

CHAPTER 6

Australian Transplant Waiting List

Reporting the deceased donor kidney transplant waiting list dynamics in Australia, the demographics of patients on the waiting list, and transplantation rates and survival for wait listed patients.

CONTENTS

Summary and Highlights	3
Waiting List Dynamics	4
Proportion of Patients Transplanted or on Waiting List	9
Time to Wait-listing	12
Waiting List Demographics	14
Transplant Rate	16
Outcomes of Wait-listing	18
Survival after Wait-listing	21

SUMMARY AND HIGHLIGHTS

The impact of the COVID-19 pandemic on the dynamics of the deceased donor transplant waiting list in Australia shifted in 2022. Table 6.1 shows a stabilisation of the number of active waitlisted patients from 1167 at the end of 2020, 1354 at the end of 2021, to 1297 at the end of 2022. This coincided with the number of deceased donor transplants stabilising, but this remained lower than the pre-2020 years. The number of patients made active decreased from 1015 in 2021 to 926 in 2022, most significantly in QLD (Table 6.4). This was offset by a notable increase in the number of patients taken off the list from 187 in 2021 to 283 in 2022 (Table 6.1). This increase was most substantial in the age 18-44 years and 45-54 years groups (Table 6.3), and in NSW/ACT and VIC/TAS (Table 6.4). The majority of patients were taken off the list due to clinical rather than laboratory reasons, and month-by-month data suggests that this increase correlated with the number of active COVID-19 cases in Australia (data not shown). This would support that the increase in the number of patients taken off the list was due to COVID-19 and unlikely related to the implementation of virtual crossmatching. As the approach to manage COVID-19 is increasingly similar to other respiratory viruses and the practice for suspending patients with COVID-19 infections from the waiting list evolves, it will be of interest to see whether the number of patients taken off list will start to decrease in the future.

The impact of the implementation of the revised national and state kidney allocation algorithm since May 2021 is illustrated in this ANZDATA report. This includes the prioritisation for sensitised patients with panel reactive antibody $\geq 95\%$ and longevity matching. With regards to sensitised patients, Table 6.6 shows that the percentage of waitlisted patients with previous transplant(s) decreased from 2020 to 2021, and this trend stabilised from 2021 to 2022. The percentages of waitlisted sensitised patients with PRA of 95-98% and 99-100% decreased from 2020 to 2021, and this stabilised in 2022, suggesting a similar temporary “bolus” effect seen in the United States following their changes to their Kidney Allocation System. However, the percentage of waitlisted patients with PRA 99-100% remained high at 10.4% in 2022 (Table 6.6), and their transplant rate remained substantially lower than the other PRA groups (Figure 6.12). In contrast, patients with PRA 95-98% experienced an increase in their transplant rate in 2021 and 2022 to a level similar to those with lower PRA (Figure 6.12). Unlike PRA 99-100% achieving deceased donor kidney transplantation in just over 40% at 5 years since waitlisting, approximately 80% of the PRA 95-98% group received a deceased donor kidney transplant at 5 years, similar to the PRA 0-79% and 80-94% groups (Figure 6.17).

The number of deceased donor kidney transplants performed in the age 65+ years group continued to decrease in 2022 (Table 6.3). With the number from this group being made active also decreasing, the number remaining on the waiting list was similar. However, Table 6.6 shows that the percentage of age 65+ years on the waiting list has increased since 2020, with a corresponding decrease in the percentage of the age 0-44 years group. Furthermore, Figure 6.9 shows the decline in transplant rate for waitlisted patients in age 65+ years in contrast to the increase in the age 18-44 years group, suggesting the impact of longevity matching in the revised allocation algorithm. Under 10% of incident age 65+ years patients starting kidney replacement therapy achieved transplant waitlisting, a rate far outpaced by those dying before waitlisting (Figure 6.6). Once waitlisted, their survival is inferior to the younger age groups (Figure 6.19), with a similar observation in those with diabetes (Figure 6.20).

SUGGESTED CITATION

D Lee, C Davies, E Au, S Bateman, J Chen, K Hurst, G Irish, H McCarthy, S McDonald, W Mulley, M Roberts, T Sun, P Clayton. 46th Report, Chapter 6: Australian Transplant Waiting List. Australia and New Zealand Dialysis and Transplant Registry, Adelaide, Australia. 2023. Available at: <http://www.anzdata.org.au>.

WAITING LIST DYNAMICS

On 1 April 2019 Australia implemented a new national clinical transplant system for the management of solid organ transplant waiting lists and organ allocation known as OrganMatch that replaced the previous National Organ Matching System (NOMS). The waiting list data presented in this chapter has been provided to ANZDATA by NOMS and OrganMatch for reporting purposes and relates to wait-listing for deceased donor (DD) kidney-only transplants. Patients wait-listed for multi-organ transplants are excluded. Data has been sourced from NOMS prior to 1 Jan 2019 and from OrganMatch from 1 Jan 2019 onwards. The OrganMatch data includes NOMS data migrated to OrganMatch from 1 Jan 2019 to 1 April 2019 as NOMS was the clinical system in use during this time period.

The number of people moving on and off the active waiting list is shown. Patients are categorised as either active or off the list - an 'on hold', 'interim' or 'temporarily off list' status is considered to be 'off list', since these patients will not be allocated kidneys. A number of de-listed patients may return to the list in subsequent years. If a patient was listed and de-listed more than once in a calendar year, only the net change is counted.

The ANZDATA registry does not currently receive deceased donor kidney waiting list data for New Zealand and hence this is not reported.

Table 6.1 shows the waiting list dynamics tables for Australia for each year. Living donor (LD) transplants performed in patients who were not on the DD waiting list are not included in this table or the subsequent waiting list dynamics tables (6.2-6.5).

Table 6.1
Australian Kidney Transplant Waiting List Dynamics 2017-2022

Event	2017	2018	2019	2020	2021	2022
Active start of year	953	965	966	1119	1167	1354
Made active	963	998	1098	906	1015	926
Taken off list	144	146	120	191	187	283
DD graft	751	811	787	633	598	648
LD graft*	45	34	33	31	37	43
Overseas graft	1	0	0	0	0	0
Died on list	10	6	5	3	6	9
Active end of year	965	966	1119	1167	1354	1297

*LD transplants performed in patients who were on the DD waiting list

Table 6.2 shows data for non-Indigenous and First Nations patients.

Table 6.2
Australian Kidney Transplant Waiting List Dynamics by Ethnicity 2017-2022

Ethnicity	Event	2017	2018	2019	2020	2021	2022
Non-Indigenous	Active start of year	908	920	909	1047	1109	1266
	Made active	913	912	1006	845	917	854
	Taken off list	134	137	110	174	175	264
	DD graft	711	747	722	575	543	586
	LD graft*	45	34	31	31	37	43
	Overseas graft	1	0	0	0	0	0
	Died on list	10	5	5	3	5	6
	Active end of year	920	909	1047	1109	1266	1221
First Nations	Active start of year	36	35	45	63	51	77
	Made active	41	68	81	52	88	64
	Taken off list	9	9	9	16	12	16
	DD graft	33	48	53	48	49	53
	LD graft*	0	0	1	0	0	0
	Overseas graft	0	0	0	0	0	0
	Died on list	0	1	0	0	1	3
	Active end of year	35	45	63	51	77	69
Not reported	Active start of year	9	10	12	9	7	11
	Made active	9	18	11	9	10	8
	Taken off list	1	0	1	1	0	3
	DD graft	7	16	12	10	6	9
	LD graft*	0	0	1	0	0	0
	Overseas graft	0	0	0	0	0	0
	Died on list	0	0	0	0	0	0
	Active end of year	10	12	9	7	11	7

*LD transplants performed in patients who were on the DD waiting list

The numbers of both dialysis patients and transplants vary with age; in table 6.3 the waiting list dynamics for the years 2017-2022 is shown by broad age groups.

