Eliminate Use of DSA and Region from Pancreas Allocation
1 Year Post-Implementation Monitoring Report

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</tbody>
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Executive Summary

This report presents data describing the U.S. organ transplantation system before and after the removal of Donation Service Area (DSA) and OPTN region from deceased donor kidney-pancreas (KP) and pancreas (PA) allocation. The analyses include data on waiting list registrations, transplant recipients, and deceased donors submitted to the OPTN between March 15, 2020 and March 14, 2022. Data are as of June 10, 2022 and are subject to change based on future submission or correction.

Equity in Access to Transplant

Kidney-pancreas (KP) and pancreas (PA) transplant volumes were similar in the 1 year pre- vs post-policy (KP: 820 vs 816; PA: 134 vs 138), despite kidney-pancreas simulated allocation model (KPSAM) projections of an increase in KP and a corresponding decrease in PA transplants. The overall KP transplant rate decreased slightly post-policy (102 vs 100 transplants per 100 active patient years) (Figure 1 & Table 1), while the overall PA transplant rate increased (63 vs 66 transplants per 100 active patient years) (Figure 19 & Table 17); these changes were not statistically significant. There were no statistically significant differences in transplant rates by candidate age group, gender, race/ethnicity, CPRA at listing, or blood type after policy implementation for KP (Figures 2-6 & Tables 2-6) or PA (Figures 20-24 & Tables 18-22).

Geography

As expected, more transplants occurred at hospitals outside the recovering OPO’s DSA after implementation (KP: 33% vs 58%; PA: 59% vs 68%) (Figure 9 & Table 9; Figure 27 & Table 25), but the majority stayed within 250 NM of the donor hospital (KP: 80% vs 85%; PA: 57% vs 63%) (Figure 7 & Table 7; Figure 25 & Table 23). Changes in transplant volume varied across OPTN region (Figure 10 & Table 10; Figure 28 & Table 26). Median distance from donor hospital to transplant hospital increased from 79 NM to 110 NM for KP (Figure 8 & Table 8), while median distance decreased from 174 NM to 138 NM for PA (Figure 26 & Table 24). Median pancreas preservation time increased from 9.2 to 10.5 hours for KP (Figure 15 & Table 12); there was no change in median preservation time for PA (8.1 hours) (Figure 29 & Table 30).

Post-Transplant Outcomes

There were no statistically significant differences in the probability of patient, kidney graft, or pancreas graft survival for KP recipients at six months post-transplant after policy implementation (Figures 16-18 & Tables 13-15). Similarly, there were no statistically significant differences in the probability of patient or pancreas graft survival for PA recipients at six months post-transplant (Figures 30-31 & Tables 31-32).

Efficient Utilization and Allocation of Organs

The overall pancreas discard rate increased from 22.7% to 26.5% after policy implementation (Figure 32 & Table 34). The overall offer rate from pancreas/kidney-pancreas match runs increased from approximately 12 to 14 offers per active patient year (Figure 33 & Table 36). The overall offer acceptance rate decreased from 79 to 68 acceptances per 1000 offers (Table 36 & Figure 34). The median sequence number of final acceptor increased from 3 (IQR: 1-9) to 5 (IQR: 2-15) after implementation (Figure 37 & Table 39).
Background

The OPTN implemented several policy changes on March 15, 2021 in order to remove DSA and region from pancreas allocation. The primary policy replaced DSA and region with a 250 nautical mile (NM) fixed circle and added proximity points to a candidate’s total allocation score. Since the DSA was no longer used to allocate pancreata, the policy for facilitated pancreas allocation was also changed.

Two supplemental policies went into effect the same day. The first policy change replaced the donor hospital with Seattle-Tacoma (Sea-Tac) International Airport as the center of the 250 NM circle used in the allocation of pancreas recovered in Alaska. This policy change aimed to maximize the utilization of deceased donor organs procured in the state of Alaska and avoid unnecessary delays in placement.

The second policy change sought to provide consistency with the Board-approved changes to remove DSA and region from kidney and pancreas allocation policies. These changes were intended to promote efficiency and organ utilization by providing options for the host OPO when the kidney, pancreas or kidney-pancreas is released by the originally accepting transplant program. The specific procedure is dependent on the organ in need of reallocation.

This report describes the impact of these policy changes in the 1 year since implementation.

Strategic Plan Goal

Increase equity in access to transplant.

Committee Request

These policies will be formally evaluated approximately 3 months, 6 months, 1 year, and 2 years post-implementation. The following metrics, and any subsequently requested by the Committee, will be evaluated as data become available. Appropriate lags will be applied, per typical OPTN conventions, to account for time delay in institutions reporting data to the OPTN Computer System and compared to an appropriate pre-policy cohort to assess performance before and after implementation of this policy.

Waiting List

1. Total kidney-pancreas and pancreas registrations on the waiting list (snapshot by month)
2. Kidney-pancreas and pancreas registrations added to the list, overall and by age, gender, ethnicity, cPRA, blood type, and insurance status at time of listing
3. % of candidates in active status
4. Waitlist mortality per 100 patient years, overall and by candidate age, gender, ethnicity, cPRA, blood type

Transplant

1. Donor, recipient and transplant characteristics: N and % of transplants by recipient age, ethnicity, waiting time (days on the waiting list), ABO, cPRA, HLA-ABDR mismatch level, diagnosis, DCD, inside/outside fixed circle, preservation time and cold ischemic time (CIT).
   - Distribution of kidney-pancreas and pancreas travel distance (NM), overall and by inside/outside fixed circle
2. Change in access by location: N and % of transplants by share type (local/regional/national), OPTN region, Donation Service Area (DSA), transplant hospital, state
3. Deceased donor transplants per 100 patient years by recipient age, ethnicity, ABO, cPRA, HLA-ABDR mismatch level, and DSA
4. Variance in deceased donor transplant rate across DSA
5. Rates of receiving kidney-pancreas and pancreas offers per 100 patient years by recipient age, ethnicity, ABO, cPRA, and HLA-ABDR mismatch level
Utilization and Efficiency of Allocation

1. Number pancreas donors recovered for transplantation
2. Number and percent of pancreas recovered but not utilized (discarded), overall
3. Number and percent of pancreas discarded by discard reason
4. Number and percent pancreas with a final acceptance
5. Offer acceptance per 100 patient years by recipient age, ethnicity, waiting time (days on the waiting list), ABO, cPRA, and inside/outside fixed circle among organs with a final acceptance.
6. Distribution of sequence number of final acceptor
7. Distribution of time between electronic offer and cross-clamp
8. Number and percent by cPRA, of kidney-pancreas and pancreas offers refused due to a positive cross-match

Outcomes

- One and two year post-transplant graft and patient survival rates, overall and stratified by recipient age, gender, ethnicity, cPRA, blood type, HLA-ABDR mismatch, CIT and preservation time.

Facilitated Pancreas Allocation

1. N and % of programs that qualify for facilitated pancreas allocation
2. Frequency of facilitated allocation use by OPOs
3. Transplant volumes that placed with facilitated pancreas allocation

Alaska

1. N and % of kidney and pancreas donors recovered in Alaska
2. N and % of kidneys and pancreata recovered in Alaska
3. N and % of kidney and pancreas transplants performed from donors recovered in Alaska
4. N and % of kidneys and pancreata transplanted inside/outside fixed circle of Sea-Tac.
5. Distribution of kidney and pancreas travel distance (NM) for transplants performed from donors recovered in Alaska

Released Organs

1. Overall and by OPTN Region (and KDPI if KP)
   - N and % of organs with a final acceptance
   - N and % of organs for which an acceptance came from an import match run
2. For accepted organs (overall and stratified by OPTN region and accepting patient cPRA)
   - Transplanted with the accepting candidate
   - Transplanted with a different candidate at the accepting center
   - Transplanted at a different center
   - Discarded

Data and Methods

Data Sources

This analysis is based on OPTN data as of June 10, 2022. Candidate information were submitted through the OPTN Waiting List and on the Transplant Candidate Registration (TCR). Recipient and transplant data were submitted on the Transplant Recipient Registration (TRR) and Transplant Recipient Follow-up (TRF). Donor data were submitted in the OPTN Donor Data and Matching System and on the Deceased Donor Registration (DDR). Match run data analyzed came from the OPTN Donor Data and Matching System. Data are subject to change based on future submission or correction.
Cohort

All kidney-pancreas and pancreas alone registrations listed, ever waiting, or transplanted between March 15, 2020 and March 14, 2022 were included in this analysis, as were all deceased kidney-pancreas or pancreas donors recovered during this time. These dates were chosen to ensure policy eras were of uniform length.

Policy eras were defined as:
- Pre-Policy: March 15, 2020 to March 14, 2021
- Post-Policy: March 15, 2021 to March 14, 2022

Methods

Waiting list mortality rates were defined as the number of deaths on the waiting list divided by the total amount of time on the waiting list (active or inactive) for registrations ever waiting between March 15, 2020 and March 14, 2022. These results are presented as deaths per 100 patient years. Deaths were defined as:
- Removals from the waiting list due to death
- Death within 14 days of waiting list removal as reported to the OPTN or identified via verified external death data sources

Pancreas and kidney-pancreas transplant rates were defined as the number of waiting list removals due to deceased donor pancreas or kidney-pancreas transplant, respectively, divided by the total amount of time on the waiting list (active) for registrations ever waiting during the study period. These results are presented as transplants per 100 active patient years.

Discard rate was defined as the number of deceased donor pancreata recovered for the purpose of transplant, but not transplanted, divided by the total number of pancreata recovered for transplant.

To determine the disposition of pancreata from pancreas matches with a final acceptance, we identified the first pancreas acceptance for each donor’s pancreas. To determine the disposition of kidneys and pancreata from kidney-pancreas matches with a final acceptance, we identified the first kidney-pancreas or pancreas acceptance for each donor’s pancreas and left or right kidney. The first acceptance was constrained to match runs submitted during the cohort. These acceptances were then cross-referenced against the reported transplants from the donor ID. Each accepted kidney and pancreas were then classified as being transplanted with the initially accepting patient, a different patient at the accepting center, a patient at a different center, discarded, or not recovered.

Offer rates were defined as the number of offers from pancreas/kidney-pancreas match runs divided by the total amount of time in active status on the waiting list for pancreas or kidney-pancreas registrations ever waiting during the study period. These results are presented as offers per active patient year. Offers include both pancreas alone and kidney-pancreas offers. This analysis only includes match runs with a final acceptance, and does not include offers after the final acceptance.

Acceptance rates were defined as the number of offers with a final acceptance divided by the total number of offers from pancreas/kidney-pancreas match runs. These results are presented as acceptances per 1000 offers.

Unadjusted post-transplant patient and graft survival were examined using Kaplan-Meier methodology. The cohort for survival analyses was restricted to transplant recipients with at least 6 months of follow-up time (transplants performed on or before September 30, 2021).

Note on the COVID-19 Pandemic

The World Health Organization (WHO) declared COVID-19 a pandemic on March 11, 2020 and a national state of emergency was declared in the U.S. on March 13, 2020. All of the data cited in this report were reported to the OPTN after the declaration of this national emergency. Given the impact that has been seen on the U.S. (see data trends at unos.org/covid), the true impact of this policy change may be challenging to determine.
Results

Kidney-Pancreas

This section describes key metrics for monitoring the removal of DSA and OPTN region from KP allocation. Additional KP waiting list, transplant, and post-transplant outcomes data may be found in the Appendix.

The overall KP transplant rate decreased slightly post-policy (102 vs 100 transplants per 100 active patient years); this decrease was not statistically significant (Figure 1 and Table 1). There were no statistically significant differences in transplant rates by candidate age group, gender, race/ethnicity, CPRA at listing, or blood type after policy implementation (Figures 2-6 & Tables 2-6). Changes in transplant volume varied across OPTN region (Figure 10 & Table 10).

As expected, more KP transplants occurred at hospitals outside the recovering OPO's DSA after implementation (33% vs 58%) (Figure 9 & Table 9), but the majority stayed within 250 NM of the donor hospital (80% vs 85%) (Figure 7 & Table 7). Median distance from donor hospital to transplant hospital increased from 79 NM to 110 NM (Figure 8 & Table 8). Median kidney cold ischemic time increased from 9.2 to 10.4 hours (Figure 14 & Table 11) and median pancreas preservation time (time between procurement cross-clamp and recipient organ reperfusion) increased from 9.2 to 10.5 hours (Figure 15 & Table 12).

There were no statistically significant differences in the probability of patient, kidney graft, or pancreas graft survival for KP recipients at 6 months post-transplant after policy implementation (Figures 16-18 & Tables 13-15).
Equity in Access to Transplant

Figure 1 and Table 1 show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era. The overall deceased donor kidney-pancreas transplant rate decreased slightly post-policy from 102 to 100 transplants per 100 active patient years. This decrease was not statistically significant.

Figure 1: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era

![Graph showing deceased donor transplants per 100 active patient years by policy era.

Table 1: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>2072</td>
<td>822</td>
<td>101.50</td>
<td>(94.68, 108.68)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>2137</td>
<td>821</td>
<td>100.16</td>
<td>(93.42, 107.25)</td>
</tr>
</tbody>
</table>
Figure 2 and Table 2 show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and age at listing. The deceased donor kidney-pancreas transplant rate increased post-policy for the 50-64 age group, while the transplant rates for the 0-17, 18-34, 35-49, and 65+ age groups decreased. These changes were not statistically significant.

Figure 2: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

Table 2: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>Pre-Policy</td>
<td>7</td>
<td>4</td>
<td>143.00 (38.96, 366.13)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>1</td>
<td>38.79 (0.98, 216.12)</td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>557</td>
<td>214</td>
<td>102.75 (89.45, 117.48)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>537</td>
<td>207</td>
<td>97.56 (84.72, 111.79)</td>
<td></td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>1121</td>
<td>426</td>
<td>96.31 (87.38, 105.91)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1137</td>
<td>402</td>
<td>92.36 (83.55, 101.85)</td>
<td></td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>439</td>
<td>174</td>
<td>101.03 (86.57, 117.2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>495</td>
<td>210</td>
<td>116.66 (101.41, 133.55)</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>4</td>
<td>4</td>
<td>364.09 (99.2, 932.21)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>1</td>
<td>46.26 (1.17, 257.75)</td>
<td></td>
</tr>
</tbody>
</table>
**Figure 3** and **Table 3** show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and gender. The transplant rate for female registrations decreased post-policy from 91 to 87 transplants per 100 active patient years, while the transplant rate for male registrations increased from 110 to 111 transplants per 100 active patient years. These changes were not statistically significant.

**Figure 3:** Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era and Gender

**Table 3:** Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>899</td>
<td>331</td>
<td>90.92</td>
<td>(81.38, 101.26)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>908</td>
<td>323</td>
<td>86.53</td>
<td>(77.35, 96.5)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>1174</td>
<td>491</td>
<td>110.02</td>
<td>(100.5, 120.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1230</td>
<td>498</td>
<td>111.44</td>
<td>(101.87, 121.67)</td>
</tr>
</tbody>
</table>
Figure 4 and Table 4 show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and candidate race/ethnicity. Transplant rates increased for candidates of Black, Non-Hispanic; Asian, Non-Hispanic; and Other, Non-Hispanic race/ethnicity while transplant rates decreased for White, Non-Hispanic and Hispanic/Latino candidates. These changes were not statistically significant.

Figure 4: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

Table 4: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>987</td>
<td>388</td>
<td>99.73 (90.05, 110.16)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>970</td>
<td>348</td>
<td>91.98 (82.57, 102.17)</td>
<td></td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>641</td>
<td>257</td>
<td>102.21 (90.09, 115.5)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>666</td>
<td>263</td>
<td>104.23 (92.01, 117.62)</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>322</td>
<td>135</td>
<td>111.65 (93.61, 132.15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>373</td>
<td>151</td>
<td>110.64 (93.7, 129.76)</td>
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</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>91</td>
<td>34</td>
<td>100.77 (69.79, 140.82)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>94</td>
<td>45</td>
<td>126.86 (92.54, 169.75)</td>
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</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>37</td>
<td>8</td>
<td>48.57 (20.97, 95.7)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>38</td>
<td>14</td>
<td>78.62 (42.98, 131.9)</td>
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</tbody>
</table>
Figure 5 and Table 5 show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and CPRA at listing. The transplant rate increased post-policy for registrations in the CPRA 80-97% group, and decreased for registrations in the 0%, 1-19%, 20-79%, and 98-100% groups. These changes were not statistically significant.

**Figure 5:** Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

Table 5: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>1447</td>
<td>618</td>
<td>115.70</td>
<td>(106.76, 125.19)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1443</td>
<td>609</td>
<td>114.19</td>
<td>(105.3, 123.63)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>182</td>
<td>75</td>
<td>102.01</td>
<td>(80.24, 127.87)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>218</td>
<td>73</td>
<td>95.80</td>
<td>(75.09, 120.45)</td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>303</td>
<td>100</td>
<td>81.21</td>
<td>(66.08, 98.77)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>325</td>
<td>105</td>
<td>75.69</td>
<td>(61.91, 91.63)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>102</td>
<td>22</td>
<td>46.77</td>
<td>(29.31, 70.81)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>108</td>
<td>29</td>
<td>73.23</td>
<td>(49.04, 105.17)</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>74</td>
<td>6</td>
<td>13.95</td>
<td>(5.12, 30.37)</td>
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<tr>
<td></td>
<td>Post-Policy</td>
<td>72</td>
<td>5</td>
<td>12.46</td>
<td>(4.04, 29.07)</td>
</tr>
<tr>
<td>Unknown</td>
<td>Pre-Policy</td>
<td>6</td>
<td>1</td>
<td>22.09</td>
<td>(0.56, 123.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>0</td>
<td>0.00</td>
<td></td>
</tr>
</tbody>
</table>
Figure 6 and Table 6 show deceased donor transplants per 100 active patient years for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and candidate blood type. Transplant rates increased post-policy for blood type B and AB candidates, and decreased for blood type A and O candidates. These changes were not statistically significant.

Figure 6: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

![Figure 6: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type](image)

Table 6: Transplants per 100 Active Patient Years for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>642</td>
<td>284</td>
<td>122.18 (108.38, 137.24)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>661</td>
<td>270</td>
<td>116.05 (102.62, 130.75)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>370</td>
<td>105</td>
<td>59.14 (48.37, 71.59)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>357</td>
<td>115</td>
<td>68.26 (56.36, 81.94)</td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>47</td>
<td>22</td>
<td>141.67 (88.79, 214.49)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>75</td>
<td>33</td>
<td>164.06 (112.93, 230.4)</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>1013</td>
<td>411</td>
<td>106.94 (96.85, 117.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1044</td>
<td>403</td>
<td>101.14 (91.5, 111.51)</td>
<td></td>
</tr>
</tbody>
</table>
**Geography**

Figure 7 and Table 7 show the number of deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and distance from donor hospital to the transplant hospital. The proportion of transplants within 250 NM of the donor hospital increased from 80% to 85% after policy implementation.

**Figure 7:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Distance from Donor Hospital

![Graph showing the proportion of transplants within 250 NM of the donor hospital increased from 80% to 85% after policy implementation.]

**Table 7:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Distance from Donor Hospital

<table>
<thead>
<tr>
<th>Distance</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-250 NM</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>652</td>
<td>79.51</td>
</tr>
<tr>
<td>&gt; 250 NM</td>
<td>168</td>
<td>20.49</td>
</tr>
<tr>
<td>Total</td>
<td>820</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure 8 and Table 8 show the distribution of distance in NM from the donor hospital to the transplant hospital for deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median distance from donor hospital increased from 79 NM to 110 NM after policy implementation.

Figure 8: Distribution of Distance from Donor Hospital for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

Table 8: Distribution of Distance from Donor Hospital for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>0</td>
<td>0</td>
<td>8</td>
<td>78.5</td>
<td>169.8</td>
<td>207.0</td>
<td>2529</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>816</td>
<td>0</td>
<td>0</td>
<td>30</td>
<td>109.5</td>
<td>174.1</td>
<td>203.2</td>
<td>1897</td>
</tr>
</tbody>
</table>
**Figure 9** and **Table 9** show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and share type. The proportion of transplants using organs procured in the same DSA as the transplant hospital decreased from 67% to 42% after the policy change. The proportion of regional and national shares increased from 18% to 26% and from 15% to 32%, respectively.

**Figure 9:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Share Type

![Bar chart showing the proportion of transplants using organs procured in the same DSA as the transplant hospital decreased from 67% to 42% after the policy change. The proportion of regional and national shares increased from 18% to 26% and from 15% to 32%, respectively.](image)

**Table 9:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Share Type

<table>
<thead>
<tr>
<th>Share Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Same DSA</td>
<td>547</td>
<td>66.71</td>
</tr>
<tr>
<td>Same Region</td>
<td>151</td>
<td>18.41</td>
</tr>
<tr>
<td>National</td>
<td>122</td>
<td>14.88</td>
</tr>
<tr>
<td>Total</td>
<td>820</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure 10** and **Table 10** show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and OPTN region. Transplant volume increased in 5 regions, and decreased in 6 regions.

**Figure 10:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Region

**Table 10:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Region

<table>
<thead>
<tr>
<th>Region</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>0.85</td>
</tr>
<tr>
<td>2</td>
<td>86</td>
<td>10.49</td>
</tr>
<tr>
<td>3</td>
<td>133</td>
<td>16.22</td>
</tr>
<tr>
<td>4</td>
<td>75</td>
<td>9.15</td>
</tr>
<tr>
<td>5</td>
<td>93</td>
<td>11.34</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>3.05</td>
</tr>
<tr>
<td>7</td>
<td>126</td>
<td>15.37</td>
</tr>
<tr>
<td>8</td>
<td>38</td>
<td>4.63</td>
</tr>
<tr>
<td>9</td>
<td>57</td>
<td>6.95</td>
</tr>
<tr>
<td>10</td>
<td>60</td>
<td>7.32</td>
</tr>
<tr>
<td>11</td>
<td>120</td>
<td>14.63</td>
</tr>
<tr>
<td>Total</td>
<td>820</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure 11** shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and DSA. Of 53 DSAs with at least one kidney-pancreas transplant during the cohort, transplant volume increased in 18 DSAs and decreased in 32 DSAs; 3 DSAs saw no change in transplant volume. The Appendix includes a table with the number of transplants performed in each DSA by policy era.

