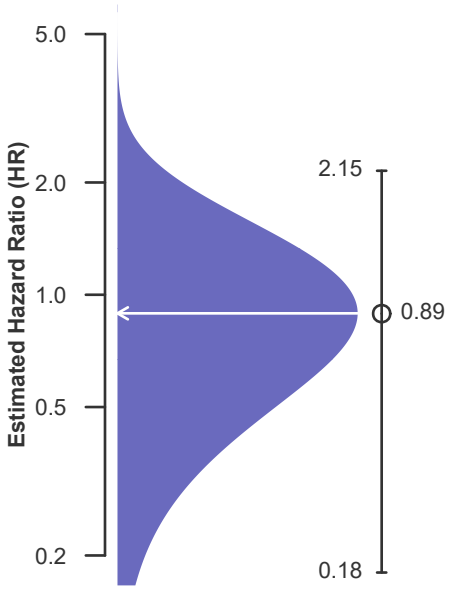
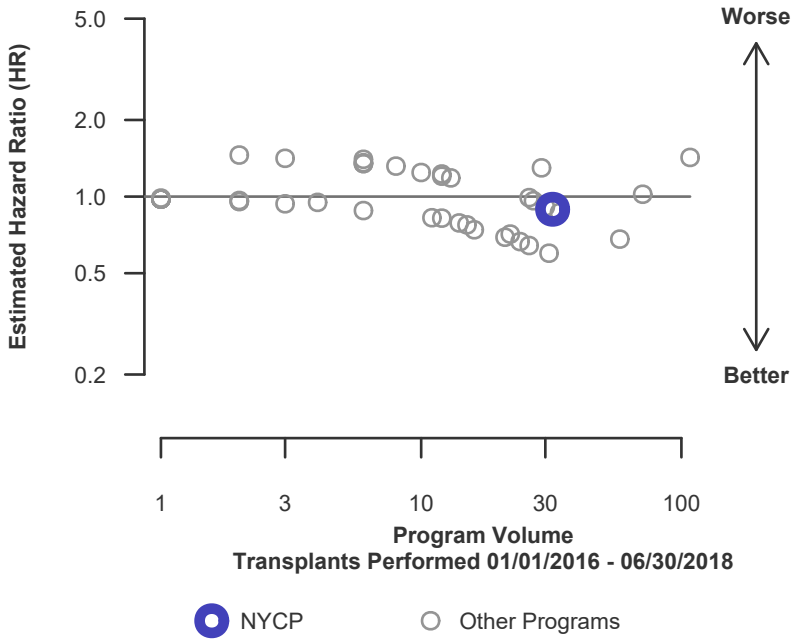


Figure C16L. Adult (18+) 1-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C13. Adult (18+) 3-year patient survival
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	240	13,591
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	87.92%	85.58%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	85.63%	--
Number of observed deaths during the first 3 years after transplant	29	1,960
Number of expected deaths during the first 3 years after transplant	34.71	--
Estimated hazard ratio*	0.84	--
95% credible interval for the hazard ratio**	[0.57, 1.17]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.57, 1.17], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 16% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 43% reduced risk up to 17% increased risk.

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

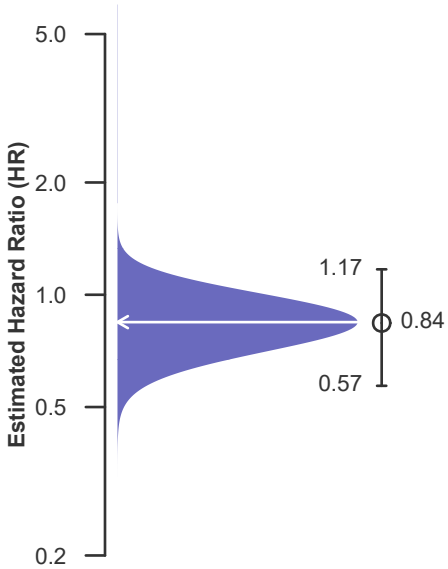
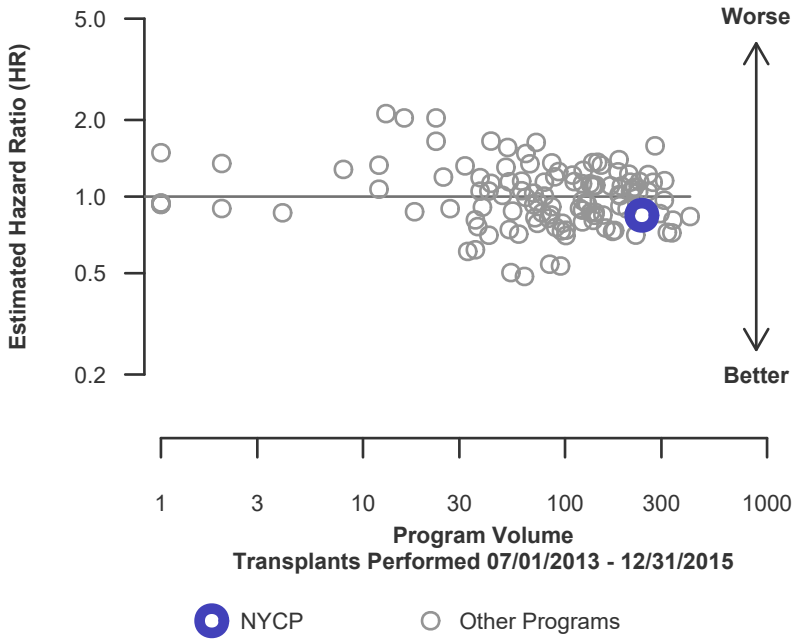


Figure C18. Adult (18+) 3-year patient death HR program comparison



C. Transplant Information

Table C13D. Adult (18+) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	203	12,989
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	87.68%	85.54%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	85.49%	--
Number of observed deaths during the first 3 years after transplant	25	1,878
Number of expected deaths during the first 3 years after transplant	29.75	--
Estimated hazard ratio*	0.85	--
95% credible interval for the hazard ratio**	[0.56, 1.20]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.56, 1.20], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 15% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 44% reduced risk up to 20% increased risk.