Table 6.3
Australian Kidney Transplant Waiting List Dynamics by Age 2017-2022

Age	Event	2017	2018	2019	2020	2021	2022
0-17	Active start of year	17	11	11	5	12	19
	Made active	18	24	12	21	26	26
	Taken off list	3	1	0	0	3	3
	DD graft	20	22	18	13	16	27
	LD graft*	1	1	0	1	0	2
	Overseas graft	0	0	0	0	0	0
	Died on list	0	0	0	0	0	0
	Active end of year	11	11	5	12	19	13
18-44	Active start of year	225	266	277	351	396	426
	Made active	229	240	295	266	288	281
	Taken off list	16	32	26	44	55	85
	DD graft	154	174	174	161	184	198
	LD graft*	16	20	19	14	17	21
	Overseas graft	1	0	0	0	0	0
	Died on list	1	3	2	2	2	1
	Active end of year	266	277	351	396	426	402
45-54	Active start of year	223	206	250	273	306	367
	Made active	200	234	247	229	255	244
	Taken off list	36	29	27	38	42	76
	DD graft	163	156	188	151	143	154
	LD graft*	15	5	7	7	9	6
	Overseas graft	0	0	0	0	0	0
	Died on list	3	0	2	0	0	1
	Active end of year	206	250	273	306	367	374
55-64	Active start of year	261	272	259	304	304	375
	Made active	295	283	309	251	297	257
	Taken off list	46	45	37	56	54	74
	DD graft	226	243	223	190	160	187
	LD graft*	9	6	4	4	9	11
	Overseas graft	0	0	0	0	0	0
	Died on list	3	2	0	1	3	3
	Active end of year	272	259	304	304	375	357
65+	Active start of year	227	210	169	186	149	167
	Made active	221	217	235	139	149	118
	Taken off list	43	39	30	53	33	45
	DD graft	188	216	184	118	95	82
	LD graft*	4	2	3	5	2	3
	Overseas graft	0	0	0	0	0	0
	Died on list	3	1	1	0	1	4
	Active end of year	210	169	186	149	167	151

*LD transplants performed in patients who were on the DD waiting list

Differences between transplanting regions are shown in table 6.4. Waiting list numbers in each region are reflective of both listing practices and donation rates, both current and historical.

Table 6.4
Australian Kidney Transplant Waiting List Dynamics by Transplant Region 2017-2022

Transplant Region	Event	2017	2018	2019	2020	2021	2022
NSW/ACT	Active start of year	361	378	370	450	490	566
	Made active	329	316	379	318	340	324
	Taken off list	64	52	51	72	64	118
	DD graft	215	251	225	184	180	200
	LD graft*	29	17	21	20	17	25
	Overseas graft	1	0	0	0	0	0
	Died on list	3	4	2	2	3	5
	Active end of year	378	370	450	490	566	542
VIC/TAS	Active start of year	385	366	319	349	351	399
	Made active	299	322	335	259	292	300
	Taken off list	57	62	41	63	69	99
	DD graft	244	297	253	186	159	224
	LD graft*	11	10	10	7	15	11
	Overseas graft	0	0	0	0	0	0
	Died on list	6	0	1	1	1	2
	Active end of year	366	319	349	351	399	363
QLD	Active start of year	104	107	134	150	190	211
	Made active	178	194	190	192	184	143
	Taken off list	14	18	15	29	35	37
	DD graft	159	146	157	122	123	95
	LD graft*	2	3	0	1	5	6
	Overseas graft	0	0	0	0	0	0
	Died on list	0	0	2	0	0	0
	Active end of year	107	134	150	190	211	216
SA/NT	Active start of year	62	82	99	107	81	101
	Made active	85	85	96	64	94	81
	Taken off list	7	11	12	19	10	16
	DD graft	55	52	74	69	62	55
	LD graft*	2	4	2	2	0	1
	Overseas graft	0	0	0	0	0	0
	Died on list	1	1	0	0	2	1
	Active end of year	82	99	107	81	101	109
WA	Active start of year	41	32	44	63	55	77
	Made active	72	81	98	73	105	78
	Taken off list	2	3	1	8	9	13
	DD graft	78	65	78	72	74	74
	LD graft*	1	0	0	1	0	0
	Overseas graft	0	0	0	0	0	0
	Died on list	0	1	0	0	0	1
	Active end of year	32	44	63	55	77	67

*LD transplants performed in patients who were on the DD waiting list

Table 6.5 shows the same data by blood group.

Table 6.5
Australian Kidney Transplant Waiting List Dynamics by Blood Group 2017-2022

Blood Group	Event	2017	2018	2019	2020	2021	2022
A	Active start of year	242	252	227	300	322	391
	Made active	328	348	423	343	366	324
	Taken off list	36	31	17	48	50	79
	DD graft	273	331	321	266	234	274
	LD graft*	8	8	12	7	11	15
	Overseas graft	1	0	0	0	0	0
	Died on list	0	3	0	0	2	4
	Active end of year	252	227	300	322	391	343
AB	Active start of year	24	27	15	18	28	27
	Made active	46	47	38	42	44	27
	Taken off list	2	1	0	2	2	2
	DD graft	41	56	34	29	43	32
	LD graft*	0	2	1	1	0	1
	Overseas graft	0	0	0	0	0	0
	Died on list	0	0	0	0	0	0
	Active end of year	27	15	18	28	27	19
B	Active start of year	175	188	199	222	195	246
	Made active	144	148	153	120	152	131
	Taken off list	34	36	26	37	28	56
	DD graft	84	95	96	101	68	88
	LD graft*	10	5	7	8	5	10
	Overseas graft	0	0	0	0	0	0
	Died on list	3	1	1	1	0	0
	Active end of year	188	199	222	195	246	223
O	Active start of year	512	498	525	579	622	690
	Made active	445	455	484	401	453	444
	Taken off list	72	78	77	104	107	146
	DD graft	353	329	336	237	253	254
	LD graft*	27	19	13	15	21	17
	Overseas graft	0	0	0	0	0	0
	Died on list	7	2	4	2	4	5
	Active end of year	498	525	579	622	690	712

*LD transplants performed in patients who were on the DD waiting list

PROPORTION OF PATIENTS TRANSPLANTED OR ON WAITING LIST

Figure 6.1 shows the proportion of prevalent kidney replacement therapy (KRT) patients who were either transplanted or actively wait-listed at the end of 2022, by state or territory and age group.

Figure 6.1
Proportion of Patients Transplanted or on Waiting List - By State or Territory and Age, Dec 2022