**Figure 11: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DSA**
**Figure 12** shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and transplant hospital. Of 113 hospitals with at least one kidney-pancreas transplant during the cohort, the number of transplants increased at 41 hospitals after policy implementation, and decreased at 63 hospitals; 9 hospitals saw no change in transplant volume. The **Appendix** includes a table with the number of transplants performed by each transplant hospital by policy era.

**Figure 12: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Transplant Hospital**

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**Appendix**

A table with the number of transplants performed by each transplant hospital by policy era.
Figure 13 shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and state. Of 38 states with at least one kidney-pancreas transplant during the cohort, the number of transplants increased in 12 states after policy implementation, and decreased in 24 states; 2 states saw no change in transplant volume. The Appendix includes a table with the specific number of transplants performed in each state by policy era.

Figure 13: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and State
**Figure 14** and **Table 11** show the distribution of kidney cold ischemic time in hours for deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median cold ischemic time increased from 9.2 to 10.4 hours after policy implementation.

**Figure 14:** Distribution of Kidney Cold Ischemic Time for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

**Table 11:** Distribution of Kidney Cold Ischemic Time for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>8</td>
<td>0.8</td>
<td>6.8</td>
<td>9.2</td>
<td>10.1</td>
<td>12.9</td>
<td>36</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>816</td>
<td>32</td>
<td>0.6</td>
<td>7.6</td>
<td>10.4</td>
<td>11.4</td>
<td>14.3</td>
<td>99</td>
</tr>
</tbody>
</table>
Figure 15 and Table 12 show the distribution of pancreas preservation time (time between procurement cross-clamp to recipient organ reperfusion) in hours for deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median preservation time increased from 9.2 to 10.5 hours after policy implementation.

**Figure 15: Distribution of Pancreas Preservation Time for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>13</td>
<td>1.0</td>
<td>6.9</td>
<td>9.2</td>
<td>10.0</td>
<td>12.2</td>
<td>29</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>816</td>
<td>35</td>
<td>0.4</td>
<td>8.1</td>
<td>10.5</td>
<td>11.2</td>
<td>13.7</td>
<td>50</td>
</tr>
</tbody>
</table>
Post-Transplant Outcomes

Patient Survival

Figure 16 and Table 13 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era. The cohort for survival analyses was restricted to transplant recipients with at least 6 months of follow-up time (transplants performed on or before September 30, 2021). There was no change in the probability of patient survival at six months post-transplant after policy implementation (97.3%). Additional information about post-transplant patient survival, including stratifications by recipient characteristics, is provided in the Appendix.

Figure 16: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

Table 13: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>22</td>
<td>784</td>
<td>97.3</td>
<td>(95.9, 98.2)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>464</td>
<td>12</td>
<td>306</td>
<td>97.3</td>
<td>(95.3, 98.5)</td>
</tr>
</tbody>
</table>
Kidney Graft Survival

Figure 17 and Table 14 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era. There was no change in the probability of kidney graft survival at six months post-transplant after policy implementation (96.5% vs 96.4%). Additional information about post-transplant kidney graft survival, including stratifications by recipient characteristics, is provided in the Appendix.

Figure 17: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

Table 14: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>29</td>
<td>780</td>
<td>96.5</td>
<td>(94.9, 97.5)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>464</td>
<td>16</td>
<td>303</td>
<td>96.4</td>
<td>(94.2, 97.8)</td>
</tr>
</tbody>
</table>
Pancreas Graft Survival

Figure 18 and Table 15 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era. The probability of pancreas graft survival at six months post-transplant increased from 91.0% to 93.4% after policy implementation. This change was not statistically significant. Additional information about post-transplant pancreas graft survival, including stratifications by recipient characteristics, is provided in the Appendix.

Figure 18: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

Table 15: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
<td>74</td>
<td>737</td>
<td>91</td>
<td>(88.8, 92.7)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>464</td>
<td>30</td>
<td>294</td>
<td>93.4</td>
<td>(90.7, 95.3)</td>
</tr>
</tbody>
</table>
Released Organs

Table 16 shows the disposition of kidneys and pancreata from kidney-pancreas matches with a final acceptance by policy era. The majority of kidneys and pancreata with a final acceptance were transplanted to the originally accepting patient both pre- and post-policy. The overall proportion of kidneys and pancreata that were transplanted to the originally accepting patient decreased post-policy from 86.3% to 81.9% for kidney, and from 87.6% to 83.6% for pancreas.

Table 16: Disposition of Kidneys and Pancreata from Kidney-Pancreas Matches with a Final Acceptance March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Organ</th>
<th>Era</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney</td>
<td>Pre-Policy</td>
<td>854</td>
<td>737 (86.3%)</td>
<td>40 (4.7%)</td>
<td>60 (7.0%)</td>
<td>2 (0.2%)</td>
<td>15 (1.8%)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>889</td>
<td>728 (81.9%)</td>
<td>43 (4.8%)</td>
<td>85 (9.6%)</td>
<td>7 (0.8%)</td>
<td>26 (2.9%)</td>
</tr>
<tr>
<td>Pancreas</td>
<td>Pre-Policy</td>
<td>831</td>
<td>728 (87.6%)</td>
<td>30 (3.6%)</td>
<td>17 (2.0%)</td>
<td>21 (2.5%)</td>
<td>35 (4.2%)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>868</td>
<td>726 (83.6%)</td>
<td>22 (2.5%)</td>
<td>35 (4.0%)</td>
<td>23 (2.6%)</td>
<td>62 (7.1%)</td>
</tr>
</tbody>
</table>
Pancreas

This section describes key metrics for monitoring the removal of DSA and OPTN region from PA allocation. Additional PA waiting list, transplant, and post-transplant outcomes data may be found in the Appendix.

The overall PA transplant rate increased slightly after policy implementation (63 vs 66 transplants per 100 active patient years); this decrease was not statistically significant (Figure 19 & Table 17). There were no statistically significant differences in transplant rates by candidate age group, gender, race/ethnicity, CPRA at listing, or blood type after implementation (Figures 20-24 & Tables 18-22). Changes in transplant volume varied across OPTN region (Figure 28 & Table 26).

As expected, more PA transplants occurred at hospitals outside the recovering OPO’s DSA after implementation (59% vs 68%) (Figure 27 & Table 25), but the majority stayed within 250 NM of the donor hospital (57% vs 63%) (Figure 25 & Table 23). Median distance from donor hospital to transplant hospital decreased from 174 NM to 138 NM (Figure 26 & Table 24). There was no change in median pancreas preservation time (time between procurement cross-clamp and recipient organ reperfusion) (8.1 hours) (Figure 29 & Table 30).

There were no statistically significant differences in the probability of patient or pancreas graft survival for PA recipients at 6 months post-transplant after policy implementation (Figures 30-31 & Tables 31-32).
Equity in Access to Transplant

Figure 19 and Table 17 show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era. The overall deceased donor pancreas transplant rate increased post-policy from 63 to 66 transplants per 100 active patient years. This increase was not statistically significant.

Figure 19: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>490</td>
<td>132</td>
<td>62.52</td>
<td>(52.31, 74.14)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>473</td>
<td>133</td>
<td>66.16</td>
<td>(55.4, 78.41)</td>
</tr>
</tbody>
</table>
Figure 20 and Table 18 show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and age at listing. Transplant rates increased post-policy for the 18-34 and 35-49 age groups, while transplant rates decreased for candidates in the 0-17, 50-64, and 65+ age groups. These changes were not statistically significant.

Figure 20: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

Table 18: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>Pre-Policy</td>
<td>66</td>
<td>21</td>
<td>59.44</td>
<td>(36.79, 90.86)</td>
</tr>
<tr>
<td>0-17</td>
<td>Post-Policy</td>
<td>70</td>
<td>16</td>
<td>43.15</td>
<td>(24.66, 70.07)</td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>118</td>
<td>31</td>
<td>61.38</td>
<td>(41.71, 87.13)</td>
</tr>
<tr>
<td>18-34</td>
<td>Post-Policy</td>
<td>119</td>
<td>30</td>
<td>65.23</td>
<td>(44.01, 93.12)</td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>208</td>
<td>51</td>
<td>59.10</td>
<td>(44, 77.7)</td>
</tr>
<tr>
<td>35-49</td>
<td>Post-Policy</td>
<td>196</td>
<td>62</td>
<td>80.31</td>
<td>(61.57, 102.95)</td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>99</td>
<td>29</td>
<td>73.74</td>
<td>(49.39, 105.91)</td>
</tr>
<tr>
<td>50-64</td>
<td>Post-Policy</td>
<td>91</td>
<td>25</td>
<td>65.30</td>
<td>(42.26, 96.4)</td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>6</td>
<td>2</td>
<td>140.38</td>
<td>(17, 507.12)</td>
</tr>
<tr>
<td>65+</td>
<td>Post-Policy</td>
<td>7</td>
<td>2</td>
<td>70.60</td>
<td>(8.55, 255.03)</td>
</tr>
</tbody>
</table>
Figure 21 and Table 19 show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and gender. The transplant rate increased post-policy for female registrations from 63.4 to 69.7 transplants per 100 active patient years, and for male registrations from 61.6 to 62.7 transplants per 100 active patient years. These increases were not statistically significant.

Figure 21: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era and Gender

Table 19: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020-March 14, 2022 by Policy Era and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>244</td>
<td>69</td>
<td>63.39</td>
<td>(49.32, 80.22)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>236</td>
<td>69</td>
<td>69.72</td>
<td>(54.25, 88.24)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>246</td>
<td>63</td>
<td>61.60</td>
<td>(47.33, 78.81)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>237</td>
<td>64</td>
<td>62.71</td>
<td>(48.29, 80.08)</td>
</tr>
</tbody>
</table>
Figure 22 and Table 20 show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and race/ethnicity. Transplant rates increased for White, Non-Hispanic; Black, Non-Hispanic; and Asian, Non-Hispanic candidates, while the transplant rate decreased for Hispanic/Latino candidates. These changes were not statistically significant, and the wide confidence intervals are reflective of small event counts.

Figure 22: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

Table 20: Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>325</td>
<td>94</td>
<td>68.54 (55.39, 83.88)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>320</td>
<td>97</td>
<td>72.58 (58.86, 88.55)</td>
<td></td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>97</td>
<td>21</td>
<td>49.04 (30.36, 74.96)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>82</td>
<td>19</td>
<td>50.03 (30.12, 78.12)</td>
<td></td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>60</td>
<td>16</td>
<td>59.27 (33.88, 96.25)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>59</td>
<td>13</td>
<td>52.64 (28.03, 90.02)</td>
<td></td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>6</td>
<td>1</td>
<td>28.19 (0.71, 157.04)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>9</td>
<td>3</td>
<td>86.08 (17.75, 251.58)</td>
<td></td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>3</td>
<td>0</td>
<td>0.00 (-)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>1</td>
<td>80.40 (2.04, 447.94)</td>
<td></td>
</tr>
</tbody>
</table>
Figure 23 and Table 21 show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and CPRA at listing. Transplant rates increased post-policy for registrations in the 0%, 80-97%, and 98-100% groups, and decreased for registrations in the CPRA 1-19% and 20-79% groups. These changes were not statistically significant and the wide confidence intervals are reflective of small event counts.

**Figure 23:** Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

**Table 21:** Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>356</td>
<td>102</td>
<td>67.67 (55.18, 82.15)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>350</td>
<td>104</td>
<td>71.19 (58.16, 86.25)</td>
<td></td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>22</td>
<td>10</td>
<td>168.05 (80.59, 309.05)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>21</td>
<td>9</td>
<td>139.37 (63.73, 264.57)</td>
<td></td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>57</td>
<td>15</td>
<td>58.57 (32.78, 96.61)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>56</td>
<td>10</td>
<td>41.52 (19.91, 76.36)</td>
<td></td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>25</td>
<td>3</td>
<td>24.94 (5.14, 72.89)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>23</td>
<td>6</td>
<td>56.82 (20.85, 123.68)</td>
<td></td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>32</td>
<td>2</td>
<td>11.17 (1.35, 40.35)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>27</td>
<td>4</td>
<td>28.29 (7.71, 72.43)</td>
<td></td>
</tr>
</tbody>
</table>
**Figure 24** and **Table 22** show deceased donor transplants per 100 active patient years for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and candidate blood type. Transplant rates increased for blood type B and O candidates after policy implementation, and decreased for blood type A and AB candidates. These changes were not statistically significant.

**Figure 24:** Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

**Table 22:** Transplants per 100 Active Patient Years for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>Registrations</th>
<th>Transplants</th>
<th>Transplants per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>178</td>
<td>55</td>
<td>75.69</td>
<td>(57.02, 98.53)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>181</td>
<td>56</td>
<td>71.99</td>
<td>(54.38, 93.48)</td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>63</td>
<td>19</td>
<td>75.73</td>
<td>(45.6, 118.27)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>51</td>
<td>14</td>
<td>79.81</td>
<td>(43.63, 133.9)</td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>19</td>
<td>5</td>
<td>85.04</td>
<td>(27.61, 198.46)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>14</td>
<td>2</td>
<td>36.70</td>
<td>(4.44, 132.58)</td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>230</td>
<td>53</td>
<td>49.30</td>
<td>(36.93, 64.49)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>227</td>
<td>61</td>
<td>60.85</td>
<td>(46.55, 78.17)</td>
</tr>
</tbody>
</table>
Geography

Figure 25 and Table 23 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and distance from donor hospital. The proportion of transplants within 250 NM of the donor hospital increased post-policy from 57% to 63%.

Figure 25: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Distance from Donor Hospital

<table>
<thead>
<tr>
<th>Distance</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-250 NM</td>
<td>76 56.72%</td>
<td>87 63.04%</td>
</tr>
<tr>
<td>&gt; 250 NM</td>
<td>58 43.28%</td>
<td>51 36.96%</td>
</tr>
<tr>
<td>Total</td>
<td>134 100.00%</td>
<td>138 100.00%</td>
</tr>
</tbody>
</table>
**Figure 26** and **Table 24** show the distribution of distance in NM from the donor hospital to the transplant hospital for deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median distance from donor hospital decreased from 174 NM to 138 NM after policy implementation.

**Figure 26:** Distribution of Distance from Donor Hospital for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

![Distribution of Distance from Donor Hospital](image)

**Table 24:** Distribution of Distance from Donor Hospital for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
<td>0</td>
<td>0</td>
<td>60.50</td>
<td>174.0</td>
<td>332.8</td>
<td>578.5</td>
<td>1653</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>138</td>
<td>0</td>
<td>0</td>
<td>67.75</td>
<td>137.5</td>
<td>299.1</td>
<td>496.2</td>
<td>1397</td>
</tr>
</tbody>
</table>
**Figure 27** and **Table 25** show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and share type. The proportion of transplants using organs procured in the same DSA as the transplant hospital decreased from 41% to 32% after the policy change. The proportion of regional and national shares increased from 19% to 27% and from 40% to 41%, respectively.

**Figure 27**: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Share Type

<table>
<thead>
<tr>
<th>Share Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Same DSA</td>
<td>55</td>
<td>44</td>
</tr>
<tr>
<td>Same Region</td>
<td>26</td>
<td>37</td>
</tr>
<tr>
<td>National</td>
<td>53</td>
<td>57</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>138</td>
</tr>
</tbody>
</table>

Table 25: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Share Type
Figure 28 and Table 26 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and OPTN region. Transplant volume increased in 4 regions, decreased in 3 regions, and remained the same in 4 regions.

**Figure 28: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Region**

![Bar chart showing transplant volume by policy era and region.]

**Table 26: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Region**

<table>
<thead>
<tr>
<th>Region</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>1</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>16</td>
<td>11.94</td>
</tr>
<tr>
<td>3</td>
<td>19</td>
<td>14.18</td>
</tr>
<tr>
<td>4</td>
<td>8</td>
<td>5.97</td>
</tr>
<tr>
<td>5</td>
<td>8</td>
<td>5.97</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>0.75</td>
</tr>
<tr>
<td>7</td>
<td>33</td>
<td>24.63</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>4.48</td>
</tr>
<tr>
<td>9</td>
<td>12</td>
<td>8.96</td>
</tr>
<tr>
<td>10</td>
<td>21</td>
<td>15.67</td>
</tr>
<tr>
<td>11</td>
<td>10</td>
<td>7.46</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Table 27 shows deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and DSA. Of 39 DSAs with at least one pancreas transplant during the cohort, the number of transplants increased in 16 DSAs after policy implementation, and decreased in 17 DSAs; 6 DSAs saw no change in transplant volume.

Table 27: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DSA

<table>
<thead>
<tr>
<th>DSA</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZOB</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>CADN</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
</tr>
<tr>
<td>CAOP</td>
<td>4</td>
<td>6</td>
<td>50.00</td>
</tr>
<tr>
<td>CASD</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>CORS</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>DCTC</td>
<td>4</td>
<td>5</td>
<td>25.00</td>
</tr>
<tr>
<td>FLFH</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>FLMP</td>
<td>10</td>
<td>9</td>
<td>-10.00</td>
</tr>
<tr>
<td>FLUF</td>
<td>6</td>
<td>2</td>
<td>-66.67</td>
</tr>
<tr>
<td>FLWC</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
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<td>GALL</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>ILIP</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>INOP</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>LAOP</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>MAOB</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>MDPC</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>MIOP</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>MNOP</td>
<td>8</td>
<td>12</td>
<td>50.00</td>
</tr>
<tr>
<td>MOMA</td>
<td>0</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>NCNC</td>
<td>2</td>
<td>4</td>
<td>100.00</td>
</tr>
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<td>NEOR</td>
<td>5</td>
<td>4</td>
<td>-20.00</td>
</tr>
<tr>
<td>NJTO</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
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<td>NYAP</td>
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<td>1</td>
<td>0.00</td>
</tr>
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<td>500.00</td>
</tr>
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<td>12</td>
<td>20.00</td>
</tr>
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<td>*</td>
</tr>
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<td>OHLB</td>
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<td>7</td>
<td>133.33</td>
</tr>
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<td>OHOV</td>
<td>6</td>
<td>4</td>
<td>-33.33</td>
</tr>
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<td>PADV</td>
<td>3</td>
<td>5</td>
<td>66.67</td>
</tr>
<tr>
<td>PATF</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
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<td>SCOP</td>
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<td>1</td>
<td>-75.00</td>
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</tr>
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<td>3</td>
<td>2</td>
<td>-33.33</td>
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<td>TXSA</td>
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<td>2</td>
<td>100.00</td>
</tr>
<tr>
<td>TXSB</td>
<td>4</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>UTOP</td>
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<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>VATB</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>WALT</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>WIUW</td>
<td>17</td>
<td>11</td>
<td>-35.29</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>138</td>
<td>2.99</td>
</tr>
</tbody>
</table>
Table 28 shows deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and transplant hospital. Of 63 transplant hospitals with at least one pancreas transplant during the cohort, the number of transplants increased at 27 hospitals after policy implementation, and decreased at 29 hospitals; 7 transplant hospitals saw no change in transplant volume.

Table 28: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Transplant Hospital

<table>
<thead>
<tr>
<th>Transplant Hospital</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>AZUA-TX1</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>CACS-TX1</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>CALL-TX1</td>
<td>3</td>
<td>4</td>
<td>33.33</td>
</tr>
<tr>
<td>CAPC-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>CAPM-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>CASH-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>CASU-TX1</td>
<td>2</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>CAUC-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>COUC-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>DCGU-TX1</td>
<td>4</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>FLFH-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>FLJM-TX1</td>
<td>10</td>
<td>9</td>
<td>-10.00</td>
</tr>
<tr>
<td>FLSL-TX1</td>
<td>6</td>
<td>2</td>
<td>-66.67</td>
</tr>
<tr>
<td>FLTG-TX1</td>
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<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>GAPH-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>ILNM-TX1</td>
<td>2</td>
<td>3</td>
<td>50.00</td>
</tr>
<tr>
<td>ILPL-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>ILSF-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>ILUC-TX1</td>
<td>2</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>ILUI-TX1</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>INIM-TX1</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>LAWK-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>MAMG-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>MDUM-TX1</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>MIHF-TX1</td>
<td>2</td>
<td>2</td>
<td>0.00</td>
</tr>
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<td>MIUM-TX1</td>
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</tr>
<tr>
<td>MNMC-TX1</td>
<td>3</td>
<td>8</td>
<td>166.67</td>
</tr>
<tr>
<td>MNUM-TX1</td>
<td>5</td>
<td>4</td>
<td>-20.00</td>
</tr>
<tr>
<td>MOBH-TX1</td>
<td>0</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>NCBG-TX1</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>NCDU-TX1</td>
<td>1</td>
<td>3</td>
<td>200.00</td>
</tr>
<tr>
<td>NEUN-TX1</td>
<td>5</td>
<td>4</td>
<td>-20.00</td>
</tr>
<tr>
<td>NJHK-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>NJSB-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>NYAM-TX1</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>NYCP-TX1</td>
<td>4</td>
<td>7</td>
<td>75.00</td>
</tr>
<tr>
<td>NYEC-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>NYFL-TX1</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>NYMA-TX1</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>NYMS-TX1</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>NYNY-TX1</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>NYUC-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>NYUM-TX1</td>
<td>0</td>
<td>5</td>
<td>*</td>
</tr>
<tr>
<td>OHCC-TX1</td>
<td>3</td>
<td>7</td>
<td>133.33</td>
</tr>
</tbody>
</table>
(continued)

<table>
<thead>
<tr>
<th>Transplant Hospital</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>OHCM-TX1</td>
<td>3</td>
<td>2</td>
<td>-33.33</td>
</tr>
<tr>
<td>OHUC-TX1</td>
<td>3</td>
<td>2</td>
<td>-33.33</td>
</tr>
<tr>
<td>PAAE-TX1</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>PACH-TX1</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>PATJ-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>PAUP-TX1</td>
<td>2</td>
<td>3</td>
<td>50.00</td>
</tr>
<tr>
<td>SCMU-TX1</td>
<td>4</td>
<td>1</td>
<td>-75.00</td>
</tr>
<tr>
<td>TNMH-TX1</td>
<td>0</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>TXHD-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>TXHS-TX1</td>
<td>1</td>
<td>2</td>
<td>100.00</td>
</tr>
<tr>
<td>TXMH-TX1</td>
<td>3</td>
<td>2</td>
<td>-33.33</td>
</tr>
<tr>
<td>TXSW-TX1</td>
<td>2</td>
<td>3</td>
<td>50.00</td>
</tr>
<tr>
<td>TXTX-TX1</td>
<td>2</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>UTLD-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>UTMG-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>VAFH-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>VAUV-TX1</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>WAUW-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>WIUW-TX1</td>
<td>17</td>
<td>11</td>
<td>-35.29</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>138</td>
<td>2.99</td>
</tr>
</tbody>
</table>
Table 29 shows deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and state. Of 27 states with at least one pancreas transplant during the cohort, the number of transplants increased in 9 states after policy implementation, and decreased in 12 states; 6 states saw no change in transplant volume.

