



User Guide

This report contains a wide range of useful information about the kidney transplant program at University of Wisconsin Hospital and Clinics (WIUW). 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



User Guide

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 30.3 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 01/01/2012 and 06/30/2017. The time it took for 5% (the 5th percentile) of patients to receive a transplant at this program was 1.2 months. If "Not Observed" is displayed in the table, then too few candidates received transplants before 12/31/2017 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. Figure B7 shows the distribution of program offer acceptance rates as well as the offer acceptance rate for this program. Figures B8 - B11 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.



User Guide

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.



Table of Contents

Section	Page
User Guide	i
A. Program Summary	
Program Summary	1
B. Waiting List Information	
Waiting list activity	2
Demographic characteristics of waiting list candidates	3
Medical characteristics of waiting list candidates	4
Transplant rates	5
Deceased donor transplant rates	6
Waiting list mortality rates	7
Waiting list candidate status after listing	8
Percent of candidates with deceased donor transplants: demographic characteristics	9
Percent of candidates with deceased donor transplants: medical characteristics	10
Time to transplant for waiting list candidates	11
Offer acceptance practices	12
C. Transplant Information	
Deceased donor transplant recipient demographic characteristics	14
Living donor transplant recipient demographic characteristics	15
Deceased donor transplant recipient medical characteristics	16
Living donor transplant recipient medical characteristics	17
Deceased donor characteristics	18
Living donor characteristics	19
Deceased donor transplant characteristics	20
Living donor transplant characteristics	21
Graft survival	22
Patient survival	40
Multi-organ transplant graft survival	58
Multi-organ transplant patient survival	58
D. Living Donor Information	
Living donor follow-up summary	59



A. Program Summary

Figure A1. Waiting list and transplant activity

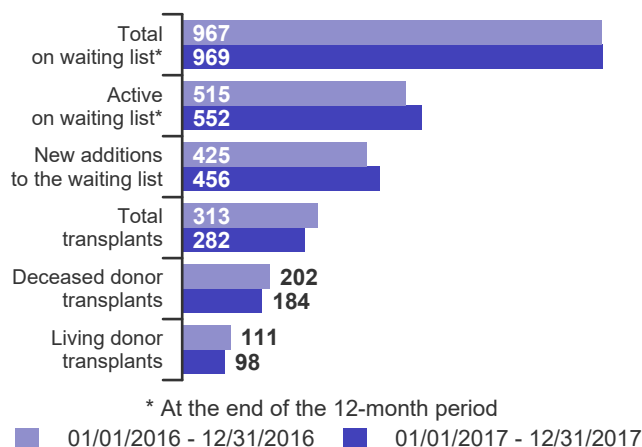


Table A1. Census of transplant recipients

Recipients	01/01/2016-12/31/2016	01/01/2017-12/31/2017
Transplanted at this center	313	282
Followed by this center*	2,738	2,804
...transplanted at this program	2,670	2,735
...transplanted elsewhere	68	69

* 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
01/01/2016 - 12/31/2017

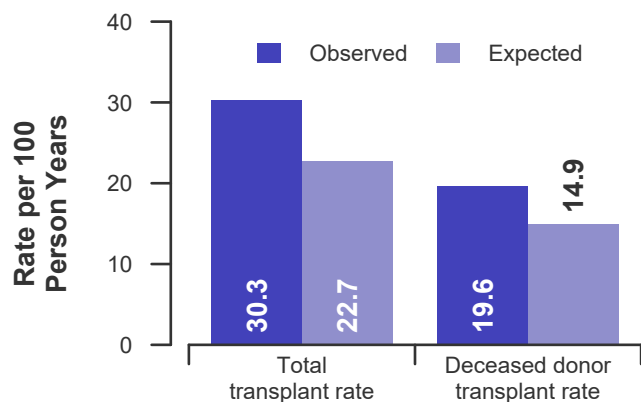


Figure A3. Waiting list mortality rates
01/01/2016 - 12/31/2017

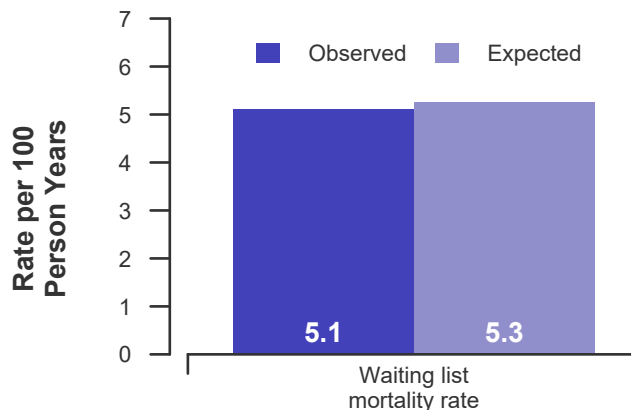


Figure A4. First-year adult graft and patient survival: 01/01/2015 - 06/30/2017

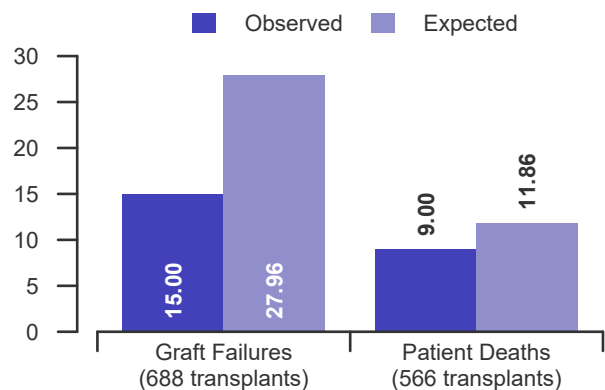
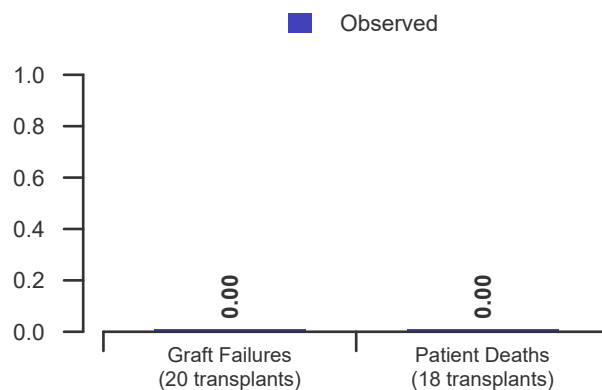


Figure A5. First-year pediatric graft and patient survival: 01/01/2015 - 06/30/2017





B. Waiting List Information

Table B1. Waiting list activity summary: 01/01/2016 - 12/31/2017

Waiting List Registrations	Counts for this center		Activity for 01/01/2017 to 12/31/2017 as percent of registrants on waiting list on 01/01/2017		
	01/01/2016- 12/31/2016	01/01/2017- 12/31/2017	This Center (%)	OPTN Region (%)	U.S. (%)
On waiting list at start	1,009	967	100.0	100.0	100.0
Additions					
New listings at this center	425	456	47.2	35.6	35.3
Removals					
Transferred to another center	5	4	0.4	1.3	1.3
Received living donor transplant*	111	98	10.1	8.0	5.5
Received deceased donor transplant*	202	183	18.9	12.9	13.5
Died	46	36	3.7	4.0	4.2
Transplanted at another center	69	58	6.0	3.4	3.0
Deteriorated	17	22	2.3	4.3	4.6
Recovered	2	4	0.4	0.3	0.2
Other reasons	15	49	5.1	6.5	5.6
On waiting list at end of period	967	969	100.2	94.8	97.5

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

Demographic Characteristic	New Waiting List Registrations 01/01/2017 to 12/31/2017 (%)			All Waiting List Registrations on 12/31/2017 (%)		
	This Center (N=456)	OPTN Region (N=2,926)	U.S. (N=36,694)	This Center (N=969)	OPTN Region (N=7,797)	U.S. (N=101,504)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity/Race (%)*						
White	70.8	56.1	44.1	64.5	47.9	36.2
African-American	12.5	21.6	27.8	17.2	28.4	32.8
Hispanic/Latino	6.8	13.0	18.4	6.3	12.6	20.0
Asian	9.2	7.2	8.0	10.2	7.9	9.4
Other	0.7	2.0	1.8	1.8	3.2	1.6
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Age (%)						
<2 years	0.2	0.3	0.2	0.0	0.2	0.1
2-11 years	0.7	1.0	1.1	0.3	0.6	0.5
12-17 years	0.4	1.3	1.6	1.0	0.8	0.9
18-34 years	9.6	11.5	11.0	10.3	10.9	10.9
35-49 years	23.7	25.2	25.4	27.1	28.3	28.0
50-64 years	43.4	42.8	41.4	44.6	45.2	43.6
65+ years	21.9	18.0	19.2	16.6	14.0	15.9
Other (includes prenatal)	0.0	0.0	0.0	0.0	0.0	0.0
Gender (%)						
Male	63.6	61.1	61.9	60.6	60.3	61.3
Female	36.4	38.9	38.1	39.4	39.7	38.7

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

Medical Characteristic	New Waiting List Registrations 01/01/2017 to 12/31/2017 (%)			All Waiting List Registrations on 12/31/2017 (%)		
	This Center (N=456)	OPTN Region (N=2,926)	U.S. (N=36,694)	This Center (N=969)	OPTN Region (N=7,797)	U.S. (N=101,504)
All (%)	100.0	100.0	100.0	100.0	100.0	100.0
Blood Type (%)						
O	40.4	45.5	48.4	53.9	52.4	53.1
A	41.0	35.0	32.8	27.0	28.4	27.6
B	15.4	15.6	14.9	17.3	16.8	16.8
AB	3.3	4.0	3.9	1.8	2.4	2.6
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Previous Transplant (%)						
Yes	22.4	17.3	13.1	24.6	18.6	14.0
No	77.6	82.7	86.9	75.4	81.4	86.0
Unknown	0.0	0.0	0.0	0.0	0.0	0.0
Initial CPRA (%)						
0-9%	77.2	80.2	79.7	71.6	78.7	81.1
10-79%	13.2	12.4	12.5	15.6	13.4	11.5
80+%	9.2	7.3	7.7	12.8	7.9	7.3
Unknown	0.4	0.1	0.1	0.0	0.0	0.1
Primary Disease (%)*						
Glomerular Diseases	24.3	22.8	20.2	24.0	21.5	19.2
Tubular and Interstitial Diseases	5.9	5.3	4.2	7.4	4.7	3.6
Polycystic Kidneys	9.4	7.8	7.6	11.5	7.8	7.0
Congenital, Familial, Metabolic	2.9	2.7	2.3	3.3	2.2	1.7
Diabetes	28.9	26.9	33.1	29.3	29.7	34.9
Renovascular & Vascular Diseases	0.7	0.2	0.2	0.3	0.2	0.1
Neoplasms	0.2	0.3	0.3	0.3	0.4	0.3
Hypertensive Nephrosclerosis	15.6	19.2	19.7	15.5	21.1	22.8
Other	11.2	14.3	12.0	7.6	11.8	10.0
Missing*	0.9	0.4	0.4	0.7	0.6	0.4

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



B. Waiting List Information

Table B4. Transplant rates: 01/01/2016 - 12/31/2017

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	1,008	1,008	8,887	105,878
Person Years**	1,960.1	1,960.1	16,503.6	207,699.0
Removals for Transplant	594	594	3,423	38,707
Adult (18+) Candidates				
Count on waiting list at start*	994	994	8,758	104,397
Person Years**	1,935.2	1,935.2	16,250.6	204,728.2
Removals for transplant	579	579	3,302	37,004
Pediatric (<18) Candidates				
Count on waiting list at start*	14	14	129	1,481
Person Years**	24.9	24.9	253.0	2,970.8
Removals for transplant	15	15	121	1,703

* 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 B1. Observed and expected transplant rates: 01/01/2016 - 12/31/2017

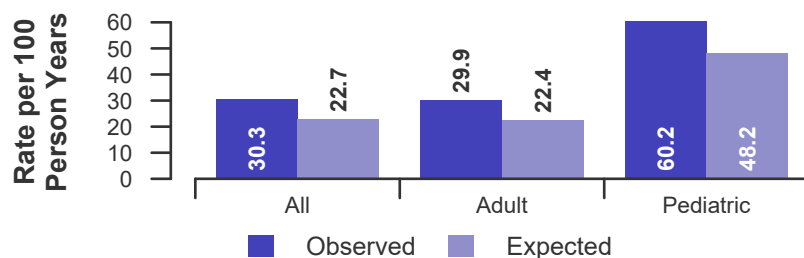


Figure B2. Transplant rate ratio estimate

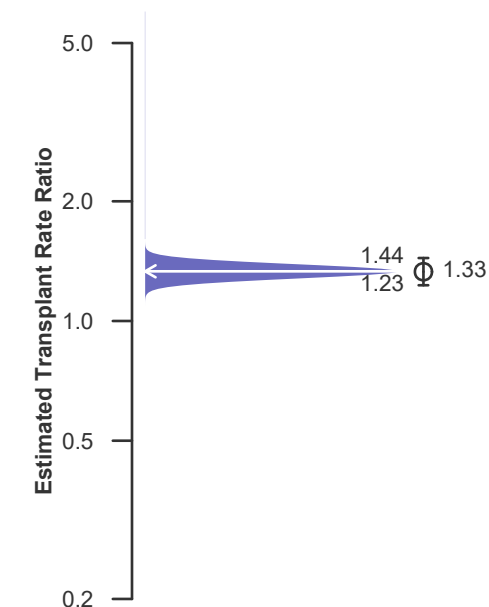
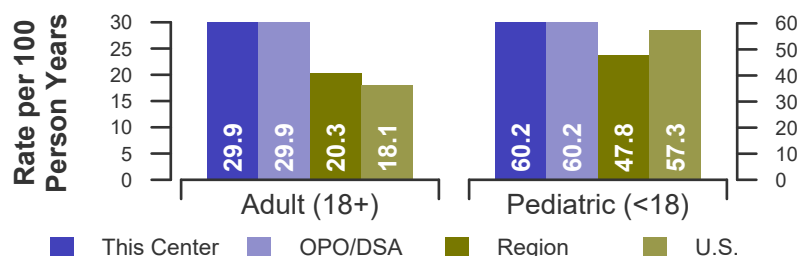


Figure B3. Observed adult (18+) and pediatric (<18) transplant rates: 01/01/2016 - 12/31/2017





B. Waiting List Information

Table B4D. Deceased donor transplant rates: 01/01/2016 - 12/31/2017

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	1,008	1,008	8,887	105,878
Person Years**	1,960.1	1,960.1	16,503.6	207,699.0
Removals for Transplant	385	385	2,059	27,410
Adult (18+) Candidates				
Count on waiting list at start*	994	994	8,758	104,397
Person Years**	1,935.2	1,935.2	16,250.6	204,728.2
Removals for transplant	384	384	1,995	26,228
Pediatric (<18) Candidates				
Count on waiting list at start*	14	14	129	1,481
Person Years**	24.9	24.9	253.0	2,970.8
Removals for transplant	1	1	64	1,182

* 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: 01/01/2016 - 12/31/2017

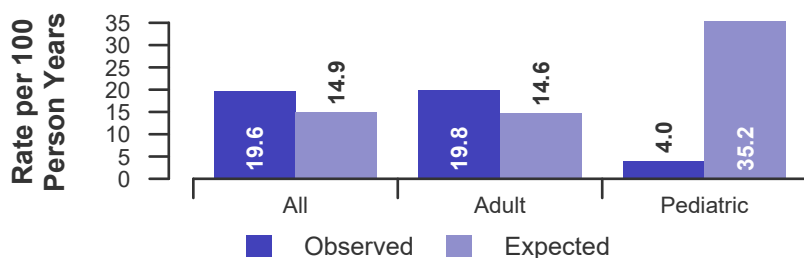


Figure B2D. Deceased donor transplant rate ratio estimate

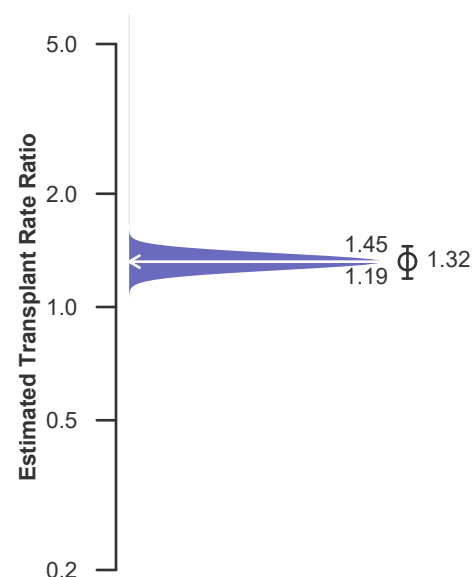
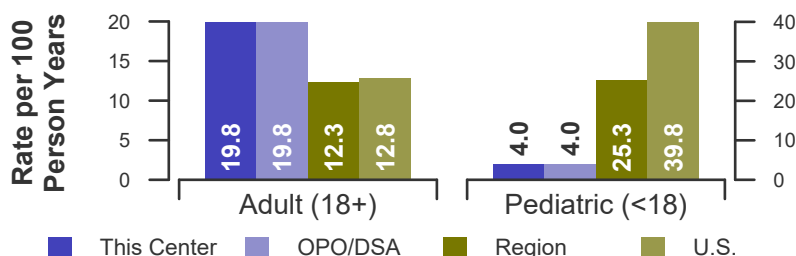


Figure B3D. Observed adult (18+) and pediatric (<18) deceased donor transplant rates: 01/01/2016 - 12/31/2017





B. Waiting List Information

Table B5. Waiting list mortality rates: 01/01/2016 - 12/31/2017

Waiting List Registrations	This Center	OPO/DSA	Region	U.S.
All Candidates				
Count on waiting list at start*	1,008	1,008	8,887	105,878
Person Years**	2,032.6	2,032.6	18,314.2	226,246.5
Number of deaths	104	104	989	12,390
Adult (18+) Candidates				
Count on waiting list at start*	994	994	8,758	104,397
Person Years**	2,007.7	2,007.7	18,047.7	223,150.7
Number of deaths	104	104	987	12,339
Pediatric (<18) Candidates				
Count on waiting list at start*	14	14	129	1,481
Person Years**	24.9	24.9	266.6	3,095.8
Number of deaths	0	0	2	51

* 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: 01/01/2016 - 12/31/2017

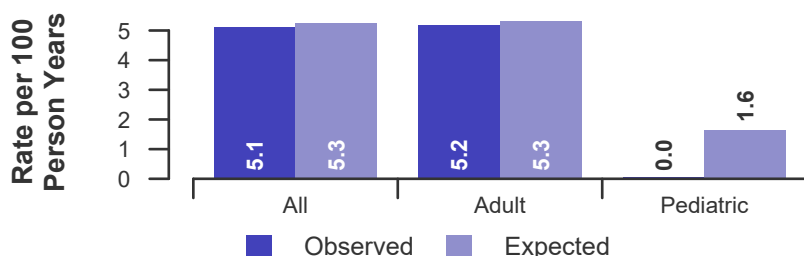


Figure B5. Waiting list mortality rate ratio estimate

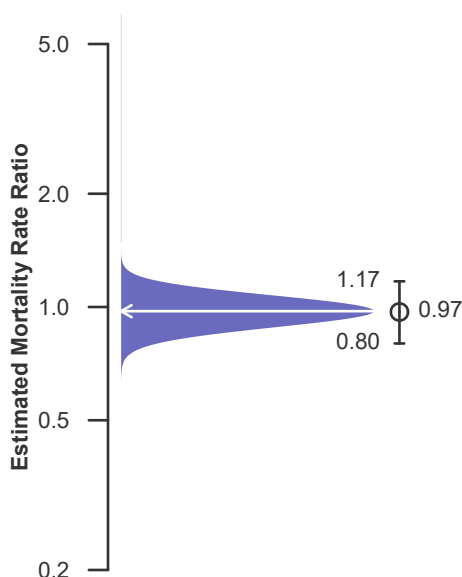
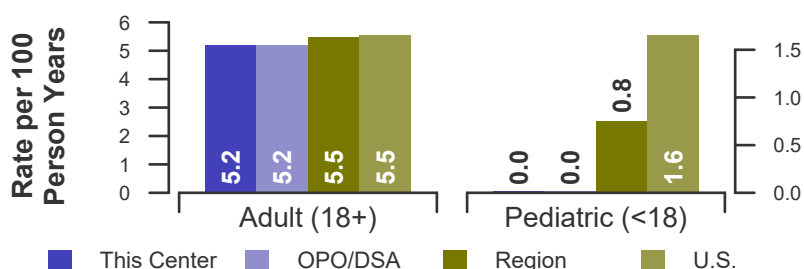