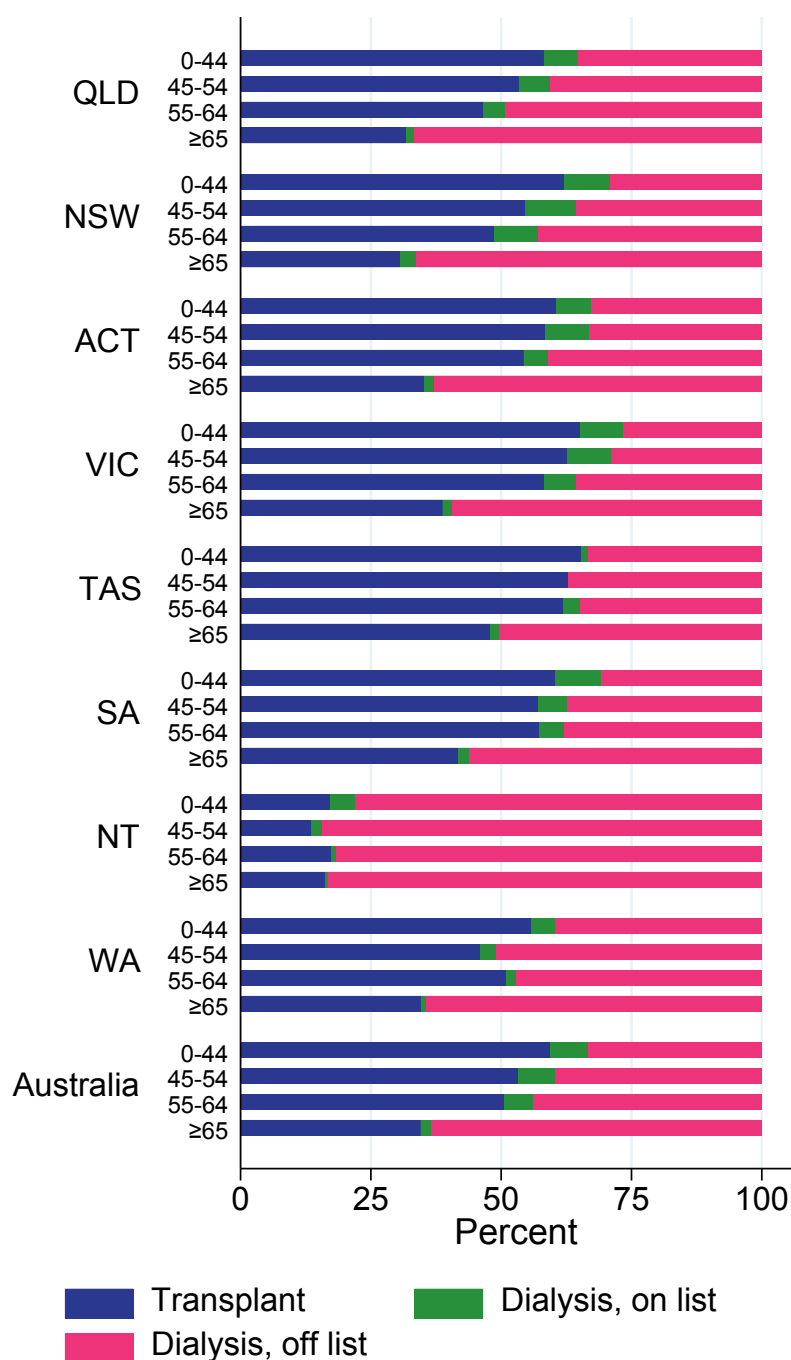
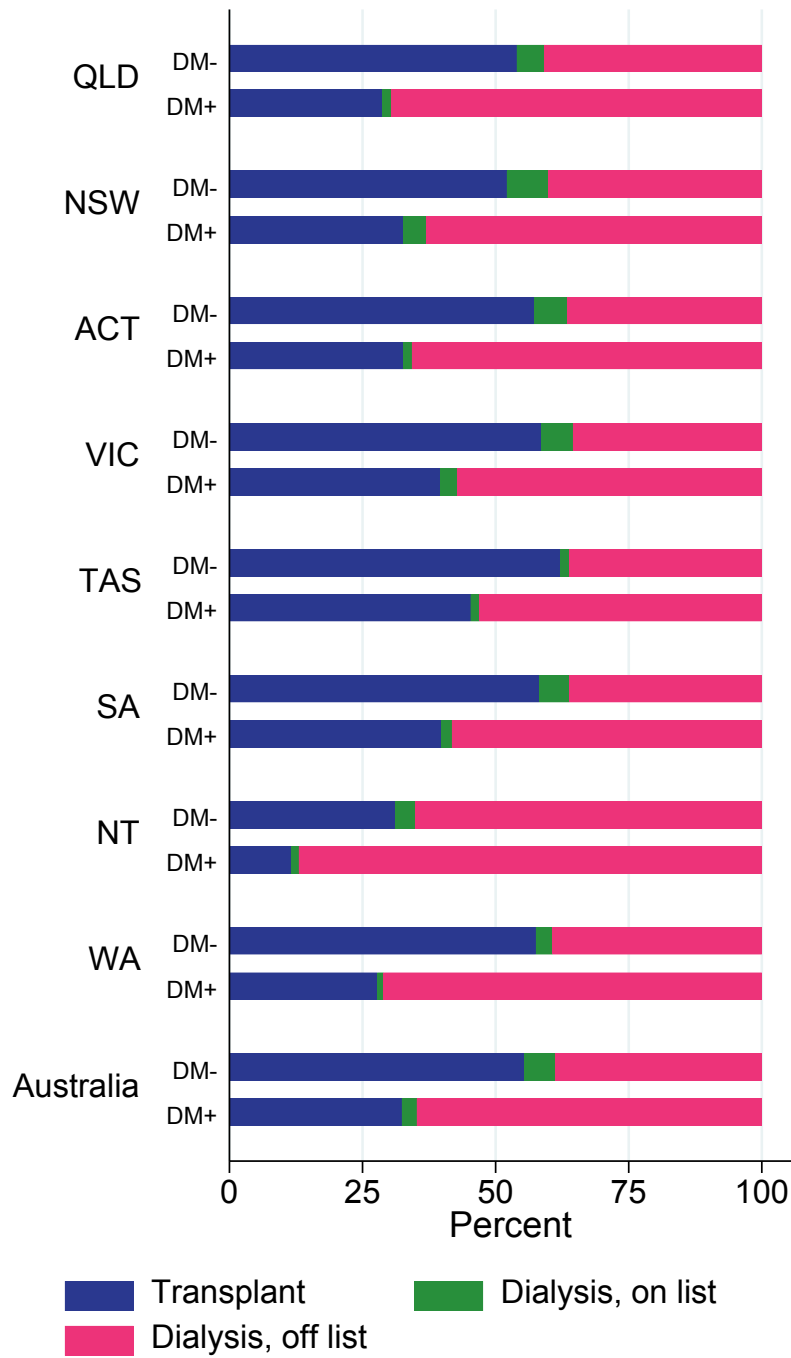


Figure 6.2 shows the proportion of prevalent KRT patients who were either transplanted or actively wait-listed at the end of 2022, by state or territory and diabetes status.

Figure 6.2
Proportion of Patients Transplanted or on Waiting List - By State or Territory and Diabetes Status, Dec



DM-: No diabetes
 DM+: Diabetes

Figure 6.3 shows differences in access to the waiting list or transplantation for incident patients, by treating hospital. This analysis is restricted to patients aged 18-60 who commenced KRT at an adult hospital in Australia over 2017-2021, and shows the proportion of these patients who had either been made active on the kidney transplant waiting list or received a kidney transplant within one year of starting KRT. Figure 6.4 shows the same data by state or territory.

Figure 6.3
Proportion of New KRT Patients Aged 18-60 who were Wait- listed and/or Transplanted within 1 year of Commencing KRT - By Hospital, Australia 2017-2021