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

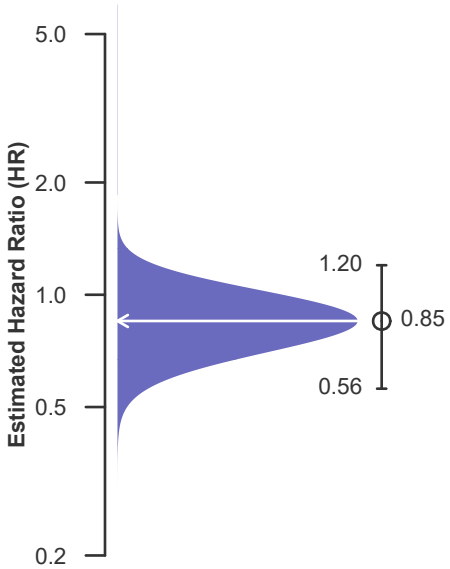
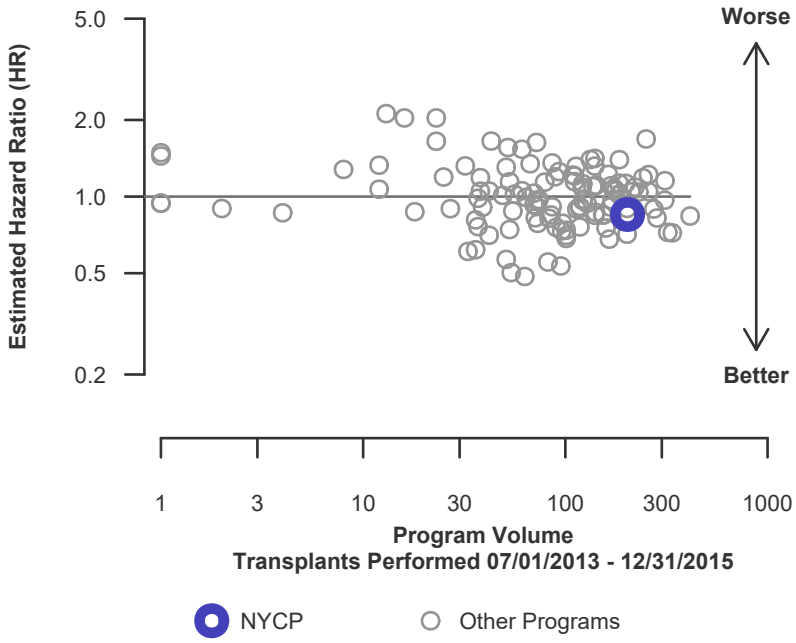


Figure C18D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C13L. Adult (18+) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	37	602
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	89.19%	86.38%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	86.39%	--
Number of observed deaths during the first 3 years after transplant	4	82
Number of expected deaths during the first 3 years after transplant	4.96	--
Estimated hazard ratio*	0.86	--
95% credible interval for the hazard ratio**	[0.32, 1.68]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.32, 1.68], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 14% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 68% reduced risk up to 68% increased risk.

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

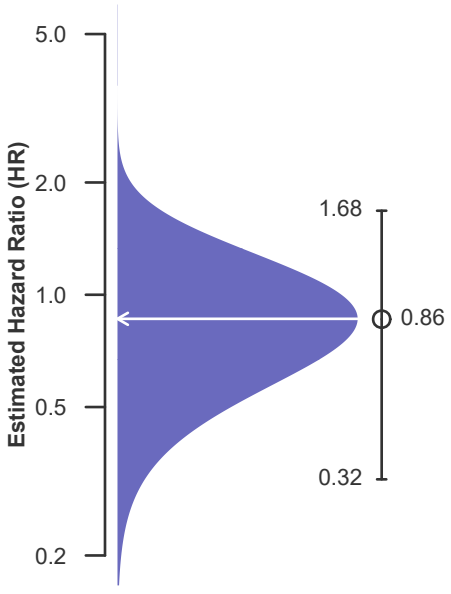
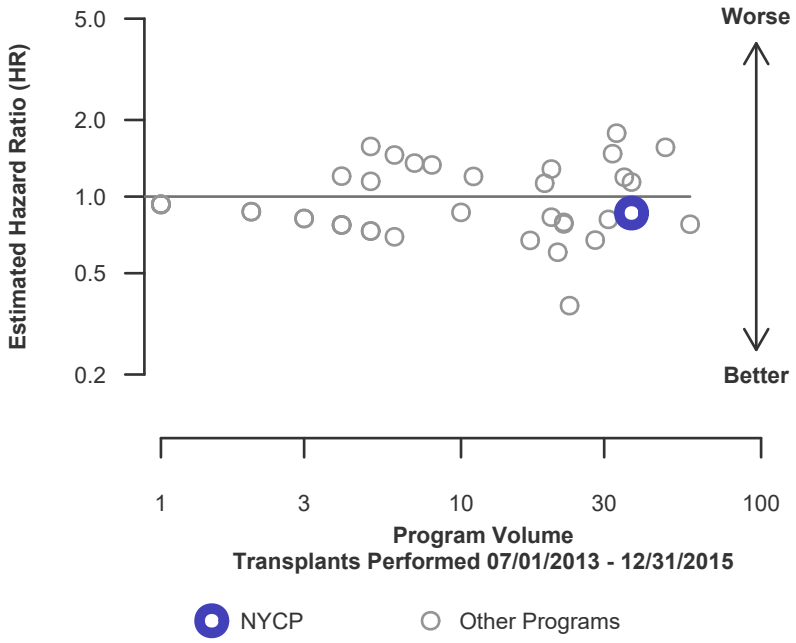