Figure B6. Observed adult (18+) and pediatric (<18) waiting list mortality rates: 01/01/2016 - 12/31/2017





B. Waiting List Information

Table B6. Waiting list candidate status after listing

Candidates registered on waiting list between 07/01/2015 and 06/30/2016

Waiting list status (survival status)	This Center (N=433)			U.S. (N=36,179)		
	Months Since Listing			Months Since Listing		
	6	12	18	6	12	18
Alive on waiting list (%)	70.0	54.3	46.2	79.4	67.3	57.9
Died on the waiting list without transplant (%)	0.9	1.6	2.8	1.3	2.3	3.3
Removed without transplant (%):						
Condition worsened (status unknown)	0.5	0.7	0.9	0.8	1.7	2.7
Condition improved (status unknown)	0.0	0.0	0.0	0.1	0.2	0.2
Refused transplant (status unknown)	0.0	0.0	0.0	0.1	0.2	0.3
Other	0.2	0.5	1.2	0.7	1.7	2.8
Transplant (living donor from waiting list only) (%):						
Functioning (alive)	14.1	21.0	19.4	6.5	9.8	9.8
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	0.0	0.1	0.1
Status Yet Unknown**	0.0	0.0	2.8	0.1	0.3	2.1
Transplant (deceased donor) (%):						
Functioning (alive)	10.9	15.7	16.2	9.3	12.9	13.6
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	0.2	0.2	0.7	0.2	0.4	0.5
Status Yet Unknown*	3.2	6.0	9.9	1.2	2.5	5.5
Lost or Transferred (status unknown) (%)	0.0	0.0	0.0	0.3	0.7	1.0
TOTAL (%)	100.0	100.0	100.0	100.0	100.0	100.0
Total % known died on waiting list or after transplant	1.2	1.8	3.5	1.5	2.7	4.0
Total % known died or removed as unstable	1.6	2.5	4.4	2.3	4.5	6.7
Total % removed for transplant	28.4	43.0	49.0	17.3	26.0	31.7
Total % with known functioning transplant (alive)	24.9	36.7	35.6	15.8	22.7	23.3

* 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 01/01/2012 and 12/31/2014

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	1,132	2.8	20.9	33.2	40.3	94,719	2.0	10.6	17.3	22.8
Ethnicity/Race*										
White	724	3.5	22.5	35.4	42.3	38,286	2.6	12.5	19.6	25.0
African-American	202	1.0	14.9	26.2	32.7	30,117	1.5	9.1	15.4	21.2
Hispanic/Latino	66	3.0	25.8	34.8	45.5	16,997	2.1	10.0	16.5	22.1
Asian	117	2.6	18.8	31.6	37.6	7,724	1.3	8.5	14.9	20.2
Other	23	0.0	21.7	30.4	43.5	1,595	1.4	9.9	17.0	23.4
Unknown	0	--	--	--	--	0	--	--	--	--
Age										
<2 years	0	--	--	--	--	150	4.7	34.7	53.3	62.7
2-11 years	2	0.0	50.0	50.0	100.0	802	6.9	50.0	64.7	71.4
12-17 years	8	0.0	0.0	25.0	37.5	1,353	8.5	48.2	59.9	66.2
18-34 years	119	3.4	21.0	33.6	40.3	9,639	1.4	9.2	17.5	25.5
35-49 years	324	3.1	21.3	32.4	40.1	24,104	1.6	8.8	15.4	21.5
50-64 years	526	2.1	19.4	32.9	39.2	41,524	2.1	9.9	16.0	21.1
65+ years	153	4.6	26.1	35.9	43.8	17,147	1.8	10.5	17.0	21.4
Other (includes prenatal)	0	--	--	--	--	0	--	--	--	--
Gender										
Male	688	2.9	22.8	32.8	40.3	57,892	2.1	10.4	16.8	22.2
Female	444	2.7	18.0	33.8	40.3	36,827	1.9	10.9	18.0	23.8

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



B. Waiting List Information

Table B8. Percent of candidates with deceased donor transplants: medical characteristics
Candidates registered on the waiting list between 01/01/2012 and 12/31/2014

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	1,132	2.8	20.9	33.2	40.3	94,719	2.0	10.6	17.3	22.8
Blood Type										
O	533	2.1	14.3	24.0	30.0	46,707	1.8	9.1	14.5	19.4
A	370	4.3	31.9	47.6	57.0	30,053	2.3	12.7	21.5	28.4
B	175	0.0	9.7	20.0	25.7	14,422	1.6	7.8	13.1	17.4
AB	54	9.3	48.1	68.5	74.1	3,537	3.6	23.0	35.2	43.0
Previous Transplant										
Yes	254	3.1	15.4	28.0	36.6	13,789	1.8	11.0	18.4	24.6
No	878	2.7	22.6	34.7	41.3	80,930	2.0	10.5	17.1	22.5
Peak PRA/CPRA										
0-9%	749	3.1	21.9	33.5	41.3	78,048	2.1	10.2	16.7	22.1
10-79%	203	2.5	20.2	35.5	40.4	9,848	1.5	11.4	19.1	25.6
80+%	180	2.2	17.8	29.4	36.1	6,815	1.9	13.3	21.6	27.8
Unknown	0	--	--	--	--	6	100.0	100.0	100.0	100.0
Primary Disease*										
Glomerular Diseases	291	2.7	19.9	32.3	39.9	16,956	1.7	11.7	19.6	26.8
Tubular & Interstitial Diseases	97	6.2	20.6	36.1	43.3	3,462	3.5	15.0	22.7	28.0
Polycystic Kidneys	122	2.5	19.7	32.8	39.3	6,006	1.4	10.1	18.2	25.0
Congenital, Familial, Metabolic	24	4.2	20.8	25.0	33.3	1,720	3.8	24.4	35.6	44.0
Diabetes	316	1.3	17.1	28.8	35.8	33,373	1.2	7.4	12.6	16.9
Renovascular & Vascular Diseases	3	0.0	66.7	100.0	100.0	148	0.0	9.5	18.2	23.6
Neoplasms	5	0.0	40.0	80.0	80.0	311	1.3	12.9	24.1	32.2
Hypertensive Nephrosclerosis	177	1.7	24.3	35.6	42.9	21,726	1.3	9.0	15.7	21.7
Other	91	7.7	30.8	42.9	49.5	10,587	6.3	18.8	26.2	31.3
Missing*	6	0.0	16.7	16.7	16.7	430	0.9	7.0	12.3	18.6

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



B. Waiting List Information

Table B9. Time to transplant for waiting list candidates*

Candidates registered on the waiting list between 01/01/2012 and 06/30/2017

Percentile	Center	Months to Transplant**		U.S.
		OPO/DSA	Region	
5th	1.2	1.2	1.2	1.4
10th	2.4	2.4	3.4	3.6
25th	6.6	6.6	11.9	13.4
50th (median time to transplant)	21.2	21.2	53.7	60.5
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 12/31/2017. 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: 01/01/2017 - 12/31/2017

Offers Acceptance Characteristics	This Center	OPO/DSA	Region	U.S.
Overall				
Number of Offers	6,385	6,385	95,582	1,544,761
Number of Acceptances	171	171	971	13,037
Expected Acceptances	111.8	111.8	1,014.9	13,025.1
Offer Acceptance Ratio*	1.52	1.52	0.96	1.00
95% Credible Interval**	[1.30, 1.75]	--	--	--
Low-KDRI Donors (KDRI < 1.05)				
Number of Offers	1,562	1,562	20,898	180,162
Number of Acceptances	53	53	343	5,070
Expected Acceptances	51.0	51.0	406.0	5,066.0
Offer Acceptance Ratio*	1.04	1.04	0.85	1.00
95% Credible Interval**	[0.78, 1.33]	--	--	--
Medium-KDRI Donors (1.05 < KDRI < 1.75)				
Number of Offers	3,915	3,915	58,982	1,037,759
Number of Acceptances	109	109	542	6,824
Expected Acceptances	58.0	58.0	518.2	6,817.9
Offer Acceptance Ratio*	1.85	1.85	1.05	1.00
95% Credible Interval**	[1.52, 2.21]	--	--	--
High-KDRI Donors (KDRI > 1.75)				
Number of Offers	908	908	15,702	326,840
Number of Acceptances	9	9	86	1,143
Expected Acceptances	2.8	2.8	90.7	1,141.1
Offer Acceptance Ratio*	2.27	2.27	0.95	1.00
95% Credible Interval**	[1.14, 3.80]	--	--	--
Hard-to-Place Kidneys (Over 100 Offers)				
Number of Offers	5,412	5,412	77,325	1,324,858
Number of Acceptances	6	6	75	1,673
Expected Acceptances	4.3	4.3	107.9	1,681.4
Offer Acceptance Ratio*	1.28	1.28	0.70	1.00
95% Credible Interval**	[0.55, 2.31]	--	--	--

* The offer acceptance ratio estimates the relative offer acceptance practice of University of Wisconsin Hospital and Clinics (WIUW) 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, [1.30, 1.75], indicates the location of WIUW's true offer acceptance ratio with 95% probability. The best estimate is 52% more likely to accept an offer compared to national acceptance behavior, but WIUW's performance could plausibly range from 30% higher acceptance up to 75% higher acceptance.



B. Waiting List Information

Figure B7. Offer acceptance: Overall

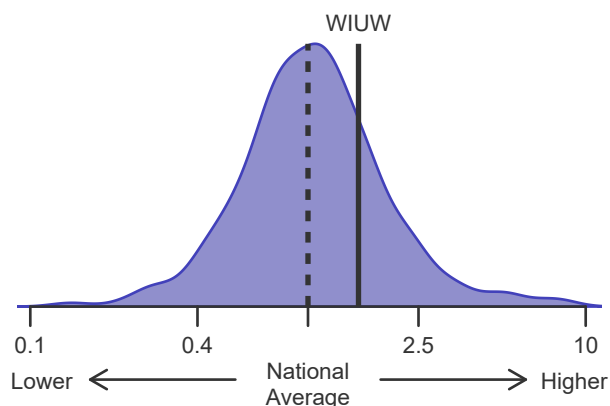


Figure B8. Offer acceptance: Low-KDRI

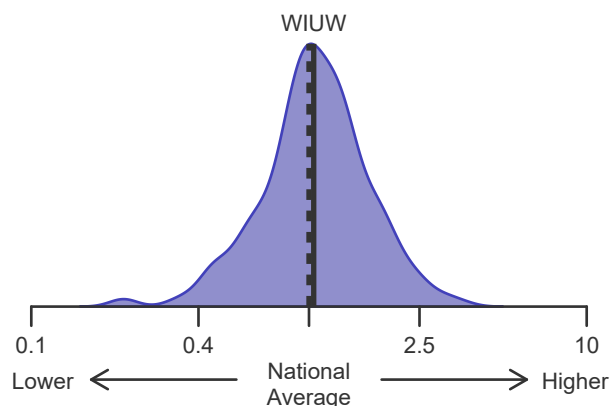


Figure B9. Offer acceptance: Medium-KDRI

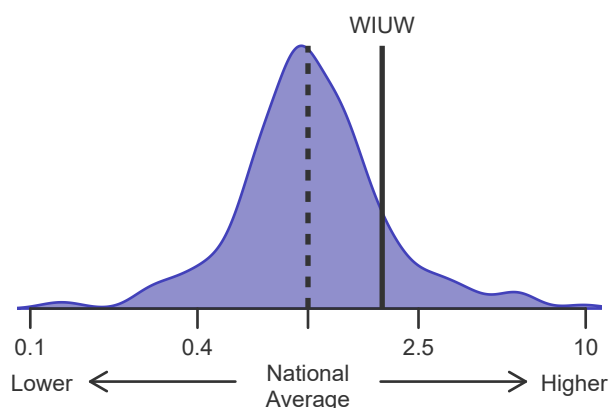


Figure B10. Offer acceptance: High-KDRI

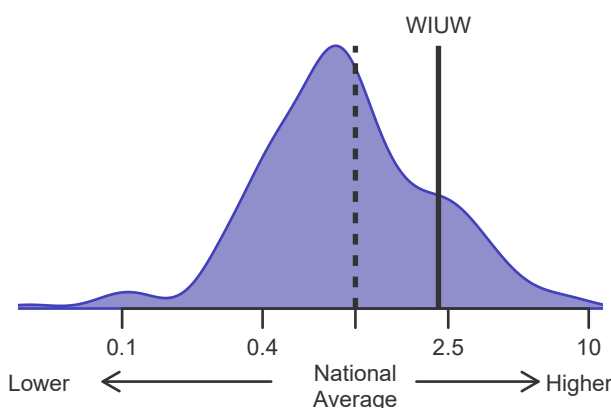
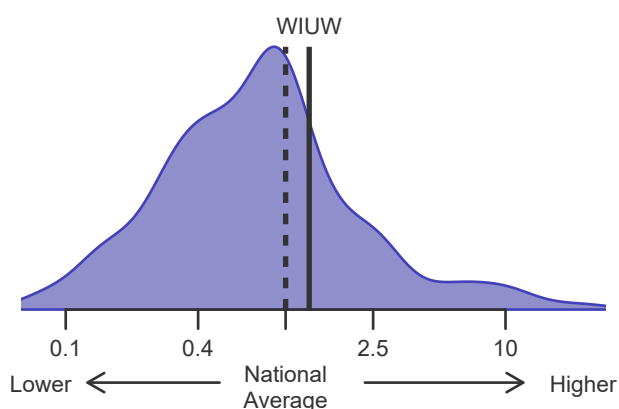


Figure B11. Offer acceptance: Offer number > 100





C. Transplant Information

Table C1D. Deceased donor transplant recipient demographic characteristics

Patients transplanted between 01/01/2017 and 12/31/2017

Characteristic	Percentage in each category		
	Center (N=184)	Region (N=1,062)	U.S. (N=14,037)
Ethnicity/Race (%)*			
White	57.6	44.7	38.5
African-American	17.9	29.3	32.6
Hispanic/Latino	8.7	14.9	19.3
Asian	14.7	8.4	7.7
Other	1.1	2.7	1.9
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	0.0	0.0	0.1
2-11 years	0.0	1.4	1.5
12-17	0.0	1.5	2.1
18-34	9.8	12.7	10.5
35-49 years	21.7	24.9	24.9
50-64 years	52.7	41.6	41.4
65+ years	15.8	17.9	19.6
Unknown	0.0	0.0	0.0
Gender (%)			
Male	65.8	57.3	60.3
Female	34.2	42.7	39.7

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

Characteristic	Percentage in each category		
	Center (N=98)	Region (N=667)	U.S. (N=5,812)
Ethnicity/Race (%)*			
White	91.8	72.4	66.1
African-American	3.1	9.7	12.3
Hispanic/Latino	2.0	11.8	14.5
Asian	2.0	5.2	6.1
Other	1.0	0.7	0.9
Unknown	0.0	0.0	0.0
Age (%)			
<2 years	1.0	0.3	0.3
2-11 years	3.1	2.4	2.0
12-17	0.0	1.0	1.7
18-34	12.2	16.5	16.3
35-49 years	19.4	25.9	27.3
50-64 years	44.9	35.5	36.7
65+ years	19.4	18.3	15.6
Unknown	0.0	0.0	0.0
Gender (%)			
Male	56.1	62.4	62.3
Female	43.9	37.6	37.7

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

Characteristic	Percentage in each category		
	Center (N=184)	Region (N=1,062)	U.S. (N=14,037)
Blood Type (%)			
O	34.8	41.8	46.4
A	42.9	38.6	34.9
B	16.3	14.2	13.5
AB	6.0	5.4	5.2
Previous Transplant (%)			
Yes	19.0	17.8	14.5
No	81.0	82.2	85.5
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	65.2	53.2	58.2
10-79%	14.7	22.6	22.1
80+ %	20.1	24.2	19.6
Unknown	0.0	0.0	0.0
Body Mass Index (%)			
0-20	7.6	10.2	10.3
21-25	23.9	26.4	28.9
26-30	41.8	30.5	31.2
31+	26.6	32.4	28.7
Unknown	0.0	0.6	1.0
Primary Disease (%)*			
Glomerular Diseases	23.9	23.6	22.6
Tubular and Interstitial Disease	6.0	5.6	4.4
Polycystic Kidneys	8.7	7.0	7.6
Congenital, Familial, Metabolic	2.2	3.5	3.0
Diabetes	28.3	24.6	26.9
Renovascular & Vascular Diseases	0.0	0.3	0.2
Neoplasms	1.6	0.7	0.4
Hypertensive Nephrosclerosis	19.0	21.6	24.1
Other Kidney	10.3	12.7	10.5
Missing*	0.0	0.6	0.3

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



C. Transplant Information

Table C2L. Living donor transplant recipient medical characteristics

Patients transplanted between 01/01/2017 and 12/31/2017

Characteristic	Percentage in each category		
	Center (N=98)	Region (N=667)	U.S. (N=5,812)
Blood Type (%)			
O	37.8	41.1	42.8
A	46.9	41.7	39.8
B	9.2	13.0	13.3
AB	6.1	4.2	4.1
Previous Transplant (%)			
Yes	19.4	15.4	11.4
No	80.6	84.6	88.6
Peak PRA/CPRA Prior to Transplant (%)			
0-9%	77.6	68.8	74.1
10-79%	11.2	21.9	20.5
80+ %	9.2	8.7	5.4
Unknown	2.0	0.6	0.1
Body Mass Index (%)			
0-20	14.3	11.4	12.2
21-25	30.6	29.7	29.7
26-30	30.6	31.0	30.8
31+	23.5	27.3	26.8
Unknown	1.0	0.6	0.6
Primary Disease (%)*			
Glomerular Diseases	31.6	35.7	31.0
Tubular and Interstitial Disease	5.1	5.4	5.0
Polycystic Kidneys	17.3	12.1	13.4
Congenital, Familial, Metabolic	7.1	4.8	4.1
Diabetes	15.3	18.6	21.5
Renovascular & Vascular Diseases	1.0	0.3	0.4
Neoplasms	0.0	0.3	0.4
Hypertensive Nephrosclerosis	16.3	14.1	15.9
Other Kidney	6.1	8.2	7.8
Missing*	0.0	0.4	0.3

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



C. Transplant Information

Table C3D. Deceased donor characteristics

Transplants performed between 01/01/2017 and 12/31/2017

Donor Characteristic	Percentage in each category		
	Center (N=184)	Region (N=1,062)	U.S. (N=14,037)
Cause of Death (%)			
Deceased: Stroke	31.0	25.5	23.9
Deceased: MVA	12.5	14.4	15.5
Deceased: Other	56.5	60.1	60.6
Ethnicity/Race (%)*			
White	91.3	71.8	67.5
African-American	4.3	13.5	14.0
Hispanic/Latino	2.7	11.3	14.7
Asian	1.6	2.4	2.8
Other	0.0	1.0	1.1
Not Reported	0.0	0.0	0.0
Age (%)			
<2 years	1.1	0.8	1.1
2-11 years	1.1	2.0	2.9
12-17	6.5	6.3	4.7
18-34	28.3	32.4	35.9
35-49 years	20.7	26.3	29.6
50-64 years	40.2	29.7	23.6
65+ years	2.2	2.5	2.2
Unknown	0.0	0.0	0.0
Gender (%)			
Male	63.6	62.1	61.7
Female	36.4	37.9	38.3
Blood Type (%)			
O	36.4	45.5	48.4
A	46.2	39.5	36.9
B	12.5	11.4	11.2
AB	4.9	3.6	3.5
Unknown	0.0	0.0	0.0
No	82.6	85.7	88.1