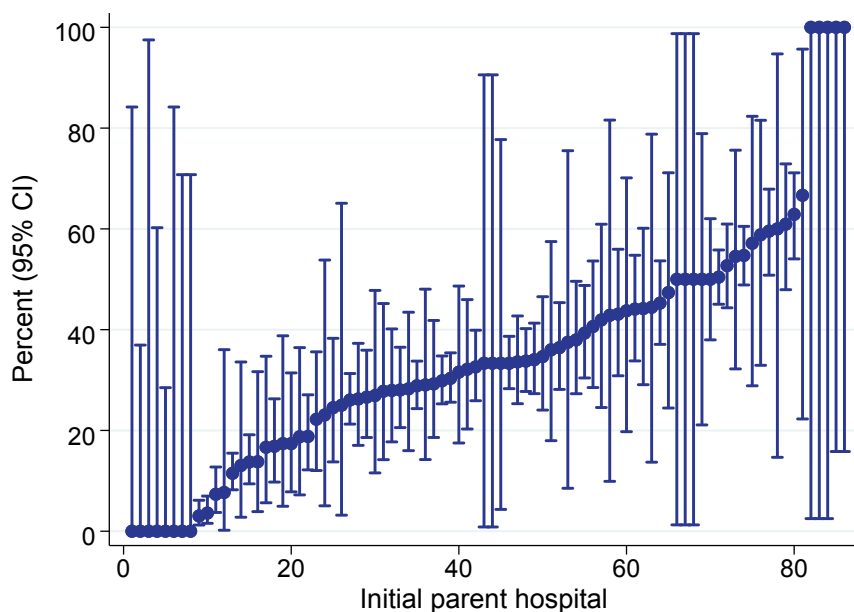
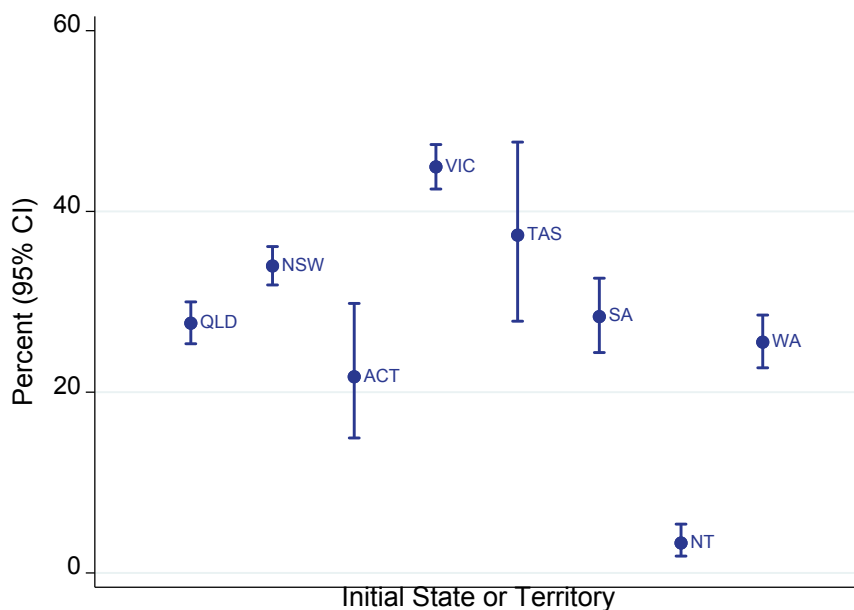


Figure 6.4
Proportion of New KRT Patients Aged 18-60 who were Wait- listed and/or Transplanted within 1 year of Commencing KRT - By State or Territory, Australia 2017-2021



TIME TO WAIT-LISTING

Figures 6.5 to 6.7 show the time to wait-listing to receive a kidney transplant for patients who commenced KRT during 2017-2022. These analyses show the cumulative incidence of wait-listing for deceased donor transplantation, living donor transplantation and death. Each outcome is considered a competing risk for the other outcomes, and only the first event is considered.

Figure 6.5
Time to Wait-listing - Australian Incident KRT Patients 2017-2022

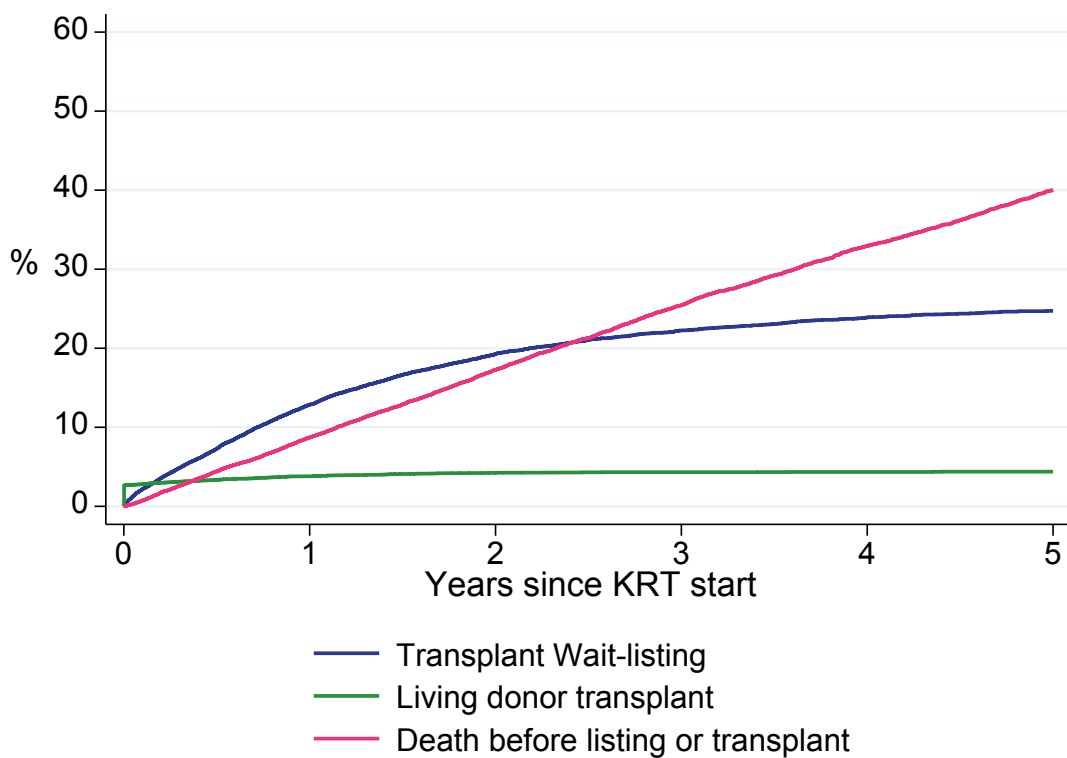


Figure 6.6
Time to Wait-listing by Age - Australian Incident KRT Patients 2017-2022