Figure C18L. Adult (18+) 3-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C14. Pediatric (<18) 1-month patient survival
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	52	1,294
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	97.84%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	98.29%	--
Number of observed deaths during the first month after transplant	0	28
Number of expected deaths during the first month after transplant	0.90	--
Estimated hazard ratio*	0.69	--
95% credible interval for the hazard ratio**	[0.08, 1.92]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.08, 1.92], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 31% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 92% reduced risk up to 92% increased risk.

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

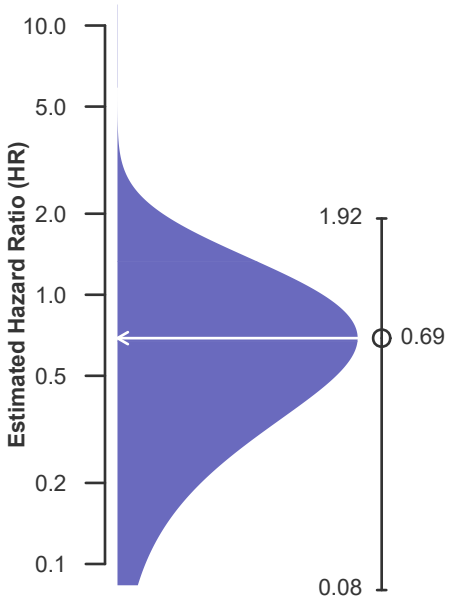
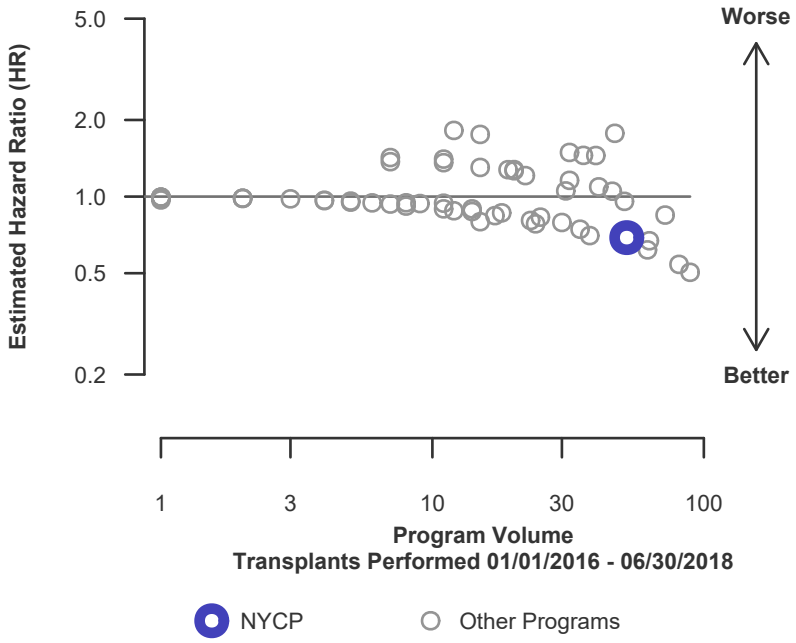


Figure C20. Pediatric (<18) 1-month patient death HR program comparison



C. Transplant Information

Table C14D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	37	1,131
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	97.70%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	98.10%	--
Number of observed deaths during the first month after transplant	0	26
Number of expected deaths during the first month after transplant	0.71	--
Estimated hazard ratio*	0.74	--
95% credible interval for the hazard ratio**	[0.09, 2.05]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.09, 2.05], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 26% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 91% reduced risk up to 105% increased risk.