Table 29: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and State

<table>
<thead>
<tr>
<th>State</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arizona</td>
<td>0</td>
<td>2</td>
<td>*</td>
</tr>
<tr>
<td>California</td>
<td>6</td>
<td>9</td>
<td>50.00</td>
</tr>
<tr>
<td>Colorado</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>Dist. Of Columbia</td>
<td>4</td>
<td>4</td>
<td>0.00</td>
</tr>
<tr>
<td>Florida</td>
<td>17</td>
<td>12</td>
<td>-29.41</td>
</tr>
<tr>
<td>Georgia</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>Illinois</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>Indiana</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>Louisiana</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>Maryland</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Michigan</td>
<td>4</td>
<td>2</td>
<td>-50.00</td>
</tr>
<tr>
<td>Minnesota</td>
<td>8</td>
<td>12</td>
<td>50.00</td>
</tr>
<tr>
<td>Missouri</td>
<td>0</td>
<td>4</td>
<td>*</td>
</tr>
<tr>
<td>Nebraska</td>
<td>5</td>
<td>4</td>
<td>-20.00</td>
</tr>
<tr>
<td>New Jersey</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>New York</td>
<td>12</td>
<td>20</td>
<td>66.67</td>
</tr>
<tr>
<td>North Carolina</td>
<td>2</td>
<td>4</td>
<td>100.00</td>
</tr>
<tr>
<td>Ohio</td>
<td>9</td>
<td>11</td>
<td>22.22</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>7</td>
<td>7</td>
<td>0.00</td>
</tr>
<tr>
<td>South Carolina</td>
<td>4</td>
<td>1</td>
<td>-75.00</td>
</tr>
<tr>
<td>Tennessee</td>
<td>0</td>
<td>3</td>
<td>*</td>
</tr>
<tr>
<td>Texas</td>
<td>8</td>
<td>8</td>
<td>0.00</td>
</tr>
<tr>
<td>Utah</td>
<td>2</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>Virginia</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>Washington</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>17</td>
<td>11</td>
<td>-35.29</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>138</td>
<td>2.99</td>
</tr>
</tbody>
</table>
**Figure 29** and **Table 30** show the distribution of pancreas preservation time (time between procurement cross-clamp to recipient organ reperfusion) in hours for deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. There was no change in median preservation time after policy implementation (8.1 hours).

**Figure 29: Distribution of Pancreas Preservation Time for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era**

![Graph showing distribution of pancreas preservation time](image)

**Table 30: Distribution of Pancreas Preservation Time for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
<td>3</td>
<td>3.5</td>
<td>6.5</td>
<td>8.1</td>
<td>9.1</td>
<td>10.6</td>
<td>25.2</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>138</td>
<td>5</td>
<td>1.0</td>
<td>6.3</td>
<td>8.1</td>
<td>9.4</td>
<td>11.3</td>
<td>24.8</td>
</tr>
</tbody>
</table>
**Post-Transplant Outcomes**

**Patient Survival**

*Figure 30* and *Table 31* show six month post-transplant patient survival for deceased donor pancreas transplants by policy era. The cohort for survival analyses was restricted to transplant recipients with at least 6 months of follow-up time (transplants performed on or before September 30, 2021). The probability of patient survival at six months post-transplant decreased from 92.3% to 89.1% after policy implementation. This decrease was not statistically significant. Additional information about post-transplant patient survival, including stratifications by recipient characteristics, is provided in the *Appendix*.

*Figure 30: Six Month Post-Transplant Patient Survival for Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era*

*Table 31: Six Month Post-Transplant Patient Survival for Pancreas Transplants by Policy Era*

<table>
<thead>
<tr>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
<td>10</td>
<td>115</td>
<td>92.3</td>
<td>(86.1, 95.8)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>92</td>
<td>9</td>
<td>55</td>
<td>89.1</td>
<td>(80, 94.2)</td>
</tr>
</tbody>
</table>
Pancreas Graft Survival

Figure 31 and Table 32 show six month post-transplant pancreas graft survival for deceased donor pancreas transplants by policy era. The probability of pancreas graft survival at six months post-transplant decreased from 85.1% to 79.7% after policy implementation. This decrease was not statistically significant. Additional information about post-transplant pancreas graft survival, including stratifications by recipient characteristics, is provided in the Appendix.

Figure 31: Six Month Post-Transplant Pancreas Graft Survival for Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

Table 32: Six Month Post-Transplant Pancreas Graft Survival for Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
<td>20</td>
<td>113</td>
<td>85.1</td>
<td>(77.8, 90.1)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>92</td>
<td>18</td>
<td>54</td>
<td>79.7</td>
<td>(69.7, 86.8)</td>
</tr>
</tbody>
</table>
Released Organs

Table 33 shows the disposition of pancreata from pancreas matches with a final acceptance by policy era. The overall proportion of pancreata that were transplanted to the originally accepting patient decreased post-policy from 50.5% to 43.8%.

There were four released pancreata where the local placement bypass code was executed to allocate at the transplant hospital where it was originally accepted.

Table 33: Disposition of Pancreata from Pancreas Matches with a Final Acceptance March 15, 2020-March 14, 2022 by Policy Era and OPTN Region

<table>
<thead>
<tr>
<th>Era</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>184</td>
<td>93 (50.5%)</td>
<td>2 (1.1%)</td>
<td>11 (6.0%)</td>
<td>25 (13.6%)</td>
<td>53 (28.8%)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>217</td>
<td>95 (43.8%)</td>
<td>3 (1.4%)</td>
<td>7 (3.2%)</td>
<td>34 (15.7%)</td>
<td>78 (35.9%)</td>
</tr>
</tbody>
</table>
**Efficient Allocation and Utilization of Organs**

This section describes key metrics for monitoring efficiency in allocation and utilization of pancreata since the removal of DSA and OPTN region from allocation. Additional data may be found in the Appendix.

The overall pancreas discard rate increased from 22.7% to 26.5% after policy implementation (Figure 32 & Table 34). The overall offer rate from pancreas/kidney-pancreas match runs increased from approximately 12 to 14 offers per active patient year (Figure 33 & Table 36). The overall offer acceptance rate decreased from 79 to 68 acceptances per 1000 offers (Table 36 & Figure 34). The median sequence number of final acceptor increased from 3 (IQR: 1-9) to 5 (IQR: 2-15) after implementation (Figure 37 & Table 39).
Figure 32 and Table 34 show discard rates for deceased donor pancreata recovered for transplant from March 15, 2020 to March 14, 2022 by policy era. The overall pancreas discard rate increased post-policy from 22.7% to 26.5%.

**Figure 32:** Discard Rates for Deceased Donor Pancreas Recovered for Transplant March 15, 2020 - March 14, 2022 by Policy Era

![Discard Rates for Deceased Donor Pancreas Recovered for Transplant March 15, 2020 - March 14, 2022 by Policy Era](image)

**Table 34:** Discard Rates for Deceased Donor Pancreas Recovered for Transplant March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Pancreata Recovered</th>
<th>Pancreata Not TXed</th>
<th>Discard Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>1245</td>
<td>283</td>
<td>22.73</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>1319</td>
<td>350</td>
<td>26.54</td>
</tr>
</tbody>
</table>
Table 35 shows deceased donor pancreata recovered but not transplanted from March 15, 2020 to March 14, 2022 by discard reason and policy era. A total of 283 pancreata were discarded pre-policy, and 350 were discarded post-policy. The most common reason for pancreas discard in both policy eras was “Other” followed by “Anatomical abnormalities”. The proportion of discards for “Other” reasons decreased post-policy from 34.3% to 30.0%. The proportion of discards due to “Anatomical abnormalities” decreased from 24.4% to 23.1%.

Table 35: Deceased Donor Pancreas Recovered but Not Transplanted March 15, 2020-March 14, 2022 by Discard Reason and Policy Era

<table>
<thead>
<tr>
<th>Discard Reason</th>
<th>Pre-Policy</th>
<th></th>
<th>Post-Policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Other, specify</td>
<td>97</td>
<td>34.28</td>
<td>105</td>
<td>30.00</td>
</tr>
<tr>
<td>Anatomical abnormalities</td>
<td>69</td>
<td>24.38</td>
<td>81</td>
<td>23.14</td>
</tr>
<tr>
<td>No recipient located - list exhausted</td>
<td>41</td>
<td>14.49</td>
<td>56</td>
<td>16.00</td>
</tr>
<tr>
<td>Diseased organ</td>
<td>18</td>
<td>6.36</td>
<td>21</td>
<td>6.00</td>
</tr>
<tr>
<td>Poor organ function</td>
<td>13</td>
<td>4.59</td>
<td>23</td>
<td>6.57</td>
</tr>
<tr>
<td>Vascular damage</td>
<td>13</td>
<td>4.59</td>
<td>19</td>
<td>5.43</td>
</tr>
<tr>
<td>Recipient determined to be unsuitable for TX in OR</td>
<td>13</td>
<td>4.59</td>
<td>7</td>
<td>2.00</td>
</tr>
<tr>
<td>Organ trauma</td>
<td>7</td>
<td>2.47</td>
<td>10</td>
<td>2.86</td>
</tr>
<tr>
<td>Too old on ice</td>
<td>4</td>
<td>1.41</td>
<td>11</td>
<td>3.14</td>
</tr>
<tr>
<td>Warm ischemic time too long</td>
<td>2</td>
<td>0.71</td>
<td>8</td>
<td>2.29</td>
</tr>
<tr>
<td>Organ not as described</td>
<td>4</td>
<td>1.41</td>
<td>5</td>
<td>1.43</td>
</tr>
<tr>
<td>Infection</td>
<td>1</td>
<td>0.35</td>
<td>2</td>
<td>0.57</td>
</tr>
<tr>
<td>Donor Medical history</td>
<td>0</td>
<td>0.00</td>
<td>2</td>
<td>0.57</td>
</tr>
<tr>
<td>Biopsy findings</td>
<td>1</td>
<td>0.35</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>283</td>
<td>100.00</td>
<td>350</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure 33 and Table 36 show offers per active patient year for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era. The overall offer rate increased from approximately 12 offers per active patient year to approximately 14 offers per active patient year after policy implementation.

**Figure 33: Offers per Active Patient Year for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era**

![Graph showing offers per active patient year before and after policy implementation.]

**Table 36: Offer and Acceptance Rates for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Active Patient Years</th>
<th>Offers</th>
<th>Acceptances</th>
<th>Offers per Active Patient Year</th>
<th>Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>1020.98</td>
<td>12680</td>
<td>998</td>
<td>12.42</td>
<td>78.71</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>1020.74</td>
<td>14470</td>
<td>982</td>
<td>14.18</td>
<td>67.86</td>
</tr>
</tbody>
</table>
**Figure 34** shows acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era. The overall acceptance rate decreased from 79 to 68 acceptances per 1000 offers after policy implementation.

**Figure 34: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era**
Figure 35 and Table 37 show acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and share type. The acceptance rate for organs recovered in the same DSA as the potential transplant recipient's center decreased from 241 to 167 acceptances per 1000 offers after policy implementation. The acceptance rate for organs recovered outside the same DSA as the potential transplant recipient increased from 36 to 49 acceptances per 1000 offers.

Figure 35: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Share Type

Table 37: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Share Type

<table>
<thead>
<tr>
<th>Share Type</th>
<th>Pre-Policy Offers</th>
<th>Pre-Policy Acceptances</th>
<th>Pre-Policy Acceptances per 1000 Offers</th>
<th>Post-Policy Offers</th>
<th>Post-Policy Acceptances</th>
<th>Post-Policy Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inside DSA</td>
<td>2656</td>
<td>639</td>
<td>240.59</td>
<td>2323</td>
<td>387</td>
<td>166.59</td>
</tr>
<tr>
<td>Outside DSA</td>
<td>10024</td>
<td>359</td>
<td>35.81</td>
<td>12147</td>
<td>595</td>
<td>48.98</td>
</tr>
</tbody>
</table>
**Figure 36** and **Table 38** show acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and distance. The acceptance rate for offers within 250 NM of the donor hospital decreased from 77 to 55 acceptances per 1000 offers. The acceptance rate for offers > 250 NM increased from 79 to 72 acceptances per 1000 offers.

**Figure 36: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Distance**

<table>
<thead>
<tr>
<th>Distance</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Offers</td>
<td>Acceptances</td>
</tr>
<tr>
<td>0-250 NM</td>
<td>2324</td>
<td>178</td>
</tr>
<tr>
<td>&gt; 250 NM</td>
<td>10356</td>
<td>820</td>
</tr>
</tbody>
</table>
Figure 37 shows the distribution of sequence number of the final acceptor for pancreas/kidney-pancreas match runs. The median sequence number of final acceptor increased from 3 to 5 after policy implementation.

**Figure 37: Distribution of Sequence Number of Final Acceptor for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era**

![Graph showing distribution of sequence number of final acceptor for pancreas/kidney-pancreas match runs. The graph compares Pre-Policy and Post-Policy periods, with a view restricted to the 90th percentile.](image)

Table 39: Distribution of Sequence Number of Final Acceptor for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>998</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>12.7</td>
<td>9</td>
<td>242</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>982</td>
<td>1</td>
<td>2</td>
<td>5</td>
<td>14.7</td>
<td>15</td>
<td>235</td>
</tr>
</tbody>
</table>
Figure 38 and Table 40 show the distribution of time from first electronic offer to cross-clamp for pancreas/kidney-pancreas match runs. Median time from first offer to cross-clamp increased from 28.2 hours to 31.2 hours after implementation.

Figure 38: Distribution of Hours from First Offer to Cross-Clamp for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era

Table 40: Distribution of Hours from First Offer to Cross-Clamp for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>N</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>998</td>
<td>0.40</td>
<td>21.68</td>
<td>28.21</td>
<td>30.33</td>
<td>36.55</td>
<td>93.37</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>982</td>
<td>6.33</td>
<td>23.60</td>
<td>31.22</td>
<td>33.41</td>
<td>40.74</td>
<td>128.03</td>
</tr>
</tbody>
</table>
Donors Recovered in Alaska

Pre-policy, three donors in Alaska had pancreata recovered. None were transplanted. Post-policy, there were no donors in Alaska with pancreata recovered or transplanted.

Facilitated Pancreas Allocation

Figure 39 shows the number of programs qualified to receive facilitated pancreas offers by policy era. A total of 44 programs qualified for facilitated placement pre-policy, and 53 programs qualified post-policy. 39 programs qualified for facilitated placement in both policy eras, while 5 programs qualified for facilitated placement in the pre-policy era only, and 14 programs qualified in the post-policy era only.

Figure 39: Number of Programs that Qualified for Facilitated Pancreas Allocation March 15, 2020 - March 14, 2022 by Policy Era
Figure 40 and Table 41 show the number of times facilitated pancreas allocation was used by policy era. Pre-policy, OPOs and the Organ Center used facilitated allocation 79 and 98 times, respectively, for a total of 177 facilitated placement attempts. Post-policy, OPOs and the Organ Center used facilitated allocation 57 and 97 times, respectively, for a total of 154 facilitated placement attempts.

Table 41: Frequency of Facilitated Pancreas Allocation March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th></th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPO</td>
<td>79 (44.6%)</td>
<td>57 (37.0%)</td>
</tr>
<tr>
<td>Organ Center</td>
<td>98 (55.4%)</td>
<td>97 (63.0%)</td>
</tr>
<tr>
<td>Total</td>
<td>177 (100%)</td>
<td>154 (100%)</td>
</tr>
</tbody>
</table>

Table 42 describes the frequency of pancreas transplants resulting from facilitated pancreas allocation by policy era. A total of 11 transplants resulted from facilitated pancreas allocation pre-policy, and 6 transplants resulted from facilitated pancreas allocation post-policy.

Table 42: Number of Transplants Resulting From Facilitated Pancreas Allocation March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Donors</th>
<th>Transplants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>175</td>
<td>11</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>153</td>
<td>6</td>
</tr>
</tbody>
</table>
Conclusion

The removal of DSA and OPTN region from pancreas and kidney-pancreas allocation has resulted in broader distribution of pancreata. While more KP and PA were allocated outside the recovering OPO’s DSA, the majority stayed within 250 NM. There was little change in KP or PA transplant volumes in the 1 year post-policy, despite KPSAM projections of an increase in KP transplants and a corresponding decrease in PA transplants. There were no statistically significant differences in the probability of patient or graft survival for KP or PA recipients at six months post-transplant after policy implementation. The OPTN Pancreas Transplantation Committee will continue to monitor the policy’s impact as data become available.
Appendix

Additional Kidney-Pancreas Information

Waiting List

Figure A1 and Table A1 show the number of registrations waiting for a kidney-pancreas on the last day of each month from March 15, 2020 to March 14, 2022. There was little change in waiting list volume after policy implementation.

Figure A1: Kidney-Pancreas Registrations Waiting on the Last Day of Each Month, March 15, 2020-March 14, 2022
Table A1: Kidney-Pancreas Registrations Waiting on the Last Day of Each Month, March 15, 2020-March 14, 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Registrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2020</td>
<td>1819</td>
</tr>
<tr>
<td>April 2020</td>
<td>1842</td>
</tr>
<tr>
<td>May 2020</td>
<td>1811</td>
</tr>
<tr>
<td>June 2020</td>
<td>1794</td>
</tr>
<tr>
<td>July 2020</td>
<td>1788</td>
</tr>
<tr>
<td>August 2020</td>
<td>1779</td>
</tr>
<tr>
<td>September 2020</td>
<td>1773</td>
</tr>
<tr>
<td>October 2020</td>
<td>1779</td>
</tr>
<tr>
<td>November 2020</td>
<td>1757</td>
</tr>
<tr>
<td>December 2020</td>
<td>1747</td>
</tr>
<tr>
<td>January 2021</td>
<td>1748</td>
</tr>
<tr>
<td>February 2021</td>
<td>1766</td>
</tr>
<tr>
<td>March 2021</td>
<td>1765</td>
</tr>
<tr>
<td>April 2021</td>
<td>1755</td>
</tr>
<tr>
<td>May 2021</td>
<td>1779</td>
</tr>
<tr>
<td>June 2021</td>
<td>1778</td>
</tr>
<tr>
<td>July 2021</td>
<td>1770</td>
</tr>
<tr>
<td>August 2021</td>
<td>1816</td>
</tr>
<tr>
<td>September 2021</td>
<td>1855</td>
</tr>
<tr>
<td>October 2021</td>
<td>1858</td>
</tr>
<tr>
<td>November 2021</td>
<td>1862</td>
</tr>
<tr>
<td>December 2021</td>
<td>1873</td>
</tr>
<tr>
<td>January 2022</td>
<td>1880</td>
</tr>
<tr>
<td>February 2022</td>
<td>1896</td>
</tr>
</tbody>
</table>
Figure A2 and Table A2 show the percentage of registrations waiting for a kidney-pancreas on the last day of each month from March 15, 2020 to March 14, 2022 by status. The proportion of registrations in active status increased slightly after policy implementation.

**Figure A2: Kidney-Pancreas Registrations Waiting on the Last Day of Each Month by Status, March 15, 2020-March 14, 2022**
Table A2: Kidney-Pancreas Registrations Waiting on the Last Day of Each Month by Status, March 15, 2020-March 14, 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Active N</th>
<th>Active %</th>
<th>Inactive N</th>
<th>Inactive %</th>
<th>Total N</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2020</td>
<td>862</td>
<td>47.39</td>
<td>957</td>
<td>52.61</td>
<td>1819</td>
<td>100.00</td>
</tr>
<tr>
<td>April 2020</td>
<td>846</td>
<td>45.93</td>
<td>996</td>
<td>54.07</td>
<td>1842</td>
<td>100.00</td>
</tr>
<tr>
<td>May 2020</td>
<td>868</td>
<td>47.93</td>
<td>943</td>
<td>52.07</td>
<td>1811</td>
<td>100.00</td>
</tr>
<tr>
<td>June 2020</td>
<td>862</td>
<td>48.05</td>
<td>932</td>
<td>51.95</td>
<td>1794</td>
<td>100.00</td>
</tr>
<tr>
<td>July 2020</td>
<td>852</td>
<td>47.65</td>
<td>936</td>
<td>52.35</td>
<td>1788</td>
<td>100.00</td>
</tr>
<tr>
<td>August 2020</td>
<td>854</td>
<td>48.00</td>
<td>925</td>
<td>52.00</td>
<td>1779</td>
<td>100.00</td>
</tr>
<tr>
<td>September 2020</td>
<td>846</td>
<td>47.72</td>
<td>927</td>
<td>52.28</td>
<td>1773</td>
<td>100.00</td>
</tr>
<tr>
<td>October 2020</td>
<td>847</td>
<td>47.61</td>
<td>932</td>
<td>52.39</td>
<td>1779</td>
<td>100.00</td>
</tr>
<tr>
<td>November 2020</td>
<td>815</td>
<td>46.39</td>
<td>942</td>
<td>53.61</td>
<td>1757</td>
<td>100.00</td>
</tr>
<tr>
<td>December 2020</td>
<td>805</td>
<td>46.08</td>
<td>942</td>
<td>53.92</td>
<td>1747</td>
<td>100.00</td>
</tr>
<tr>
<td>January 2021</td>
<td>802</td>
<td>45.88</td>
<td>946</td>
<td>54.12</td>
<td>1748</td>
<td>100.00</td>
</tr>
<tr>
<td>February 2021</td>
<td>820</td>
<td>46.43</td>
<td>946</td>
<td>53.57</td>
<td>1766</td>
<td>100.00</td>
</tr>
<tr>
<td>March 2021</td>
<td>819</td>
<td>46.40</td>
<td>946</td>
<td>53.60</td>
<td>1765</td>
<td>100.00</td>
</tr>
<tr>
<td>April 2021</td>
<td>818</td>
<td>46.61</td>
<td>937</td>
<td>53.39</td>
<td>1755</td>
<td>100.00</td>
</tr>
<tr>
<td>May 2021</td>
<td>864</td>
<td>48.57</td>
<td>915</td>
<td>51.43</td>
<td>1779</td>
<td>100.00</td>
</tr>
<tr>
<td>June 2021</td>
<td>859</td>
<td>48.31</td>
<td>919</td>
<td>51.69</td>
<td>1778</td>
<td>100.00</td>
</tr>
<tr>
<td>July 2021</td>
<td>852</td>
<td>48.14</td>
<td>918</td>
<td>51.86</td>
<td>1770</td>
<td>100.00</td>
</tr>
<tr>
<td>August 2021</td>
<td>864</td>
<td>47.58</td>
<td>952</td>
<td>52.42</td>
<td>1816</td>
<td>100.00</td>
</tr>
<tr>
<td>September 2021</td>
<td>873</td>
<td>47.06</td>
<td>982</td>
<td>52.94</td>
<td>1855</td>
<td>100.00</td>
</tr>
<tr>
<td>October 2021</td>
<td>878</td>
<td>47.26</td>
<td>980</td>
<td>52.74</td>
<td>1858</td>
<td>100.00</td>
</tr>
<tr>
<td>November 2021</td>
<td>852</td>
<td>45.76</td>
<td>1010</td>
<td>54.24</td>
<td>1862</td>
<td>100.00</td>
</tr>
<tr>
<td>December 2021</td>
<td>839</td>
<td>44.79</td>
<td>1034</td>
<td>55.21</td>
<td>1873</td>
<td>100.00</td>
</tr>
<tr>
<td>January 2022</td>
<td>824</td>
<td>43.83</td>
<td>1056</td>
<td>56.17</td>
<td>1880</td>
<td>100.00</td>
</tr>
<tr>
<td>February 2022</td>
<td>836</td>
<td>44.09</td>
<td>1060</td>
<td>55.91</td>
<td>1896</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A3 and Table A3 show total kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era. There were 1317 registrations added to the waiting list in the pre-policy era, and 1506 added in the post-policy era.