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



C. Transplant Information

Table C3L. Living donor characteristics**Transplants performed between 01/01/2017 and 12/31/2017**

Donor Characteristic	Percentage in each category		
	Center (N=98)	Region (N=667)	U.S. (N=5,812)
Ethnicity/Race (%)*			
White	92.9	75.9	71.3
African-American	1.0	7.6	8.8
Hispanic/Latino	3.1	11.5	13.8
Asian	1.0	3.6	4.7
Other	2.0	1.3	1.4
Not Reported	0.0	0.0	0.0
Age (%)			
0-11 years	0.0	0.0	0.0
12-17	0.0	0.0	0.0
18-34	25.5	25.9	27.0
35-49 years	35.7	39.7	39.1
50-64 years	32.7	29.1	29.7
65+ years	6.1	5.2	4.2
Unknown	0.0	0.0	0.0
Gender (%)			
Male	46.9	42.7	37.0
Female	53.1	57.3	63.0
Blood Type (%)			
O	53.1	58.8	62.9
A	36.7	32.5	27.9
B	7.1	7.0	7.8
AB	3.1	1.6	1.3
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 01/01/2017 and 12/31/2017

Transplant Characteristic	Percentage in each category		
	Center (N=184)	Region (N=1,062)	U.S. (N=14,037)
Cold Ischemic Time (Hours): Local (%)			
Deceased: 0-11 hr	36.8	39.2	38.2
Deceased: 12-21 hr	49.7	50.9	45.4
Deceased: 22-31 hr	12.3	8.9	13.4
Deceased: 32-41 hr	1.3	0.6	2.0
Deceased: 42+ hr	0.0	0.0	0.5
Not Reported	0.0	0.4	0.5
Cold Ischemic Time (Hours): Shared (%)			
Deceased: 0-11 hr	6.9	13.6	9.9
Deceased: 12-21 hr	58.6	52.7	39.9
Deceased: 22-31 hr	34.5	32.2	35.6
Deceased: 32-41 hr	0.0	0.8	10.3
Deceased: 42+ hr	0.0	0.0	3.8
Not Reported	0.0	0.8	0.5
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	16.8	15.9	11.9
1	29.3	36.3	38.7
2	53.8	46.5	48.8
Not Reported	0.0	1.2	0.5
B Locus Mismatches (%)			
0	8.2	10.5	7.6
1	26.1	24.9	25.2
2	65.8	63.4	66.6
Not Reported	0.0	1.2	0.5
DR Locus Mismatches (%)			
0	21.2	21.2	17.3
1	44.6	44.2	47.3
2	34.2	33.4	34.9
Not Reported	0.0	1.2	0.5
Total Mismatches (%)			
0	4.9	8.4	4.8
1	3.3	2.3	1.5
2	4.3	5.1	5.2
3	15.2	12.8	14.0
4	27.7	24.8	27.6
5	28.8	31.5	31.4
6	15.8	13.9	15.0
Not Reported	0.0	1.2	0.5
Procedure Type (%)			
Kidney alone	92.9	92.1	93.3
Kidney and another organ	7.1	7.9	6.7
Dialysis in First Week After Transplant (%)			
Yes	41.3	29.8	27.1
No	58.7	70.2	72.9
Not Reported	0.0	0.0	0.0
Sharing (%)			
Local	84.2	75.1	70.6
Shared	15.8	24.9	29.4
Median Time in Hospital After Transplant*	5.0 Days	5.0 Days	5.0 Days

* Multiple organ transplants are excluded from this statistic.



C. Transplant Information

Table C4L. Living donor transplant characteristics
Transplants performed between 01/01/2017 and 12/31/2017

Transplant Characteristic	Percentage in each category		
	Center (N=98)	Region (N=667)	U.S. (N=5,812)
Relation with Donor (%)			
Related	45.9	44.7	43.7
Unrelated	53.1	55.2	56.3
Not Reported	1.0	0.1	0.1
Level of Mismatch (%)			
A Locus Mismatches (%)			
0	21.4	19.8	18.0
1	54.1	51.1	50.1
2	23.5	28.8	30.7
Not Reported	1.0	0.3	1.3
B Locus Mismatches (%)			
0	13.3	12.6	10.8
1	50.0	48.0	44.9
2	35.7	39.1	43.1
Not Reported	1.0	0.3	1.3
DR Locus Mismatches (%)			
0	24.5	18.3	16.7
1	50.0	49.5	50.6
2	24.5	31.9	31.5
Not Reported	1.0	0.3	1.3
Total Mismatches (%)			
0	6.1	6.6	5.4
1	5.1	4.2	4.1
2	22.4	15.7	13.6
3	26.5	24.4	23.7
4	14.3	16.9	17.6
5	14.3	19.5	22.8
6	10.2	12.3	11.5
Not Reported	1.0	0.3	1.3
Procedure Type (%)			
Kidney alone	100.0	100.0	100.0
Kidney and another organ	0.0	0.0	0.0
Dialysis in First Week After Transplant (%)			
Yes	2.0	3.3	2.8
No	96.9	96.6	97.2
Not Reported	1.0	0.1	0.0
Median Time in Hospital After Transplant*	4.0 Days	4.0 Days	4.0 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 01/01/2015 and 06/30/2017
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	688	42,472
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	99.56%	98.48%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.58%	--
Number of observed graft failures (including deaths) during the first month after transplant	3	647
Number of expected graft failures (including deaths) during the first month after transplant	9.87	--
Estimated hazard ratio*	0.42	--
95% credible interval for the hazard ratio**	[0.14, 0.86]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.14, 0.86], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 58% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 86% reduced risk up to 14% reduced risk.

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

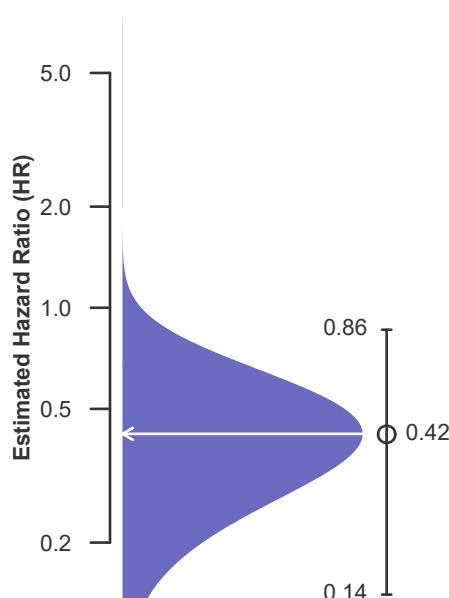
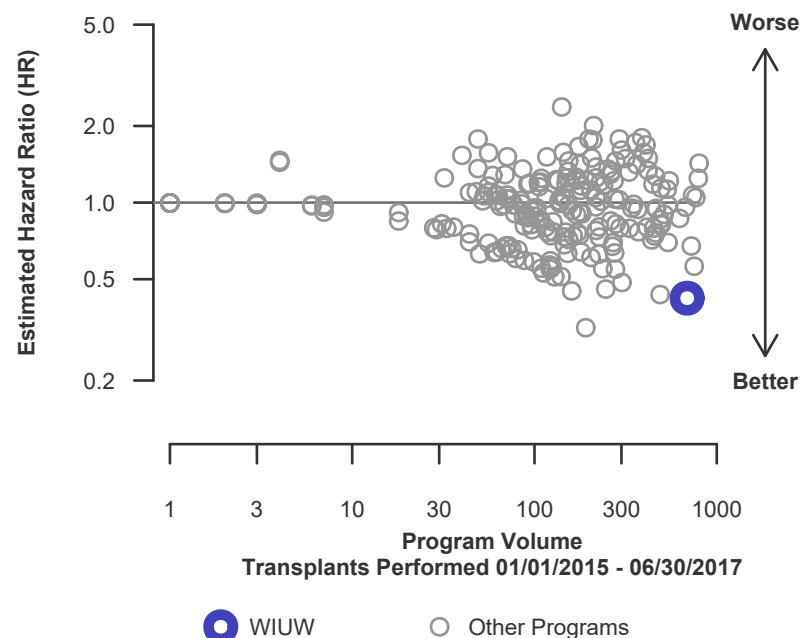


Figure C2. Adult (18+) 1-month graft failure HR program comparison





C. Transplant Information

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

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	429	29,060
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	99.53%	98.12%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.22%	--
Number of observed graft failures (including deaths) during the first month after transplant	2	547
Number of expected graft failures (including deaths) during the first month after transplant	7.73	--
Estimated hazard ratio*	0.41	--
95% credible interval for the hazard ratio**	[0.11, 0.90]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 0.90], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 59% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 89% reduced risk up to 10% reduced risk.

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

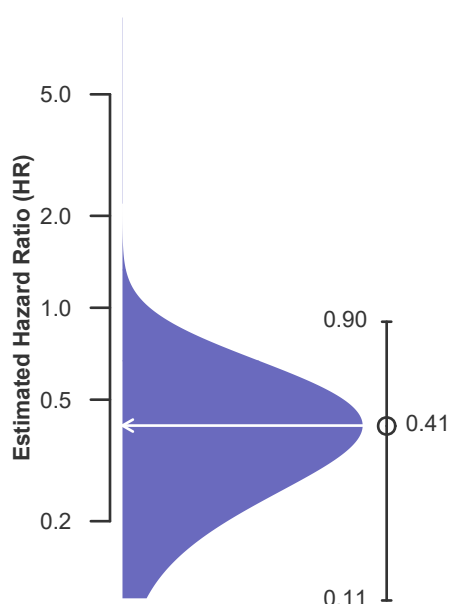
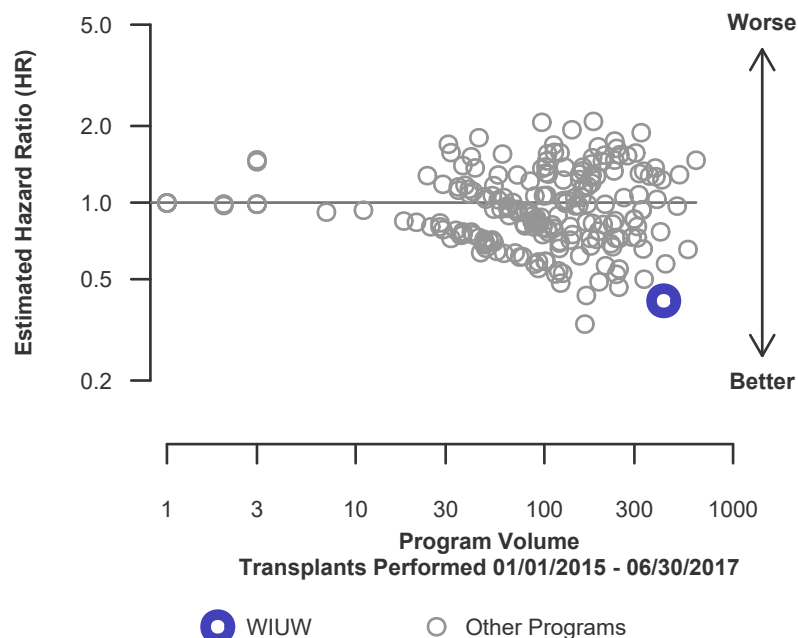


Figure C2D. Adult (18+) 1-month deceased donor graft failure HR program comparison





C. Transplant Information

Table C5L. Adult (18+) 1-month survival with a functioning living donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	259	13,412
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	99.61%	99.25%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.17%	--
Number of observed graft failures (including deaths) during the first month after transplant	1	100
Number of expected graft failures (including deaths) during the first month after transplant	2.14	--
Estimated hazard ratio*	0.72	--
95% credible interval for the hazard ratio**	[0.15, 1.74]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.15, 1.74], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 28% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 85% reduced risk up to 74% increased risk.

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

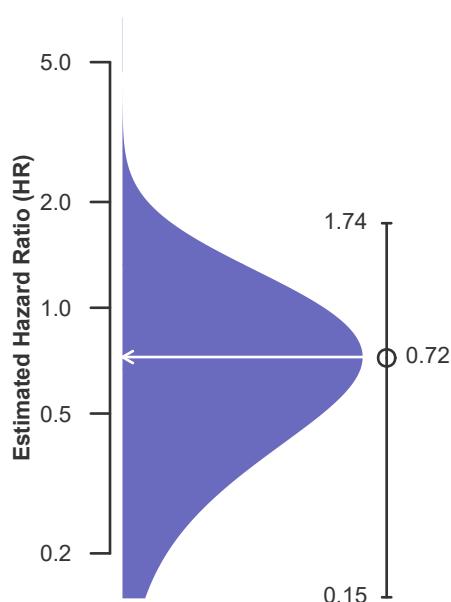
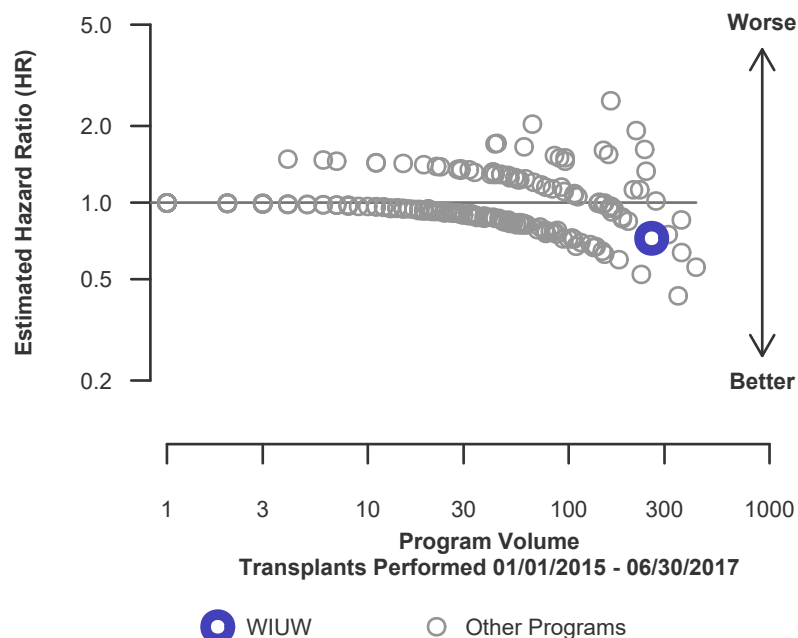


Figure C2L. Adult (18+) 1-month living donor graft failure HR program comparison





C. Transplant Information

Table C6. Adult (18+) 1-year survival with a functioning graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	688	42,472
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	97.55%	95.43%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	95.75%	--
Number of observed graft failures (including deaths) during the first year after transplant	15	1,818
Number of expected graft failures (including deaths) during the first year after transplant	27.96	--
Estimated hazard ratio*	0.57	--
95% credible interval for the hazard ratio**	[0.33, 0.87]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.33, 0.87], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 43% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 67% reduced risk up to 13% reduced risk.

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

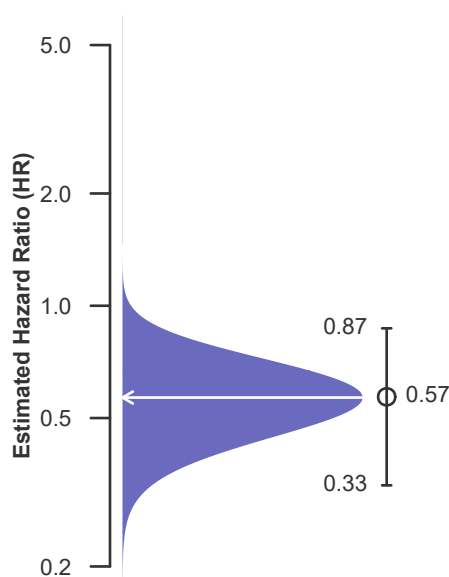
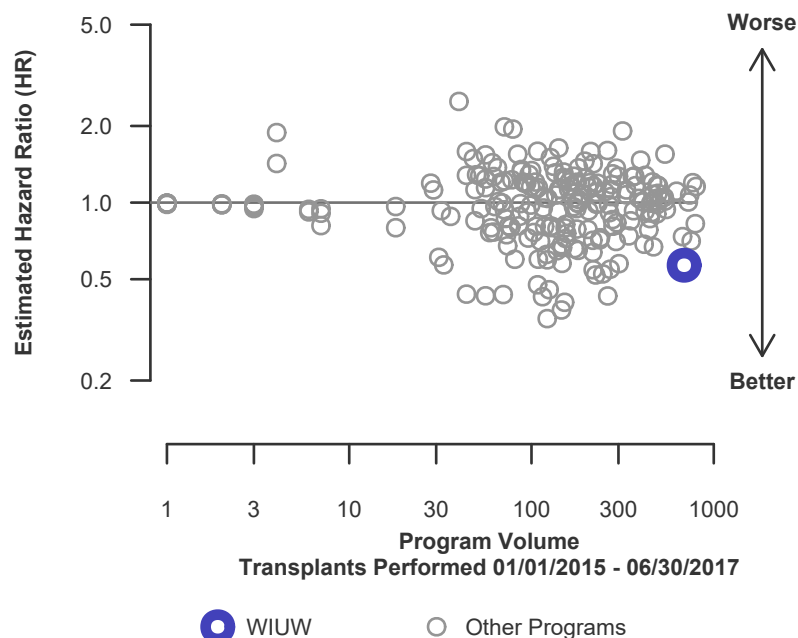


Figure C4. Adult (18+) 1-year graft failure HR program comparison





C. Transplant Information

Table C6D. Adult (18+) 1-year survival with a functioning deceased donor graft
Single organ transplants performed between 01/01/2015 and 06/30/2017
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	429	29,060
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	96.85%	94.23%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	94.52%	--
Number of observed graft failures (including deaths) during the first year after transplant	12	1,569
Number of expected graft failures (including deaths) during the first year after transplant	22.52	--
Estimated hazard ratio*	0.57	--
95% credible interval for the hazard ratio**	[0.31, 0.91]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.31, 0.91], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 43% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 69% reduced risk up to 9% reduced risk.