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

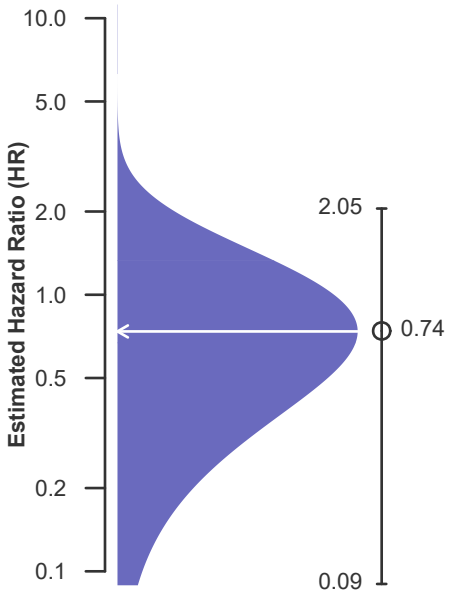
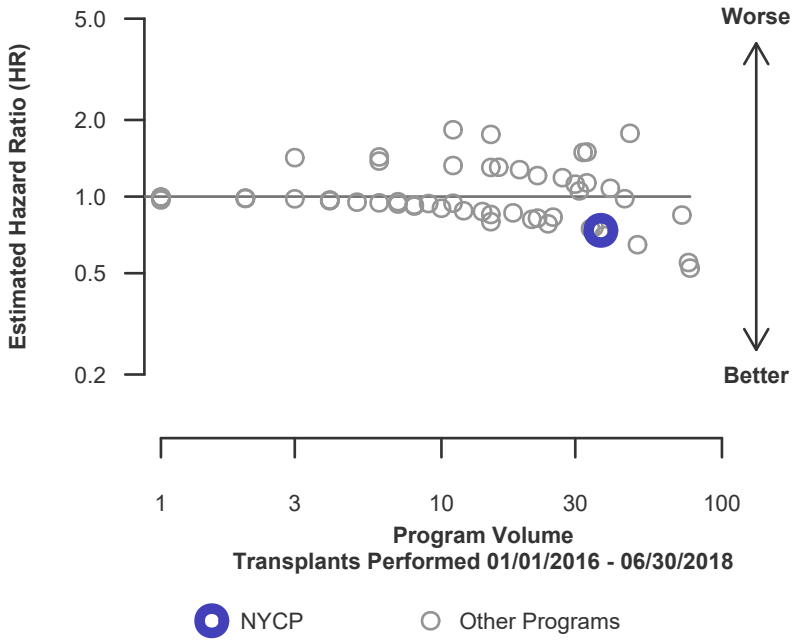


Figure C20D. Pediatric (<18) 1-month patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C14L. Pediatric (<18) 1-month patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	15	163
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	98.77%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	98.78%	--
Number of observed deaths during the first month after transplant	0	2
Number of expected deaths during the first month after transplant	0.18	--
Estimated hazard ratio*	0.92	--
95% credible interval for the hazard ratio**	[0.11, 2.55]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.11, 2.55], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 8% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 89% reduced risk up to 155% increased risk.

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

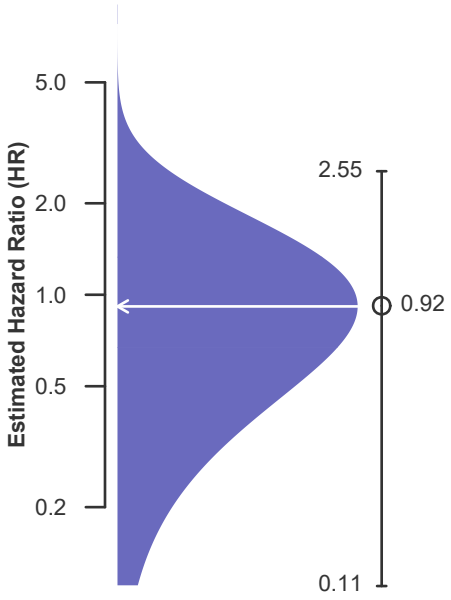
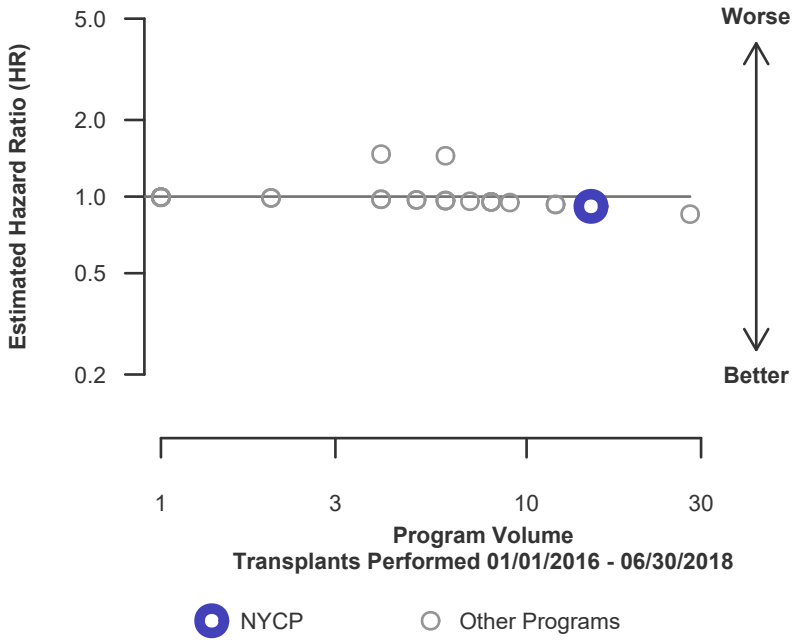


Figure C20L. Pediatric (<18) 1-month patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C15. Pediatric (<18) 1-year patient survival
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	52	1,294
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	93.56%	94.82%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	95.23%	--
Number of observed deaths during the first year after transplant	3	64
Number of expected deaths during the first year after transplant	2.36	--
Estimated hazard ratio*	1.15	--
95% credible interval for the hazard ratio**	[0.37, 2.35]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.37, 2.35], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 15% higher risk of patient death compared to an average program, but NYCP's performance could plausibly range from 63% reduced risk up to 135% increased risk.