**Figure A3: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era**

![Bar chart showing number of kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era. Pre-Policy has 1317 registrations, Post-Policy has 1506 registrations.]

**Table A3: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>1317</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>1506</td>
</tr>
</tbody>
</table>
Figure A4 and Table A4 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and age at listing. Candidates aged 35-49 years accounted for the majority of waiting list additions overall both pre- and post-policy, and there was little change in the distribution of candidate age at listing after policy implementation.

Figure A4: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Age at Listing

Table A4: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>0-5</td>
<td>4</td>
<td>0.30</td>
</tr>
<tr>
<td>6-11</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>12-17</td>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>18-34</td>
<td>342</td>
<td>25.97</td>
</tr>
<tr>
<td>35-49</td>
<td>674</td>
<td>51.18</td>
</tr>
<tr>
<td>50-64</td>
<td>290</td>
<td>22.02</td>
</tr>
<tr>
<td>65+</td>
<td>4</td>
<td>0.30</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A5 and Table A5 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and gender. The number of waiting list additions increased for both male and female candidates after implementation. The proportion of registrations added for female candidates decreased post-policy from 44.0% to 40.4%.

**Figure A5: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Gender**

![Bar chart showing kidney-pancreas registrations added by policy era and gender.](image)

**Table A5: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Female</td>
<td>580</td>
<td>44.04</td>
</tr>
<tr>
<td>Male</td>
<td>737</td>
<td>55.96</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A6 and Table A6 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and candidate race/ethnicity. The proportion of waiting list additions for Hispanic/Latino candidates increased post-policy from 15.8% to 19.0%. There was little change in the proportion of waiting list additions for other racial/ethnic groups post-policy.

Figure A6: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Race/Ethnicity

Table A6: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>615</td>
<td>46.70</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>409</td>
<td>31.06</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>208</td>
<td>15.79</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>63</td>
<td>4.78</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>22</td>
<td>1.67</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A7 and Table A7 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and blood type. There was little change in the proportion of waiting list additions by candidate blood type after policy implementation.

Figure A7: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Blood Type

Table A7: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>Blood Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>447</td>
<td>513</td>
</tr>
<tr>
<td>AB</td>
<td>32</td>
<td>66</td>
</tr>
<tr>
<td>B</td>
<td>197</td>
<td>201</td>
</tr>
<tr>
<td>O</td>
<td>641</td>
<td>726</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>1506</td>
</tr>
</tbody>
</table>

Percent of Registrations (%)

<table>
<thead>
<tr>
<th>Candidate Blood Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>33.94</td>
<td>34.06</td>
</tr>
<tr>
<td>AB</td>
<td>2.43</td>
<td>4.38</td>
</tr>
<tr>
<td>B</td>
<td>14.96</td>
<td>13.35</td>
</tr>
<tr>
<td>O</td>
<td>48.67</td>
<td>48.21</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A8 and Table A8 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and CPRA at listing. The majority of waiting list additions in both policy eras were for candidates with CPRA 0% and there was little change in the distribution of CPRA at listing after policy implementation.

**Figure A8: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and CPRA**

![Graph showing kidney-pancreas registrations added by CPRA at listing](image)

**Table A8: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and CPRA**

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>931</td>
<td>70.69</td>
</tr>
<tr>
<td>1-19</td>
<td>122</td>
<td>9.26</td>
</tr>
<tr>
<td>20-79</td>
<td>187</td>
<td>14.20</td>
</tr>
<tr>
<td>80-97</td>
<td>50</td>
<td>3.80</td>
</tr>
<tr>
<td>98-100</td>
<td>27</td>
<td>2.05</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A9 and Table A9 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and primary diagnosis at listing. The majority of waiting list additions in both policy eras were for candidates with type 1 diabetes. There was little change in the distribution of diagnosis at listing after policy implementation.

Figure A9: Kidney-Pancreas Registrations Added March 15, 2020 - March 14, 2022 by Policy Era and Diagnosis at Listing

Table A9: Kidney-Pancreas Registrations Added March 15, 2020 - March 14, 2022 by Policy Era and Diagnosis at Listing

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Diabetes Type 1</td>
<td>897</td>
<td>68.11</td>
</tr>
<tr>
<td>Diabetes Type 2</td>
<td>374</td>
<td>28.40</td>
</tr>
<tr>
<td>Other</td>
<td>46</td>
<td>3.49</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A10 and Table A10 show kidney-pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and insurance status at listing. There was little change in the distribution of candidate insurance status at listing after policy implementation.

Figure A10: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Insurance Status at Listing

![Bar chart showing distribution of candidate insurance status at listing before and after policy implementation.]

Table A10: Kidney-Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Insurance Status at Listing

<table>
<thead>
<tr>
<th>Insurance at Listing</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Public insurance</td>
<td>696</td>
<td>52.85</td>
</tr>
<tr>
<td>Private insurance</td>
<td>618</td>
<td>46.92</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>0.15</td>
</tr>
<tr>
<td>Unknown</td>
<td>1</td>
<td>0.08</td>
</tr>
<tr>
<td>Total</td>
<td>1317</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A11 and Table A11 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era. There were 110 deaths on the waiting list pre-policy and 99 deaths post-policy. The overall kidney-pancreas waiting list mortality rate decreased post-policy from 6.4 to 5.7 deaths per 100 patient years. This decrease was not statistically significant.

Figure A11: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era

Table A11: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>2919</td>
<td>110</td>
<td>6.43 (5.28, 7.75)</td>
<td></td>
</tr>
<tr>
<td>Post-Policy</td>
<td>3079</td>
<td>99</td>
<td>5.65 (4.59, 6.88)</td>
<td></td>
</tr>
</tbody>
</table>
Figure A12 and Table A12 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and age at listing. Waiting list mortality rates decreased post-policy for the 35-49 age group, and increased for the 18-34 and 50-64 age groups. These changes were not statistically significant. There were no deaths on the waiting list for registrations aged 0-17 at listing pre-policy, and 1 death on the waiting list post-policy. There were no deaths on the waiting list for registrations aged 65+ at listing in the pre- or post-policy eras.

Figure A12: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

![Graph showing waiting list mortality rates for different age groups pre- and post-policy.]

Table A12: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>Pre-Policy</td>
<td>8</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>5</td>
<td>1</td>
<td>33.64 (0.85, 187.43)</td>
<td></td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>784</td>
<td>31</td>
<td>6.91 (4.69, 9.8)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>776</td>
<td>32</td>
<td>7.17 (4.9, 10.12)</td>
<td></td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>1553</td>
<td>65</td>
<td>7.19 (5.55, 9.17)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1622</td>
<td>43</td>
<td>4.63 (3.35, 6.23)</td>
<td></td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>657</td>
<td>18</td>
<td>4.66 (2.76, 7.37)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>744</td>
<td>23</td>
<td>5.73 (3.63, 8.6)</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>4</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
</tbody>
</table>
Figure A13 and Table A13 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and gender. The waiting list mortality rate decreased post-policy for female registrations from 7.1 to 5.6 deaths per 100 patient years. This change was not statistically significant. There was little change in the waiting list mortality rate for male registrations (5.9 vs 5.7 deaths per 100 patient years).

Figure A13: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Gender

Table A13: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>1288</td>
<td>55</td>
<td>7.13</td>
<td>(5.37, 9.28)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1323</td>
<td>44</td>
<td>5.62</td>
<td>(4.08, 7.54)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>1632</td>
<td>55</td>
<td>5.85</td>
<td>(4.41, 7.62)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1757</td>
<td>55</td>
<td>5.68</td>
<td>(4.28, 7.39)</td>
</tr>
</tbody>
</table>
Figure A14 and Table A14 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and race/ethnicity. Waiting list mortality rates decreased for candidates of Black, Non-Hispanic; Hispanic/Latino; and Other race/ethnicity after policy implementation, and increased for Asian, Non-Hispanic candidates. These changes were not statistically significant. There was little change in the waiting list mortality rate for White, Non-Hispanic candidates after policy implementation (6.4 vs 6.6 deaths per 100 patient years).

Figure A14: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

Table A14: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>1422</td>
<td>55</td>
<td>6.43</td>
<td>(4.85, 8.37)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1441</td>
<td>55</td>
<td>6.58</td>
<td>(4.96, 8.56)</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>843</td>
<td>30</td>
<td>6.30</td>
<td>(4.25, 8.99)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>909</td>
<td>24</td>
<td>4.77</td>
<td>(3.05, 7.09)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>476</td>
<td>19</td>
<td>6.92</td>
<td>(4.16, 10.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>537</td>
<td>13</td>
<td>4.40</td>
<td>(2.34, 7.53)</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>127</td>
<td>2</td>
<td>2.94</td>
<td>(0.36, 10.61)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>143</td>
<td>4</td>
<td>4.92</td>
<td>(1.34, 12.59)</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>58</td>
<td>4</td>
<td>10.18</td>
<td>(2.78, 26.08)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>57</td>
<td>3</td>
<td>7.63</td>
<td>(1.57, 22.31)</td>
</tr>
</tbody>
</table>
Figure A15 and Table A15 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and CPRA at listing. Waiting list mortality rates decreased post-policy for candidates with CPRA 0%, 1-19%, and 20-79%, and increased for candidates with CPRA 80-97% and 98-100%. These changes were not statistically significant.

Figure A15: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

Table A15: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>2047</td>
<td>77</td>
<td>6.59</td>
<td>(5.2, 8.23)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>2099</td>
<td>63</td>
<td>5.37</td>
<td>(4.13, 6.87)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>241</td>
<td>8</td>
<td>5.84</td>
<td>(2.52, 11.5)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>295</td>
<td>5</td>
<td>3.19</td>
<td>(1.04, 7.45)</td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>422</td>
<td>14</td>
<td>5.61</td>
<td>(3.07, 9.41)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>460</td>
<td>14</td>
<td>5.12</td>
<td>(2.8, 8.59)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>144</td>
<td>7</td>
<td>7.84</td>
<td>(3.15, 16.15)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>160</td>
<td>7</td>
<td>8.18</td>
<td>(3.29, 16.85)</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>112</td>
<td>8</td>
<td>9.63</td>
<td>(4.16, 18.97)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>104</td>
<td>10</td>
<td>13.33</td>
<td>(6.39, 24.51)</td>
</tr>
<tr>
<td>Unknown</td>
<td>Pre-Policy</td>
<td>12</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>10</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
</tbody>
</table>
Figure A16 and Table A16 show waiting list mortality rates for kidney-pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and blood type. Waiting list mortality rates decreased post-policy for blood type A, AB, and O candidates, and increased for blood type B candidates. These changes were not statistically significant.

Figure A16: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

Table A16: Waiting List Mortality Rates for Kidney-Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>929</td>
<td>38</td>
<td>7.30 (5.16, 10.02)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>973</td>
<td>28</td>
<td>5.37 (3.57, 7.76)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>489</td>
<td>15</td>
<td>4.73 (2.64, 7.79)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>509</td>
<td>17</td>
<td>5.25 (3.06, 8.41)</td>
<td></td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>76</td>
<td>3</td>
<td>6.60 (1.36, 19.28)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>105</td>
<td>3</td>
<td>5.99 (1.24, 17.52)</td>
<td></td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>1426</td>
<td>55</td>
<td>6.64 (5, 8.65)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1492</td>
<td>51</td>
<td>5.96 (4.43, 7.83)</td>
<td></td>
</tr>
</tbody>
</table>
Deceased Donor Transplants

Figure A17 and Table A17 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. There were 820 transplants performed in the pre-policy era, and 816 in the post-policy era.

Figure A17: Deceased Donor Kidney-Pancreas Transplants March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Transplants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>820</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>816</td>
</tr>
</tbody>
</table>
Figure A18 and Table A18 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient age at transplant. The volume and proportion of transplants to recipients in the 50-64 age group increased after policy implementation, while the volume and proportion of transplants to recipients in the 18-34 and 35-49 age groups decreased.

Figure A18: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Age at Transplant

Table A18: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Age at Transplant

<table>
<thead>
<tr>
<th>Age at Transplant</th>
<th>Pre-Policy</th>
<th></th>
<th>Post-Policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>1</td>
<td>0.12</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>6-11</td>
<td>1</td>
<td>0.12</td>
<td>1</td>
<td>0.12</td>
</tr>
<tr>
<td>12-17</td>
<td>2</td>
<td>0.24</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>18-34</td>
<td>192</td>
<td>23.41</td>
<td>181</td>
<td>22.18</td>
</tr>
<tr>
<td>35-49</td>
<td>428</td>
<td>52.20</td>
<td>396</td>
<td>48.53</td>
</tr>
<tr>
<td>50-64</td>
<td>189</td>
<td>23.05</td>
<td>236</td>
<td>28.92</td>
</tr>
<tr>
<td>65+</td>
<td>7</td>
<td>0.85</td>
<td>2</td>
<td>0.25</td>
</tr>
<tr>
<td>Total</td>
<td>820</td>
<td>100.00</td>
<td>816</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure A19** and **Table A19** show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient race/ethnicity. The volume and proportion of transplants to Black, Non-Hispanic; Hispanic/Latino; and Asian, Non-Hispanic recipients increased after implementation, while the volume and proportion of transplants to White, Non-Hispanic recipients decreased.

**Figure A19: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Race/Ethnicity**

**Table A19: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Race/Ethnicity**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Pre-Policy</th>
<th></th>
<th>Post-Policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>387</td>
<td>47.20</td>
<td>345</td>
<td>42.28</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>256</td>
<td>31.22</td>
<td>262</td>
<td>32.11</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>135</td>
<td>16.46</td>
<td>150</td>
<td>18.38</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>34</td>
<td>4.15</td>
<td>45</td>
<td>5.51</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>8</td>
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<td>14</td>
<td>1.72</td>
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<tr>
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<td>820</td>
<td>100.00</td>
<td>816</td>
<td>100.00</td>
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</table>
Figure A20 and Table A20 show the distribution of time on the waiting list in years for deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median time from listing to transplant decreased from 0.52 years to 0.37 years after policy implementation.

Figure A20: Distribution of Waiting Time for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

Table A20: Distribution of Waiting Time for Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
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<td>Pre-Policy</td>
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<td>0.83</td>
<td>1.08</td>
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</table>
Figure A21 and Table A21 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient blood type. The volume and proportion of transplants to blood type A and O recipients decreased slightly after policy implementation, while the volume and proportion of transplants to blood type AB and B recipients increased slightly.

**Figure A21:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Blood Type

<table>
<thead>
<tr>
<th>Recipient Blood Type</th>
<th>Percent (%)</th>
<th>Pre-Policy</th>
<th>Percent (%)</th>
<th>Post-Policy</th>
</tr>
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<tbody>
<tr>
<td>A</td>
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<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>AB</td>
<td>22</td>
<td>2.68</td>
<td>33</td>
<td>4.04</td>
</tr>
<tr>
<td>B</td>
<td>105</td>
<td>12.80</td>
<td>115</td>
<td>14.09</td>
</tr>
<tr>
<td>O</td>
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<tr>
<td>Total</td>
<td>820</td>
<td>100.00</td>
<td>816</td>
<td>100.00</td>
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</table>
Figure A22 and Table A22 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and CPRA at transplant. The proportion of transplants to recipients with CPRA 80-97% increased from 3.2% to 5.0% after implementation, while the proportion of transplants to recipients with CPRA 98-100% decreased from 1.6% to 0.5%.

Figure A22: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and CPRA

Table A22: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and CPRA

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
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</thead>
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<tr>
<td></td>
<td>N</td>
<td>%</td>
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<tr>
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<td>580</td>
<td>70.73</td>
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<tr>
<td>1-19</td>
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<tr>
<td>20-79</td>
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<td>80-97</td>
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<td>98-100</td>
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<td>1.59</td>
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<tr>
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</table>
Figure A23 and Table A23 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and level of HLA mismatch. Multi-organ transplants including a kidney-pancreas were excluded. There was little change in the distribution of HLA mismatch level after implementation.

Figure A23: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and HLA Mismatch

Table A23: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and HLA Mismatch

<table>
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<td>6</td>
<td>0.74</td>
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<td>87</td>
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<tr>
<td>4</td>
<td>205</td>
<td>25.15</td>
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<td>308</td>
<td>37.79</td>
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<tr>
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Figure A24 and Table A24 show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and primary diagnosis. While the majority of recipients in both policy eras had type 1 diabetes, the proportion of transplants to recipients with type 1 diabetes decreased after implementation from 72.3% to 67.5%, and the proportion of transplants to recipients with type 2 diabetes increased from 25.0% to 30.6%.

Figure A24: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Diagnosis

Table A24: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Diagnosis

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<td>Other</td>
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<tr>
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<td>820</td>
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</table>
**Figure A25** and **Table A25** show deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and donor DCD status. The volume and proportion of transplants from DCD donors increased slightly after implementation from 23 (2.8%) to 27 (3.3%).

**Figure A25:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DCD Status

**Table A25:** Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DCD Status

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<tr>
<td>non-DCD</td>
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<tr>
<td>Total</td>
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Table A26 shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and DSA.

### Table A26: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DSA

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(continued)

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</tbody>
</table>
**Table A27** shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and transplant hospital.

**Table A27: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Transplant Hospital**

<table>
<thead>
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<th>Transplant Hospital</th>
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</tr>
<tr>
<td>MAMG-TX1</td>
<td>2</td>
<td>1</td>
<td>-50.00</td>
</tr>
<tr>
<td>MAPB-TX1</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>MDJH-TX1</td>
<td>7</td>
<td>7</td>
<td>0.00</td>
</tr>
<tr>
<td>MDUM-TX1</td>
<td>21</td>
<td>16</td>
<td>-23.81</td>
</tr>
<tr>
<td>MIHF-TX1</td>
<td>0</td>
<td>1</td>
<td>*</td>
</tr>
<tr>
<td>Transplant Hospital</td>
<td>Pre-Policy</td>
<td>Post-Policy</td>
<td>% Change</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------</td>
<td>-------------</td>
<td>----------</td>
</tr>
<tr>
<td>MIUM-TX1</td>
<td>7</td>
<td>1</td>
<td>-85.71</td>
</tr>
<tr>
<td>MNMC-TX1</td>
<td>4</td>
<td>11</td>
<td>175.00</td>
</tr>
<tr>
<td>MNUM-TX1</td>
<td>29</td>
<td>24</td>
<td>-17.24</td>
</tr>
<tr>
<td>MOBH-TX1</td>
<td>11</td>
<td>9</td>
<td>-18.18</td>
</tr>
</tbody>
</table>
| MORH-TX1            | 0          | 2           |          *
<p>| MOSL-TX1            | 2          | 0           | -100.00  |
| MSUM-TX1            | 5          | 4           | -20.00   |
| NCBG-TX1            | 25         | 16          | -36.00   |
| NCCM-TX1            | 4          | 3           | -25.00   |
| NCDU-TX1            | 6          | 12          | 100.00   |
| NCEC-TX1            | 9          | 6           | -33.33   |
| NCMH-TX1            | 2          | 3           | 50.00    |
| NEUN-TX1            | 1          | 0           | -100.00  |
| NJLL-TX1            | 5          | 4           | -20.00   |
| NJRW-TX1            | 6          | 14          | 133.33   |
| NJSB-TX1            | 3          | 1           | -66.67   |
| NMPH-TX1            | 2          | 0           | -100.00  |
| NYAM-TX1            | 3          | 1           | -66.67   |
| NYCP-TX1            | 5          | 11          | 120.00   |
| NYEC-TX1            | 2          | 7           | 250.00   |
| NYMA-TX1            | 23         | 24          | 4.35     |
| NYMS-TX1            | 6          | 4           | -33.33   |
| NYNY-TX1            | 5          | 7           | 40.00    |
| NYUC-TX1            | 12         | 7           | -41.67   |
| NYUM-TX1            | 1          | 6           | 500.00   |
| OHCC-TX1            | 9          | 10          | 11.11    |
| OHOU-TX1            | 15         | 10          | -33.33   |
| OHUC-TX1            | 4          | 5           | 25.00    |
| OHUH-TX1            | 8          | 2           | -75.00   |
| OKBC-TX1            | 1          | 4           | 300.00   |
| OKMD-TX1            | 1          | 3           | 200.00   |
| ORUO-TX1            | 10         | 2           | -80.00   |
| PAAE-TX1            | 2          | 2           | 0.00     |
| PAAG-TX1            | 2          | 1           | -50.00   |
| PACH-TX1            | 1          | 0           | -100.00  |
| PALV-TX1            | 2          | 3           | 50.00    |
| PAPT-TX1            | 4          | 5           | 25.00    |
| PATJ-TX1            | 3          | 5           | 66.67    |
| PATU-TX1            | 2          | 2           | 0.00     |
| PAUP-TX1            | 7          | 10          | 42.86    |
| PRSJ-TX1            | 6          | 6           | 0.00     |
| SCMU-TX1            | 27         | 29          | 7.41     |
| SDMK-TX1            | 1          | 0           | -100.00  |
| TNMH-TX1            | 15         | 6           | -60.00   |
| TNUV-TX1            | 2          | 10          | 400.00   |
| TXAS-TX1            | 7          | 3           | -57.14   |
| TXHD-TX1            | 6          | 8           | 33.33    |
| TXHH-TX1            | 2          | 0           | -100.00  |
| TXHS-TX1            | 5          | 1           | -80.00   |
| TXJS-TX1            | 4          | 0           | -100.00  |
| TXMC-TX1            | 6          | 4           | -33.33   |</p>
<table>
<thead>
<tr>
<th>Transplant Hospital</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>TXMH-TX1</td>
<td>16</td>
<td>15</td>
<td>-6.25</td>
</tr>
<tr>
<td>TXSW-TX1</td>
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<td>9</td>
<td>-47.06</td>
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<td>TXTX-TX1</td>
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</tr>
<tr>
<td>UTLD-TX1</td>
<td>7</td>
<td>5</td>
<td>-28.57</td>
</tr>
<tr>
<td>UTMC-TX1</td>
<td>9</td>
<td>2</td>
<td>-77.78</td>
</tr>
<tr>
<td>VAFH-TX1</td>
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<td>*</td>
</tr>
<tr>
<td>VAMC-TX1</td>
<td>6</td>
<td>9</td>
<td>50.00</td>
</tr>
<tr>
<td>VANG-TX1</td>
<td>2</td>
<td>1</td>
<td>-50.00</td>
</tr>
<tr>
<td>VAUV-TX1</td>
<td>14</td>
<td>10</td>
<td>-28.57</td>
</tr>
<tr>
<td>WASH-TX1</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>WASM-TX1</td>
<td>2</td>
<td>1</td>
<td>-50.00</td>
</tr>
<tr>
<td>WAWU-TX1</td>
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</tr>
<tr>
<td>WAVM-TX1</td>
<td>5</td>
<td>3</td>
<td>-40.00</td>
</tr>
<tr>
<td>WISE-TX1</td>
<td>5</td>
<td>2</td>
<td>-60.00</td>
</tr>
<tr>
<td>WISL-TX1</td>
<td>3</td>
<td>0</td>
<td>-100.00</td>
</tr>
<tr>
<td>WUW-TX1</td>
<td>24</td>
<td>19</td>
<td>-20.83</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>820</strong></td>
<td><strong>816</strong></td>
<td><strong>-0.49</strong></td>
</tr>
</tbody>
</table>
Table A28 shows deceased donor kidney-pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and state.