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

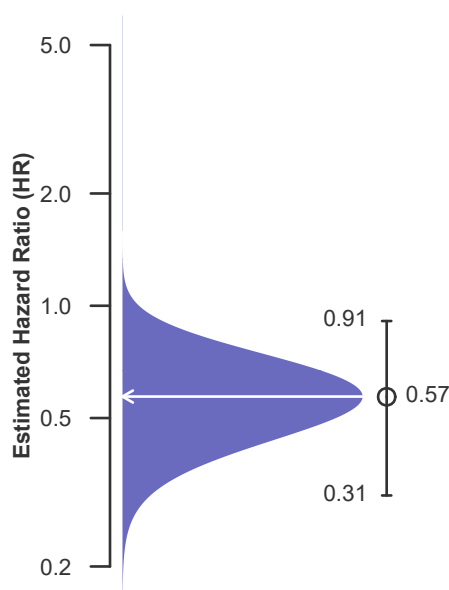
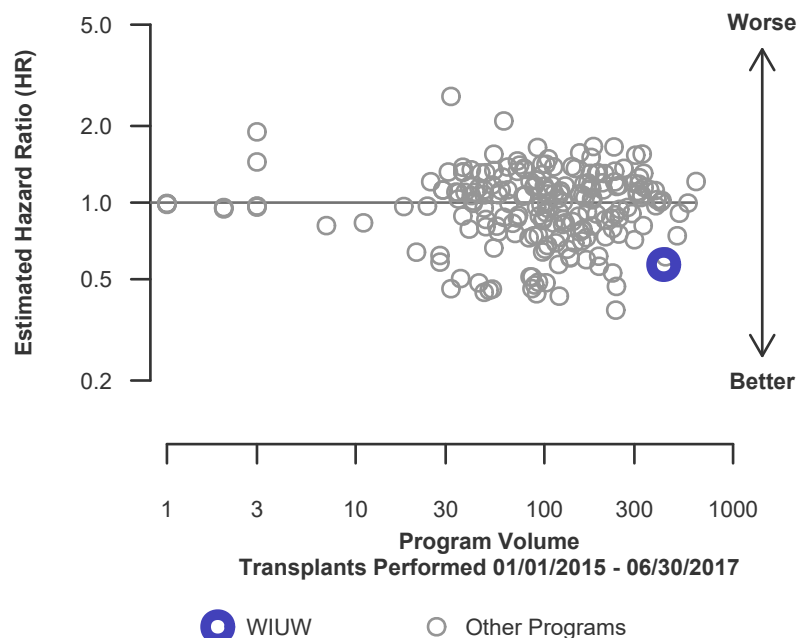


Figure C4D. Adult (18+) 1-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C6L. Adult (18+) 1-year survival with a functioning living donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	259	13,412
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	98.69%	98.00%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	97.79%	--
Number of observed graft failures (including deaths) during the first year after transplant	3	249
Number of expected graft failures (including deaths) during the first year after transplant	5.44	--
Estimated hazard ratio*	0.67	--
95% credible interval for the hazard ratio**	[0.22, 1.38]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.22, 1.38], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 33% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 78% reduced risk up to 38% increased risk.

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

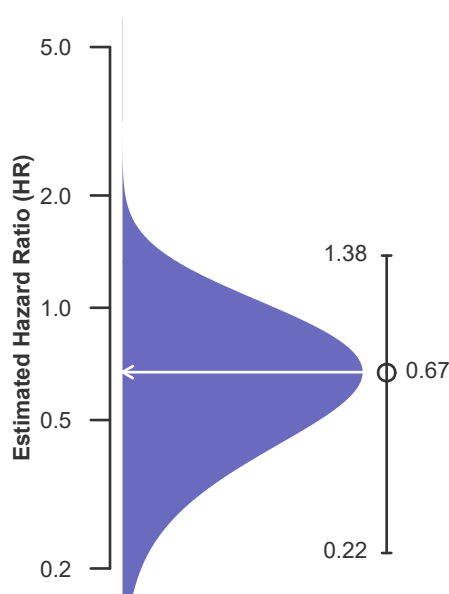
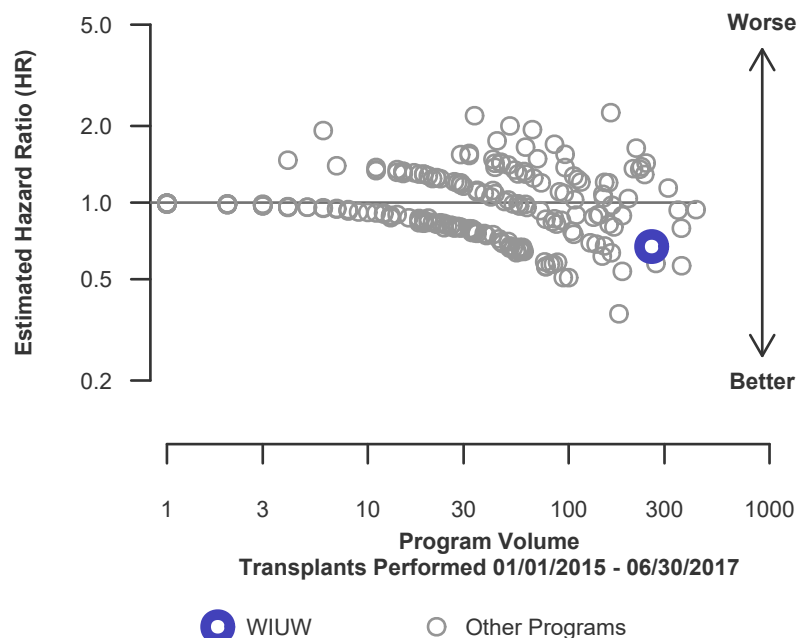


Figure C4L. Adult (18+) 1-year living donor graft failure HR program comparison





C. Transplant Information

Table C7. Adult (18+) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2012 and 12/31/2014
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	627	38,749
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	88.04%	88.96%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	88.37%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	75	4,276
Number of expected graft failures (including deaths) during the first 3 years after transplant	73.16	--
Estimated hazard ratio*	1.02	--
95% credible interval for the hazard ratio**	[0.81, 1.27]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.81, 1.27], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 2% higher risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 19% reduced risk up to 27% increased risk.

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

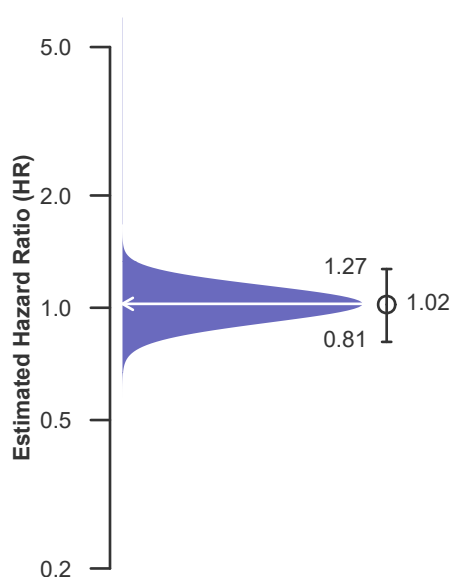
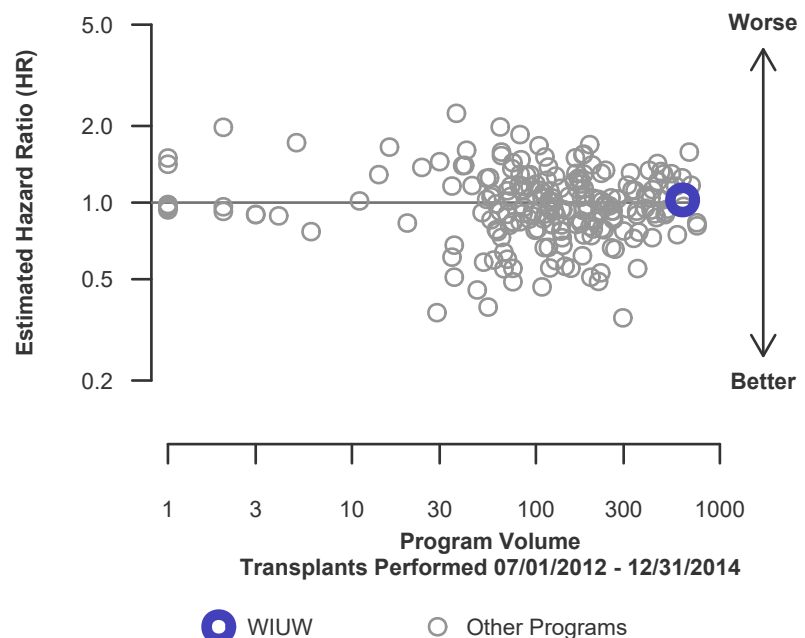


Figure C6. Adult (18+) 3-year graft failure HR program comparison





C. Transplant Information

Table C7D. Adult (18+) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2012 and 12/31/2014
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	396	25,342
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	86.62%	86.60%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	86.44%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	53	3,396
Number of expected graft failures (including deaths) during the first 3 years after transplant	53.77	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.74, 1.26]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.74, 1.26], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 1% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 26% reduced risk up to 26% increased risk.

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

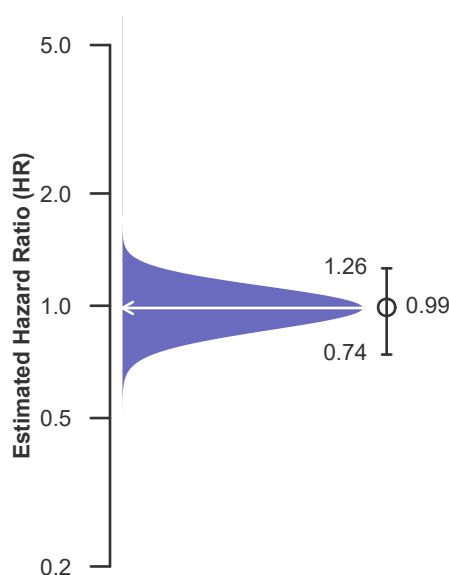
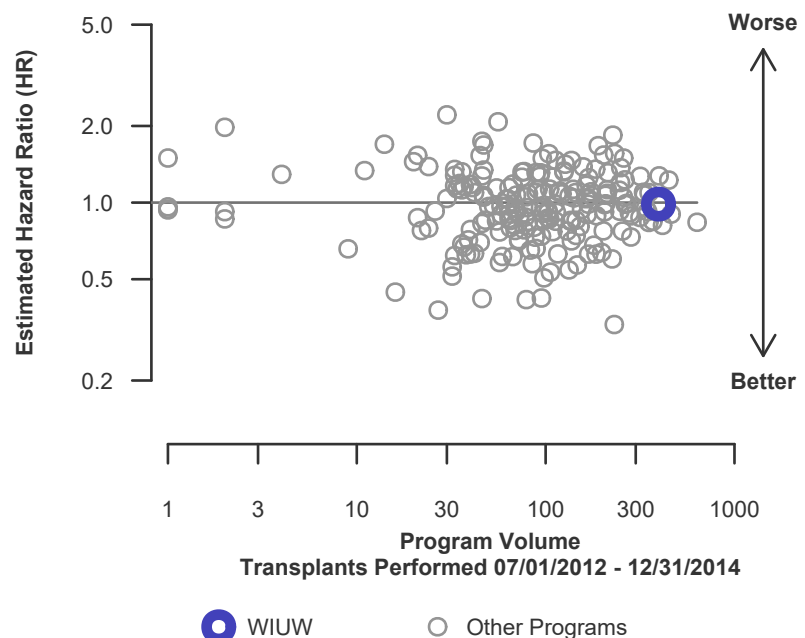


Figure C6D. Adult (18+) 3-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C7L. Adult (18+) 3-year survival with a functioning living donor graft

Single organ transplants performed between 07/01/2012 and 12/31/2014

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	231	13,407
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	90.48%	93.44%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	91.68%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	22	880
Number of expected graft failures (including deaths) during the first 3 years after transplant	19.40	--
Estimated hazard ratio*	1.12	--
95% credible interval for the hazard ratio**	[0.72, 1.61]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.72, 1.61], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 12% higher risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 28% reduced risk up to 61% increased risk.

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

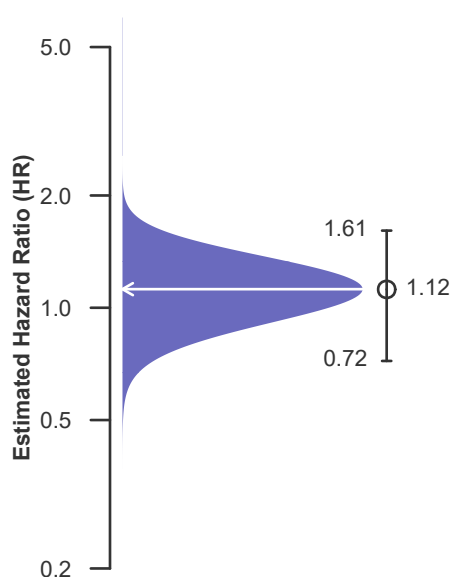
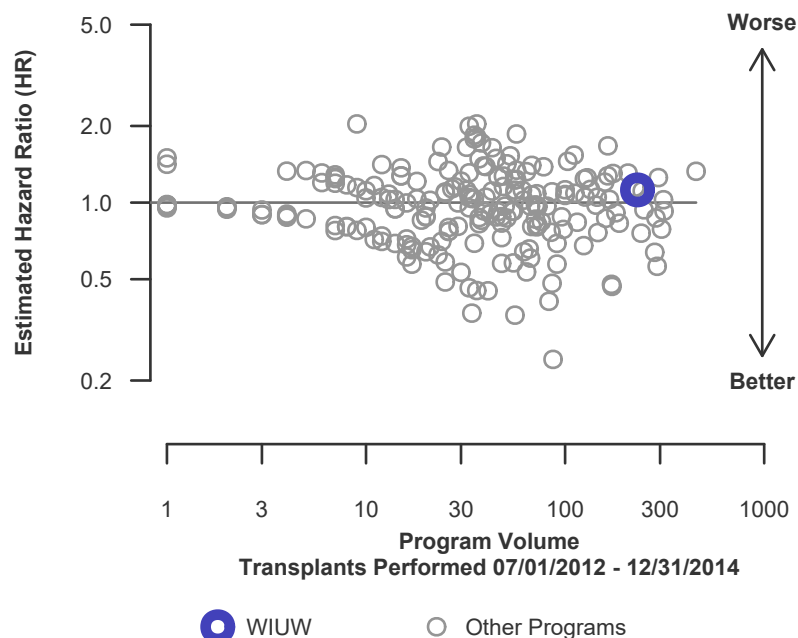


Figure C6L. Adult (18+) 3-year living donor graft failure HR program comparison





C. Transplant Information

Table C8. Pediatric (<18) 1-month survival with a functioning graft
Single organ transplants performed between 01/01/2015 and 06/30/2017
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	20	2,049
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	98.88%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.02%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	23
Number of expected graft failures (including deaths) during the first month after transplant	0.20	--
Estimated hazard ratio*	0.91	--
95% credible interval for the hazard ratio**	[0.11, 2.54]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.54], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 9% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 89% reduced risk up to 154% increased risk.

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

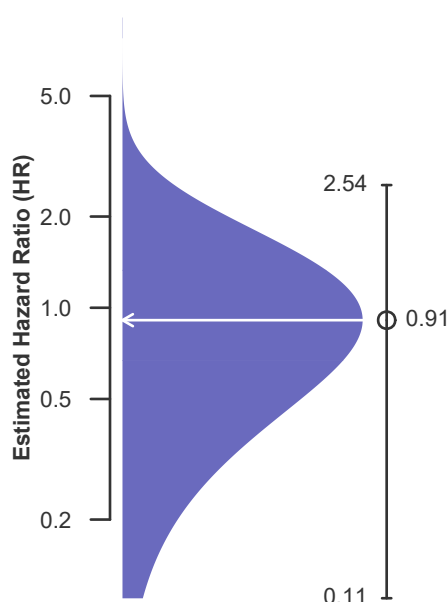
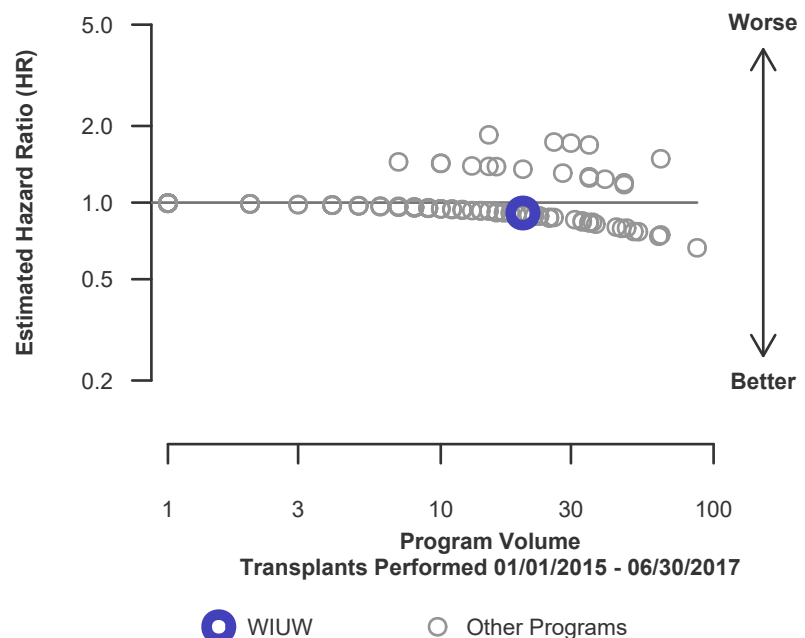


Figure C8. Pediatric (<18) 1-month graft failure HR program comparison





C. Transplant Information

Table C8D. Pediatric (<18) 1-month survival with a functioning deceased donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	4	1,403
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	98.79%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	98.79%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	17
Number of expected graft failures (including deaths) during the first month after transplant	0.05	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.72]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.72], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 2% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 172% increased risk.

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

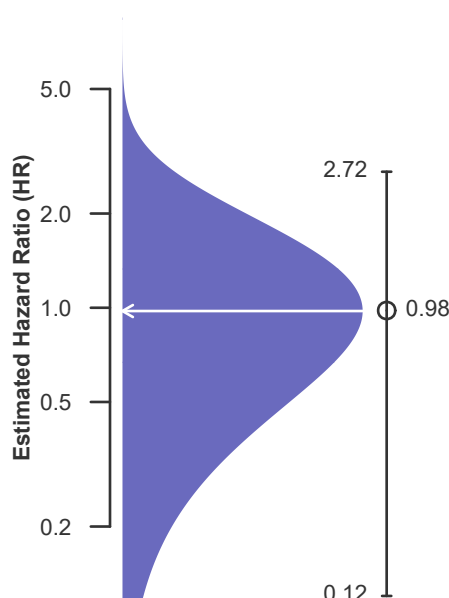
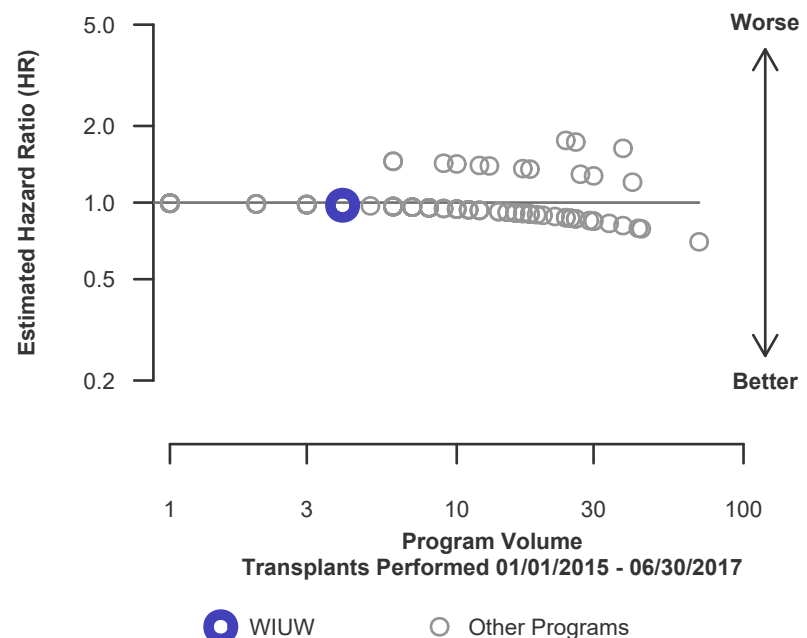


Figure C8D. Pediatric (<18) 1-month deceased donor graft failure HR program comparison





C. Transplant Information

Table C8L. Pediatric (<18) 1-month survival with a functioning living donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	16	646
Estimated probability of surviving with a functioning graft at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.07%
Expected probability of surviving with a functioning graft at 1 month (adjusted for patient and donor characteristics)	99.07%	--
Number of observed graft failures (including deaths) during the first month after transplant	0	6
Number of expected graft failures (including deaths) during the first month after transplant	0.15	--
Estimated hazard ratio*	0.93	--
95% credible interval for the hazard ratio**	[0.11, 2.59]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.59], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 7% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 89% reduced risk up to 159% increased risk.