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

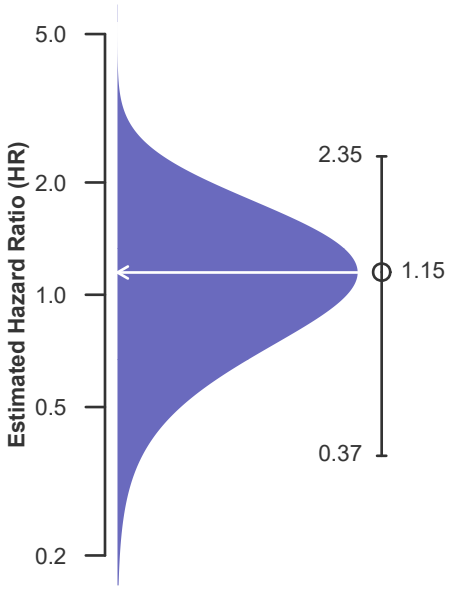
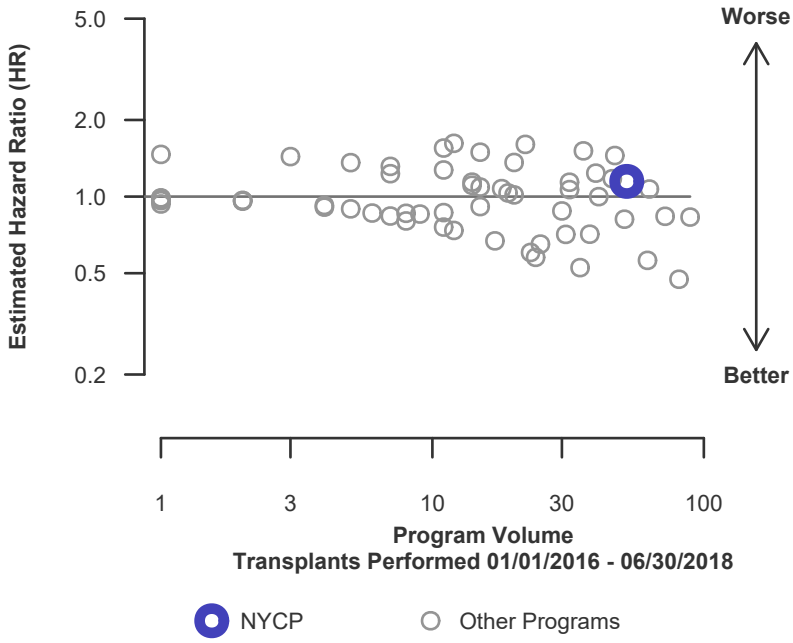


Figure C22. Pediatric (<18) 1-year patient death HR program comparison



C. Transplant Information

Table C15D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	37	1,131
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	91.09%	94.64%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	94.88%	--
Number of observed deaths during the first year after transplant	3	58
Number of expected deaths during the first year after transplant	1.83	--
Estimated hazard ratio*	1.30	--
95% credible interval for the hazard ratio**	[0.42, 2.67]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.42, 2.67], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 30% higher risk of patient death compared to an average program, but NYCP's performance could plausibly range from 58% reduced risk up to 167% increased risk.

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

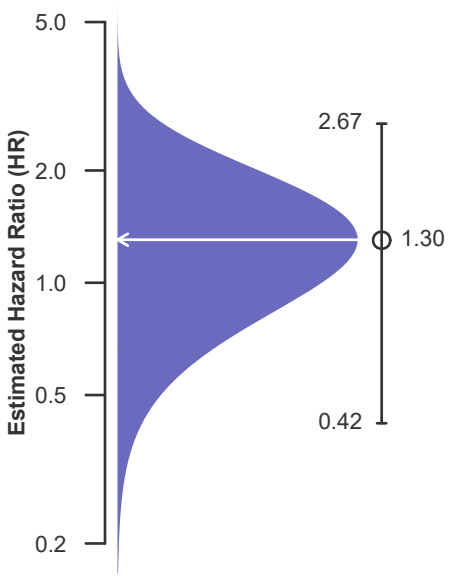
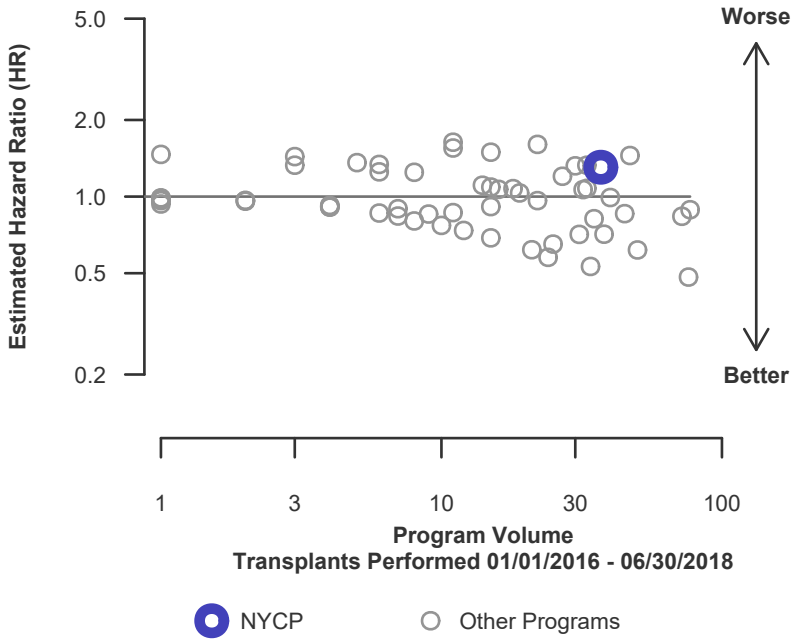


Figure C22D. Pediatric (<18) 1-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C15L. Pediatric (<18) 1-year patient survival (living donor graft recipients)
Single organ transplants performed between 01/01/2016 and 06/30/2018
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	15	163
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	96.07%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	96.08%	--
Number of observed deaths during the first year after transplant	0	6
Number of expected deaths during the first year after transplant	0.52	--
Estimated hazard ratio*	0.79	--
95% credible interval for the hazard ratio**	[0.10, 2.21]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.10, 2.21], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 21% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 90% reduced risk up to 121% increased risk.

