



SECTION 9

Deceased Donor Pancreas Donation

SUMMARY

This section summarises pancreas donation activity from deceased donor in 2016, compared with previous years. Both countries reached their highest rate of pancreas transplanted in 2016, with 2.2 pmp in Australia and 0.9 pmp in New Zealand.

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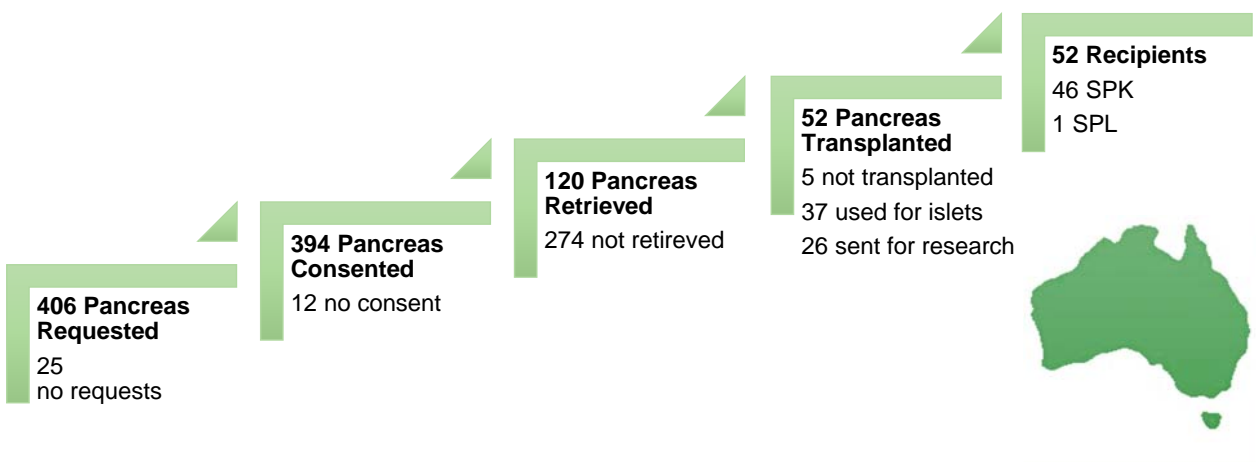
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Pancreas Donation

In Australia there were 52 pancreas transplants in 2016, a 15.6% increase in the total number of pancreas transplants compared to 45 in 2015. Forty-seven pancreases were transplanted simultaneously with another organ resulting in 46 simultaneous pancreas/kidney transplant recipients and one pancreas/liver transplant recipient. There was an overall increase of 15.6% in the total number of pancreas transplants; an increase to 2.2 per million population (pmp).

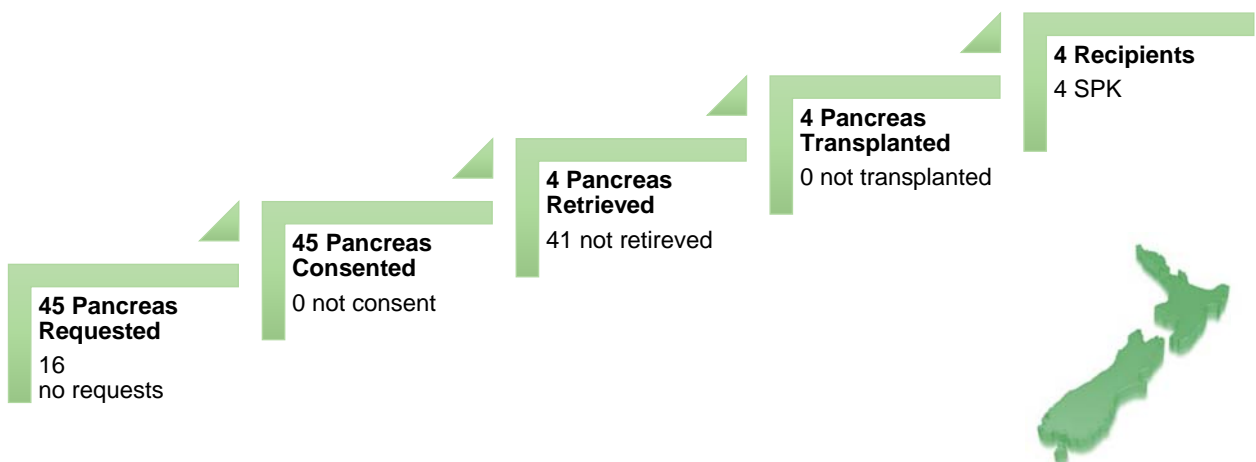
Figure 9.1 Outcomes of Request for Pancreas Donation from Actual Donors in Australia 2016



In New Zealand, there were four pancreas transplants in 2016. All four transplants were a combined pancreas/kidney transplant.