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

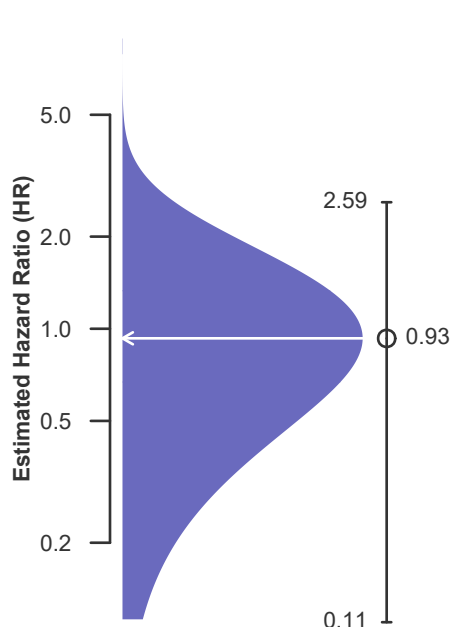
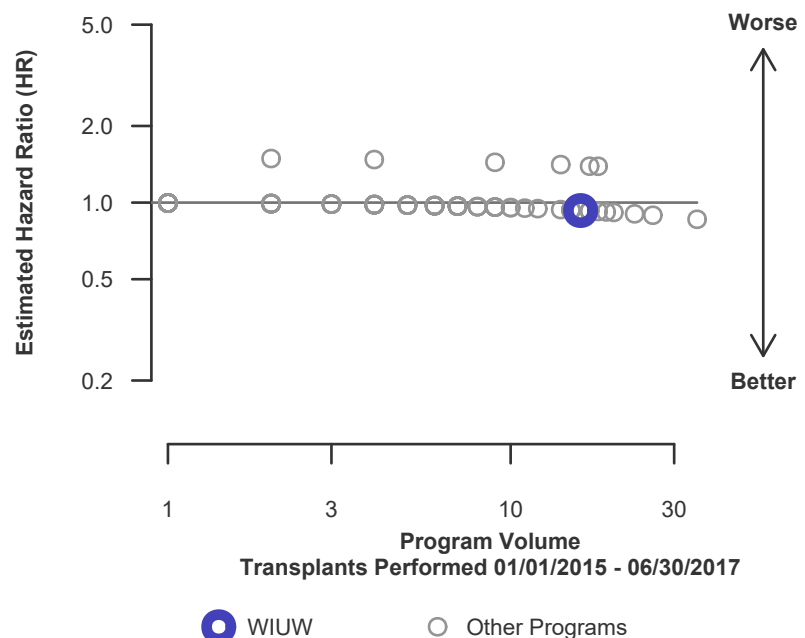


Figure C8L. Pediatric (<18) 1-month living donor graft failure HR program comparison





C. Transplant Information

Table C9. Pediatric (<18) 1-year survival with a functioning graft
Single organ transplants performed between 01/01/2015 and 06/30/2017
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	20	2,049
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	98.07%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	98.30%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	38
Number of expected graft failures (including deaths) during the first year after transplant	0.33	--
Estimated hazard ratio*	0.86	--
95% credible interval for the hazard ratio**	[0.10, 2.39]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.10, 2.39], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 14% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 90% reduced risk up to 139% increased risk.

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

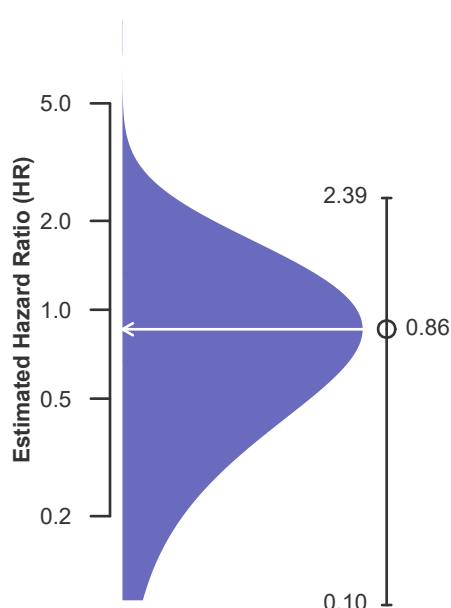
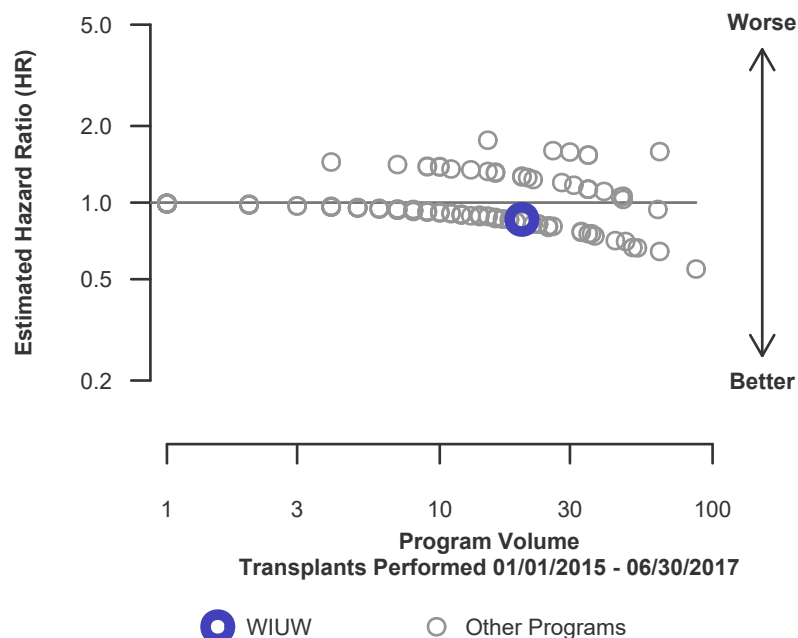


Figure C10. Pediatric (<18) 1-year graft failure HR program comparison





C. Transplant Information

Table C9D. Pediatric (<18) 1-year survival with a functioning deceased donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	4	1,403
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	97.93%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	97.93%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	28
Number of expected graft failures (including deaths) during the first year after transplant	0.08	--
Estimated hazard ratio*	0.96	--
95% credible interval for the hazard ratio**	[0.12, 2.67]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.67], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 4% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 167% increased risk.

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

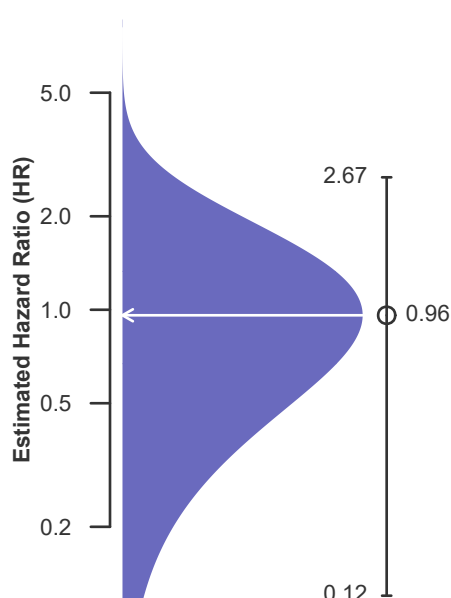
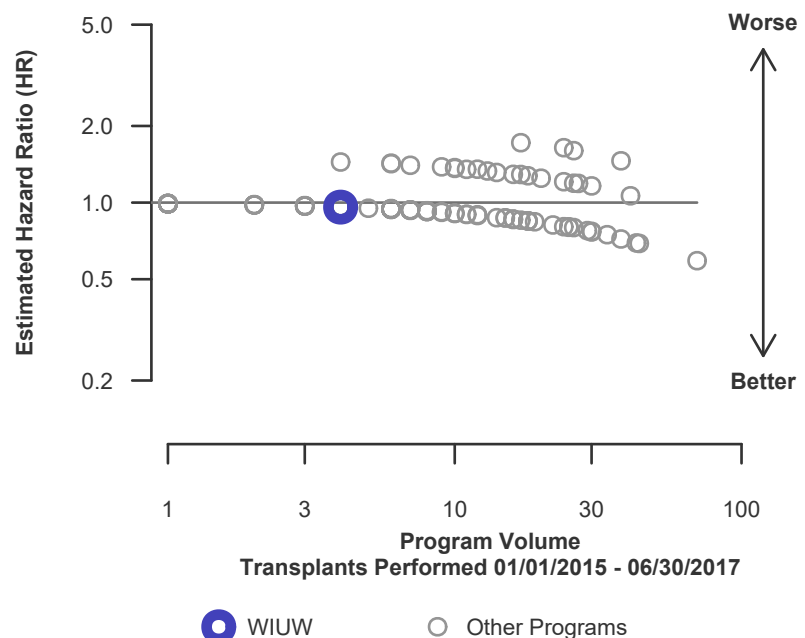


Figure C10D. Pediatric (<18) 1-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C9L. Pediatric (<18) 1-year survival with a functioning living donor graft

Single organ transplants performed between 01/01/2015 and 06/30/2017

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	16	646
Estimated probability of surviving with a functioning graft at 1 year (unadjusted for patient and donor characteristics)	100.00%	98.38%
Expected probability of surviving with a functioning graft at 1 year (adjusted for patient and donor characteristics)	98.39%	--
Number of observed graft failures (including deaths) during the first year after transplant	0	10
Number of expected graft failures (including deaths) during the first year after transplant	0.24	--
Estimated hazard ratio*	0.89	--
95% credible interval for the hazard ratio**	[0.11, 2.48]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.11, 2.48], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 11% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 89% reduced risk up to 148% increased risk.

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

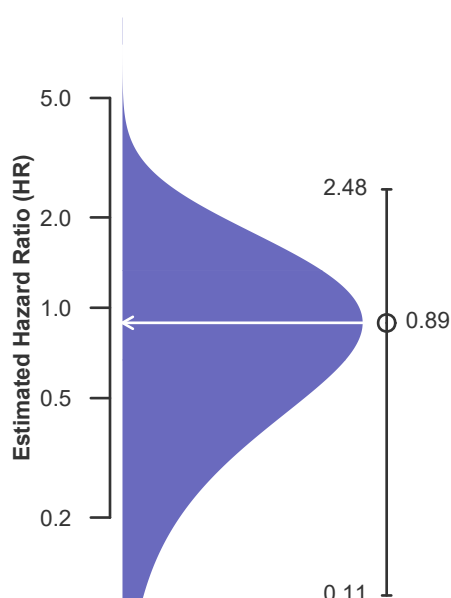
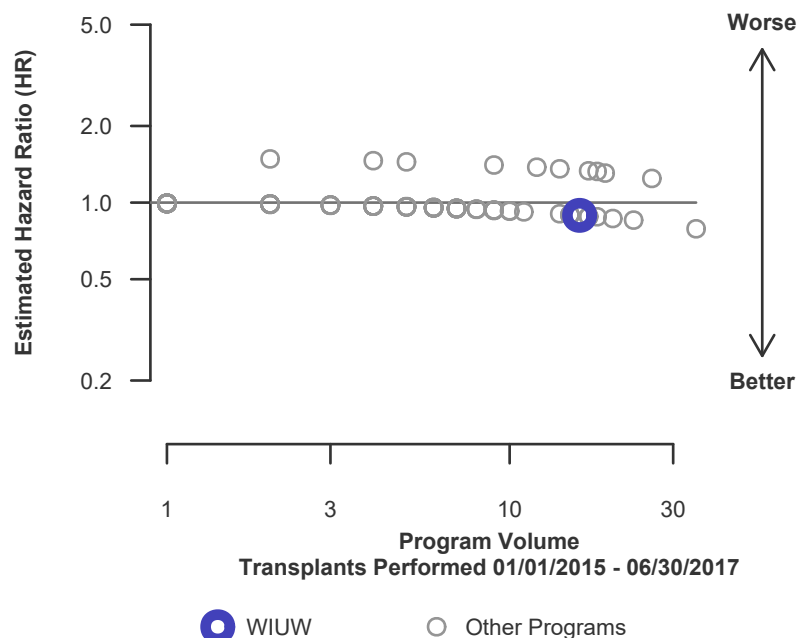


Figure C10L. Pediatric (<18) 1-year living donor graft failure HR program comparison





C. Transplant Information

Table C10. Pediatric (<18) 3-year survival with a functioning graft
Single organ transplants performed between 07/01/2012 and 12/31/2014
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	5	2,043
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	80.00%	90.16%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	87.39%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	1	201
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.66	--
Estimated hazard ratio*	1.13	--
95% credible interval for the hazard ratio**	[0.23, 2.71]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.23, 2.71], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 13% higher risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 77% reduced risk up to 171% increased risk.

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

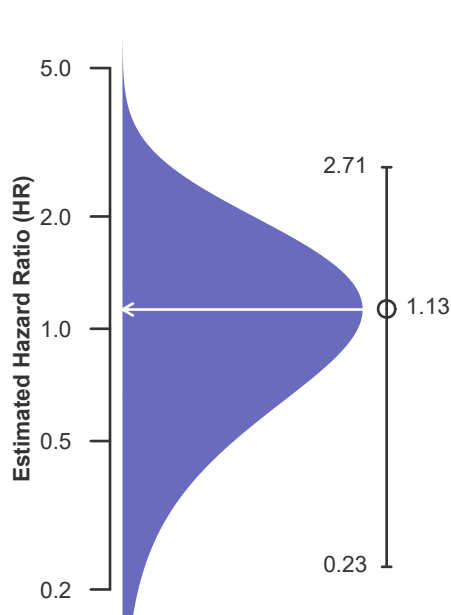
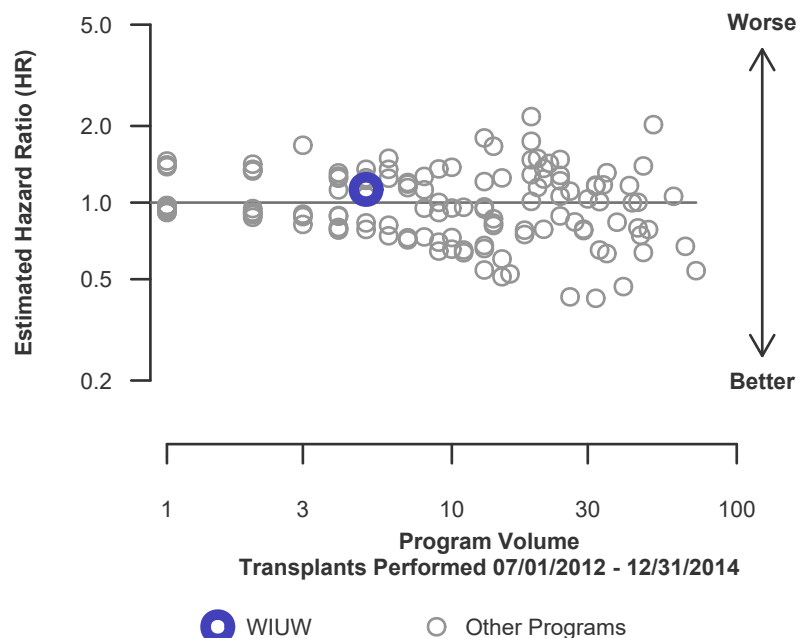


Figure C12. Pediatric (<18) 3-year graft failure HR program comparison





C. Transplant Information

Table C10D. Pediatric (<18) 3-year survival with a functioning deceased donor graft
Single organ transplants performed between 07/01/2012 and 12/31/2014
Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	4	1,321
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	100.00%	87.74%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	85.59%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	0	162
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.62	--
Estimated hazard ratio*	0.76	--
95% credible interval for the hazard ratio**	[0.09, 2.12]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.09, 2.12], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 24% lower risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 91% reduced risk up to 112% increased risk.

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

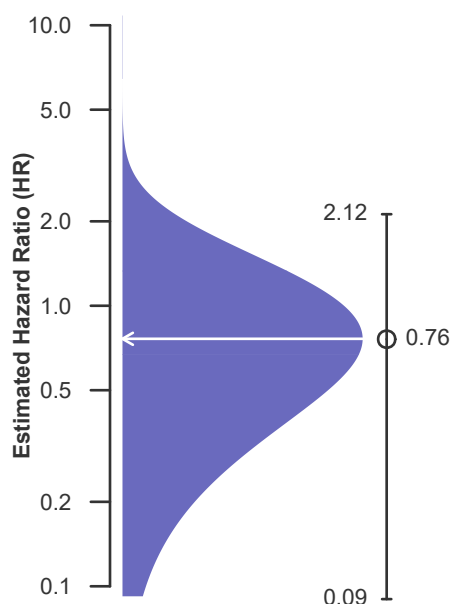
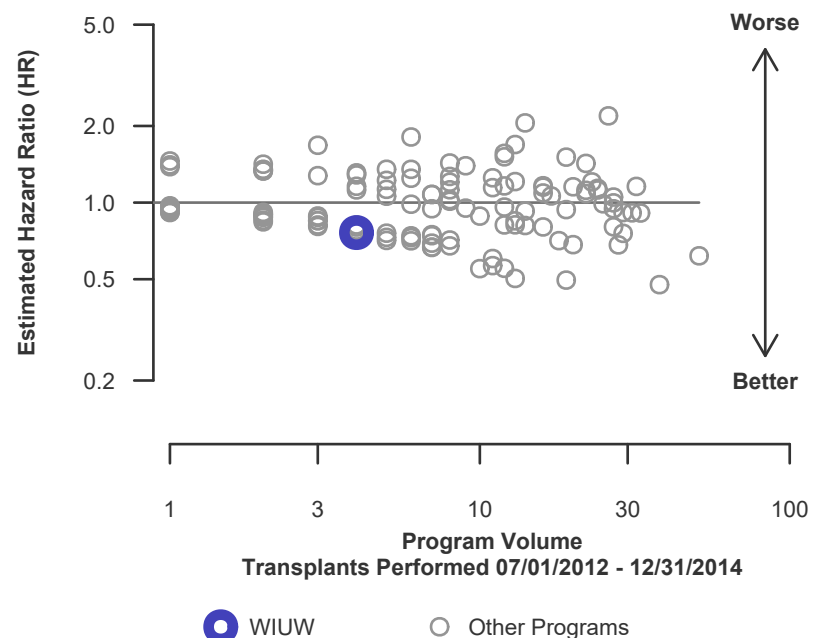


Figure C12D. Pediatric (<18) 3-year deceased donor graft failure HR program comparison





C. Transplant Information

Table C10L. Pediatric (<18) 3-year survival with a functioning living donor graft

Single organ transplants performed between 07/01/2012 and 12/31/2014

Deaths and retransplants are considered graft failures

	WIUW	U.S.
Number of transplants evaluated	1	722
Estimated probability of surviving with a functioning graft at 3 years (unadjusted for patient and donor characteristics)	0.00%	94.60%
Expected probability of surviving with a functioning graft at 3 years (adjusted for patient and donor characteristics)	94.60%	--
Number of observed graft failures (including deaths) during the first 3 years after transplant	1	39
Number of expected graft failures (including deaths) during the first 3 years after transplant	0.04	--
Estimated hazard ratio*	1.47	--
95% credible interval for the hazard ratio**	[0.30, 3.54]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's graft failure rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.30, 3.54], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 47% higher risk of graft failure compared to an average program, but WIUW's performance could plausibly range from 70% reduced risk up to 254% increased risk.