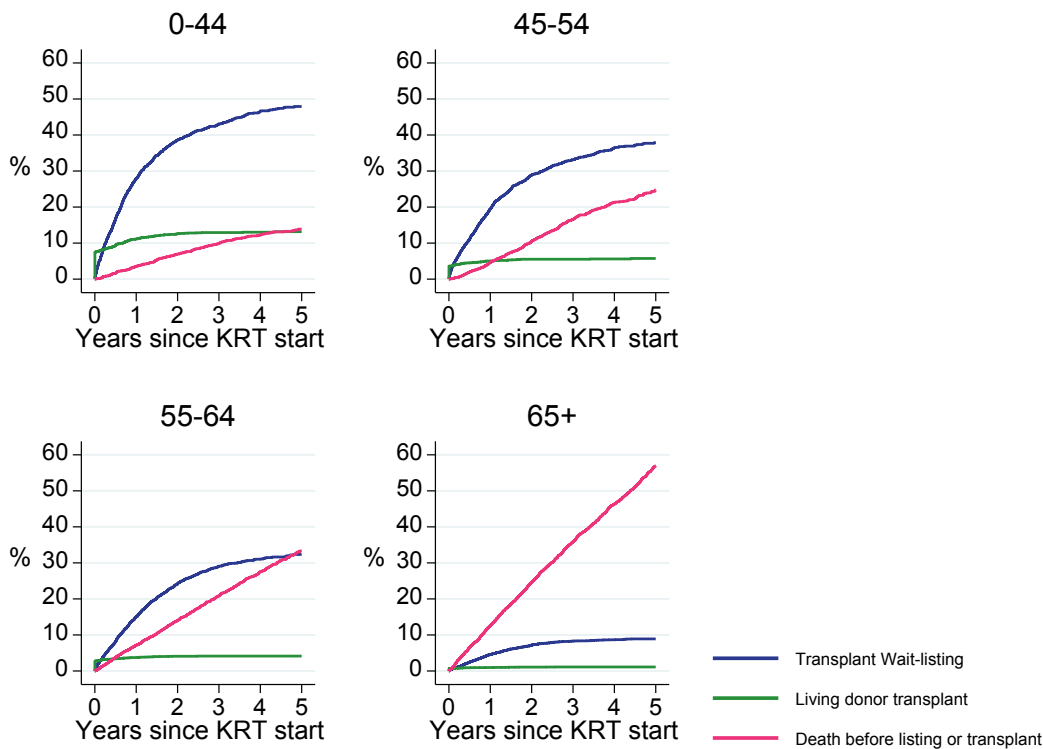
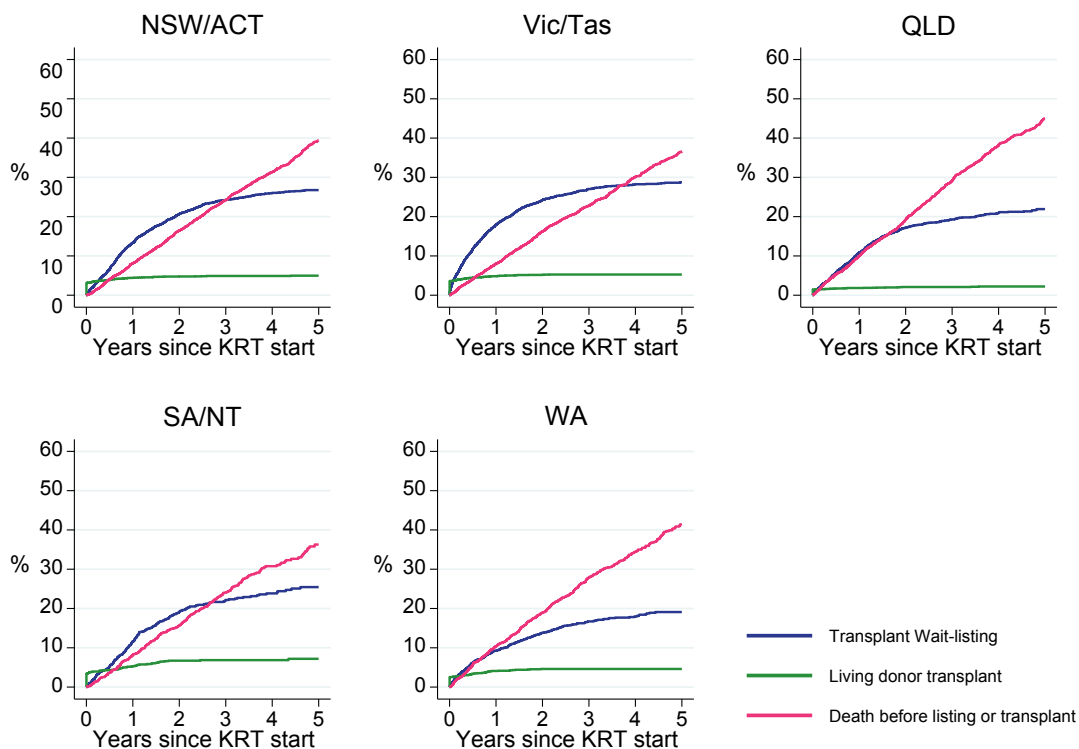


Figure 6.7
Time to Wait-listing by Transplanting Region - Australian Incident KRT Patients 2017-2022



WAITING LIST DEMOGRAPHICS

Table 6.6 shows the demographic characteristics of actively wait-listed patients over 2017-2022. Tables 6.7-6.9 show the waiting time by transplant region, blood group and PRA category, respectively.

Table 6.6
Demographics of the Australian Kidney Transplant Waiting List 2017-2022

Factor	2017	2018	2019	2020	2021	2022
N	965	966	1121	1165	1351	1293
Waiting time (years), median (IQR)	2.2 (1.2, 3.6)	2.1 (1.2, 3.6)	2.1 (1.2, 3.6)	2.2 (1.3, 3.4)	2.3 (1.4, 3.6)	2.5 (1.5, 3.9)
Blood Group						
A	252 (26.1%)	227 (23.5%)	302 (26.9%)	323 (27.7%)	391 (28.9%)	343 (26.5%)
AB	27 (2.8%)	15 (1.6%)	18 (1.6%)	28 (2.4%)	27 (2.0%)	19 (1.5%)
B	188 (19.5%)	199 (20.6%)	223 (19.9%)	195 (16.7%)	246 (18.2%)	223 (17.2%)
O	498 (51.6%)	525 (54.3%)	578 (51.6%)	619 (53.1%)	687 (50.9%)	708 (54.8%)
PRA Category						
0-79	750 (77.7%)	695 (71.9%)	822 (73.3%)	857 (73.6%)	1087 (80.5%)	1056 (81.7%)
80-94	33 (3.4%)	44 (4.6%)	44 (3.9%)	53 (4.5%)	56 (4.1%)	52 (4.0%)
95-98	46 (4.8%)	76 (7.9%)	76 (6.8%)	87 (7.5%)	61 (4.5%)	50 (3.9%)
99-100	136 (14.1%)	151 (15.6%)	179 (16.0%)	168 (14.4%)	147 (10.9%)	135 (10.4%)
Previous grafts						
0	723 (74.9%)	732 (75.8%)	857 (76.4%)	900 (77.3%)	1103 (81.6%)	1060 (82.0%)
1	201 (20.8%)	196 (20.3%)	221 (19.7%)	229 (19.7%)	205 (15.2%)	193 (14.9%)
2	39 (4.0%)	36 (3.7%)	41 (3.7%)	34 (2.9%)	41 (3.0%)	35 (2.7%)
3	2 (0.2%)	2 (0.2%)	2 (0.2%)	2 (0.2%)	2 (0.1%)	4 (0.3%)
4	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (0.1%)
Age (years)						
0-44	300 (31.1%)	312 (32.3%)	355 (31.7%)	384 (33.0%)	378 (28.0%)	335 (25.9%)
45-54	237 (24.6%)	239 (24.7%)	273 (24.4%)	285 (24.5%)	345 (25.5%)	335 (25.9%)
55-64	261 (27.0%)	260 (26.9%)	306 (27.3%)	316 (27.1%)	391 (28.9%)	371 (28.7%)
65+	167 (17.3%)	155 (16.0%)	187 (16.7%)	180 (15.5%)	237 (17.5%)	252 (19.5%)
Gender						
Male	611 (63.3%)	585 (60.6%)	688 (61.4%)	726 (62.3%)	853 (63.1%)	832 (64.3%)
Ethnicity						
First Nations	35 (3.6%)	45 (4.7%)	62 (5.5%)	50 (4.3%)	76 (5.6%)	68 (5.3%)
Non-Indigenous	889 (92.1%)	873 (90.4%)	1025 (91.4%)	1081 (92.8%)	1244 (92.1%)	1199 (92.7%)
Not reported	41 (4.2%)	48 (5.0%)	34 (3.0%)	34 (2.9%)	31 (2.3%)	26 (2.0%)
Primary kidney disease						
Diabetic kidney disease	139 (14.4%)	159 (16.5%)	187 (16.7%)	167 (14.3%)	204 (15.1%)	202 (15.6%)
Glomerular disease	390 (40.4%)	376 (38.9%)	421 (37.6%)	465 (39.9%)	523 (38.7%)	467 (36.1%)
Hypertension / Renal vascular disease	77 (8.0%)	82 (8.5%)	112 (10.0%)	95 (8.2%)	108 (8.0%)	122 (9.4%)
Familial / hereditary kidney diseases	148 (15.3%)	147 (15.2%)	170 (15.2%)	179 (15.4%)	208 (15.4%)	201 (15.5%)
Tubulointerstitial disease	134 (13.9%)	128 (13.3%)	131 (11.7%)	156 (13.4%)	178 (13.2%)	165 (12.8%)
Other systemic diseases affecting the kidney	7 (0.7%)	9 (0.9%)	7 (0.6%)	12 (1.0%)	17 (1.3%)	13 (1.0%)
Miscellaneous kidney disorders	60 (6.2%)	60 (6.2%)	82 (7.3%)	83 (7.1%)	104 (7.7%)	113 (8.7%)
Not reported	10 (1.0%)	5 (0.5%)	11 (1.0%)	8 (0.7%)	9 (0.7%)	10 (0.8%)
Comorbidities						
Diabetes	217 (22.6%)	233 (24.1%)	303 (27.2%)	281 (24.2%)	329 (24.6%)	336 (26.0%)
Coronary artery disease	182 (18.9%)	182 (18.8%)	232 (20.9%)	207 (17.9%)	253 (18.9%)	234 (18.1%)
Peripheral vascular disease	95 (9.9%)	92 (9.5%)	109 (9.8%)	95 (8.2%)	102 (7.6%)	122 (9.5%)
Cerebrovascular disease	55 (5.7%)	55 (5.7%)	54 (4.9%)	71 (6.1%)	72 (5.4%)	78 (6.0%)
Chronic lung disease	92 (9.6%)	92 (9.5%)	90 (8.1%)	87 (7.5%)	111 (8.3%)	116 (9.0%)