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

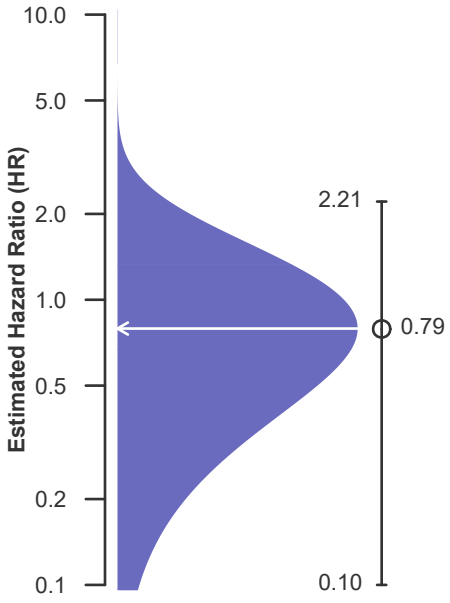
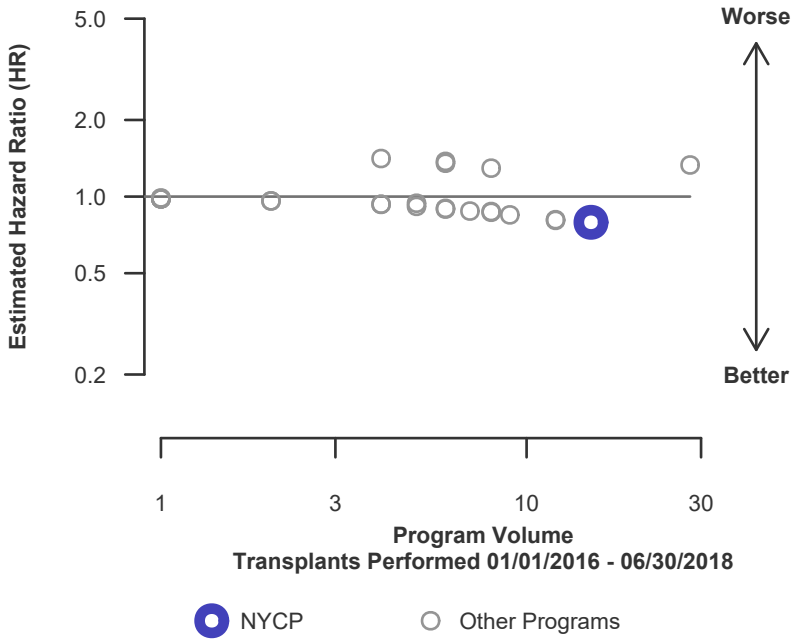


Figure C22L. Pediatric (<18) 1-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C16. Pediatric (<18) 3-year patient survival
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	47	1,154
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	89.36%	93.67%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	93.86%	--
Number of observed deaths during the first 3 years after transplant	5	73
Number of expected deaths during the first 3 years after transplant	2.82	--
Estimated hazard ratio*	1.45	--
95% credible interval for the hazard ratio**	[0.58, 2.71]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.58, 2.71], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 45% higher risk of patient death compared to an average program, but NYCP's performance could plausibly range from 42% reduced risk up to 171% increased risk.

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

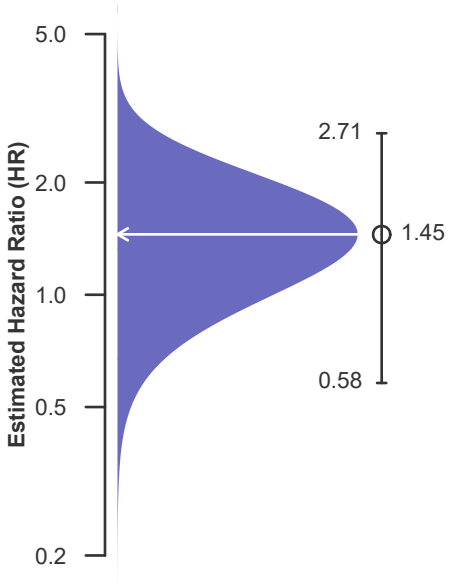
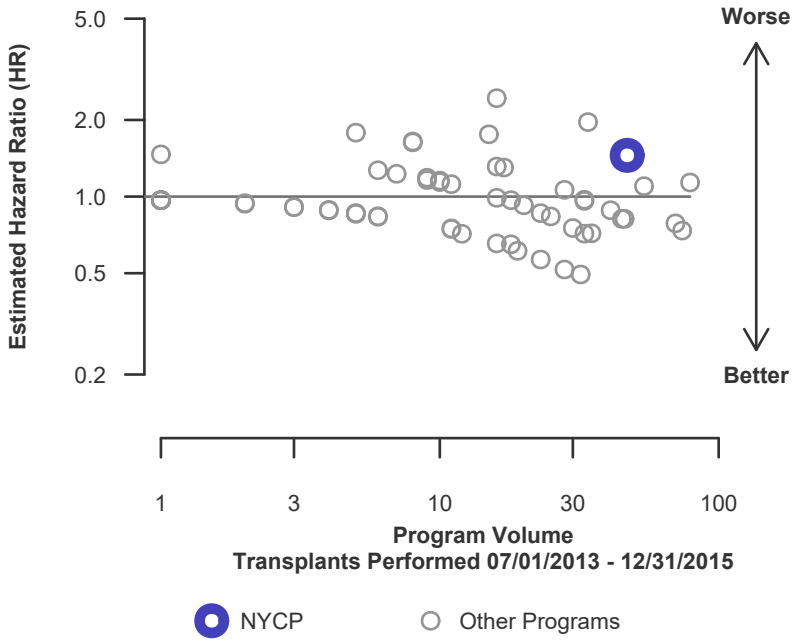