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

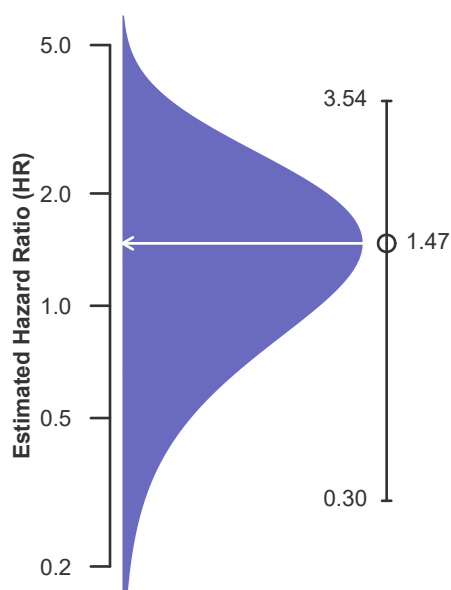
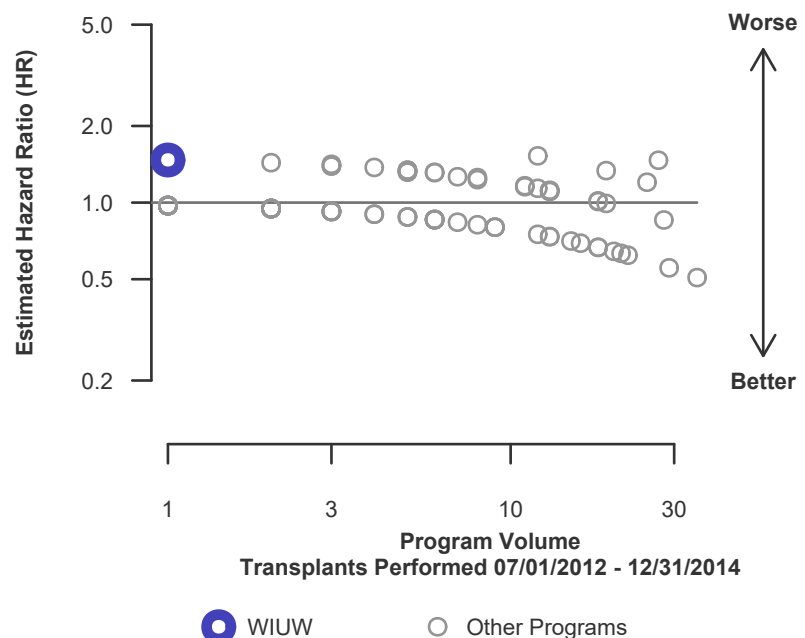


Figure C12L. Pediatric (<18) 3-year living donor graft failure HR program comparison





C. Transplant Information

Table C11. Adult (18+) 1-month patient survival

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	566	36,744
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.53%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.57%	--
Number of observed deaths during the first month after transplant	0	173
Number of expected deaths during the first month after transplant	2.43	--
Estimated hazard ratio*	0.45	--
95% credible interval for the hazard ratio**	[0.05, 1.26]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.05, 1.26], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 55% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 95% reduced risk up to 26% increased risk.

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

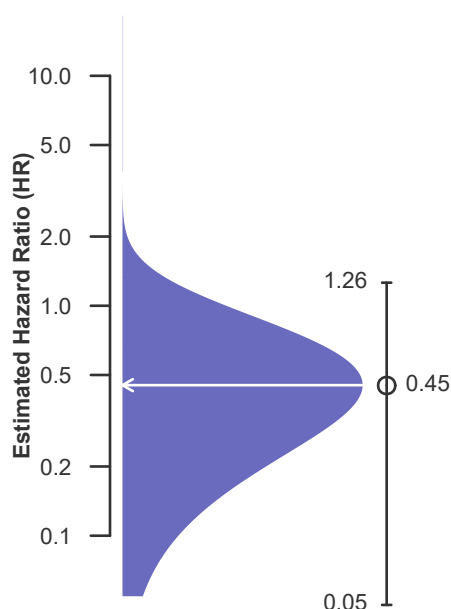
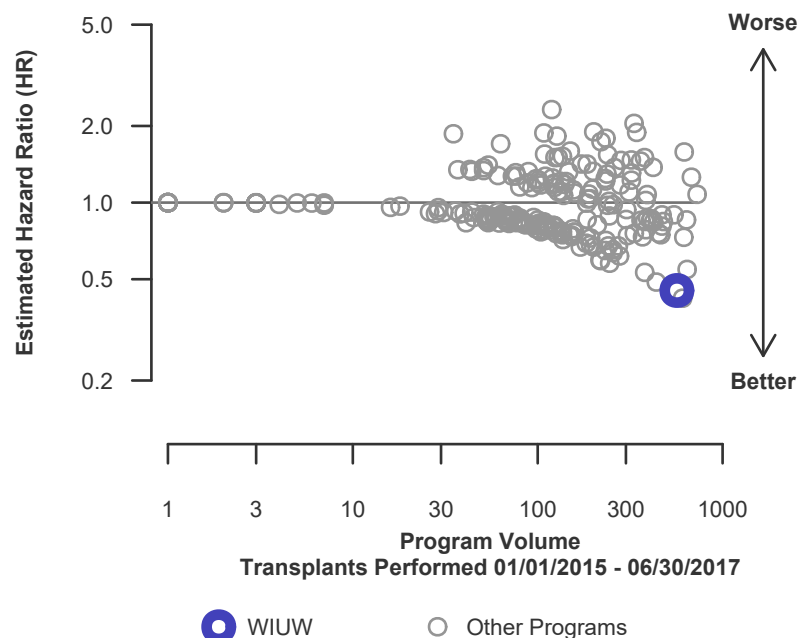


Figure C14. Adult (18+) 1-month patient death HR program comparison





C. Transplant Information

Table C11D. Adult (18+) 1-month patient survival (deceased donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	346	24,669
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.39%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.43%	--
Number of observed deaths during the first month after transplant	0	151
Number of expected deaths during the first month after transplant	1.97	--
Estimated hazard ratio*	0.50	--
95% credible interval for the hazard ratio**	[0.06, 1.40]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.06, 1.40], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 50% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 94% reduced risk up to 40% increased risk.

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

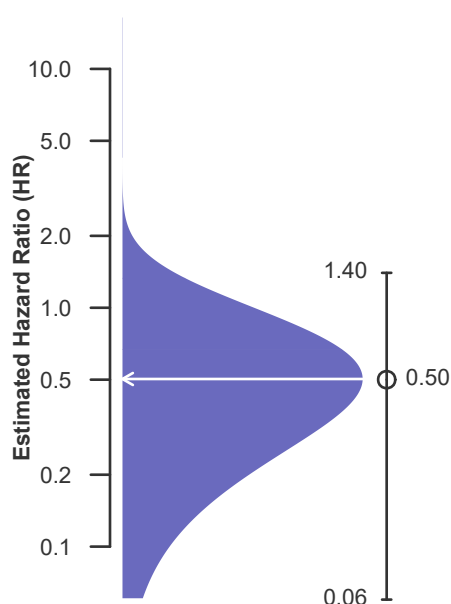
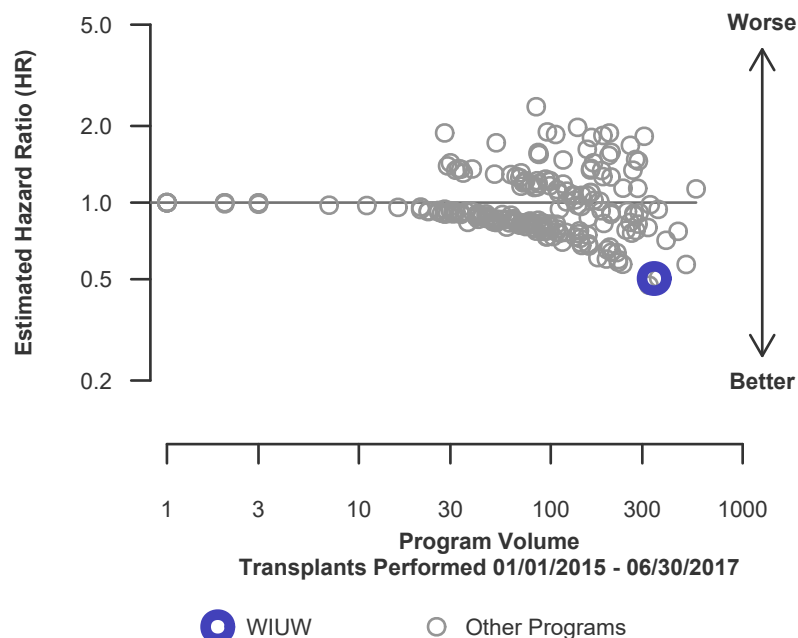


Figure C14D. Adult (18+) 1-month patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C11L. Adult (18+) 1-month patient survival (living donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	220	12,075
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.82%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.79%	--
Number of observed deaths during the first month after transplant	0	22
Number of expected deaths during the first month after transplant	0.45	--
Estimated hazard ratio*	0.81	--
95% credible interval for the hazard ratio**	[0.10, 2.27]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.10, 2.27], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 19% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 90% reduced risk up to 127% increased risk.

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

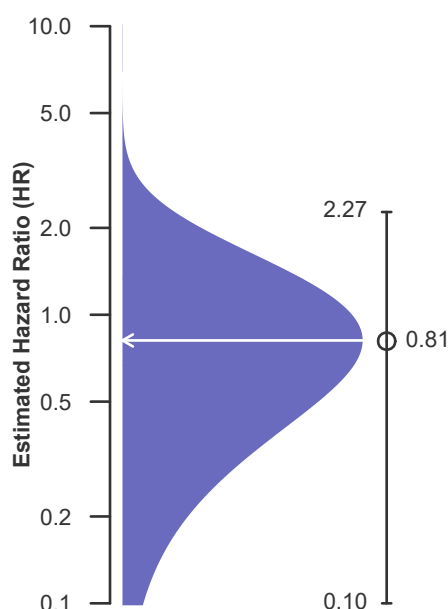
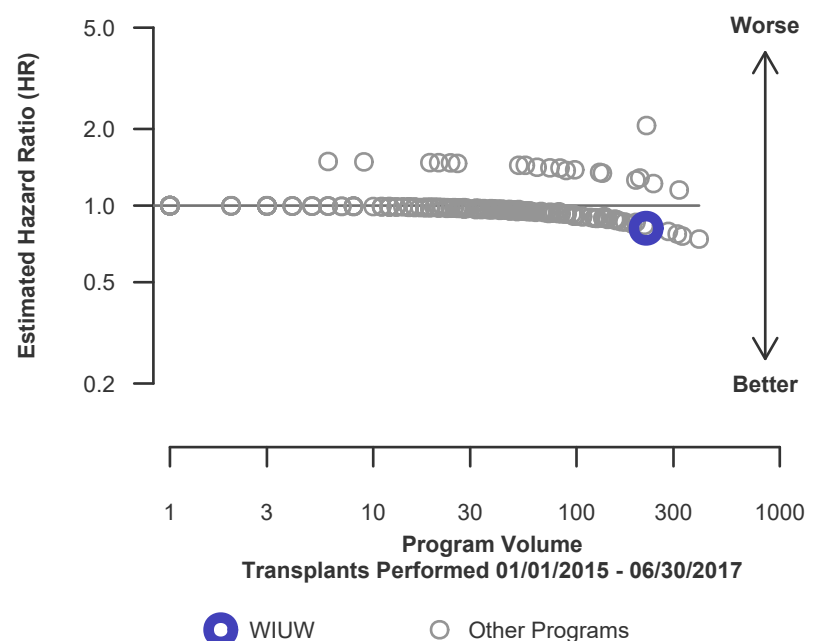


Figure C14L. Adult (18+) 1-month patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C12. Adult (18+) 1-year patient survival

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	566	36,744
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	98.08%	97.50%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	97.74%	--
Number of observed deaths during the first year after transplant	9	840
Number of expected deaths during the first year after transplant	11.86	--
Estimated hazard ratio*	0.79	--
95% credible interval for the hazard ratio**	[0.40, 1.33]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.40, 1.33], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 21% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 60% reduced risk up to 33% increased risk.

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

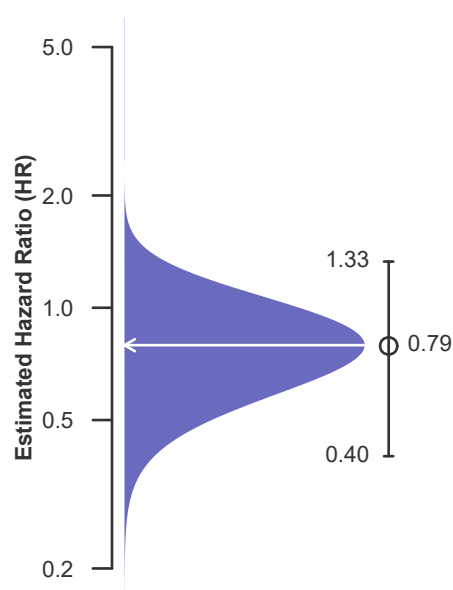
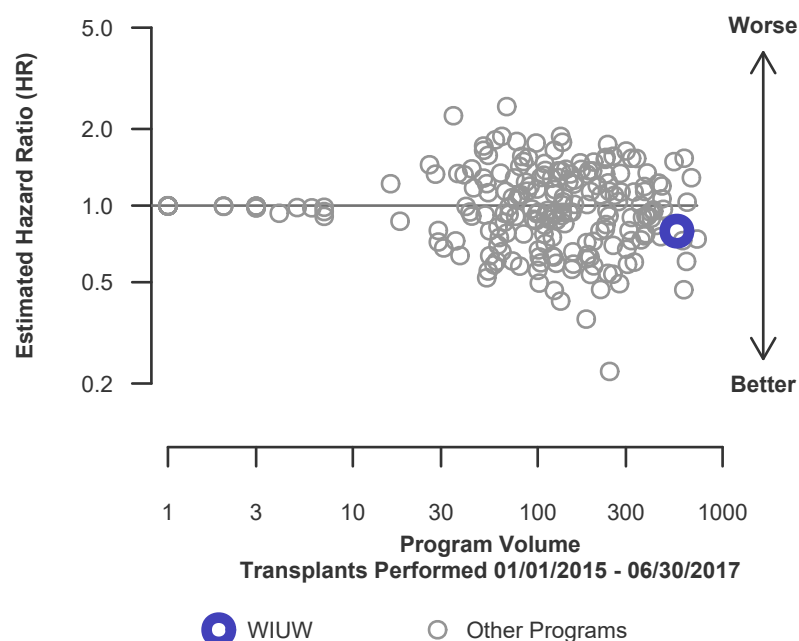


Figure C16. Adult (18+) 1-year patient death HR program comparison





C. Transplant Information

Table C12D. Adult (18+) 1-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	346	24,669
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	97.52%	96.73%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	96.95%	--
Number of observed deaths during the first year after transplant	7	740
Number of expected deaths during the first year after transplant	9.73	--
Estimated hazard ratio*	0.77	--
95% credible interval for the hazard ratio**	[0.35, 1.34]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.35, 1.34], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 23% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 65% reduced risk up to 34% increased risk.

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

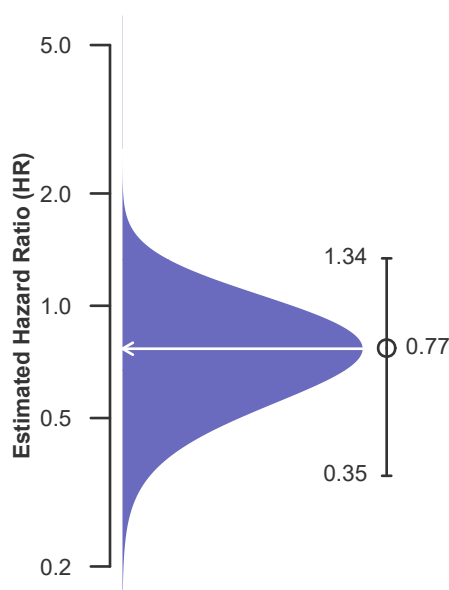
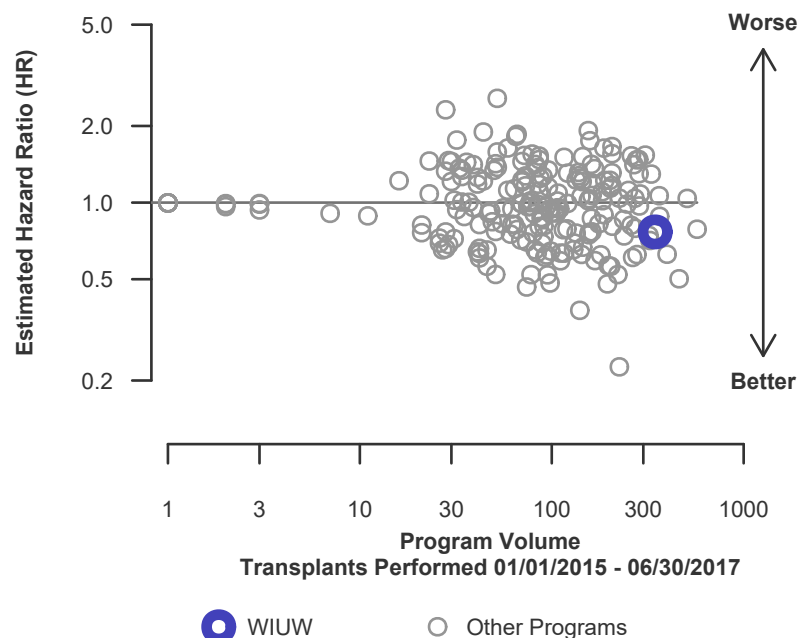


Figure C16D. Adult (18+) 1-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C12L. Adult (18+) 1-year patient survival (living donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	220	12,075
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	98.92%	99.09%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	98.96%	--
Number of observed deaths during the first year after transplant	2	100
Number of expected deaths during the first year after transplant	2.12	--
Estimated hazard ratio*	0.97	--
95% credible interval for the hazard ratio**	[0.26, 2.13]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.26, 2.13], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 3% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 74% reduced risk up to 113% increased risk.

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

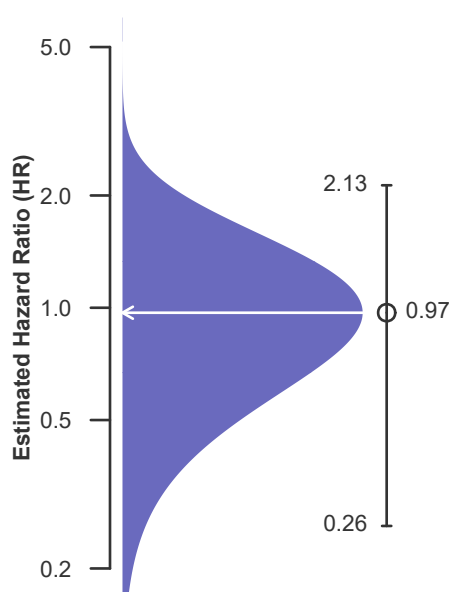
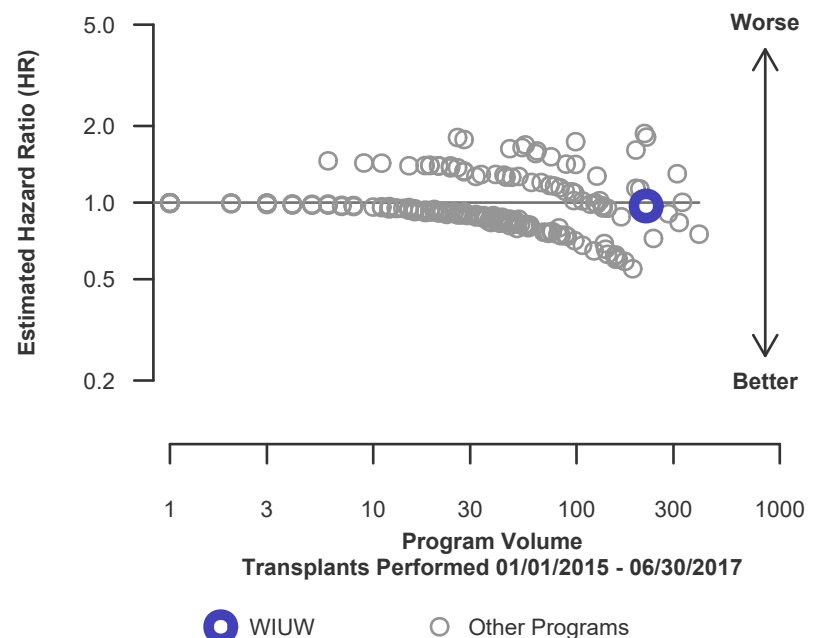


Figure C16L. Adult (18+) 1-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C13. Adult (18+) 3-year patient survival

Single organ transplants performed between 07/01/2012 and 12/31/2014
Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	498	33,948
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	93.78%	93.71%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	93.13%	--
Number of observed deaths during the first 3 years after transplant	31	2,136
Number of expected deaths during the first 3 years after transplant	34.33	--
Estimated hazard ratio*	0.91	--
95% credible interval for the hazard ratio**	[0.63, 1.24]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.63, 1.24], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 9% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 37% reduced risk up to 24% increased risk.