[BACK TO CONTENTS](#)

Table 6.7**Waiting time (years), median (IQR) of the Australian Kidney Transplant Waiting List by Transplant Region 2017-2022**

Transplant Region	2017	2018	2019	2020	2021	2022
NSW/ACT	2.3 (1.3, 3.4)	2.2 (1.4, 3.5)	2.3 (1.4, 3.7)	2.4 (1.4, 3.5)	2.7 (1.8, 3.7)	2.9 (1.8, 4.1)
VIC/TAS	2.0 (1.2, 3.3)	2.0 (1.1, 3.8)	1.9 (1.0, 3.4)	2.0 (1.2, 3.4)	2.0 (1.2, 3.2)	2.2 (1.3, 3.5)
QLD	2.2 (1.1, 4.8)	1.5 (0.9, 3.3)	1.8 (1.0, 3.3)	1.8 (1.1, 2.6)	2.1 (1.3, 3.2)	2.5 (1.6, 3.7)
SA/NT	1.6 (1.0, 3.1)	2.3 (1.2, 3.2)	2.2 (1.4, 3.4)	2.9 (1.9, 4.2)	2.8 (1.6, 4.1)	2.2 (1.6, 4.2)
WA	4.6 (2.8, 7.4)	4.5 (2.1, 6.8)	2.5 (1.1, 5.9)	2.4 (1.4, 3.9)	1.8 (1.1, 3.1)	2.5 (1.4, 3.9)

Table 6.8**Waiting time (years), median (IQR) of the Australian Kidney Transplant Waiting List by Blood Group 2017-2022**

Blood Group	2017	2018	2019	2020	2021	2022
A	1.8 (1.1, 2.9)	1.6 (0.9, 3.4)	1.6 (0.9, 3.0)	1.9 (1.1, 2.8)	2.1 (1.3, 3.2)	2.3 (1.3, 3.3)
AB	1.4 (0.8, 2.3)	1.4 (0.6, 3.5)	3.6 (1.7, 4.9)	1.9 (0.7, 4.9)	1.5 (0.5, 3.8)	1.8 (1.2, 3.1)
B	2.5 (1.2, 3.8)	2.4 (1.3, 4.0)	2.5 (1.5, 3.9)	2.7 (1.4, 4.0)	2.3 (1.4, 3.9)	2.6 (1.5, 4.0)
O	2.3 (1.3, 3.7)	2.2 (1.2, 3.6)	2.2 (1.2, 3.5)	2.3 (1.4, 3.4)	2.5 (1.5, 3.7)	2.7 (1.7, 4.1)

Table 6.9**Waiting time (years), median (IQR) of the Australian Kidney Transplant Waiting List by PRA Category 2017-2022**

PRA Category	2017	2018	2019	2020	2021	2022
0-79	1.8 (1.1, 2.9)	1.8 (1.0, 2.7)	1.8 (1.0, 2.8)	1.9 (1.2, 2.7)	2.1 (1.3, 3.2)	2.3 (1.5, 3.4)
80-94	3.4 (1.5, 5.5)	3.9 (1.3, 7.0)	3.2 (1.6, 6.0)	2.3 (1.4, 3.2)	2.6 (1.6, 3.9)	3.0 (1.7, 4.8)
95-98	5.2 (3.3, 8.2)	3.5 (1.8, 7.3)	4.1 (2.2, 7.6)	3.4 (2.0, 7.1)	4.2 (2.9, 8.1)	4.3 (1.9, 6.2)
99-100	4.5 (2.6, 7.4)	4.5 (3.0, 8.0)	4.7 (2.8, 8.1)	5.3 (2.9, 8.4)	5.3 (3.2, 8.5)	5.2 (3.4, 8.2)

TRANSPLANT RATE

The transplant rate represents the likelihood of receiving a kidney transplant in patients who are actively wait-listed. For these analyses the transplant rate was calculated as the number of deceased donor kidney-only transplants performed (numerator) per 100 patient-years on the active kidney-only waiting list (denominator). The transplant rate depends on the number of organs available, the number of patients on the waiting list, and the kidney allocation system. Figures 6.8-6.12 show the transplant rate by transplanting region, age, ethnicity, blood group and PRA category, respectively.

Figure 6.8
Deceased Donor Transplant Rate by Transplanting Region - Per 100 Active Patient-Years

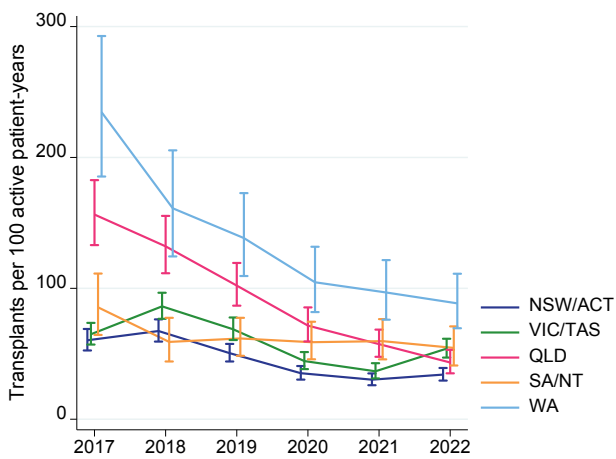


Figure 6.9
Deceased Donor Transplant Rate by Age - Per 100 Active Patient-Years

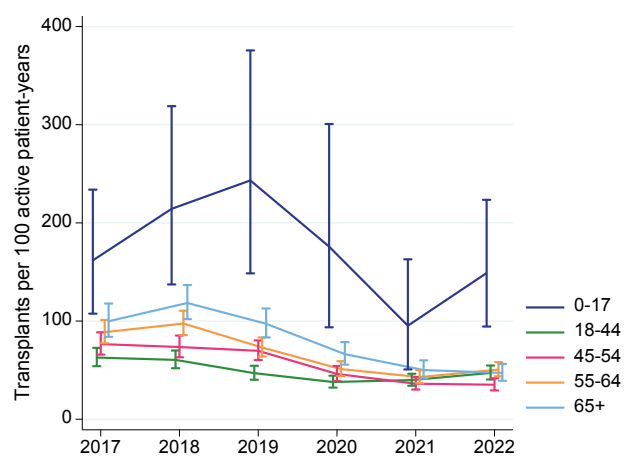


Figure 6.10
Deceased Donor Transplant Rate by Ethnicity - Per 100 Active Patient-Years