Figure C24. Pediatric (<18) 3-year patient death HR program comparison



C. Transplant Information

Table C16D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	33	1,007
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	84.85%	93.55%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	93.55%	--
Number of observed deaths during the first 3 years after transplant	5	65
Number of expected deaths during the first 3 years after transplant	2.04	--
Estimated hazard ratio*	1.73	--
95% credible interval for the hazard ratio**	[0.70, 3.23]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.70, 3.23], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 73% higher risk of patient death compared to an average program, but NYCP's performance could plausibly range from 30% reduced risk up to 223% increased risk.

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

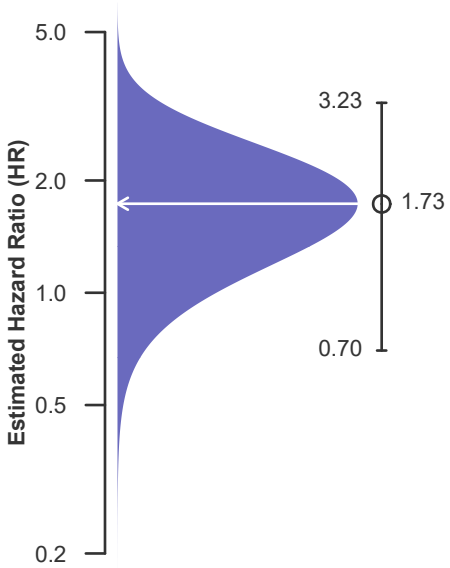
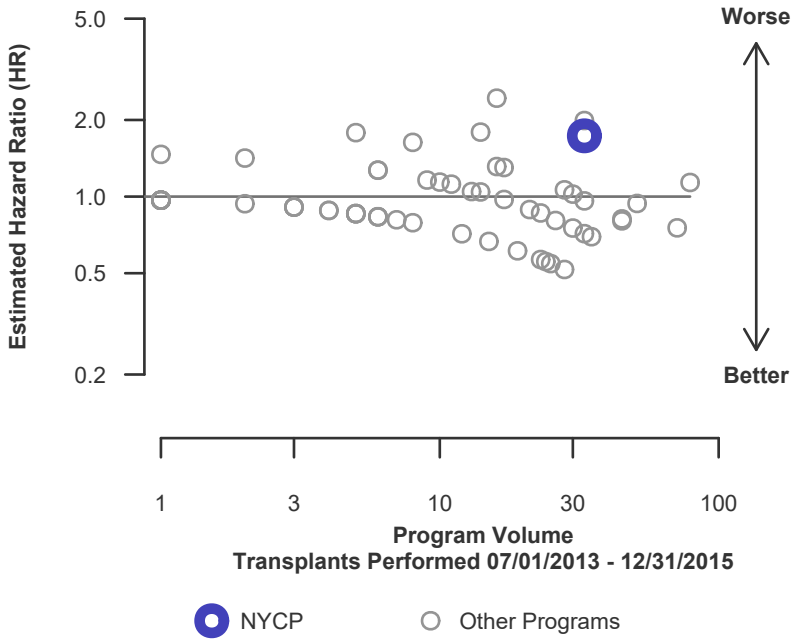


Figure C24D. Pediatric (<18) 3-year patient death HR program comparison (deceased donor grafts)



C. Transplant Information

Table C16L. Pediatric (<18) 3-year patient survival (living donor graft recipients)
Single organ transplants performed between 07/01/2013 and 12/31/2015
Retransplants excluded

	NYCP	U.S.
Number of transplants evaluated	14	147
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	94.56%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	94.58%	--
Number of observed deaths during the first 3 years after transplant	0	8
Number of expected deaths during the first 3 years after transplant	0.78	--
Estimated hazard ratio*	0.72	--
95% credible interval for the hazard ratio**	[0.09, 2.00]	--

* The hazard ratio provides an estimate of how NY Presbyterian Hospital/Columbia Univ. Medical Center (NYCP)'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 NYCP's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.
** The 95% credible interval, [0.09, 2.00], indicates the location of NYCP's true hazard ratio with 95% probability. The best estimate is 28% lower risk of patient death compared to an average program, but NYCP's performance could plausibly range from 91% reduced risk up to 100% increased risk.