There was an overall increase of one in the total number of pancreas transplant recipients (4) in 2016 compared to the previous year (3). Figure 9.2 shows the outcomes of requests for pancreas donation, in New Zealand.

Figure 9.2 Outcomes of Request for Pancreas Donation from Actual Donors in New Zealand 2016



SPK = Simultaneous Pancreas Kidney transplant
SPL = Simultaneous Pancreas Liver transplant

Figure 9.3 to 9.5 show the number of pancreas transplants by donation pathway and the number of pancreas recipients by jurisdiction. Figure 9.3 particularly shows an increase in DCD pancreas from 2006 to 2016, and DBD pancreas from 2012 to 2016 in Australia.

Figure 9.3 Pancreas Transplanted by Donation Pathway - Australia,

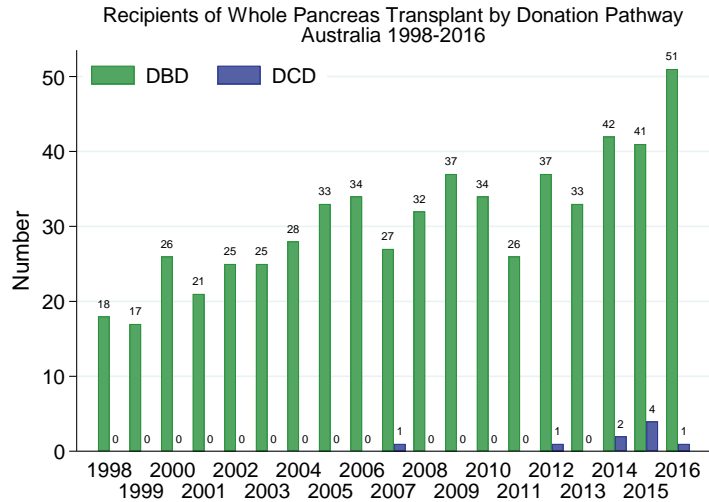


Figure 9.4 Pancreas Transplanted by Donation Pathway - New Zealand,

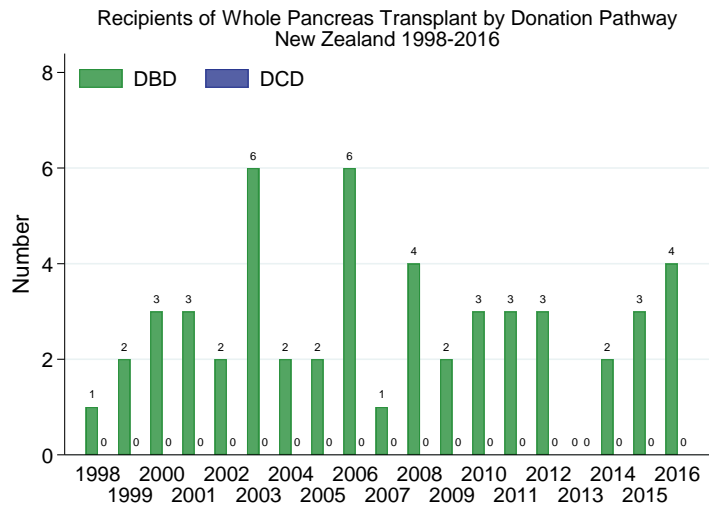
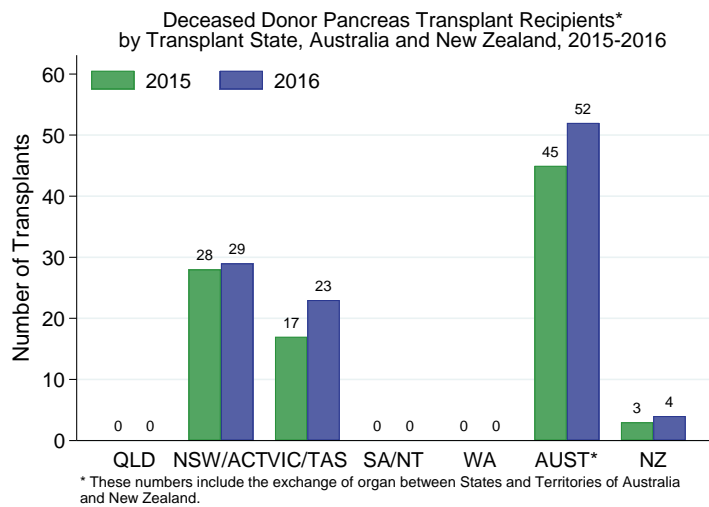