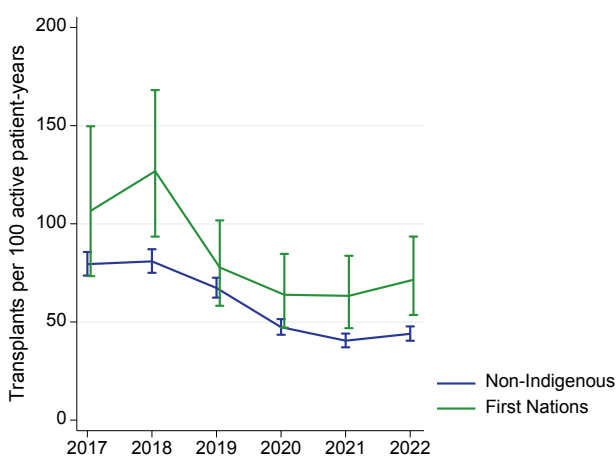


Figure 6.11
Deceased Donor Transplant Rate by Blood Group - Per 100 Active Patient-Years

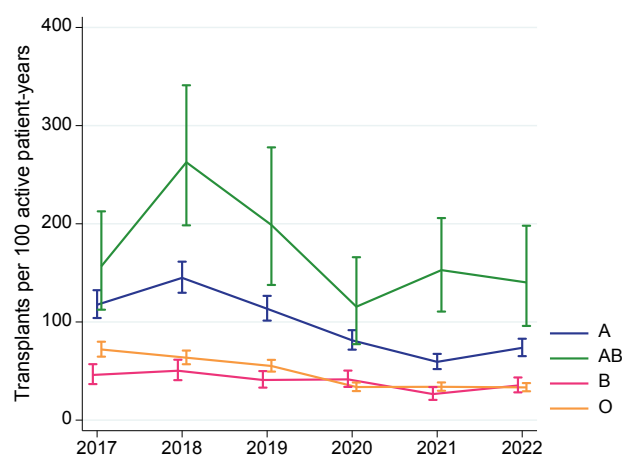
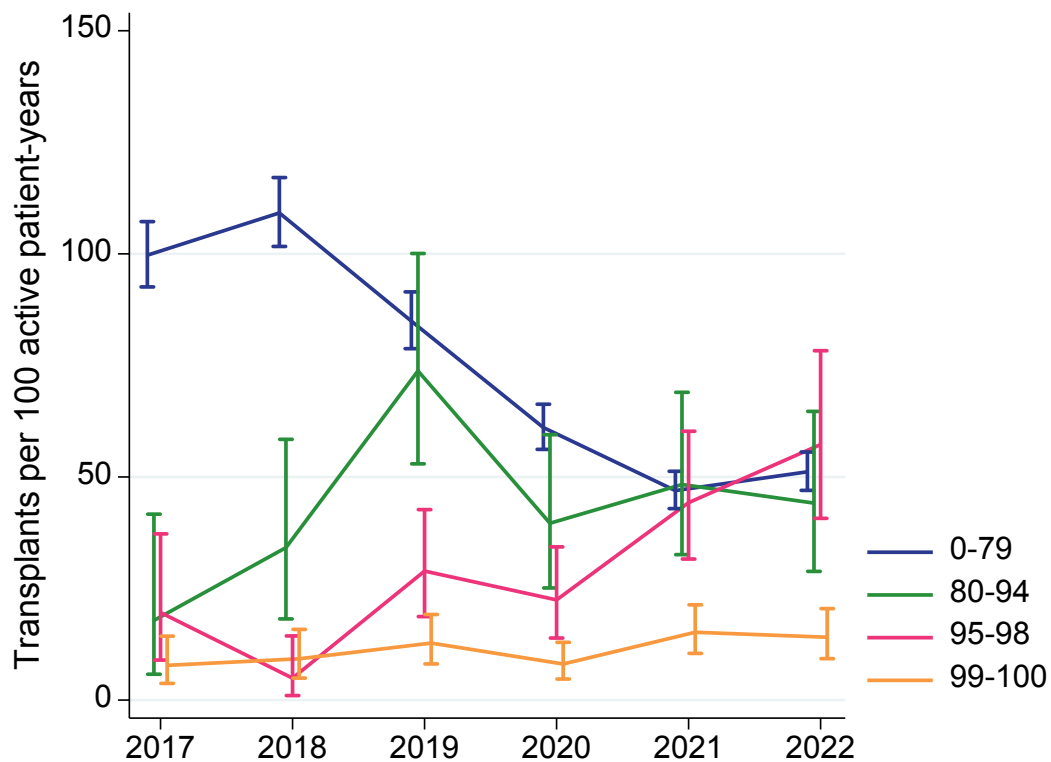


Figure 6.12
 Deceased Donor Transplant Rate by PRA Category - Per 100 Active Patient-Years



OUTCOMES OF WAIT-LISTING

Figures 6.13-6.17 show the outcomes of patients who commenced dialysis during 2017-2022 and were subsequently wait-listed for a kidney transplant. These analyses show the cumulative incidence of deceased donor transplantation, living donor transplantation or death. Each outcome is considered a competing risk for the other outcomes, and only the first event is considered.

Figure 6.13
Outcomes after Wait-listing - Australian Incident Dialysis Patients 2017-2022

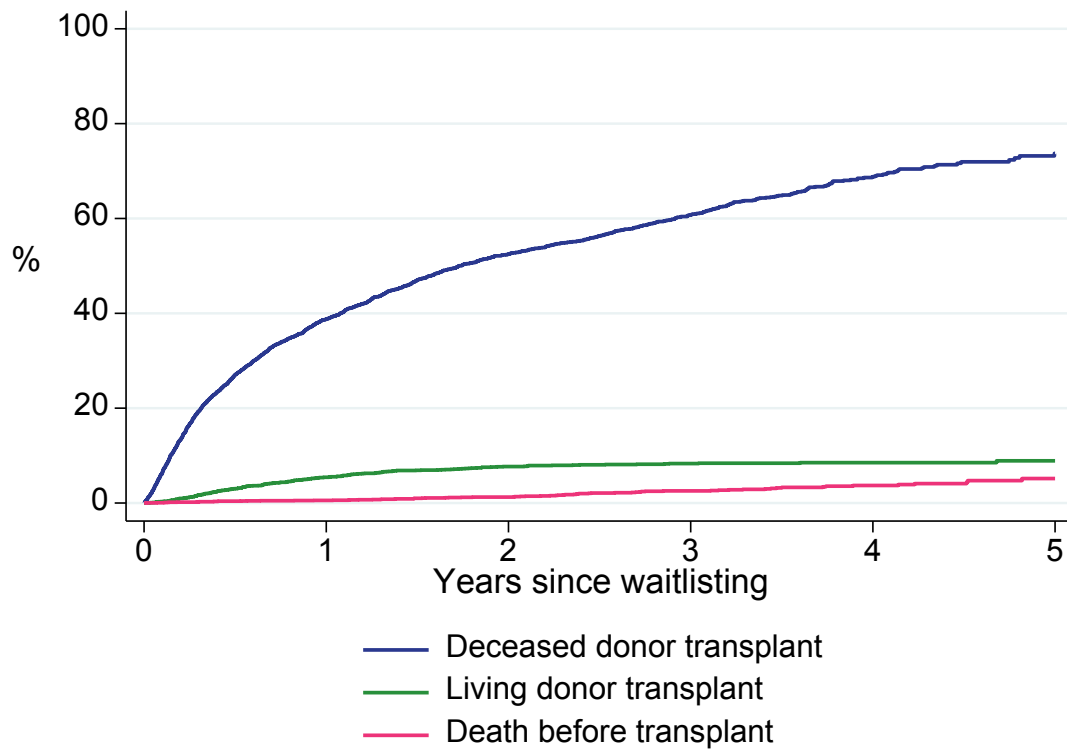


Figure 6.14
Outcomes after Wait-listing by Transplanting Region - Australian Incident Dialysis Patients 2017-2022