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

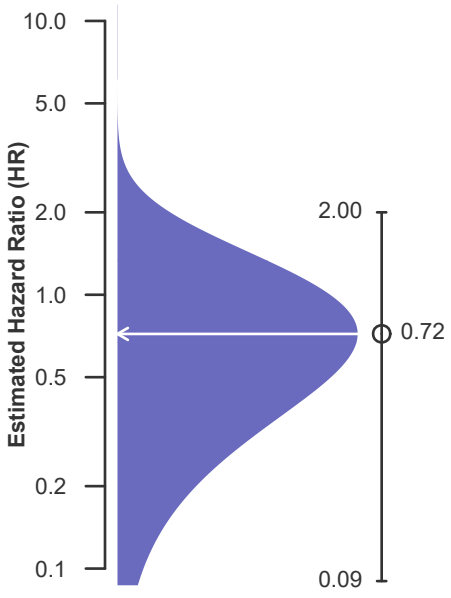
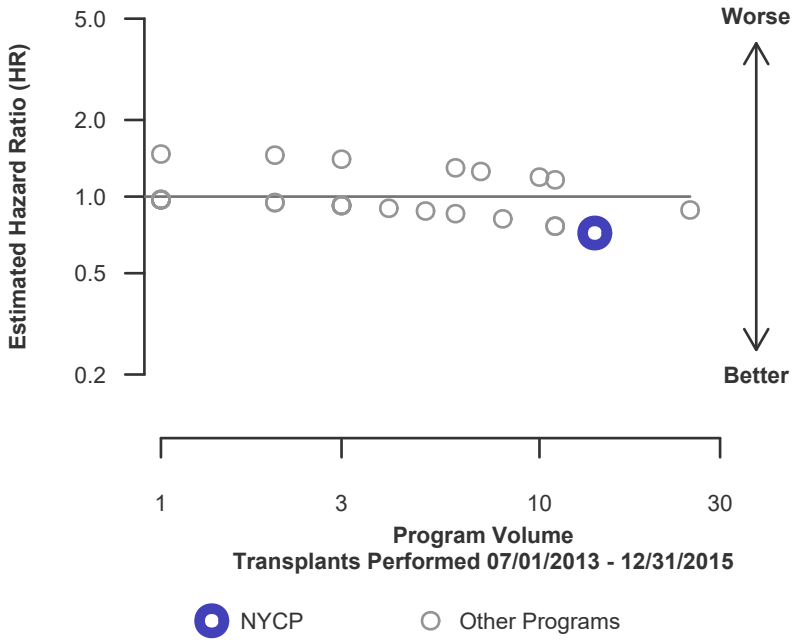


Figure C24L. Pediatric (<18) 3-year patient death HR program comparison (living donor grafts)



C. Transplant Information

Table C17. Multi-organ transplant graft survival: 01/01/2016 - 06/30/2018

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Liver Graft Failures		First-Year Outcomes: Estimated Liver Graft Survival	
	NYCP-TX1	USA	NYCP-TX1	USA	NYCP-TX1	USA
Kidney-Liver	4	1,761	0	169	100.0%	90.0%
Liver-Heart	2	63	0	6	100.0%	89.9%
Pancreas-Liver-Intestine	1	65	1	26	0.0%	59.4%

Pediatric (<18) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Liver Graft Failures		First-Year Outcomes: Estimated Liver Graft Survival	
	NYCP-TX1	USA	NYCP-TX1	USA	NYCP-TX1	USA
Pancreas-Liver-Intestine	5	75	0	10	100.0%	86.3%

Table C18. Multi-organ transplant patient survival: 01/01/2016 - 06/30/2018

Adult (18+) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Patient Deaths		First-Year Outcomes: Estimated Patient Survival	
	NYCP-TX1	USA	NYCP-TX1	USA	NYCP-TX1	USA
Kidney-Liver	4	1,761	0	157	100.0%	90.7%
Liver-Heart	2	63	0	6	100.0%	89.9%
Pancreas-Liver-Intestine	1	65	1	23	0.0%	64.0%

Pediatric (<18) Transplants

Transplant Type	Transplants Performed		First-Year Outcomes: Patient Deaths		First-Year Outcomes: Estimated Patient Survival	
	NYCP-TX1	USA	NYCP-TX1	USA	NYCP-TX1	USA
Pancreas-Liver-Intestine	5	75	0	10	100.0%	86.3%

D. Living Donor Information

Table D1. Living donor summary: 01/01/2016 - 12/31/2018

Living Donor Follow-Up	This Center			United States		
	01/2016-12/2016	01/2017-12/2017	01/2018-06/2018	01/2016-12/2016	01/2017-12/2017	01/2018-06/2018
Number of Living Donors	16	23	8	336	359	173
6-Month Follow-Up						
Donors due for follow-up	16	23	8	335	359	173
Timely clinical data	13 81.2%	17 73.9%	4 50.0%	291 86.9%	306 85.2%	157 90.8%
Timely lab data	13 81.2%	16 69.6%	6 75.0%	291 86.9%	293 81.6%	156 90.2%
12-Month Follow-Up						
Donors due for follow-up	16	23		335	359	
Timely clinical data	13 81.2%	14 60.9%		290 86.6%	293 81.6%	
Timely lab data	13 81.2%	14 60.9%		270 80.6%	281 78.3%	
24-Month Follow-Up						
Donors due for follow-up	16			334		
Timely clinical data	8 50.0%			259 77.5%		
Timely lab data	7 43.8%			214 64.1%		

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