Figure 9.5 Deceased Donor Pancreas Transplant Recipients by State, Australia & New Zealand, 2015 vs 2016



Age of Pancreas Donors

The age distribution of donors providing transplanted pancreas for Australia and New Zealand is shown in Figures 9.6 and 9.7 respectively.

Figure 9.6 Age of Donors Providing Transplant Pancreas, Australia, 2016

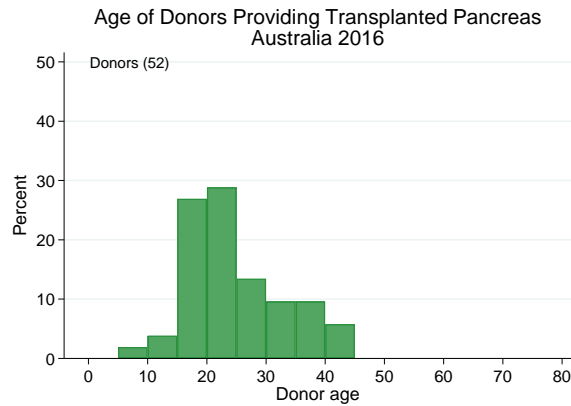
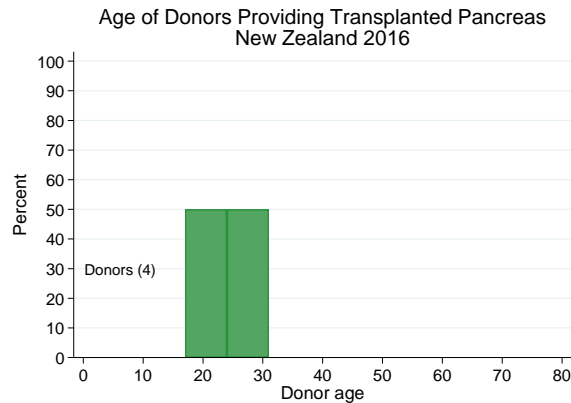


Figure 9.7 Age of Donors Providing Transplant Pancreas, New Zealand, 2016



Donor Pancreas Function

Tests for pancreas function of deceased donors include blood sugar levels, serum amylase and serum lipase tests. There were 81.5% of donors in Australia and 40% of donors in New Zealand, who had blood sugar levels greater than 8mmol/L. Eighty-seven percent of donors in Australia and 75% in New Zealand, in 2016, had normal amylase levels or lipase less than 80 U/L.

Pancreas Not Retrieved

In 2016, there were 274 pancreas not retrieved from Australian donors and 41 not retrieved from New Zealand donors.

For Australia, the main reason was due to the pancreas not being medically suitable (115), followed age of donor (58). In New Zealand, there were 21 non-retrieved pancreas due to age of donor and nine due to not being medically suitable.

Reason	Australia	New Zealand
Logistics	27	0
Not Medically Suitable	115	9
Surgically Unsuitable	11	0
Trauma to Organ	7	5
No Suitable Recipients	43	3
Age of Donor	58	21
DCD Donor	11	2
Consent Withdrawn	1	0
Others	1	1
Total	274	41

Pancreas Retrieved and Not utilised

The reasons why pancreas were not utilised for organ transplantation is presented in Table 9.2.

Year	Logistics	Not Medically Suitable	Not Surgically Suitable	Trauma to Organ	No Suitable Recipients	Research	Islets	Other	Total
2012	2 (0)	0 (0)	0 (0)	0 (0)	0 (0)	19 (0)	7 (0)	0 (0)	28 (0)
2013	0 (0)	1 (0)	0 (0)	1 (0)	0 (0)	26 (0)	6 (0)	0 (0)	34 (0)
2014	0 (0)	2 (0)	1 (0)	0 (0)	0 (0)	38 (0)	6 (0)	0 (0)	47 (0)
2015	1 (0)	4 (0)	1 (0)	0 (0)	0 (0)	42 (0)	12 (0)	0 (0)	60 (0)
2016	1 (0)	2 (0)	2 (0)	0 (0)	0 (0)	48 (0)	7 (0)	0 (0)	60 (0)

Figures 9.8 and 9.9 show the non-utilisation rate of retrieved pancreas – the proportion of pancreas that were retrieved for the purpose of solid organ transplantation, but not ultimately transplanted into a recipient (either due to an absence of suitable recipients, or the pancreas being found to be medically or surgically unsuitable after retrieval).