**Table A28: Deceased Donor Kidney-Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and State**

<table>
<thead>
<tr>
<th>State</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>10</td>
<td>6</td>
<td>-40.00</td>
</tr>
<tr>
<td>Arizona</td>
<td>19</td>
<td>37</td>
<td>94.74</td>
</tr>
<tr>
<td>California</td>
<td>56</td>
<td>87</td>
<td>55.36</td>
</tr>
<tr>
<td>Colorado</td>
<td>4</td>
<td>3</td>
<td>-25.00</td>
</tr>
<tr>
<td>Dist. Of Columbia</td>
<td>21</td>
<td>12</td>
<td>-42.86</td>
</tr>
<tr>
<td>Florida</td>
<td>46</td>
<td>51</td>
<td>10.87</td>
</tr>
<tr>
<td>Georgia</td>
<td>29</td>
<td>26</td>
<td>-10.34</td>
</tr>
<tr>
<td>Hawaii</td>
<td>1</td>
<td>1</td>
<td>0.00</td>
</tr>
<tr>
<td>Illinois</td>
<td>60</td>
<td>96</td>
<td>60.00</td>
</tr>
<tr>
<td>Indiana</td>
<td>17</td>
<td>14</td>
<td>-17.65</td>
</tr>
<tr>
<td>Iowa</td>
<td>10</td>
<td>9</td>
<td>-10.00</td>
</tr>
<tr>
<td>Kansas</td>
<td>10</td>
<td>8</td>
<td>-20.00</td>
</tr>
<tr>
<td>Kentucky</td>
<td>8</td>
<td>6</td>
<td>-25.00</td>
</tr>
<tr>
<td>Louisiana</td>
<td>37</td>
<td>27</td>
<td>-27.03</td>
</tr>
<tr>
<td>Maryland</td>
<td>28</td>
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<td>28.57</td>
</tr>
<tr>
<td>Michigan</td>
<td>7</td>
<td>2</td>
<td>-71.43</td>
</tr>
<tr>
<td>Minnesota</td>
<td>33</td>
<td>35</td>
<td>6.06</td>
</tr>
<tr>
<td>Mississippi</td>
<td>5</td>
<td>4</td>
<td>-20.00</td>
</tr>
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<td>Missouri</td>
<td>13</td>
<td>11</td>
<td>-15.38</td>
</tr>
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<td>Nebraska</td>
<td>1</td>
<td>0</td>
<td>-100.00</td>
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<td>New Jersey</td>
<td>14</td>
<td>19</td>
<td>35.71</td>
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<tr>
<td>New Mexico</td>
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<td>0</td>
<td>-100.00</td>
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<td>New York</td>
<td>57</td>
<td>67</td>
<td>17.54</td>
</tr>
<tr>
<td>North Carolina</td>
<td>46</td>
<td>40</td>
<td>-13.04</td>
</tr>
<tr>
<td>Ohio</td>
<td>36</td>
<td>27</td>
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<tr>
<td>Oklahoma</td>
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<td>7</td>
<td>250.00</td>
</tr>
<tr>
<td>Oregon</td>
<td>10</td>
<td>2</td>
<td>-80.00</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>23</td>
<td>28</td>
<td>21.74</td>
</tr>
<tr>
<td>Puerto Rico</td>
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<td>6</td>
<td>0.00</td>
</tr>
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<td>South Carolina</td>
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<td>7.41</td>
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<td>0</td>
<td>-100.00</td>
</tr>
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<td>16</td>
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<td>Texas</td>
<td>73</td>
<td>47</td>
<td>-35.62</td>
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<tr>
<td>Utah</td>
<td>16</td>
<td>7</td>
<td>-56.25</td>
</tr>
<tr>
<td>Virginia</td>
<td>22</td>
<td>25</td>
<td>13.64</td>
</tr>
<tr>
<td>Washington</td>
<td>14</td>
<td>8</td>
<td>-42.86</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>32</td>
<td>21</td>
<td>-34.38</td>
</tr>
<tr>
<td>Total</td>
<td>820</td>
<td>816</td>
<td>-0.49</td>
</tr>
</tbody>
</table>
Post-Transplant Outcomes

Patient Survival

Figure A26 and Table A29 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and recipient age at transplant. There were no statistically significant differences in the probability of patient survival at six months post-transplant within recipient age groups.

Figure A26: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

Table A29: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

<table>
<thead>
<tr>
<th>Recipient Age</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>Pre-Policy</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>192</td>
<td>2</td>
<td>186</td>
<td>99</td>
<td>(95.9, 99.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>101</td>
<td>1</td>
<td>67</td>
<td>99</td>
<td>(92.9, 99.9)</td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>428</td>
<td>12</td>
<td>408</td>
<td>97.2</td>
<td>(95.1, 98.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>237</td>
<td>8</td>
<td>155</td>
<td>96.6</td>
<td>(93.2, 98.3)</td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>189</td>
<td>7</td>
<td>180</td>
<td>96.3</td>
<td>(92.4, 98.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>125</td>
<td>3</td>
<td>83</td>
<td>97.4</td>
<td>(92.1, 99.2)</td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A27 and Table A30 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and recipient gender. There were no statistically significant differences in the probability of patient survival at six months post-transplant for female or male recipients.

**Figure A27: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Gender**

![Graph showing patient survival probability by policy era and gender.]

**Table A30: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Gender**

<table>
<thead>
<tr>
<th>Recipient Gender</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>330</td>
<td>11</td>
<td>313</td>
<td>96.7</td>
<td>(94.1, 98.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>179</td>
<td>5</td>
<td>122</td>
<td>97.2</td>
<td>(93.3, 98.8)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>490</td>
<td>11</td>
<td>471</td>
<td>97.8</td>
<td>(96, 98.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>285</td>
<td>7</td>
<td>184</td>
<td>97.4</td>
<td>(94.6, 98.8)</td>
</tr>
</tbody>
</table>
Figure A28 and Table A31 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and recipient age at transplant. There were no statistically significant differences in the probability of patient survival at six months post-transplant within recipient racial/ethnic groups.

**Figure A28:** Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity

**Table A31:** Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Recipient Race/Ethnicity</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>387</td>
<td>11</td>
<td>370</td>
<td>97.2</td>
<td>(94.9, 98.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>202</td>
<td>5</td>
<td>128</td>
<td>97.4</td>
<td>(93.8, 98.9)</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>256</td>
<td>9</td>
<td>242</td>
<td>96.5</td>
<td>(93.3, 98.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>144</td>
<td>2</td>
<td>99</td>
<td>98.6</td>
<td>(94.4, 99.6)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>135</td>
<td>1</td>
<td>131</td>
<td>99.3</td>
<td>(94.9, 99.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>83</td>
<td>4</td>
<td>55</td>
<td>95.2</td>
<td>(87.7, 98.2)</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>34</td>
<td>1</td>
<td>33</td>
<td>97.1</td>
<td>(80.9, 99.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>27</td>
<td>1</td>
<td>17</td>
<td>96.2</td>
<td>(75.7, 99.4)</td>
</tr>
<tr>
<td>Other</td>
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<td>0</td>
<td>8</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A29 and Table A32 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and recipient CPRA. There were no statistically significant differences in the probability of patient survival at six months post-transplant within recipient CPRA groups.

Figure A29: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and CPRA

<table>
<thead>
<tr>
<th>CPRA</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>580</td>
<td>13</td>
<td>555</td>
<td>97.8</td>
<td>(96.2, 98.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>319</td>
<td>10</td>
<td>209</td>
<td>96.7</td>
<td>(94, 98.2)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>73</td>
<td>3</td>
<td>68</td>
<td>95.9</td>
<td>(87.8, 98.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>49</td>
<td>1</td>
<td>33</td>
<td>97.9</td>
<td>(86.1, 99.7)</td>
</tr>
<tr>
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<td>Pre-Policy</td>
<td>128</td>
<td>4</td>
<td>124</td>
<td>96.9</td>
<td>(91.9, 98.8)</td>
</tr>
<tr>
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<td>Post-Policy</td>
<td>66</td>
<td>1</td>
<td>43</td>
<td>98.4</td>
<td>(89.1, 99.8)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>26</td>
<td>1</td>
<td>25</td>
<td>96.2</td>
<td>(75.7, 99.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>26</td>
<td>0</td>
<td>18</td>
<td>100</td>
<td>–</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>13</td>
<td>1</td>
<td>12</td>
<td>92.3</td>
<td>(56.6, 98.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>0</td>
<td>3</td>
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<td>–</td>
</tr>
</tbody>
</table>
Figure A30 and Table A33 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and recipient blood type. There were no statistically significant differences in the probability of patient survival at six months post-transplant within blood type groups.

Figure A30: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type

Table A33: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>283</td>
<td>8</td>
<td>270</td>
<td>97.2</td>
<td>(94.4, 98.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>154</td>
<td>3</td>
<td>94</td>
<td>97.9</td>
<td>(93.7, 99.3)</td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>105</td>
<td>5</td>
<td>97</td>
<td>95.2</td>
<td>(88.9, 98)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>60</td>
<td>4</td>
<td>41</td>
<td>93.2</td>
<td>(82.9, 97.4)</td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>22</td>
<td>2</td>
<td>20</td>
<td>90.9</td>
<td>(68.3, 97.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>17</td>
<td>2</td>
<td>12</td>
<td>87.5</td>
<td>(58.6, 96.7)</td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>410</td>
<td>7</td>
<td>397</td>
<td>98.3</td>
<td>(96.4, 99.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>233</td>
<td>3</td>
<td>159</td>
<td>98.7</td>
<td>(95.9, 99.6)</td>
</tr>
</tbody>
</table>
Figure A31 and Table A34 show six month post-transplant patient survival for deceased donor kidney-pancreas transplants by policy era and kidney cold ischemic time. There were no statistically significant differences in the probability of patient survival at six months post-transplant within quartiles of cold ischemic time.

Figure A31: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Cold Ischemic Time

Table A34: Six Month Post-Transplant Patient Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Cold Ischemic Time

<table>
<thead>
<tr>
<th>Cold Ischemic Time</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 (1-6 hours)</td>
<td>Pre-Policy</td>
<td>269</td>
<td>5</td>
<td>260</td>
<td>98.1</td>
<td>(95.6, 99.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>114</td>
<td>2</td>
<td>76</td>
<td>98.2</td>
<td>(93, 99.5)</td>
</tr>
<tr>
<td>Q2 (7-9 hours)</td>
<td>Pre-Policy</td>
<td>227</td>
<td>4</td>
<td>221</td>
<td>98.2</td>
<td>(95.4, 99.3)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>118</td>
<td>2</td>
<td>86</td>
<td>98.2</td>
<td>(93, 99.5)</td>
</tr>
<tr>
<td>Q3 (10-13 hours)</td>
<td>Pre-Policy</td>
<td>187</td>
<td>8</td>
<td>175</td>
<td>95.7</td>
<td>(91.6, 97.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>111</td>
<td>4</td>
<td>72</td>
<td>96.3</td>
<td>(90.5, 98.6)</td>
</tr>
<tr>
<td>Q4 (14-48 hours)</td>
<td>Pre-Policy</td>
<td>129</td>
<td>4</td>
<td>122</td>
<td>96.9</td>
<td>(91.9, 98.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>112</td>
<td>3</td>
<td>70</td>
<td>97.2</td>
<td>(91.5, 99.1)</td>
</tr>
</tbody>
</table>
Kidney Graft Survival

Figure A32 and Table A35 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and recipient age at transplant. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant within recipient age groups.

Figure A32: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

Table A35: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

<table>
<thead>
<tr>
<th>Recipient Age</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>Pre-Policy</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>192</td>
<td>4</td>
<td>184</td>
<td>97.9</td>
<td>(94.5, 99.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>101</td>
<td>2</td>
<td>67</td>
<td>97.9</td>
<td>(92, 99.5)</td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>428</td>
<td>14</td>
<td>409</td>
<td>96.7</td>
<td>(94.5, 98)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>237</td>
<td>11</td>
<td>152</td>
<td>95.3</td>
<td>(91.7, 97.4)</td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>189</td>
<td>10</td>
<td>177</td>
<td>94.7</td>
<td>(90.4, 97.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>125</td>
<td>3</td>
<td>83</td>
<td>97.4</td>
<td>(92.1, 99.2)</td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A33 and Table A36 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and recipient age at transplant. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant for female or male recipients.

**Figure A33: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Gender**

<table>
<thead>
<tr>
<th></th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Transplants</td>
<td>330</td>
<td>179</td>
</tr>
<tr>
<td>N Graft Failures</td>
<td>14</td>
<td>7</td>
</tr>
<tr>
<td>N at Risk</td>
<td>311</td>
<td>120</td>
</tr>
<tr>
<td>Estimate</td>
<td>95.8</td>
<td>96</td>
</tr>
<tr>
<td>95% CI</td>
<td>(92.9, 97.5)</td>
<td>(91.9, 98.1)</td>
</tr>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N Transplants</td>
<td>490</td>
<td>285</td>
</tr>
<tr>
<td>N Graft Failures</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>N at Risk</td>
<td>469</td>
<td>183</td>
</tr>
<tr>
<td>Estimate</td>
<td>96.9</td>
<td>96.7</td>
</tr>
<tr>
<td>95% CI</td>
<td>(95, 98.1)</td>
<td>(93.7, 98.3)</td>
</tr>
</tbody>
</table>
Figure A34 and Table A37 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and recipient race/ethnicity. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant within racial/ethnic groups.

Figure A34: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity

Table A37: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Recipient Race/Ethnicity</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>387</td>
<td>14</td>
<td>368</td>
<td>96.4</td>
<td>(94, 97.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>202</td>
<td>7</td>
<td>126</td>
<td>96.3</td>
<td>(92.5, 98.2)</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>256</td>
<td>10</td>
<td>241</td>
<td>96.1</td>
<td>(92.8, 97.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>144</td>
<td>4</td>
<td>98</td>
<td>97.1</td>
<td>(92.6, 98.9)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>135</td>
<td>4</td>
<td>130</td>
<td>97</td>
<td>(92.3, 98.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>83</td>
<td>4</td>
<td>55</td>
<td>95.2</td>
<td>(87.7, 98.2)</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>34</td>
<td>1</td>
<td>33</td>
<td>97.1</td>
<td>(80.9, 99.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>27</td>
<td>1</td>
<td>17</td>
<td>96.2</td>
<td>(75.7, 99.4)</td>
</tr>
<tr>
<td>Other</td>
<td>Pre-Policy</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
**Figure A35** and **Table A38** show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and recipient CPRA. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant within CPRA groups.

**Figure A35:** Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and CPRA

**Table A38:** Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and CPRA

<table>
<thead>
<tr>
<th>CPRA</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
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<td>580</td>
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<td>550</td>
<td>96.5</td>
<td>(94.7, 97.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>319</td>
<td>13</td>
<td>207</td>
<td>95.8</td>
<td>(92.8, 97.5)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>73</td>
<td>3</td>
<td>69</td>
<td>95.9</td>
<td>(87.8, 98.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>49</td>
<td>1</td>
<td>33</td>
<td>97.9</td>
<td>(86.1, 99.7)</td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>128</td>
<td>4</td>
<td>124</td>
<td>96.9</td>
<td>(91.9, 98.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>66</td>
<td>1</td>
<td>43</td>
<td>98.4</td>
<td>(89.1, 99.8)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>26</td>
<td>1</td>
<td>25</td>
<td>96.2</td>
<td>(75.7, 99.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>26</td>
<td>0</td>
<td>18</td>
<td>100</td>
<td>–</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>13</td>
<td>1</td>
<td>12</td>
<td>92.3</td>
<td>(56.6, 98.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A36 and Table A39 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and recipient blood type. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant within blood type groups.

**Figure A36: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type**

**Table A39: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type**

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>283</td>
<td>10</td>
<td>270</td>
<td>96.5</td>
<td>(93.5, 98.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>154</td>
<td>4</td>
<td>93</td>
<td>97.3</td>
<td>(92.9, 99)</td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>105</td>
<td>6</td>
<td>96</td>
<td>94.3</td>
<td>(87.7, 97.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>60</td>
<td>5</td>
<td>40</td>
<td>91.6</td>
<td>(80.9, 96.4)</td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>22</td>
<td>2</td>
<td>20</td>
<td>90.9</td>
<td>(68.3, 97.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>17</td>
<td>2</td>
<td>12</td>
<td>87.5</td>
<td>(58.6, 96.7)</td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>410</td>
<td>11</td>
<td>394</td>
<td>97.3</td>
<td>(95.2, 98.5)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>233</td>
<td>5</td>
<td>158</td>
<td>97.8</td>
<td>(94.8, 99.1)</td>
</tr>
</tbody>
</table>
Figure A37 and Table A40 show six month post-transplant kidney graft survival for deceased donor kidney-pancreas transplants by policy era and cold ischemic time. There were no statistically significant differences in the probability of kidney graft survival at six months post-transplant within quartiles of cold ischemic time.

Figure A37: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Cold Ischemic Time

Table A40: Six Month Post-Transplant Kidney Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Cold Ischemic Time

<table>
<thead>
<tr>
<th>Cold Ischemic Time</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 (1-6 hours)</td>
<td>Pre-Policy</td>
<td>269</td>
<td>6</td>
<td>260</td>
<td>97.8</td>
<td>(95.1, 99)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>114</td>
<td>2</td>
<td>76</td>
<td>98.2</td>
<td>(93, 99.5)</td>
</tr>
<tr>
<td>Q2 (7-9 hours)</td>
<td>Pre-Policy</td>
<td>227</td>
<td>6</td>
<td>220</td>
<td>97.4</td>
<td>(94.2, 98.8)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>118</td>
<td>2</td>
<td>86</td>
<td>98.2</td>
<td>(93.1, 99.6)</td>
</tr>
<tr>
<td>Q3 (10-13 hours)</td>
<td>Pre-Policy</td>
<td>187</td>
<td>10</td>
<td>174</td>
<td>94.6</td>
<td>(90.3, 97.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>111</td>
<td>5</td>
<td>71</td>
<td>95.4</td>
<td>(89.3, 98.1)</td>
</tr>
<tr>
<td>Q4 (14-48 hours)</td>
<td>Pre-Policy</td>
<td>129</td>
<td>6</td>
<td>120</td>
<td>95.3</td>
<td>(89.9, 97.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>112</td>
<td>6</td>
<td>68</td>
<td>94.3</td>
<td>(87.8, 97.4)</td>
</tr>
</tbody>
</table>
Pancreas Graft Survival

Figure A38 and Table A41 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and recipient age at transplant. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant within age groups.

Figure A38: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

Table A41: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Recipient Age

<table>
<thead>
<tr>
<th>Recipient Age</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;18</td>
<td>Pre-Policy</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>192</td>
<td>15</td>
<td>174</td>
<td>92.2</td>
<td>(87.4, 95.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>101</td>
<td>3</td>
<td>67</td>
<td>96.9</td>
<td>(90.8, 99)</td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>428</td>
<td>39</td>
<td>385</td>
<td>90.9</td>
<td>(87.7, 93.3)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>237</td>
<td>17</td>
<td>148</td>
<td>92.8</td>
<td>(88.6, 95.4)</td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>189</td>
<td>19</td>
<td>168</td>
<td>89.9</td>
<td>(84.6, 93.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>125</td>
<td>10</td>
<td>78</td>
<td>91.6</td>
<td>(84.9, 95.4)</td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>7</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A39 and Table A42 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and recipient gender. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant for female or male recipients.

**Figure A39: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Gender**

Table A42: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Gender

<table>
<thead>
<tr>
<th>Recipient Gender</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>330</td>
<td>34</td>
<td>291</td>
<td>89.7</td>
<td>(85.9, 92.5)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>179</td>
<td>11</td>
<td>118</td>
<td>93.8</td>
<td>(89.1, 96.5)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>490</td>
<td>40</td>
<td>446</td>
<td>91.8</td>
<td>(89, 93.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>285</td>
<td>19</td>
<td>176</td>
<td>93.1</td>
<td>(89.4, 95.5)</td>
</tr>
</tbody>
</table>
Figure A40 and Table A43 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and recipient race/ethnicity. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant within racial/ethnic groups.