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

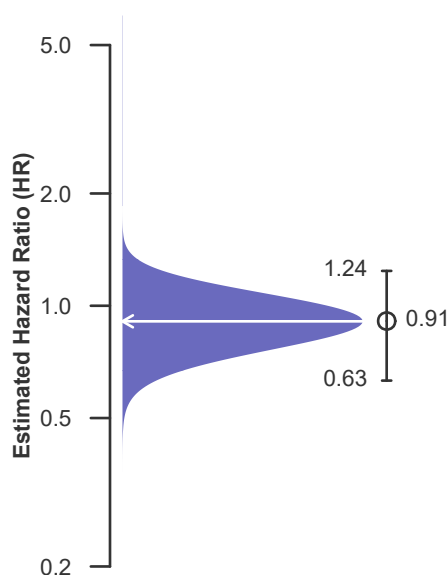
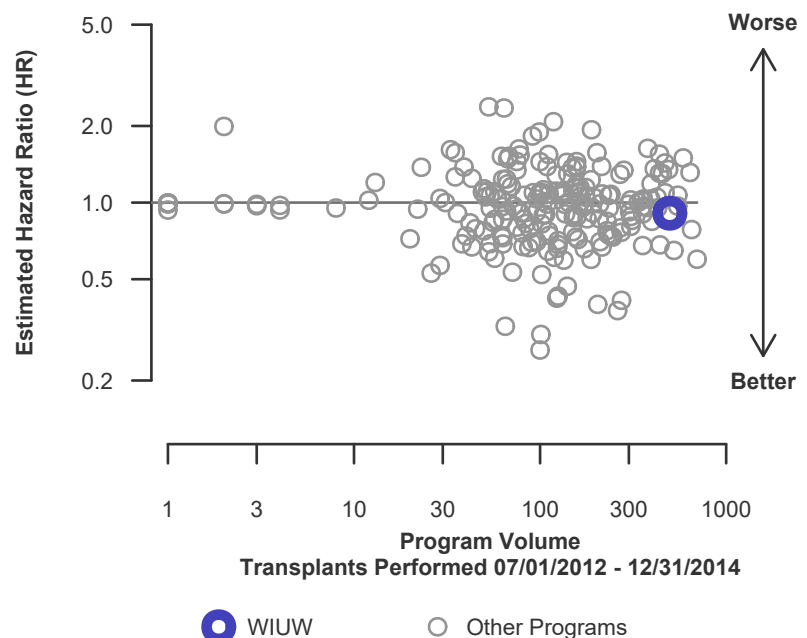


Figure C18. Adult (18+) 3-year patient death HR program comparison





C. Transplant Information

Table C13D. Adult (18+) 3-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2012 and 12/31/2014

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	316	22,012
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	92.41%	92.19%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	92.17%	--
Number of observed deaths during the first 3 years after transplant	24	1,719
Number of expected deaths during the first 3 years after transplant	24.68	--
Estimated hazard ratio*	0.97	--
95% credible interval for the hazard ratio**	[0.64, 1.38]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.64, 1.38], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 3% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 36% reduced risk up to 38% increased risk.

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

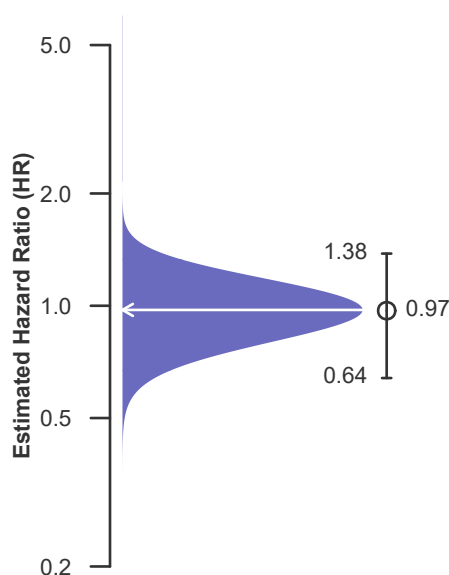
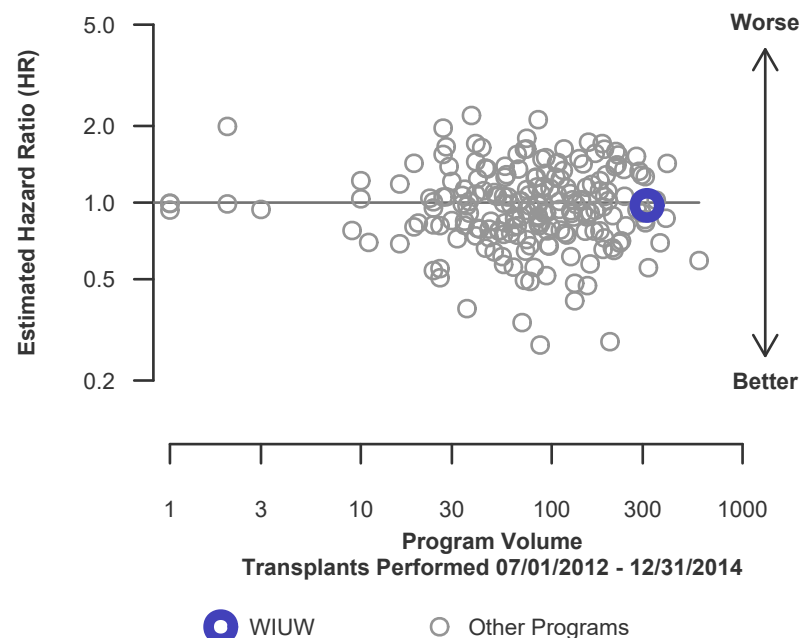


Figure C18D. Adult (18+) 3-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C13L. Adult (18+) 3-year patient survival (living donor graft recipients)

Single organ transplants performed between 07/01/2012 and 12/31/2014

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	182	11,936
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	96.15%	96.51%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	94.80%	--
Number of observed deaths during the first 3 years after transplant	7	417
Number of expected deaths during the first 3 years after transplant	9.65	--
Estimated hazard ratio*	0.77	--
95% credible interval for the hazard ratio**	[0.35, 1.35]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.35, 1.35], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 23% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 65% reduced risk up to 35% increased risk.

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

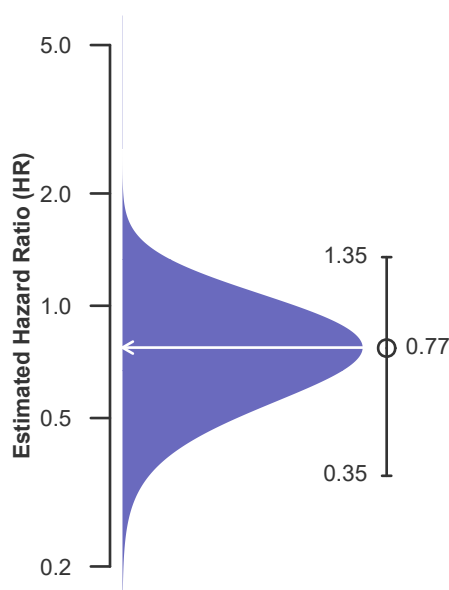
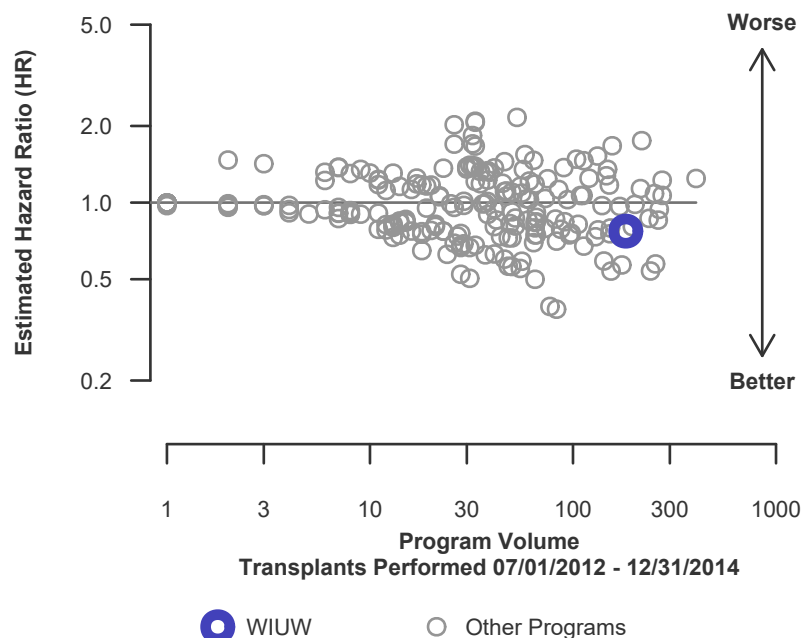


Figure C18L. Adult (18+) 3-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C14. Pediatric (<18) 1-month patient survival

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	18	1,841
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.84%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.83%	--
Number of observed deaths during the first month after transplant	0	3
Number of expected deaths during the first month after transplant	0.03	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.74]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.74], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 174% increased risk.

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

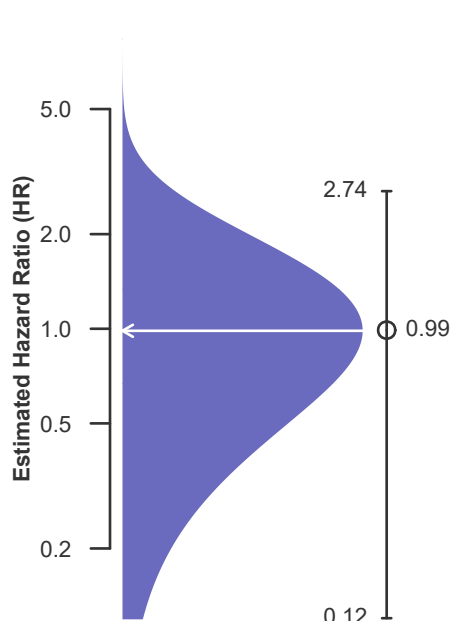
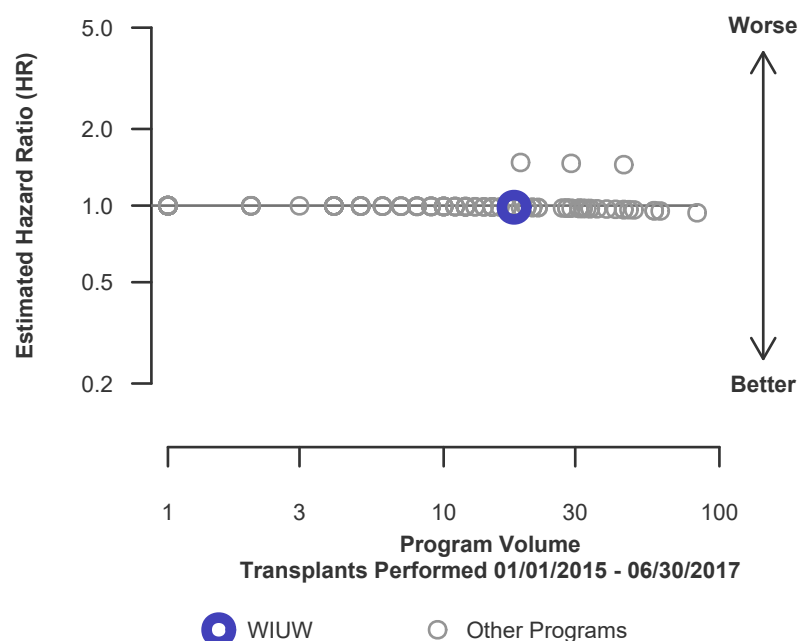


Figure C20. Pediatric (<18) 1-month patient death HR program comparison





C. Transplant Information

Table C14D. Pediatric (<18) 1-month patient survival (deceased donor graft recipients)
Single organ transplants performed between 01/01/2015 and 06/30/2017
Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	3	1,248
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.84%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.84%	--
Number of observed deaths during the first month after transplant	0	2
Number of expected deaths during the first month after transplant	0.00	--
Estimated hazard ratio*	1.00	--
95% credible interval for the hazard ratio**	[0.12, 2.78]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.78], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 0% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 178% increased risk.

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

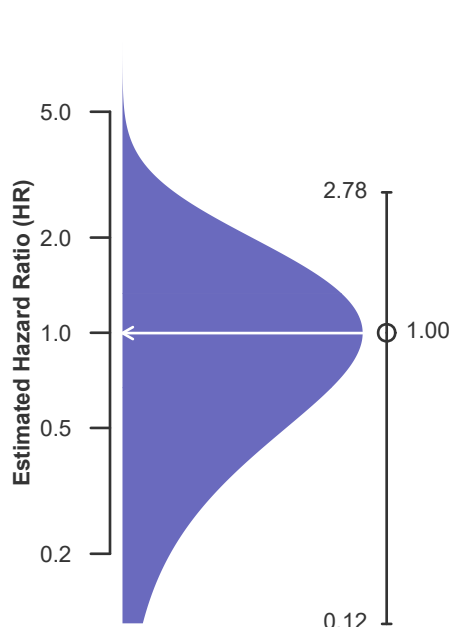
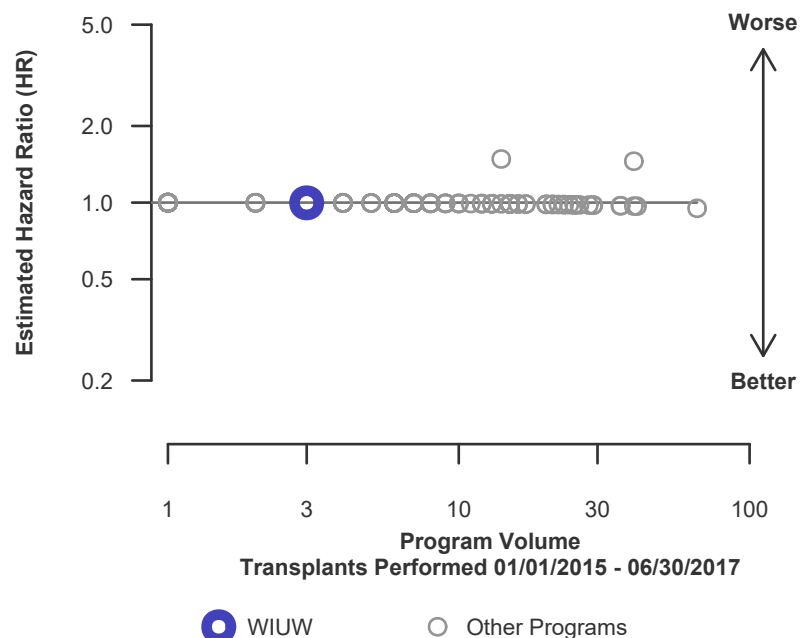


Figure C20D. Pediatric (<18) 1-month patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C14L. Pediatric (<18) 1-month patient survival (living donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	15	593
Estimated probability of surviving at 1 month (unadjusted for patient and donor characteristics)	100.00%	99.83%
Expected probability of surviving at 1 month (adjusted for patient and donor characteristics)	99.83%	--
Number of observed deaths during the first month after transplant	0	1
Number of expected deaths during the first month after transplant	0.03	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.75]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.75], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 175% increased risk.

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

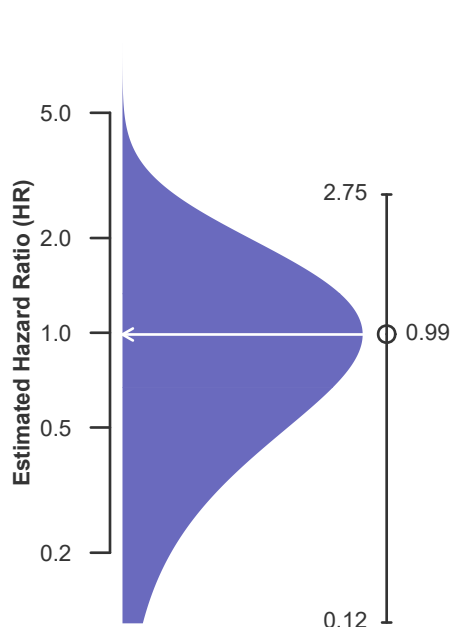
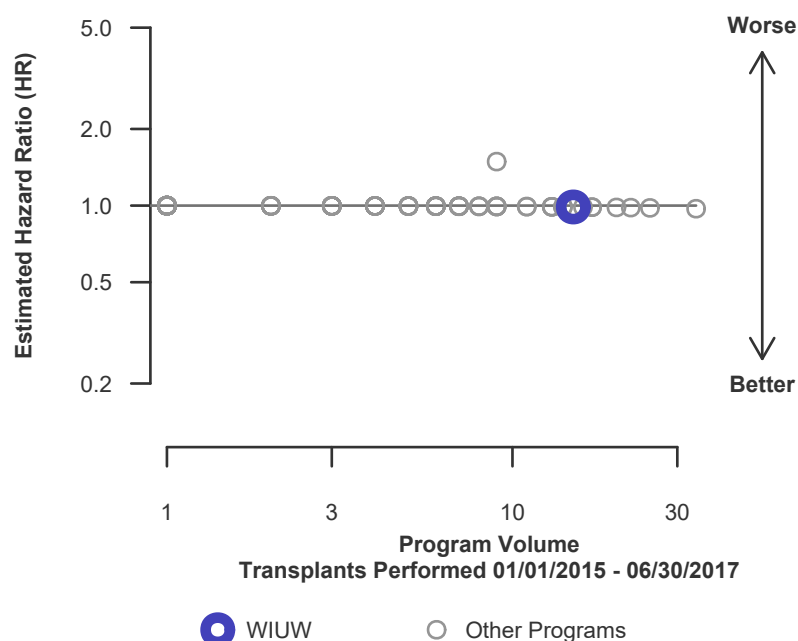


Figure C20L. Pediatric (<18) 1-month patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C15. Pediatric (<18) 1-year patient survival

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	18	1,841
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.78%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.82%	--
Number of observed deaths during the first year after transplant	0	4
Number of expected deaths during the first year after transplant	0.03	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.74]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.74], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 2% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 174% increased risk.