Figure 9.8 Non-Utilisation Rate of Retrieved Pancreas, Australia, 2012-2016

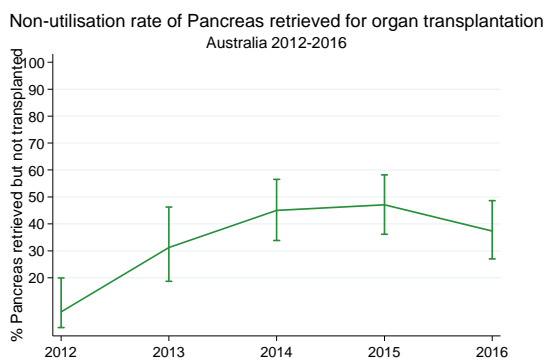
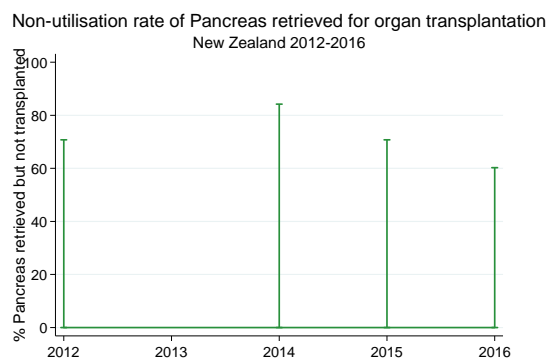


Figure 9.9 Non-Utilisation Rate of Retrieved Pancreas, New Zealand, 2012-2016



Outcome of Pancreas Donation

The outcome of pancreas donation activity in Australia and New Zealand throughout the donation pathway is shown in table 9.4

Table 9.4 Outcome of Request for Pancreas Donation in Australia 2012 - 2016

Outcome of Request	2012	2013	2014	2015	2016
Total Donors	354	391	378	435	503
No Request for Pancreas Donation	88	92	77	107	97
Request for Pancreas Donation	266	299	301	328	406
Consent Not Given	8	10	16	14	12
Consent Given	258	289	285	314	394
Pancreas Not Retrieved	188	221	184	193	274
Pancreas Retrieved	70	68	101	121	120
Pancreas Not Used	28	34	47	60	60
Whole Pancreas Transplanted	38	33	44	45	52
Pancreas Only Transplanted	0	0	0	2	5
Pancreas Transplanted with Other Organ	38	33	44	43	47
Pancreas Islets Transplanted	4	1	10	16	8
Whole Pancreas Recipients	38	33	44	45	52
Pancreas Only Recipients	0	0	0	2	5
Pancreas with Other Organ Recipients	38	33	44	43	47
Pancreas Islets Recipients	3	1	10	15	8
Pancreas (including Islets) Non-utilisation Rate	40%	50%	46.53%	49.59%	50%
Pancreas (Whole, no Islets) Utilised Rate	54.29%	48.53%	43.56%	37.19%	43.33%

Table 9.5 Outcome of Request for Pancreas Donation in New Zealand 2012 - 2016

Outcome of Request	2012	2013	2014	2015	2016
Total Donors	38	36	46	53	61
No Request for Pancreas Donation	16	23	24	14	16
Request for Pancreas Donation	22	12	22	39	45
Consent Not Given	0	0	0	1	0
Consent Given	22	12	22	38	45
Pancreas Not Retrieved	19	12	20	35	41
Pancreas Retrieved	3	0	2	3	4
Pancreas Not Used	0	0	0	0	0
Whole Pancreas Transplanted	3	0	2	3	4
Pancreas Transplanted with Other Organ	3	0	2	3	4
Pancreas Islets Transplanted	0	0	0	0	0
Whole Pancreas Recipients	3	0	2	3	4
Pancreas with Other Organ Recipients	3	0	2	3	4
Pancreas (Whole, no Islets) Utilised Rate	100%	0%	100%	100%	100%

Suggested Citation:

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