**Figure A40: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity**

**Table A43: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Race/Ethnicity**

<table>
<thead>
<tr>
<th>Recipient Race/Ethnicity</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>387</td>
<td>36</td>
<td>346</td>
<td>90.7</td>
<td>(87.3, 93.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>202</td>
<td>15</td>
<td>120</td>
<td>92.3</td>
<td>(87.6, 95.3)</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>256</td>
<td>24</td>
<td>228</td>
<td>90.6</td>
<td>(86.3, 93.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>144</td>
<td>8</td>
<td>96</td>
<td>94.4</td>
<td>(89, 97.1)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>135</td>
<td>10</td>
<td>125</td>
<td>92.6</td>
<td>(86.7, 95.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>83</td>
<td>5</td>
<td>54</td>
<td>94</td>
<td>(86.1, 97.4)</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>34</td>
<td>3</td>
<td>31</td>
<td>91.2</td>
<td>(75.1, 97.1)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>27</td>
<td>2</td>
<td>17</td>
<td>92.3</td>
<td>(72.6, 98)</td>
</tr>
<tr>
<td>Other</td>
<td>Pre-Policy</td>
<td>8</td>
<td>1</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>0</td>
<td>7</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A41 and Table A44 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and recipient CPRA. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant within CPRA groups.

**Figure A41:** Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and CPRA

![Graph showing six month post-transplant pancreas graft survival for kidney-pancreas transplants by policy era and CPRA.](image)

**Table A44:** Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and CPRA

<table>
<thead>
<tr>
<th>CPRA</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>580</td>
<td>49</td>
<td>523</td>
<td>91.5</td>
<td>(89, 93.5)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>319</td>
<td>23</td>
<td>201</td>
<td>92.6</td>
<td>(89.1, 95)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>73</td>
<td>13</td>
<td>59</td>
<td>82.2</td>
<td>(71.3, 89.2)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>49</td>
<td>4</td>
<td>31</td>
<td>91.7</td>
<td>(79.4, 96.8)</td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>128</td>
<td>9</td>
<td>119</td>
<td>93</td>
<td>(86.9, 96.3)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>66</td>
<td>3</td>
<td>41</td>
<td>95.3</td>
<td>(86.1, 98.5)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>26</td>
<td>1</td>
<td>25</td>
<td>96.2</td>
<td>(75.7, 99.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>26</td>
<td>0</td>
<td>18</td>
<td>100</td>
<td>–</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>13</td>
<td>2</td>
<td>11</td>
<td>84.6</td>
<td>(51.2, 95.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>
Figure A42 and Table A45 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and recipient blood type. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant within blood type groups.

Figure A42: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type

Table A45: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>283</td>
<td>26</td>
<td>255</td>
<td>90.8</td>
<td>(86.8, 93.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>154</td>
<td>11</td>
<td>90</td>
<td>92.6</td>
<td>(87, 95.8)</td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>105</td>
<td>9</td>
<td>93</td>
<td>91.4</td>
<td>(84.2, 95.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>60</td>
<td>5</td>
<td>40</td>
<td>91.6</td>
<td>(80.9, 96.4)</td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>22</td>
<td>2</td>
<td>20</td>
<td>90.9</td>
<td>(68.3, 97.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>17</td>
<td>3</td>
<td>11</td>
<td>81.2</td>
<td>(52.5, 93.5)</td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>410</td>
<td>37</td>
<td>369</td>
<td>91</td>
<td>(87.7, 93.4)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>233</td>
<td>11</td>
<td>153</td>
<td>95.2</td>
<td>(91.5, 97.3)</td>
</tr>
</tbody>
</table>
Figure A43 and Table A46 show six month post-transplant pancreas graft survival for deceased donor kidney-pancreas transplants by policy era and preservation time. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant within quartiles of preservation time.

Figure A43: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Preservation Time

Table A46: Six Month Post-Transplant Pancreas Graft Survival for Kidney-Pancreas Transplants March 15, 2020 - September 30, 2021 by Policy Era and Preservation Time

<table>
<thead>
<tr>
<th>Preservation Time</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1 (0-6 hours)</td>
<td>Pre-Policy</td>
<td>254</td>
<td>3</td>
<td>247</td>
<td>98.8</td>
<td>(96.4, 99.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>92</td>
<td>2</td>
<td>63</td>
<td>97.7</td>
<td>(91.3, 99.4)</td>
</tr>
<tr>
<td>Q2 (7-9 hours)</td>
<td>Pre-Policy</td>
<td>250</td>
<td>7</td>
<td>240</td>
<td>97.2</td>
<td>(94.2, 98.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>136</td>
<td>4</td>
<td>93</td>
<td>96.9</td>
<td>(92, 98.8)</td>
</tr>
<tr>
<td>Q3 (10-12 hours)</td>
<td>Pre-Policy</td>
<td>162</td>
<td>7</td>
<td>152</td>
<td>95.7</td>
<td>(91.2, 97.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>103</td>
<td>3</td>
<td>71</td>
<td>97</td>
<td>(90.9, 99)</td>
</tr>
<tr>
<td>Q4 (13-40 hours)</td>
<td>Pre-Policy</td>
<td>141</td>
<td>3</td>
<td>135</td>
<td>97.9</td>
<td>(93.5, 99.3)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>123</td>
<td>3</td>
<td>75</td>
<td>97.4</td>
<td>(92.3, 99.2)</td>
</tr>
</tbody>
</table>
Released Organs

Table 47 shows the disposition of kidneys and pancreata from kidney-pancreas matches with a final acceptance by policy era and OPTN region. The majority of kidneys and pancreata with a final acceptance were transplanted to the originally accepting patient both pre- and post-policy across all regions. Pre-policy, this ranged from 66.7% to 100% for kidneys, and from 70.0% to 100% for pancreata. Post-policy, this proportion ranged from 62.6% to 96.0% for kidneys and from 64.4% to 96.0% for pancreata. Overall, the proportion of kidneys and pancreata that were transplanted to the originally accepting patient decreased post-policy (kidney: 86.3% vs 81.9%; pancreas: 87.6% vs 83.6%).

Table 47: Disposition of Kidneys and Pancreata from Kidney-Pancreas Matches with a Final Acceptance
March 15, 2020-March 14, 2022 by Policy Era and OPTN Region

<table>
<thead>
<tr>
<th>Organ</th>
<th>Era</th>
<th>Region</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney</td>
<td>Pre-Policy</td>
<td>1</td>
<td>10</td>
<td>10 (100.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>76</td>
<td>76 (100.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>153</td>
<td>138 (90.2%)</td>
<td>6 (3.9%)</td>
<td>9 (5.9%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>97</td>
<td>78 (80.4%)</td>
<td>4 (4.1%)</td>
<td>14 (14.4%)</td>
<td>0 (0.0%)</td>
<td>1 (1.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>99</td>
<td>93 (93.9%)</td>
<td>2 (2.0%)</td>
<td>3 (3.0%)</td>
<td>0 (0.0%)</td>
<td>1 (1.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>25</td>
<td>25 (100.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>105</td>
<td>70 (66.7%)</td>
<td>11 (10.5%)</td>
<td>14 (13.3%)</td>
<td>1 (1.0%)</td>
<td>9 (8.6%)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>8</td>
<td>68</td>
<td>64 (94.1%)</td>
<td>0 (0.0%)</td>
<td>3 (4.4%)</td>
<td>0 (0.0%)</td>
<td>1 (1.5%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>20</td>
<td>17 (85.0%)</td>
<td>3 (15.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10</td>
<td>87</td>
<td>65 (74.7%)</td>
<td>11 (12.6%)</td>
<td>8 (9.2%)</td>
<td>1 (1.1%)</td>
<td>2 (2.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11</td>
<td>114</td>
<td>101 (88.6%)</td>
<td>3 (2.6%)</td>
<td>9 (7.9%)</td>
<td>0 (0.0%)</td>
<td>1 (0.9%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Organ</th>
<th>Era</th>
<th>Region</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kidney</td>
<td>Total</td>
<td>854</td>
<td>737</td>
<td>86.3%</td>
<td>40 (4.7%)</td>
<td>60 (7.0%)</td>
<td>2 (0.2%)</td>
<td>15 (1.8%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>25</td>
<td>24 (96.0%)</td>
<td>0 (0.0%)</td>
<td>1 (4.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>92</td>
<td>87 (94.6%)</td>
<td>4 (4.3%)</td>
<td>1 (1.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3</td>
<td>153</td>
<td>138 (90.2%)</td>
<td>6 (3.9%)</td>
<td>6 (3.9%)</td>
<td>3 (2.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>73</td>
<td>51 (69.9%)</td>
<td>1 (1.4%)</td>
<td>18 (24.7%)</td>
<td>1 (1.4%)</td>
<td>2 (2.7%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>121</td>
<td>110 (90.9%)</td>
<td>3 (2.5%)</td>
<td>8 (6.6%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6</td>
<td>20</td>
<td>17 (85.0%)</td>
<td>2 (10.0%)</td>
<td>1 (5.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>99</td>
<td>62 (62.6%)</td>
<td>8 (8.1%)</td>
<td>19 (19.2%)</td>
<td>0 (0.0%)</td>
<td>10 (10.1%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8</td>
<td>79</td>
<td>66 (83.5%)</td>
<td>3 (3.8%)</td>
<td>9 (11.4%)</td>
<td>0 (0.0%)</td>
<td>1 (1.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9</td>
<td>23</td>
<td>20 (87.0%)</td>
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<td>104</td>
<td>66 (63.5%)</td>
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<td>17 (16.3%)</td>
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<td>9 (8.7%)</td>
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<td>4 (4.0%)</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>889</td>
<td>728</td>
<td>81.9%</td>
<td>43 (4.8%)</td>
<td>85 (9.6%)</td>
<td>7 (0.8%)</td>
<td>26 (2.9%)</td>
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<td>Discard</td>
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<td></td>
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<td>70</td>
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<td>2 (3.0%)</td>
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<td>3</td>
<td>17</td>
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<td>3 (15.0%)</td>
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<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
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<td>4</td>
<td>63</td>
<td>63 (74.1%)</td>
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<td>8 (9.4%)</td>
<td></td>
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<td>5</td>
<td>99</td>
<td>99 (89.2%)</td>
<td>3 (2.7%)</td>
<td>6 (5.4%)</td>
<td>1 (0.9%)</td>
<td>2 (1.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>728</td>
<td>30 (3.6%)</td>
<td>17 (2.0%)</td>
<td>21 (2.5%)</td>
<td>35 (4.2%)</td>
<td></td>
</tr>
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<td>24</td>
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<td>1 (4.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>86</td>
<td>86 (93.5%)</td>
<td>3 (3.3%)</td>
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<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>137</td>
<td>137 (91.3%)</td>
<td>4 (2.7%)</td>
<td>2 (1.3%)</td>
<td>5 (3.3%)</td>
<td>2 (1.3%)</td>
<td></td>
</tr>
<tr>
<td></td>
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<td></td>
<td>75</td>
<td>30 (3.6%)</td>
<td>17 (2.0%)</td>
<td>21 (2.5%)</td>
<td>35 (4.2%)</td>
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</tr>
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<td>110</td>
<td>110 (92.4%)</td>
<td>3 (2.5%)</td>
<td>5 (4.2%)</td>
<td>0 (0.0%)</td>
<td>1 (0.8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>110</td>
<td>22 (2.5%)</td>
<td>14 (2.3%)</td>
<td>6 (0.8%)</td>
<td>2 (0.2%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>17</td>
<td>17 (89.5%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2 (10.5%)</td>
<td>0 (0.0%)</td>
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</tr>
<tr>
<td></td>
<td>7</td>
<td>61</td>
<td>61 (65.6%)</td>
<td>2 (2.2%)</td>
<td>5 (5.4%)</td>
<td>4 (4.3%)</td>
<td>21 (22.6%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>66</td>
<td>66 (86.8%)</td>
<td>2 (2.6%)</td>
<td>4 (5.3%)</td>
<td>0 (0.0%)</td>
<td>4 (5.3%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>21</td>
<td>21 (95.5%)</td>
<td>1 (4.5%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td>23</td>
<td>4 (4.0%)</td>
<td>7 (6.9%)</td>
<td>5 (5.0%)</td>
<td>20 (19.8%)</td>
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</tr>
<tr>
<td></td>
<td>10</td>
<td>65</td>
<td>65 (64.4%)</td>
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<td>4 (4.0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td>88</td>
<td>88 (88.0%)</td>
<td>3 (3.0%)</td>
<td>3 (3.0%)</td>
<td>2 (2.0%)</td>
<td>62 (7.1%)</td>
<td></td>
</tr>
</tbody>
</table>
Table 48 shows the disposition of kidneys from kidney-pancreas matches with a final acceptance by policy era and KDPI. The proportion of kidneys transplanted to the originally accepting patient was highest for KDPI 0-20% kidneys both pre-policy (89.0%) and post-policy (84.7%). There were no kidney-pancreas matches with a final acceptance for kidneys with KDPI >85% either pre- or post-policy.

Table 48: Disposition of Kidneys from Kidney-Pancreas Matches with a Final Acceptance March 15, 2020-March 14, 2022 by Policy Era and KDPI

<table>
<thead>
<tr>
<th>Era</th>
<th>KDPI (%)</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-20</td>
<td>554</td>
<td>493 (89.0%)</td>
<td>15 (2.7%)</td>
<td>35 (6.3%)</td>
<td>1 (0.2%)</td>
<td>10 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>21-34</td>
<td>166</td>
<td>140 (84.3%)</td>
<td>12 (7.2%)</td>
<td>11 (6.6%)</td>
<td>0 (0.0%)</td>
<td>3 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>35-85</td>
<td>134</td>
<td>104 (77.6%)</td>
<td>13 (9.7%)</td>
<td>14 (10.4%)</td>
<td>1 (0.7%)</td>
<td>2 (1.5%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>854</td>
<td>737 (86.3%)</td>
<td>40 (4.7%)</td>
<td>60 (7.0%)</td>
<td>2 (0.2%)</td>
<td>15 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>Post-Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-20</td>
<td>569</td>
<td>482 (84.7%)</td>
<td>26 (4.6%)</td>
<td>49 (8.6%)</td>
<td>2 (0.4%)</td>
<td>10 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>21-34</td>
<td>189</td>
<td>142 (75.1%)</td>
<td>10 (5.3%)</td>
<td>23 (12.2%)</td>
<td>4 (2.1%)</td>
<td>10 (5.3%)</td>
<td></td>
</tr>
<tr>
<td>35-85</td>
<td>131</td>
<td>104 (79.4%)</td>
<td>7 (5.3%)</td>
<td>13 (9.9%)</td>
<td>1 (0.8%)</td>
<td>6 (4.6%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>889</td>
<td>728 (81.9%)</td>
<td>43 (4.8%)</td>
<td>85 (9.6%)</td>
<td>7 (0.8%)</td>
<td>26 (2.9%)</td>
<td></td>
</tr>
</tbody>
</table>

Table 49 shows the disposition of kidneys from kidney-pancreas matches with a final acceptance by policy era and CPRA of the accepting patient. The proportion of kidneys transplanted to the originally accepting patient was highest for patients with CPRA 98-100% pre-policy (91.7%), and highest for patients with CPRA 1-19% post-policy (86.8%).

Table 49: Disposition of Kidneys from Kidney-Pancreas Matches with a Final Acceptance March 15, 2020-March 14, 2022 by Policy Era and Accepting Patient CPRA

<table>
<thead>
<tr>
<th>Era</th>
<th>CPRA (%)</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>574</td>
<td>502 (87.5%)</td>
<td>25 (4.4%)</td>
<td>32 (5.6%)</td>
<td>2 (0.3%)</td>
<td>13 (2.3%)</td>
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</tr>
<tr>
<td>1-19</td>
<td>101</td>
<td>82 (81.2%)</td>
<td>7 (6.9%)</td>
<td>11 (10.9%)</td>
<td>0 (0.0%)</td>
<td>1 (0.7%)</td>
<td></td>
</tr>
<tr>
<td>20-79</td>
<td>137</td>
<td>142 (85.4%)</td>
<td>6 (4.4%)</td>
<td>13 (9.5%)</td>
<td>0 (0.0%)</td>
<td>1 (0.7%)</td>
<td></td>
</tr>
<tr>
<td>80-97</td>
<td>29</td>
<td>25 (86.2%)</td>
<td>2 (6.9%)</td>
<td>2 (6.9%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>98-100</td>
<td>12</td>
<td>11 (91.7%)</td>
<td>0 (0.0%)</td>
<td>1 (8.3%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>854</td>
<td>737 (86.3%)</td>
<td>40 (4.7%)</td>
<td>60 (7.0%)</td>
<td>2 (0.2%)</td>
<td>15 (1.8%)</td>
<td></td>
</tr>
<tr>
<td>Post-Policy</td>
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<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>574</td>
<td>469 (81.7%)</td>
<td>24 (4.2%)</td>
<td>56 (9.8%)</td>
<td>5 (0.9%)</td>
<td>20 (3.5%)</td>
<td></td>
</tr>
<tr>
<td>1-19</td>
<td>121</td>
<td>105 (86.8%)</td>
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<tr>
<td>20-79</td>
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<td>113 (79.0%)</td>
<td>9 (6.3%)</td>
<td>16 (11.2%)</td>
<td>1 (0.7%)</td>
<td>4 (2.8%)</td>
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<tr>
<td>80-97</td>
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<td>0 (0.0%)</td>
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<td></td>
</tr>
<tr>
<td>98-100</td>
<td>6</td>
<td>3 (50.0%)</td>
<td>0 (0.0%)</td>
<td>2 (33.3%)</td>
<td>0 (0.0%)</td>
<td>1 (16.7%)</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>889</td>
<td>728 (81.9%)</td>
<td>43 (4.8%)</td>
<td>85 (9.6%)</td>
<td>7 (0.8%)</td>
<td>26 (2.9%)</td>
<td></td>
</tr>
</tbody>
</table>
Additional Pancreas Information

Waiting List

Figure A44 and Table A50 show the number of registrations waiting for a pancreas on the last day of each month from March 15, 2020 to March 14, 2022. There was little change in waiting list volume after policy implementation.

Figure A44: Pancreas Registrations Waiting on the Last Day of Each Month, March 15, 2020-March 14, 2022
### Table A50: Pancreas Registrations Waiting on the Last Day of Each Month, March 15, 2020-March 14, 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Registrations</th>
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<tbody>
<tr>
<td>March 2020</td>
<td>882</td>
</tr>
<tr>
<td>April 2020</td>
<td>889</td>
</tr>
<tr>
<td>May 2020</td>
<td>894</td>
</tr>
<tr>
<td>June 2020</td>
<td>896</td>
</tr>
<tr>
<td>July 2020</td>
<td>888</td>
</tr>
<tr>
<td>August 2020</td>
<td>881</td>
</tr>
<tr>
<td>September 2020</td>
<td>885</td>
</tr>
<tr>
<td>October 2020</td>
<td>899</td>
</tr>
<tr>
<td>November 2020</td>
<td>903</td>
</tr>
<tr>
<td>December 2020</td>
<td>891</td>
</tr>
<tr>
<td>January 2021</td>
<td>900</td>
</tr>
<tr>
<td>February 2021</td>
<td>907</td>
</tr>
<tr>
<td>March 2021</td>
<td>898</td>
</tr>
<tr>
<td>April 2021</td>
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<tr>
<td>November 2021</td>
<td>852</td>
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<tr>
<td>December 2021</td>
<td>857</td>
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<td>January 2022</td>
<td>848</td>
</tr>
<tr>
<td>February 2022</td>
<td>849</td>
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</tbody>
</table>
**Figure A45** and **Table A51** show the percentage of registrations waiting for a pancreas on the last day of each month from March 15, 2020 to March 14, 2022 by status. There was little change in the proportion of registrations in active status after policy implementation.