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

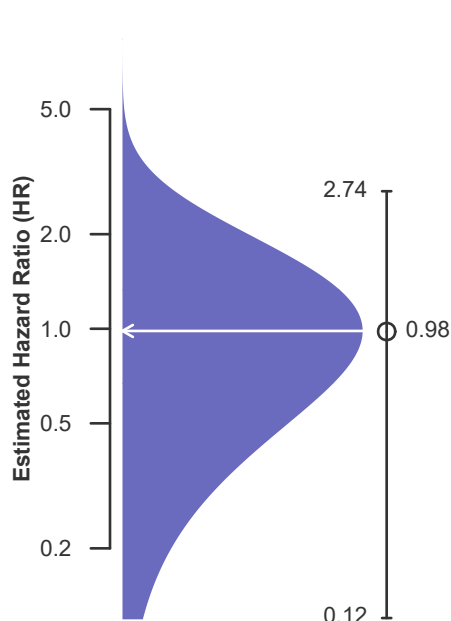
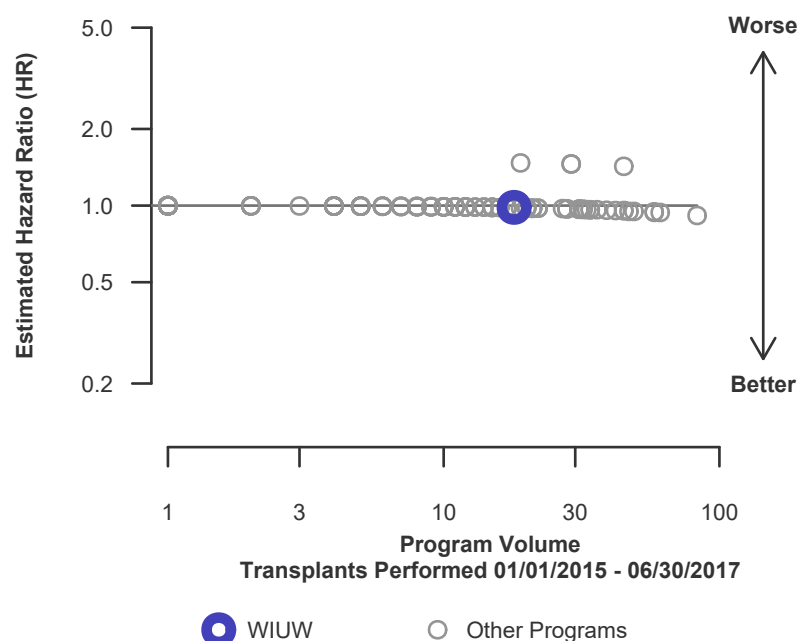


Figure C22. Pediatric (<18) 1-year patient death HR program comparison





C. Transplant Information

Table C15D. Pediatric (<18) 1-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	3	1,248
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.76%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.76%	--
Number of observed deaths during the first year after transplant	0	3
Number of expected deaths during the first year after transplant	0.01	--
Estimated hazard ratio*	1.00	--
95% credible interval for the hazard ratio**	[0.12, 2.78]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.78], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 0% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 178% increased risk.

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

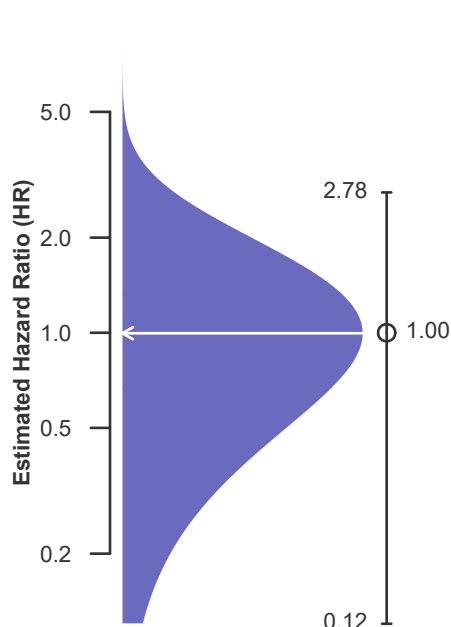
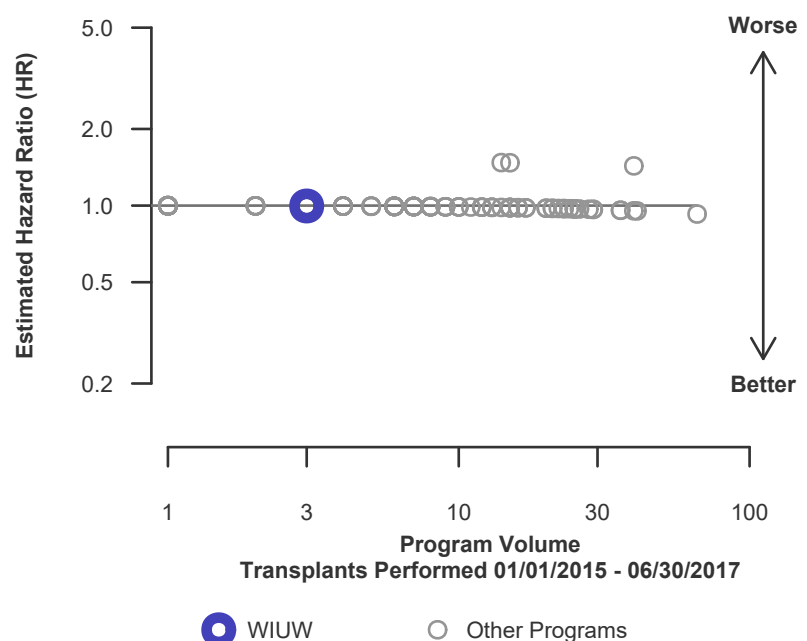


Figure C22D. Pediatric (<18) 1-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C15L. Pediatric (<18) 1-year patient survival (living donor graft recipients)

Single organ transplants performed between 01/01/2015 and 06/30/2017

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	15	593
Estimated probability of surviving at 1 year (unadjusted for patient and donor characteristics)	100.00%	99.83%
Expected probability of surviving at 1 year (adjusted for patient and donor characteristics)	99.83%	--
Number of observed deaths during the first year after transplant	0	1
Number of expected deaths during the first year after transplant	0.03	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.75]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.75], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 175% increased risk.

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

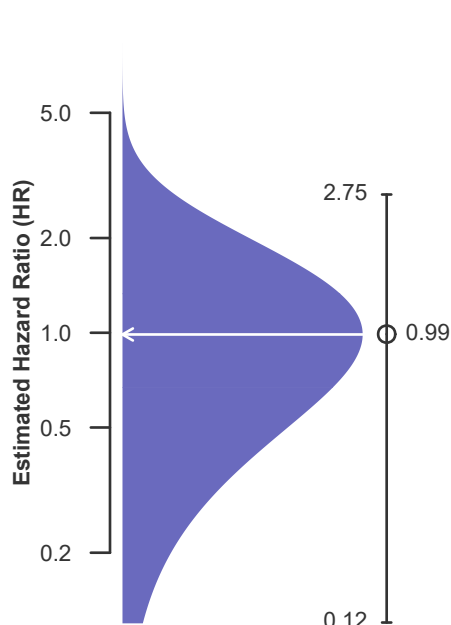
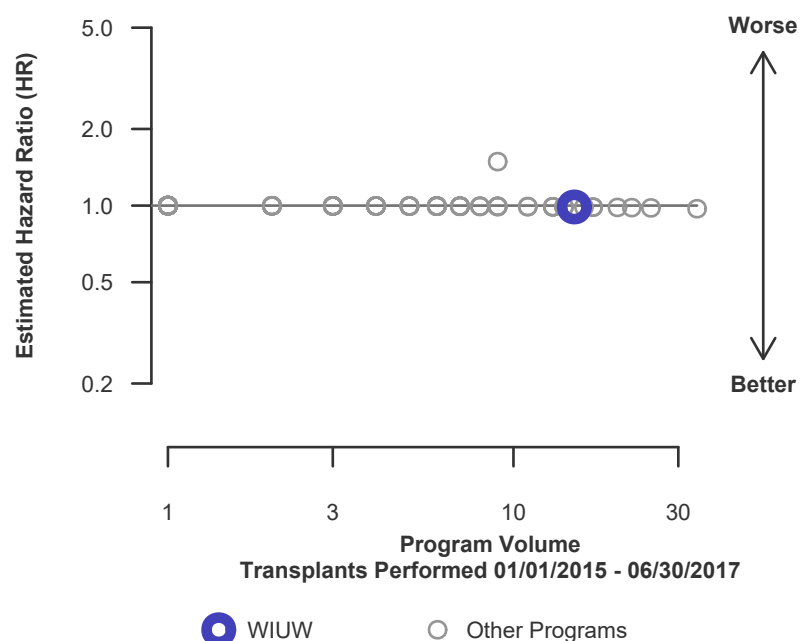


Figure C22L. Pediatric (<18) 1-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C16. Pediatric (<18) 3-year patient survival

Single organ transplants performed between 07/01/2012 and 12/31/2014

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	3	1,833
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	98.47%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	98.47%	--
Number of observed deaths during the first 3 years after transplant	0	28
Number of expected deaths during the first 3 years after transplant	0.05	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.72]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.72], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 2% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 172% increased risk.

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

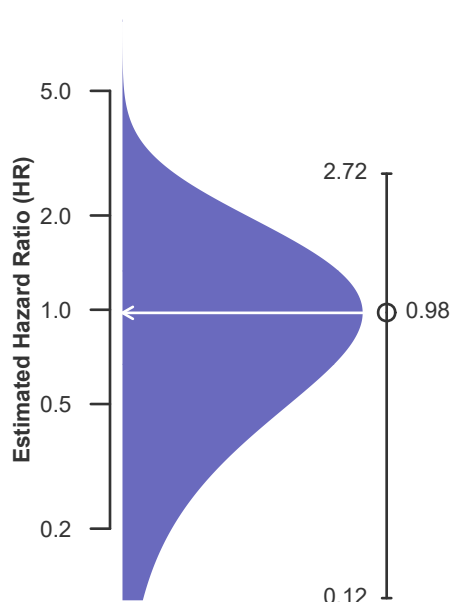
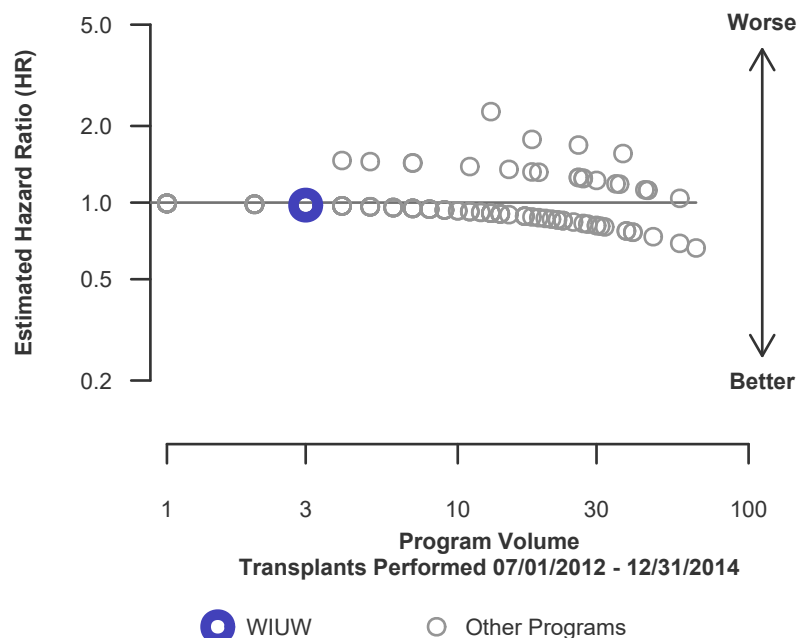


Figure C24. Pediatric (<18) 3-year patient death HR program comparison





C. Transplant Information

Table C16D. Pediatric (<18) 3-year patient survival (deceased donor graft recipients)

Single organ transplants performed between 07/01/2012 and 12/31/2014

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	2	1,178
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	98.47%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	98.47%	--
Number of observed deaths during the first 3 years after transplant	0	18
Number of expected deaths during the first 3 years after transplant	0.03	--
Estimated hazard ratio*	0.98	--
95% credible interval for the hazard ratio**	[0.12, 2.74]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.74], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 2% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 174% increased risk.

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

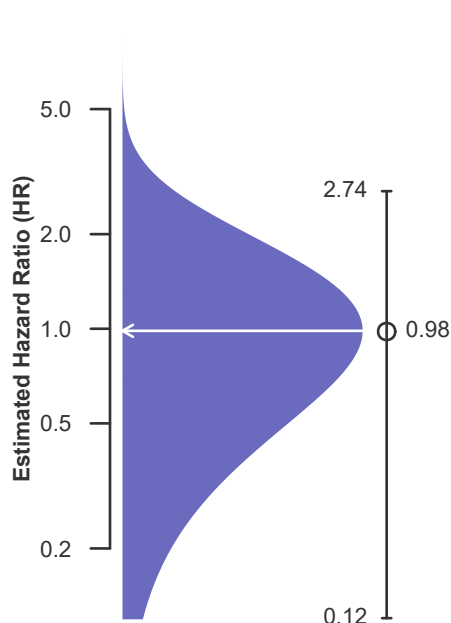
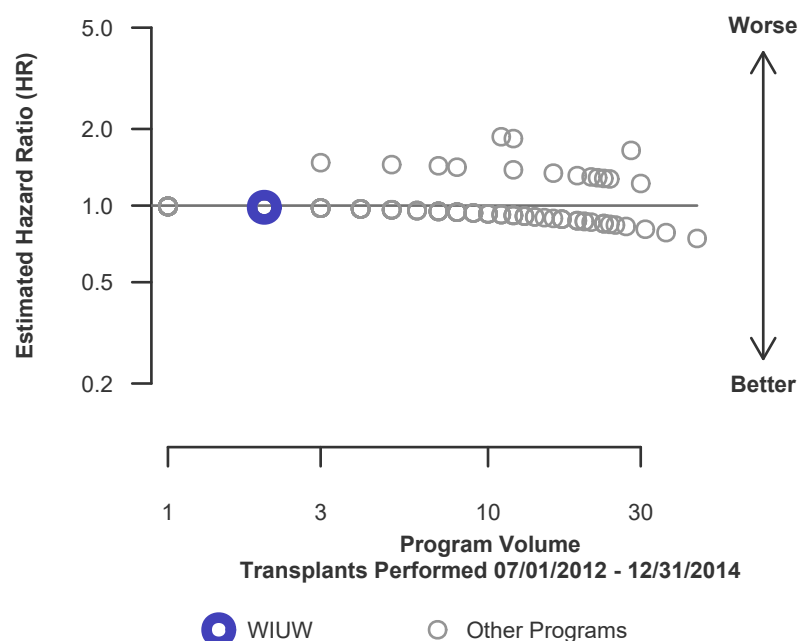


Figure C24D. Pediatric (<18) 3-year patient death HR program comparison (deceased donor grafts)





C. Transplant Information

Table C16L. Pediatric (<18) 3-year patient survival (living donor graft recipients)

Single organ transplants performed between 07/01/2012 and 12/31/2014

Retransplants excluded

	WIUW	U.S.
Number of transplants evaluated	1	655
Estimated probability of surviving at 3 years (unadjusted for patient and donor characteristics)	100.00%	98.47%
Expected probability of surviving at 3 years (adjusted for patient and donor characteristics)	98.47%	--
Number of observed deaths during the first 3 years after transplant	0	10
Number of expected deaths during the first 3 years after transplant	0.02	--
Estimated hazard ratio*	0.99	--
95% credible interval for the hazard ratio**	[0.12, 2.76]	--

* The hazard ratio provides an estimate of how University of Wisconsin Hospital and Clinics (WIUW)'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 WIUW's patient death rate were precisely the expected rate, the estimated hazard ratio would be 1.0.

** The 95% credible interval, [0.12, 2.76], indicates the location of WIUW's true hazard ratio with 95% probability. The best estimate is 1% lower risk of patient death compared to an average program, but WIUW's performance could plausibly range from 88% reduced risk up to 176% increased risk.

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

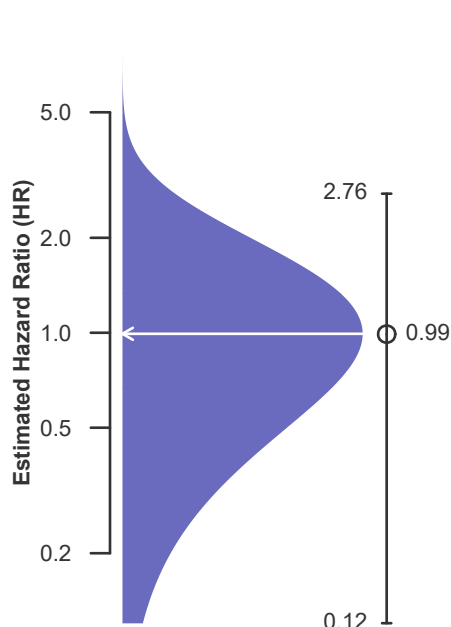
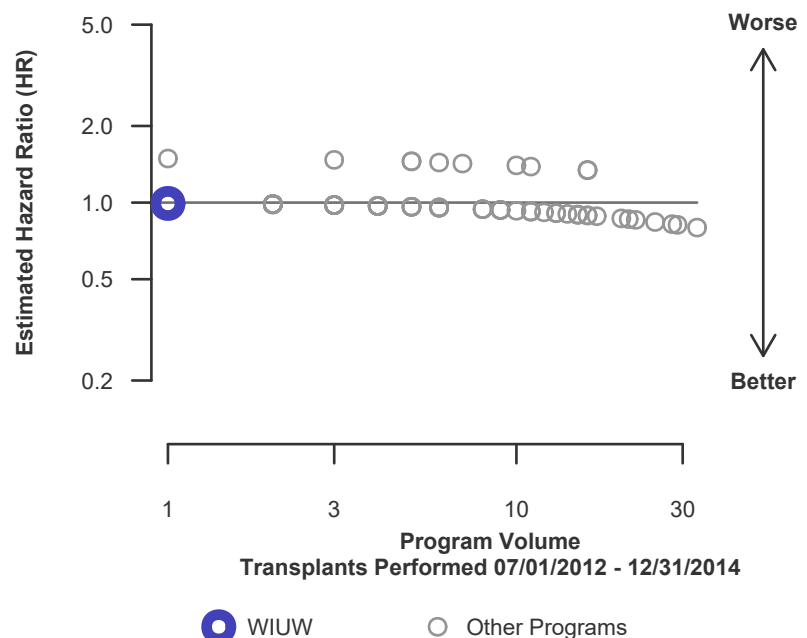


Figure C24L. Pediatric (<18) 3-year patient death HR program comparison (living donor grafts)





C. Transplant Information

Table C17. Multi-organ transplant graft survival: 01/01/2015 - 06/30/2017

Adult (18+) Transplants

Transplant Type	First-Year Outcomes					
	Transplants Performed		Kidney Graft Failures		Estimated Kidney Graft Survival	
	WIUW-TX1	USA	WIUW-TX1	USA	WIUW-TX1	USA
Kidney-Liver	15	1,718	4	189	73.3%	88.4%
Kidney-Pancreas	82	1,879	2	67	97.3%	96.2%

Pediatric (<18) Transplants

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

Table C18. Multi-organ transplant patient survival: 01/01/2015 - 06/30/2017

Adult (18+) Transplants

Transplant Type	First-Year Outcomes					
	Transplants Performed		Patient Deaths		Estimated Patient Survival	
	WIUW-TX1	USA	WIUW-TX1	USA	WIUW-TX1	USA
Kidney-Liver	15	1,718	4	148	73.3%	90.8%
Kidney-Pancreas	82	1,879	2	42	97.3%	97.6%

Pediatric (<18) Transplants

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



D. Living Donor Information

Table D1. Living donor summary: 01/01/2015 - 12/31/2017

Living Donor Follow-Up	This Center			United States		
	01/2015- 12/2015	01/2016- 12/2016	01/2017- 06/2017	01/2015- 12/2015	01/2016- 12/2016	01/2017- 06/2017
Number of Living Donors	118	110	46	5,631	5,627	2,810
6-Month Follow-Up						
Donors due for follow-up	118	110	46	5,628	5,625	2,750
Timely clinical data	113 95.8%	104 94.5%	42 91.3%	4,709 83.7%	4,974 88.4%	2,435 88.5%
Timely lab data	109 92.4%	100 90.9%	39 84.8%	4,453 79.1%	4,752 84.5%	2,323 84.5%
12-Month Follow-Up						
Donors due for follow-up	118	109		5,625	5,602	
Timely clinical data	108 91.5%	97 89.0%		4,458 79.3%	4,711 84.1%	
Timely lab data	97 82.2%	90 82.6%		4,083 72.6%	4,443 79.3%	
24-Month Follow-Up						
Donors due for follow-up	117			5,605		
Timely clinical data	93 79.5%			4,268 76.1%		
Timely lab data	90 76.9%			3,887 69.3%		

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