**Figure A45:** Pancreas Registrations Waiting on the Last Day of Each Month by Status, March 15, 2020-March 14, 2022
## Table A51: Pancreas Registrations Waiting on the Last Day of Each Month by Status, March 15, 2020-March 14, 2022

<table>
<thead>
<tr>
<th>Date</th>
<th>Active N</th>
<th>Active %</th>
<th>Inactive N</th>
<th>Inactive %</th>
<th>Total N</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2020</td>
<td>196</td>
<td>22.22</td>
<td>686</td>
<td>77.78</td>
<td>882</td>
<td>100.00</td>
</tr>
<tr>
<td>April 2020</td>
<td>204</td>
<td>22.95</td>
<td>685</td>
<td>77.05</td>
<td>889</td>
<td>100.00</td>
</tr>
<tr>
<td>May 2020</td>
<td>232</td>
<td>25.95</td>
<td>662</td>
<td>74.05</td>
<td>894</td>
<td>100.00</td>
</tr>
<tr>
<td>June 2020</td>
<td>223</td>
<td>24.89</td>
<td>673</td>
<td>75.11</td>
<td>896</td>
<td>100.00</td>
</tr>
<tr>
<td>July 2020</td>
<td>209</td>
<td>23.54</td>
<td>679</td>
<td>76.46</td>
<td>888</td>
<td>100.00</td>
</tr>
<tr>
<td>August 2020</td>
<td>203</td>
<td>23.04</td>
<td>678</td>
<td>76.96</td>
<td>881</td>
<td>100.00</td>
</tr>
<tr>
<td>September 2020</td>
<td>199</td>
<td>22.49</td>
<td>686</td>
<td>77.51</td>
<td>885</td>
<td>100.00</td>
</tr>
<tr>
<td>October 2020</td>
<td>212</td>
<td>23.58</td>
<td>687</td>
<td>76.42</td>
<td>899</td>
<td>100.00</td>
</tr>
<tr>
<td>November 2020</td>
<td>208</td>
<td>23.03</td>
<td>695</td>
<td>76.97</td>
<td>903</td>
<td>100.00</td>
</tr>
<tr>
<td>December 2020</td>
<td>197</td>
<td>22.11</td>
<td>694</td>
<td>77.89</td>
<td>891</td>
<td>100.00</td>
</tr>
<tr>
<td>January 2021</td>
<td>194</td>
<td>21.56</td>
<td>706</td>
<td>78.44</td>
<td>900</td>
<td>100.00</td>
</tr>
<tr>
<td>February 2021</td>
<td>204</td>
<td>22.49</td>
<td>703</td>
<td>77.51</td>
<td>907</td>
<td>100.00</td>
</tr>
<tr>
<td>March 2021</td>
<td>215</td>
<td>23.94</td>
<td>683</td>
<td>76.06</td>
<td>898</td>
<td>100.00</td>
</tr>
<tr>
<td>April 2021</td>
<td>215</td>
<td>24.05</td>
<td>679</td>
<td>75.95</td>
<td>894</td>
<td>100.00</td>
</tr>
<tr>
<td>May 2021</td>
<td>215</td>
<td>23.86</td>
<td>686</td>
<td>76.14</td>
<td>901</td>
<td>100.00</td>
</tr>
<tr>
<td>June 2021</td>
<td>211</td>
<td>23.90</td>
<td>672</td>
<td>76.10</td>
<td>883</td>
<td>100.00</td>
</tr>
<tr>
<td>July 2021</td>
<td>193</td>
<td>22.68</td>
<td>658</td>
<td>77.32</td>
<td>851</td>
<td>100.00</td>
</tr>
<tr>
<td>August 2021</td>
<td>187</td>
<td>22.16</td>
<td>657</td>
<td>77.84</td>
<td>844</td>
<td>100.00</td>
</tr>
<tr>
<td>September 2021</td>
<td>187</td>
<td>21.85</td>
<td>669</td>
<td>78.15</td>
<td>856</td>
<td>100.00</td>
</tr>
<tr>
<td>October 2021</td>
<td>186</td>
<td>21.83</td>
<td>666</td>
<td>78.17</td>
<td>852</td>
<td>100.00</td>
</tr>
<tr>
<td>November 2021</td>
<td>183</td>
<td>21.48</td>
<td>669</td>
<td>78.52</td>
<td>852</td>
<td>100.00</td>
</tr>
<tr>
<td>December 2021</td>
<td>190</td>
<td>22.17</td>
<td>667</td>
<td>77.83</td>
<td>857</td>
<td>100.00</td>
</tr>
<tr>
<td>January 2022</td>
<td>180</td>
<td>21.23</td>
<td>668</td>
<td>78.77</td>
<td>848</td>
<td>100.00</td>
</tr>
<tr>
<td>February 2022</td>
<td>179</td>
<td>21.08</td>
<td>670</td>
<td>78.92</td>
<td>849</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A46 and Table A52 show total pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era. There were 541 registrations added to the waiting list in the pre-policy era, and 496 added in the post-policy era.

**Figure A46: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>541</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>496</td>
</tr>
</tbody>
</table>
Figure A47 and Table A53 show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and age at listing. There was little change in the distribution of candidate age at listing after policy implementation.

Figure A47: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Age at Listing

![Bar chart showing pancreas registrations by age at listing before and after policy implementation.]

Table A53: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0-5</td>
<td>34</td>
<td>6.28</td>
</tr>
<tr>
<td>6-11</td>
<td>13</td>
<td>2.40</td>
</tr>
<tr>
<td>12-17</td>
<td>6</td>
<td>1.11</td>
</tr>
<tr>
<td>18-34</td>
<td>126</td>
<td>23.29</td>
</tr>
<tr>
<td>35-49</td>
<td>226</td>
<td>41.77</td>
</tr>
<tr>
<td>50-64</td>
<td>128</td>
<td>23.66</td>
</tr>
<tr>
<td>65+</td>
<td>8</td>
<td>1.48</td>
</tr>
<tr>
<td>Total</td>
<td>541</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A48 and Table A54 show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and gender. The proportion of registrations added for female candidates decreased post-policy from 46.6% to 43.2%.

Figure A48: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Gender

Table A54: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N  %</td>
<td>N  %</td>
</tr>
<tr>
<td>Female</td>
<td>252 46.58</td>
<td>214 43.15</td>
</tr>
<tr>
<td>Male</td>
<td>289 53.42</td>
<td>282 56.85</td>
</tr>
<tr>
<td>Total</td>
<td>541 100.00</td>
<td>496 100.00</td>
</tr>
</tbody>
</table>
**Figure A49** and **Table A55** show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and race/ethnicity. There was little change in the distribution of waiting list additions by race/ethnicity after policy implementation.

**Figure A49: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Race/Ethnicity**

![Bar chart showing the distribution of pancreas registrations by race/ethnicity and policy era.]

**Table A55: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Race/Ethnicity**

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Pre-Policy</th>
<th></th>
<th>Post-Policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>326</td>
<td>60.26</td>
<td>295</td>
<td>59.48</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>115</td>
<td>21.26</td>
<td>87</td>
<td>17.54</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>87</td>
<td>16.08</td>
<td>85</td>
<td>17.14</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>7</td>
<td>1.29</td>
<td>18</td>
<td>3.63</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>6</td>
<td>1.11</td>
<td>11</td>
<td>2.22</td>
</tr>
<tr>
<td>Total</td>
<td>541</td>
<td>100.00</td>
<td>496</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A50 and Table A56 show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and blood type. There was little change in the distribution of waiting list additions by blood type after policy implementation.

**Figure A50: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Blood Type**

![Bar chart showing percentage of registrations by blood type and policy era]

**Table A56: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Blood Type**

<table>
<thead>
<tr>
<th>Blood Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>A</td>
<td>224</td>
<td>194</td>
</tr>
<tr>
<td>AB</td>
<td>24</td>
<td>26</td>
</tr>
<tr>
<td>B</td>
<td>70</td>
<td>58</td>
</tr>
<tr>
<td>O</td>
<td>223</td>
<td>218</td>
</tr>
<tr>
<td>Total</td>
<td>541</td>
<td>496</td>
</tr>
</tbody>
</table>
Figure A51 and Table A57 show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and CPRA at listing. The majority of waiting list additions in both policy eras were for candidates with CPRA 0% and there was little change in the distribution of CPRA at listing after policy implementation.

Figure A51: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and CPRA

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>405 74.86%</td>
<td>386 77.82%</td>
</tr>
<tr>
<td>1-19</td>
<td>31  5.73%</td>
<td>24  4.84%</td>
</tr>
<tr>
<td>20-79</td>
<td>57 10.54%</td>
<td>54 10.89%</td>
</tr>
<tr>
<td>80-97</td>
<td>25  4.62%</td>
<td>18  3.63%</td>
</tr>
<tr>
<td>98-100</td>
<td>23  4.25%</td>
<td>14  2.82%</td>
</tr>
<tr>
<td>Total</td>
<td>541 100.00%</td>
<td>496 100.00%</td>
</tr>
</tbody>
</table>

Table A57: Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and CPRA
**Figure A52** and **Table A58** show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and insurance status at listing. There was little change in the distribution of candidate insurance status at listing after policy implementation.

**Figure A52:** Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Insurance Status at Listing

![Figure A52](image)

**Table A58:** Pancreas Registrations Added March 15, 2020-March 14, 2022 by Policy Era and Insurance Status at Listing

<table>
<thead>
<tr>
<th>Insurance at Listing</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Public insurance</td>
<td>272</td>
<td>50.28</td>
</tr>
<tr>
<td>Private insurance</td>
<td>258</td>
<td>47.69</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>1.48</td>
</tr>
<tr>
<td>Unknown</td>
<td>3</td>
<td>0.55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>541</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure A53** and **Table A59** show pancreas registrations added to the waiting list from March 15, 2020 to March 14, 2022 by policy era and primary diagnosis at listing. The proportion of waiting list additions for candidates with type 1 diabetes decreased slightly after policy implementation, while the proportion of waiting list for candidates with type 2 diabetes and other diagnoses increased slightly.

**Figure A53: Pancreas Registrations Added March 15, 2020 - March 14, 2022 by Policy Era and Diagnosis at Listing**

![Bar chart showing pancreas registrations by policy era and diagnosis at listing]

**Table A59: Pancreas Registrations Added March 15, 2020 - March 14, 2022 by Policy Era and Diagnosis at Listing**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Pre-Policy</th>
<th></th>
<th>Post-Policy</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Diabetes Type 1</td>
<td>285</td>
<td>52.68</td>
<td>241</td>
<td>48.59</td>
</tr>
<tr>
<td>Diabetes Type 2</td>
<td>72</td>
<td>13.31</td>
<td>75</td>
<td>15.12</td>
</tr>
<tr>
<td>Other</td>
<td>184</td>
<td>34.01</td>
<td>180</td>
<td>36.29</td>
</tr>
<tr>
<td>Total</td>
<td>541</td>
<td>100.00</td>
<td>496</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A54 and Table A60 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era. There were 24 deaths on the waiting list pre-policy and 28 deaths post-policy. The overall pancreas waiting list mortality rate increased post-policy from 2.68 to 3.23 deaths per 100 patient years. This increase was not statistically significant.

Figure A54: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era

![Graph showing waiting list mortality rates](image)

Table A60: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>1280</td>
<td>24</td>
<td>2.68</td>
<td>(1.72, 3.99)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>1264</td>
<td>28</td>
<td>3.23</td>
<td>(2.15, 4.67)</td>
</tr>
</tbody>
</table>
Figure A55 and Table A61 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and age at listing. Waiting list mortality rates decreased post-policy for the 35-49 and 50-64 age groups, and increased for the 0-17 and 18-34 age groups. These changes were not statistically significant. There were no deaths on the waiting list for registrations aged 65+ at listing in the pre-policy era, and one death on the waiting list post-policy.

Figure A55: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

Table A61: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>Pre-Policy</td>
<td>91</td>
<td>1</td>
<td>1.68</td>
<td>(0.04, 9.36)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>88</td>
<td>3</td>
<td>5.64</td>
<td>(1.16, 16.48)</td>
</tr>
<tr>
<td>18-34</td>
<td>Pre-Policy</td>
<td>323</td>
<td>4</td>
<td>1.76</td>
<td>(0.48, 4.49)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>324</td>
<td>9</td>
<td>4.07</td>
<td>(1.86, 7.72)</td>
</tr>
<tr>
<td>35-49</td>
<td>Pre-Policy</td>
<td>622</td>
<td>12</td>
<td>2.74</td>
<td>(1.42, 4.79)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>607</td>
<td>10</td>
<td>2.36</td>
<td>(1.13, 4.35)</td>
</tr>
<tr>
<td>50-64</td>
<td>Pre-Policy</td>
<td>264</td>
<td>7</td>
<td>4.15</td>
<td>(1.67, 8.56)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>270</td>
<td>5</td>
<td>2.99</td>
<td>(0.97, 6.98)</td>
</tr>
<tr>
<td>65+</td>
<td>Pre-Policy</td>
<td>10</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>10</td>
<td>1</td>
<td>20.49</td>
<td>(0.52, 114.19)</td>
</tr>
</tbody>
</table>
Figure A56 and Table A62 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and gender. The waiting list mortality rate increased post-policy for male registrations from 1.80 to 2.94 deaths per 100 patient years. This change was not statistically significant. There was no change in the waiting list mortality rate for female registrations (3.56 vs 3.53 deaths per 100 patient years).

**Figure A56: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Gender**

![Chart showing waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and gender. The waiting list mortality rate increased post-policy for male registrations from 1.80 to 2.94 deaths per 100 patient years. This change was not statistically significant. There was no change in the waiting list mortality rate for female registrations (3.56 vs 3.53 deaths per 100 patient years).]

**Table A62: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Gender**

<table>
<thead>
<tr>
<th>Gender</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>641</td>
<td>16</td>
<td>3.56</td>
<td>(2.03, 5.77)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>616</td>
<td>15</td>
<td>3.53</td>
<td>(1.97, 5.82)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>639</td>
<td>8</td>
<td>1.80</td>
<td>(0.78, 3.54)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>648</td>
<td>13</td>
<td>2.94</td>
<td>(1.57, 5.03)</td>
</tr>
</tbody>
</table>
Figure A57 and Table A63 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and race/ethnicity. Waiting list mortality rates increased for candidates of White, Non-Hispanic and Hispanic/Latino race/ethnicity after policy implementation. These changes were not statistically significant. There was little change in the waiting list mortality rate for Black, Non-Hispanic or Asian, Non-Hispanic candidates after policy implementation.

Figure A57: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

Table A63: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>796</td>
<td>13</td>
<td>2.36</td>
<td>(1.25, 4.03)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>769</td>
<td>17</td>
<td>3.23</td>
<td>(1.88, 5.17)</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>253</td>
<td>5</td>
<td>2.83</td>
<td>(0.92, 6.61)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>243</td>
<td>5</td>
<td>3.00</td>
<td>(0.98, 7.01)</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>Pre-Policy</td>
<td>188</td>
<td>4</td>
<td>2.98</td>
<td>(0.81, 7.63)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>200</td>
<td>5</td>
<td>3.69</td>
<td>(1.2, 8.62)</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>30</td>
<td>1</td>
<td>4.65</td>
<td>(0.12, 25.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>33</td>
<td>1</td>
<td>4.74</td>
<td>(0.12, 26.39)</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>Pre-Policy</td>
<td>15</td>
<td>1</td>
<td>8.52</td>
<td>(0.22, 47.48)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>21</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
</tbody>
</table>
Figure A58 and Table A64 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and CPRA at listing. Waiting list mortality rates decreased post-policy for candidates with CPRA 98-100%, and increased for candidates with CPRA 0% and 80-97%. There was no change in the waiting list mortality rate for candidates with CPRA 1-19% or 20-79%.

Figure A58: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

Table A64: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Pre-Policy</td>
<td>897</td>
<td>20</td>
<td>3.25</td>
<td>(1.99, 5.02)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>887</td>
<td>21</td>
<td>3.58</td>
<td>(2.21, 5.47)</td>
</tr>
<tr>
<td>1-19</td>
<td>Pre-Policy</td>
<td>67</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>69</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td>20-79</td>
<td>Pre-Policy</td>
<td>158</td>
<td>2</td>
<td>1.77</td>
<td>(0.21, 6.41)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>163</td>
<td>2</td>
<td>1.75</td>
<td>(0.21, 6.34)</td>
</tr>
<tr>
<td>80-97</td>
<td>Pre-Policy</td>
<td>61</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>62</td>
<td>4</td>
<td>9.04</td>
<td>(2.46, 23.15)</td>
</tr>
<tr>
<td>98-100</td>
<td>Pre-Policy</td>
<td>91</td>
<td>2</td>
<td>2.86</td>
<td>(0.35, 10.32)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>82</td>
<td>1</td>
<td>1.56</td>
<td>(0.04, 8.69)</td>
</tr>
<tr>
<td>Unknown</td>
<td>Pre-Policy</td>
<td>16</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>15</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
</tbody>
</table>
Figure A59 and Table A65 show waiting list mortality rates for pancreas registrations ever waiting between March 15, 2020 and March 14, 2022 by policy era and blood type. Waiting list mortality rates decreased post-policy for blood type B and AB candidates, and increased for blood type A and O candidates. These changes were not statistically significant.

Figure A59: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

![Figure A59: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type](image)

Table A65: Waiting List Mortality Rates for Pancreas Registrations Ever Waiting March 15, 2020 - March 14, 2022 by Policy Era and Blood Type

<table>
<thead>
<tr>
<th>ABO</th>
<th>Era</th>
<th>Registrations</th>
<th>Deaths</th>
<th>Deaths per 100 Patient Years</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Pre-Policy</td>
<td>467</td>
<td>5</td>
<td>1.55</td>
<td>(0.5, 3.61)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>466</td>
<td>10</td>
<td>3.09</td>
<td>(1.48, 5.69)</td>
</tr>
<tr>
<td>B</td>
<td>Pre-Policy</td>
<td>169</td>
<td>2</td>
<td>1.73</td>
<td>(0.21, 6.25)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>154</td>
<td>1</td>
<td>0.92</td>
<td>(0.02, 5.13)</td>
</tr>
<tr>
<td>AB</td>
<td>Pre-Policy</td>
<td>44</td>
<td>2</td>
<td>6.58</td>
<td>(0.8, 23.77)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>51</td>
<td>0</td>
<td>0.00</td>
<td>-</td>
</tr>
<tr>
<td>O</td>
<td>Pre-Policy</td>
<td>600</td>
<td>15</td>
<td>3.52</td>
<td>(1.97, 5.81)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>593</td>
<td>17</td>
<td>4.25</td>
<td>(2.47, 6.8)</td>
</tr>
</tbody>
</table>
Deceased Donor Transplants

Figure A60 and Table A66 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. There were 134 transplants in the pre-policy era, and 138 in the post-policy era.

Figure A60: Deceased Donor Pancreas Transplants March 15, 2020- March 14, 2022 by Policy Era

Table A66: Deceased Donor Pancreas Transplants March 15, 2020- March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Transplants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>138</td>
</tr>
</tbody>
</table>
Figure A61 and Table A67 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient age at transplant. The proportion of transplants increased post-policy for the 0-5, 35-49, and 65+ age groups, and decreased for the 6-11, 12-17, 18-34, and 50-64 age groups.

Figure A61: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Age at Transplant

Table A67: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Age at Transplant

<table>
<thead>
<tr>
<th>Age at Transplant</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0-5</td>
<td>11</td>
<td>8.21</td>
</tr>
<tr>
<td>6-11</td>
<td>5</td>
<td>3.73</td>
</tr>
<tr>
<td>12-17</td>
<td>4</td>
<td>2.99</td>
</tr>
<tr>
<td>18-34</td>
<td>30</td>
<td>22.39</td>
</tr>
<tr>
<td>35-49</td>
<td>47</td>
<td>35.07</td>
</tr>
<tr>
<td>50-64</td>
<td>35</td>
<td>26.12</td>
</tr>
<tr>
<td>65+</td>
<td>2</td>
<td>1.49</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A62 and Table A68 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient race/ethnicity. The proportion of transplants increased post-policy for White, Non-Hispanic and Asian, Non-Hispanic recipients, and decreased for recipients of Black, Non-Hispanic and Hispanic/Latino race/ethnicity.

Figure A62: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Race/Ethnicity

Table A68: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Race/Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>White, Non-Hispanic</td>
<td>94</td>
<td>70.15</td>
</tr>
<tr>
<td>Black, Non-Hispanic</td>
<td>21</td>
<td>15.67</td>
</tr>
<tr>
<td>Hispanic/Latino</td>
<td>18</td>
<td>13.43</td>
</tr>
<tr>
<td>Asian, Non-Hispanic</td>
<td>1</td>
<td>0.75</td>
</tr>
<tr>
<td>Other, Non-Hispanic</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A63 and Table A69 show the distribution of waiting time in years for deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era. Median time from listing to transplant increased from 0.51 to 0.77 years after policy implementation.

Figure A63: Distribution of Waiting Time for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

Table A69: Distribution of Waiting Time for Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era

<table>
<thead>
<tr>
<th>Era</th>
<th>Total</th>
<th>Missing</th>
<th>Min</th>
<th>25th %-tile</th>
<th>Median</th>
<th>Mean</th>
<th>75th %-tile</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>134</td>
<td>0</td>
<td>0.00</td>
<td>0.18</td>
<td>0.51</td>
<td>1.08</td>
<td>1.35</td>
<td>12.26</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>138</td>
<td>0</td>
<td>0.01</td>
<td>0.39</td>
<td>0.77</td>
<td>1.39</td>
<td>1.99</td>
<td>16.97</td>
</tr>
</tbody>
</table>
Figure A64 and Table A70 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and recipient blood type. The proportion of transplants increased after implementation for blood type A and O recipients, and decreased for type AB and B recipients.

**Figure A64: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Blood Type**

<table>
<thead>
<tr>
<th>Candidate Blood Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>55 (41.04%)</td>
<td>60 (43.48%)</td>
</tr>
<tr>
<td>AB</td>
<td>5 (3.73%)</td>
<td>2 (1.45%)</td>
</tr>
<tr>
<td>B</td>
<td>19 (14.18%)</td>
<td>14 (10.14%)</td>
</tr>
<tr>
<td>O</td>
<td>55 (41.04%)</td>
<td>62 (44.93%)</td>
</tr>
<tr>
<td>Total</td>
<td>134 (100.00%)</td>
<td>138 (100.00%)</td>
</tr>
</tbody>
</table>

**Table A70: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Recipient Blood Type**
**Figure A65** and **Table A71** show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and CPRA at transplant. The proportion of transplants to recipients in the CPRA 80-97% group increased from 5.2% to 8.7% after policy implementation. There was no change in the proportion of transplants to recipients in the CPRA 98-100% group (2.2%).

**Figure A65: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and CPRA**

**Table A71: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and CPRA**

<table>
<thead>
<tr>
<th>CPRA (%)</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>101</td>
<td>75.37</td>
</tr>
<tr>
<td>1-19</td>
<td>7</td>
<td>5.22</td>
</tr>
<tr>
<td>20-79</td>
<td>16</td>
<td>11.94</td>
</tr>
<tr>
<td>80-97</td>
<td>7</td>
<td>5.22</td>
</tr>
<tr>
<td>98-100</td>
<td>3</td>
<td>2.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A66 and Table A72 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and level of HLA mismatch. Multi-organ transplants including a pancreas were excluded.

Figure A66: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and HLA Mismatch

Table A72: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and HLA Mismatch

<table>
<thead>
<tr>
<th>HLA Mismatch Level</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
<td>3.23</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1.08</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>9.68</td>
</tr>
<tr>
<td>3</td>
<td>10</td>
<td>10.75</td>
</tr>
<tr>
<td>4</td>
<td>24</td>
<td>25.81</td>
</tr>
<tr>
<td>5</td>
<td>28</td>
<td>30.11</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>19.35</td>
</tr>
<tr>
<td>Total</td>
<td>93</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A67 and Table A73 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and primary diagnosis. The proportion of recipients diagnosed with type 1 diabetes increased post-policy from 54.5% to 58.7%, while the proportion of recipients with type 2 diabetes decreased from 7.5% to 3.6%. There was little change in the proportion of recipients with other diagnoses (38.1% vs 37.7%).

Figure A67: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Diagnosis

Table A73: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Diabetes Type 1</td>
<td>73</td>
<td>54.48</td>
</tr>
<tr>
<td>Diabetes Type 2</td>
<td>10</td>
<td>7.46</td>
</tr>
<tr>
<td>Other</td>
<td>51</td>
<td>38.06</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Figure A68 and Table A74 show deceased donor pancreas transplants from March 15, 2020 to March 14, 2022 by policy era and donor DCD status. The volume and proportion of pancreas transplants from DCD donors decreased from 4 (3.0%) to 2 (1.5%) after policy implementation.

Figure A68: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DCD Status

Table A74: Deceased Donor Pancreas Transplants from March 15, 2020-March 14, 2022 by Policy Era and DCD Status

<table>
<thead>
<tr>
<th>DCD Donor</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>DCD</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>non-DCD</td>
<td>130</td>
<td>136</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>138</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>DCD</td>
<td>4</td>
<td>2.99</td>
</tr>
<tr>
<td>non-DCD</td>
<td>130</td>
<td>97.01</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>100.00</td>
</tr>
</tbody>
</table>
Post-Transplant Outcomes

Patient Survival

Figure A69 and Table A75 show six month post-transplant patient survival for deceased donor pancreas transplants by policy era and recipient gender. There were no statistically significant differences in the probability of patient survival at six months post-transplant for female or male recipients.

Figure A69: Six Month Post-Transplant Patient Survival for Pancreas Transplants by Policy Era and Gender

Table A75: Six Month Post-Transplant Patient Survival for Pancreas Transplants by Policy Era and Gender

<table>
<thead>
<tr>
<th>Recipient Gender</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Deaths</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>69</td>
<td>4</td>
<td>61</td>
<td>94</td>
<td>(84.7, 97.7)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>51</td>
<td>6</td>
<td>30</td>
<td>86.6</td>
<td>(72.3, 93.8)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>65</td>
<td>6</td>
<td>54</td>
<td>90.4</td>
<td>(79.9, 95.6)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>41</td>
<td>3</td>
<td>25</td>
<td>92.4</td>
<td>(78.3, 97.5)</td>
</tr>
</tbody>
</table>
Pancreas Graft Survival

Figure A70 and Table A76 show six month post-transplant pancreas graft survival for deceased donor pancreas transplants by policy era and recipient gender. There were no statistically significant differences in the probability of pancreas graft survival at six months post-transplant for female or male recipients.

**Figure A70: Six Month Post-Transplant Pancreas Graft Survival for Pancreas Transplants by Policy Era and Gender**

![Figure A70: Six Month Post-Transplant Pancreas Graft Survival for Pancreas Transplants by Policy Era and Gender](image)

**Table A76: Six Month Post-Transplant Pancreas Graft Survival for Pancreas Transplants by Policy Era and Gender**

<table>
<thead>
<tr>
<th>Recipient Gender</th>
<th>Era</th>
<th>N Transplants</th>
<th>N Graft Failures</th>
<th>N at Risk</th>
<th>Estimate</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>Pre-Policy</td>
<td>69</td>
<td>7</td>
<td>61</td>
<td>89.8</td>
<td>(79.8, 95)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>51</td>
<td>11</td>
<td>29</td>
<td>77.5</td>
<td>(62.9, 86.9)</td>
</tr>
<tr>
<td>Male</td>
<td>Pre-Policy</td>
<td>65</td>
<td>13</td>
<td>52</td>
<td>80</td>
<td>(68.1, 87.9)</td>
</tr>
<tr>
<td></td>
<td>Post-Policy</td>
<td>41</td>
<td>7</td>
<td>25</td>
<td>82.7</td>
<td>(67, 91.3)</td>
</tr>
</tbody>
</table>
Released Organs

Table 77 shows the disposition of pancreata from pancreas matches with a final acceptance by policy era and OPTN region. The proportion of pancreata with a final acceptance that were transplanted to the originally accepting patient varied by region, ranging from 20.0% to 100% pre-policy and from 22.6% to 60.0% post-policy.

Table 77: Disposition of Pancreata from Pancreas Matches with a Final Acceptance March 15, 2020-March 14, 2022 by Policy Era and OPTN Region

<table>
<thead>
<tr>
<th>Era</th>
<th>Region</th>
<th>N</th>
<th>Same Patient</th>
<th>Same Center</th>
<th>Different Center</th>
<th>Discard</th>
<th>Non-Recovery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Same Patient</td>
<td>Same Center</td>
<td>Different Center</td>
<td>Discard</td>
<td>Non-Recovery</td>
</tr>
<tr>
<td>Pre-Policy</td>
<td></td>
<td></td>
<td>Same Patient</td>
<td>Same Center</td>
<td>Different Center</td>
<td>Discard</td>
<td>Non-Recovery</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>4</td>
<td>(57.1%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (14.3%)</td>
<td>2 (28.6%)</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>8</td>
<td>(88.9%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (11.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>3</td>
<td>27</td>
<td>18</td>
<td>(66.7%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>4 (14.8%)</td>
<td>5 (18.5%)</td>
</tr>
<tr>
<td>4</td>
<td>19</td>
<td>8</td>
<td>(42.1%)</td>
<td>0 (0.0%)</td>
<td>2 (10.5%)</td>
<td>2 (10.5%)</td>
<td>7 (36.8%)</td>
</tr>
<tr>
<td>5</td>
<td>25</td>
<td>5</td>
<td>(20.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>1 (4.1%)</td>
<td>16 (64.0%)</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>6</td>
<td>(100.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>7</td>
<td>26</td>
<td>15</td>
<td>(57.7%)</td>
<td>1 (3.8%)</td>
<td>3 (11.5%)</td>
<td>2 (7.7%)</td>
<td>5 (19.2%)</td>
</tr>
<tr>
<td>8</td>
<td>12</td>
<td>4</td>
<td>(33.3%)</td>
<td>1 (8.3%)</td>
<td>0 (0.0%)</td>
<td>3 (25.0%)</td>
<td>4 (33.3%)</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>4</td>
<td>(57.1%)</td>
<td>0 (0.0%)</td>
<td>2 (28.6%)</td>
<td>1 (4.1%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>10</td>
<td>25</td>
<td>14</td>
<td>(56.0%)</td>
<td>0 (0.0%)</td>
<td>3 (12.0%)</td>
<td>1 (4.1%)</td>
<td>7 (28.0%)</td>
</tr>
<tr>
<td>11</td>
<td>21</td>
<td>7</td>
<td>(33.3%)</td>
<td>0 (0.0%)</td>
<td>1 (4.8%)</td>
<td>6 (28.6%)</td>
<td>7 (33.3%)</td>
</tr>
<tr>
<td>Total</td>
<td>184</td>
<td>93</td>
<td>(50.5%)</td>
<td>2 (1.1%)</td>
<td>11 (6.0%)</td>
<td>25 (13.6%)</td>
<td>53 (28.8%)</td>
</tr>
<tr>
<td>Post-Policy</td>
<td></td>
<td></td>
<td>Same Patient</td>
<td>Same Center</td>
<td>Different Center</td>
<td>Discard</td>
<td>Non-Recovery</td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>2</td>
<td>(40.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>3 (60.0%)</td>
<td>0 (0.0%)</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>12</td>
<td>(48.0%)</td>
<td>0 (0.0%)</td>
<td>1 (4.0%)</td>
<td>6 (24.0%)</td>
<td>6 (24.0%)</td>
</tr>
<tr>
<td>3</td>
<td>21</td>
<td>9</td>
<td>(42.9%)</td>
<td>0 (0.0%)</td>
<td>1 (4.8%)</td>
<td>5 (23.8%)</td>
<td>6 (28.6%)</td>
</tr>
<tr>
<td>4</td>
<td>18</td>
<td>10</td>
<td>(55.6%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>8 (44.4%)</td>
</tr>
<tr>
<td>5</td>
<td>23</td>
<td>11</td>
<td>(47.8%)</td>
<td>0 (0.0%)</td>
<td>1 (4.8%)</td>
<td>3 (13.0%)</td>
<td>8 (34.8%)</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>1</td>
<td>(25.0%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2 (50.0%)</td>
<td>1 (25.0%)</td>
</tr>
<tr>
<td>7</td>
<td>29</td>
<td>15</td>
<td>(51.7%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>2 (6.9%)</td>
<td>12 (41.4%)</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>9</td>
<td>(60.0%)</td>
<td>2 (13.3%)</td>
<td>0 (0.0%)</td>
<td>1 (6.7%)</td>
<td>3 (20.0%)</td>
</tr>
<tr>
<td>9</td>
<td>19</td>
<td>10</td>
<td>(52.6%)</td>
<td>1 (5.3%)</td>
<td>0 (0.0%)</td>
<td>4 (21.1%)</td>
<td>4 (21.1%)</td>
</tr>
<tr>
<td>10</td>
<td>31</td>
<td>7</td>
<td>(22.6%)</td>
<td>0 (0.0%)</td>
<td>4 (12.9%)</td>
<td>3 (9.7%)</td>
<td>17 (54.8%)</td>
</tr>
<tr>
<td>11</td>
<td>27</td>
<td>9</td>
<td>(33.3%)</td>
<td>0 (0.0%)</td>
<td>0 (0.0%)</td>
<td>5 (18.5%)</td>
<td>13 (48.1%)</td>
</tr>
<tr>
<td>Total</td>
<td>217</td>
<td>95</td>
<td>(43.8%)</td>
<td>3 (1.4%)</td>
<td>7 (3.2%)</td>
<td>34 (15.7%)</td>
<td>78 (35.9%)</td>
</tr>
</tbody>
</table>
**Additional Information on Efficient Allocation and Utilization of Organs**

**Figure A71** and **Table A78** show total pancreas donors recovered from March 15, 2020 to March 14, 2022 by policy era. There were 1245 pancreas donors recovered in the pre-policy era, and 1319 recovered in the post-policy era.

**Figure A71: Pancreas Donors Recovered March 15, 2020-March 14, 2022 by Policy Era**

<table>
<thead>
<tr>
<th>Era</th>
<th>Donors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>1245</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>1319</td>
</tr>
</tbody>
</table>

**Table A78: Pancreas Donors Recovered March 15, 2020-March 14, 2022 by Policy Era**
Figure A72 and Table A79 show deceased pancreas donors recovered from March 15, 2020 to March 14, 2022 by policy era and donor DCD status. There was no change in the proportion of DCD pancreas donors recovered after policy implementation (4.7%).

**Figure A72: Deceased Pancreas Donors Recovered March 15, 2020-March 14, 2022 by DCD Status and Policy Era**

![Bar chart showing the proportion of DCD and Non-DCD donors recovered pre-policy and post-policy.]

**Table A79: Deceased Pancreas Donors Recovered March 15, 2020-March 14, 2022 by DCD Status and Policy Era**

<table>
<thead>
<tr>
<th>Donor Type</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>DCD</td>
<td>59</td>
<td>4.74</td>
</tr>
<tr>
<td>Non-DCD</td>
<td>1186</td>
<td>95.26</td>
</tr>
<tr>
<td>Total</td>
<td>1245</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure A73** and **Table A80** show deceased pancreas donors recovered from March 15, 2020 to March 14, 2022 by donor age and policy era.

**Figure A73:** Deceased Pancreas Donors Recovered March 15, 2020-March 14, 2022 by Age and Policy Era

![Bar chart showing deceased pancreas donors recovered by age and policy era.](chart.png)

**Table A80:** Deceased Pancreas Donors Recovered March 15, 2020-March 14, 2022 by Age and Policy Era

<table>
<thead>
<tr>
<th>Donor Age</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>&lt;18</td>
<td>226</td>
<td>18.15</td>
</tr>
<tr>
<td>18-34</td>
<td>861</td>
<td>69.16</td>
</tr>
<tr>
<td>35-49</td>
<td>150</td>
<td>12.05</td>
</tr>
<tr>
<td>50-64</td>
<td>8</td>
<td>0.64</td>
</tr>
<tr>
<td>65+</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>Total</td>
<td>1245</td>
<td>100.00</td>
</tr>
</tbody>
</table>
**Figure A74** and **Table A81** show offers per active patient year for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and candidate age at listing. Offer rates increased after policy implementation for candidates in the 18-34, 35-49, and 50-64 age groups, while offer rates decreased for candidates in the 0-17 and 65+ age groups.

**Figure A74:** Offers per Active Patient Year for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Age at Listing</th>
<th>Pre-Policy</th>
<th>Post-Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17</td>
<td>38.13</td>
<td>39.66</td>
</tr>
<tr>
<td>18-34</td>
<td>258.77</td>
<td>258.17</td>
</tr>
<tr>
<td>35-49</td>
<td>528.60</td>
<td>512.45</td>
</tr>
<tr>
<td>50-64</td>
<td>211.56</td>
<td>218.30</td>
</tr>
<tr>
<td>65+</td>
<td>2.52</td>
<td>4.99</td>
</tr>
</tbody>
</table>

**Table A81:** Offer and Acceptance Rates for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing

<table>
<thead>
<tr>
<th>Era</th>
<th>Age</th>
<th>Active Patient Years</th>
<th>Offers</th>
<th>Acceptances</th>
<th>Offers per Active Patient Year</th>
<th>Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>0-17</td>
<td>38.13</td>
<td>368</td>
<td>7</td>
<td>9.65</td>
<td>19.02</td>
</tr>
<tr>
<td></td>
<td>18-34</td>
<td>258.77</td>
<td>3384</td>
<td>259</td>
<td>13.08</td>
<td>76.54</td>
</tr>
<tr>
<td></td>
<td>35-49</td>
<td>528.60</td>
<td>6061</td>
<td>500</td>
<td>11.47</td>
<td>82.49</td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td>211.56</td>
<td>2819</td>
<td>228</td>
<td>13.33</td>
<td>80.88</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>2.52</td>
<td>45</td>
<td>4</td>
<td>17.83</td>
<td>88.89</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>0-17</td>
<td>39.66</td>
<td>361</td>
<td>3</td>
<td>9.10</td>
<td>8.31</td>
</tr>
<tr>
<td></td>
<td>18-34</td>
<td>258.17</td>
<td>3893</td>
<td>252</td>
<td>15.08</td>
<td>64.73</td>
</tr>
<tr>
<td></td>
<td>35-49</td>
<td>512.45</td>
<td>6963</td>
<td>484</td>
<td>13.59</td>
<td>69.51</td>
</tr>
<tr>
<td></td>
<td>50-64</td>
<td>218.30</td>
<td>3195</td>
<td>240</td>
<td>14.64</td>
<td>75.12</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>4.99</td>
<td>58</td>
<td>3</td>
<td>11.61</td>
<td>51.72</td>
</tr>
</tbody>
</table>
Figure A75 shows acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and age at listing. Acceptance rates decreased for all age groups after policy implementation.

Figure A75: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Age at Listing
**Figure A76** and **Table A82** show offers per active patient year for pancreas/kidney-pancreas matches from March 15, 2020 to March 14, 2022 by policy era and race/ethnicity. Offer rates increased for candidates of all race/ethnicities after policy implementation.

**Figure A76: Offers per Active Patient Year for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity**

![Bar chart showing offers per active patient year for different races and ethnicities.]

**Table A82: Offer and Acceptance Rates for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity**

<table>
<thead>
<tr>
<th>Era</th>
<th>Race/Ethnicity</th>
<th>Active Patient Years</th>
<th>Offers</th>
<th>Acceptances</th>
<th>Offers per Active Patient Year</th>
<th>Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>White, Non-Hispanic</td>
<td>526.20</td>
<td>7002</td>
<td>509</td>
<td>13.31</td>
<td>72.69</td>
</tr>
<tr>
<td></td>
<td>Black, Non-Hispanic</td>
<td>294.27</td>
<td>3319</td>
<td>287</td>
<td>11.28</td>
<td>86.47</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latino</td>
<td>147.91</td>
<td>1710</td>
<td>153</td>
<td>11.56</td>
<td>89.47</td>
</tr>
<tr>
<td></td>
<td>Asian, Non-Hispanic</td>
<td>37.29</td>
<td>369</td>
<td>32</td>
<td>9.90</td>
<td>86.72</td>
</tr>
<tr>
<td></td>
<td>Other, Non-Hispanic</td>
<td>17.87</td>
<td>280</td>
<td>17</td>
<td>15.67</td>
<td>60.71</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>White, Non-Hispanic</td>
<td>511.97</td>
<td>7612</td>
<td>459</td>
<td>14.87</td>
<td>60.30</td>
</tr>
<tr>
<td></td>
<td>Black, Non-Hispanic</td>
<td>290.31</td>
<td>3909</td>
<td>291</td>
<td>13.46</td>
<td>74.44</td>
</tr>
<tr>
<td></td>
<td>Hispanic/Latino</td>
<td>161.17</td>
<td>2036</td>
<td>167</td>
<td>12.63</td>
<td>82.02</td>
</tr>
<tr>
<td></td>
<td>Asian, Non-Hispanic</td>
<td>38.96</td>
<td>505</td>
<td>47</td>
<td>12.96</td>
<td>93.07</td>
</tr>
<tr>
<td></td>
<td>Other, Non-Hispanic</td>
<td>19.05</td>
<td>408</td>
<td>18</td>
<td>21.42</td>
<td>44.12</td>
</tr>
</tbody>
</table>
**Figure A77** shows acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and race/ethnicity. Acceptance rates increased after implementation for Asian, Non-Hispanic candidates, while acceptance rates decreased for all other racial/ethnic groups.

**Figure A77: Acceptances per 1000 Offers for pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Race/Ethnicity**

![Bar chart showing acceptances per 1000 offers for different race/ethnicity groups before and after policy implementation.](chart_image)

- **Pre-Policy**
- **Post-Policy**

Candidate Race/Ethnicity: White, Non-Hispanic, Black, Non-Hispanic, Hispanic/Latino, Asian, Non-Hispanic, Other, Non-Hispanic
Figure A78 and Table A83 show offers per active patient year for pancreas/kidney-pancreas matches from March 15, 2020 to March 14, 2022 by policy era and blood type. Offer rates increased after implementation for candidates with blood types A, AB, and O, while offer rates decreased for blood type B candidates.

**Figure A78: Offers per Active Patient Year for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Blood Type**

![Bar chart showing offers per active patient year for different blood types and policy eras.]

**Table A83: Offer and Acceptance Rates for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Blood Type**

<table>
<thead>
<tr>
<th>Era</th>
<th>Blood Type</th>
<th>Active Patient Years</th>
<th>Offers</th>
<th>Acceptances</th>
<th>Offers per Active Patient Year</th>
<th>Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td>A</td>
<td>305.11</td>
<td>3752</td>
<td>363</td>
<td>12.30</td>
<td>96.75</td>
</tr>
<tr>
<td></td>
<td>AB</td>
<td>21.41</td>
<td>335</td>
<td>25</td>
<td>15.65</td>
<td>74.63</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>202.64</td>
<td>1557</td>
<td>129</td>
<td>7.68</td>
<td>82.85</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>491.82</td>
<td>7036</td>
<td>481</td>
<td>14.31</td>
<td>68.36</td>
</tr>
<tr>
<td>Post-Policy</td>
<td>A</td>
<td>310.45</td>
<td>4709</td>
<td>336</td>
<td>15.17</td>
<td>71.35</td>
</tr>
<tr>
<td></td>
<td>AB</td>
<td>25.56</td>
<td>581</td>
<td>35</td>
<td>22.73</td>
<td>60.24</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>186.01</td>
<td>1114</td>
<td>133</td>
<td>5.99</td>
<td>119.39</td>
</tr>
<tr>
<td></td>
<td>O</td>
<td>498.71</td>
<td>8066</td>
<td>478</td>
<td>16.17</td>
<td>59.26</td>
</tr>
</tbody>
</table>
**Figure A79** shows acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and blood type. Acceptance rates increased for blood type B candidates after implementation. Acceptance rates decreased for blood types A, AB, and O.

**Figure A79: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and Blood Type**
Figure A80 and Table A84 show offers per active patient year for kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and CPRA at listing. There was little change in the offer rate for candidates with CPRA 98-100% after implementation (0.56 vs 0.76 offers per active patient year). Offer rates increased for all other CPRA groups after implementation.

Figure A80: Offers per Active Patient Year for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing
Table A84: Offer and Acceptance Rates for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing

<table>
<thead>
<tr>
<th>Era</th>
<th>CPRA (%)</th>
<th>Active Patient Years</th>
<th>Offers</th>
<th>Acceptances</th>
<th>Offers per Active Patient Year</th>
<th>Acceptances per 1000 Offers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Policy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>684.85</td>
<td>7005</td>
<td>424</td>
<td>10.23</td>
<td>60.53</td>
</tr>
<tr>
<td>1-19</td>
<td></td>
<td>79.47</td>
<td>732</td>
<td>53</td>
<td>9.21</td>
<td>72.40</td>
</tr>
<tr>
<td>20-79</td>
<td></td>
<td>123.14</td>
<td>874</td>
<td>68</td>
<td>7.10</td>
<td>77.80</td>
</tr>
<tr>
<td>80-97</td>
<td></td>
<td>47.04</td>
<td>84</td>
<td>14</td>
<td>1.79</td>
<td>166.67</td>
</tr>
<tr>
<td>80-97</td>
<td></td>
<td>12.03</td>
<td>84</td>
<td>14</td>
<td>6.98</td>
<td>166.67</td>
</tr>
<tr>
<td>98-100</td>
<td></td>
<td>60.90</td>
<td>34</td>
<td>5</td>
<td>0.56</td>
<td>147.06</td>
</tr>
<tr>
<td>Post-Policy</td>
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**Figure A81** shows acceptances per 1000 offers for pancreas/kidney-pancreas match runs from March 15, 2020 to March 14, 2022 by policy era and CPRA at listing. Acceptance rates decreased for all CPRA groups after policy implementation.

**Figure A81: Acceptances per 1000 Offers for Pancreas/Kidney-Pancreas Match Runs March 15, 2020 - March 14, 2022 by Policy Era and CPRA at Listing**
**Figure A82** and **Table A85** describe pancreas/kidney-pancreas match run offer refusals due to positive crossmatch by CPRA. The proportion of refusals due to positive crossmatch was highest for candidates with CPRA 80-97% and 98-100% both before and after policy implementation, and increased after implementation for the CPRA 98-100% group. There was little change in the overall proportion of refusals due to positive crossmatch (0.84% vs 0.54%).

**Figure A82: Percent of Refusals Due to Positive Crossmatch for Pancreas/Kidney-Pancreas Matches March 15, 2020 - March 14, 2022 by Policy Era and CPRA**

![Chart showing the percent of refusals due to positive crossmatch for different CPRA groups before and after policy implementation.](chart)

**Table A85: Number and Percent of Refusals Due to Positive Crossmatch for Pancreas/Kidney-Pancreas Matches March 15, 2020 - March 14, 2022 by Policy Era and CPRA**

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<tr>
<td>Total</td>
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</table>

Pre-Policy: Before policy implementation; Post-Policy: After policy implementation.