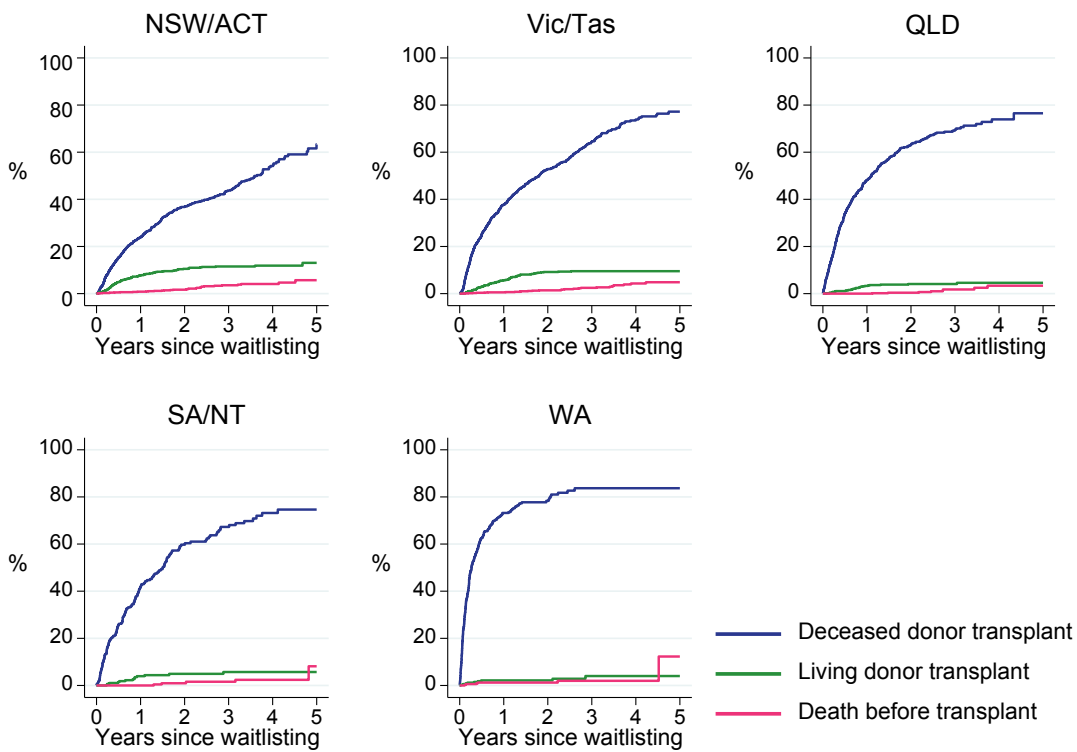


Figure 6.15
Outcomes after Wait-listing by Blood Group - Australian Incident Dialysis Patients 2017-2022

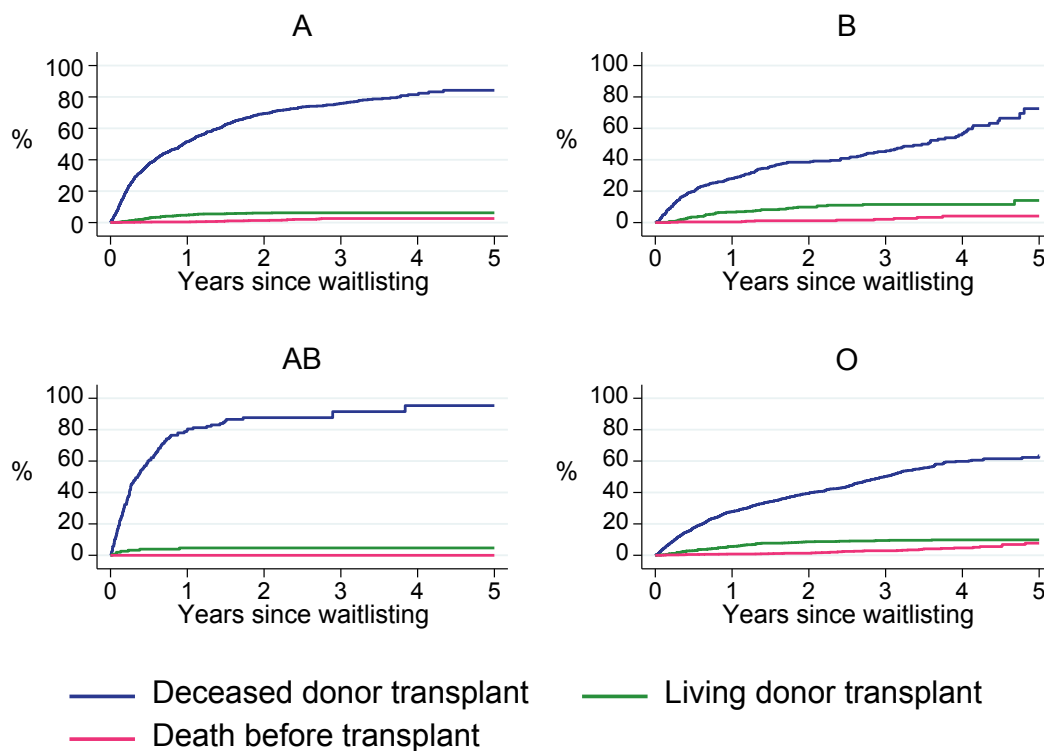


Figure 6.16
Outcomes after Wait-listing by Age Group - Australian Incident Dialysis Patients 2017-2022

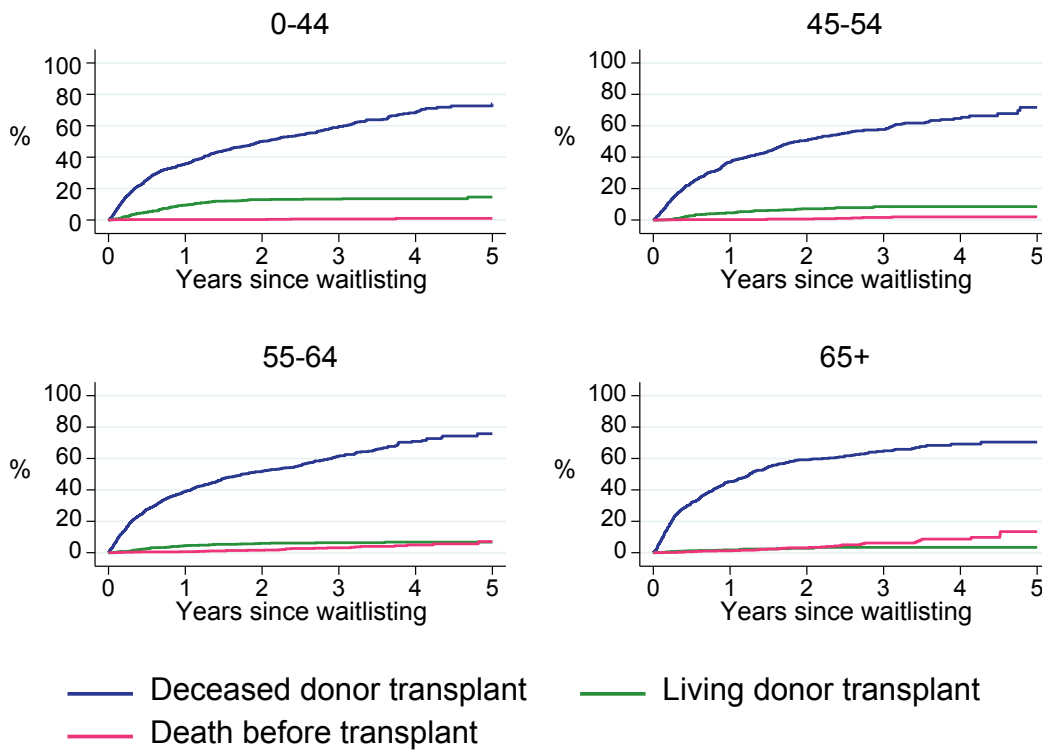
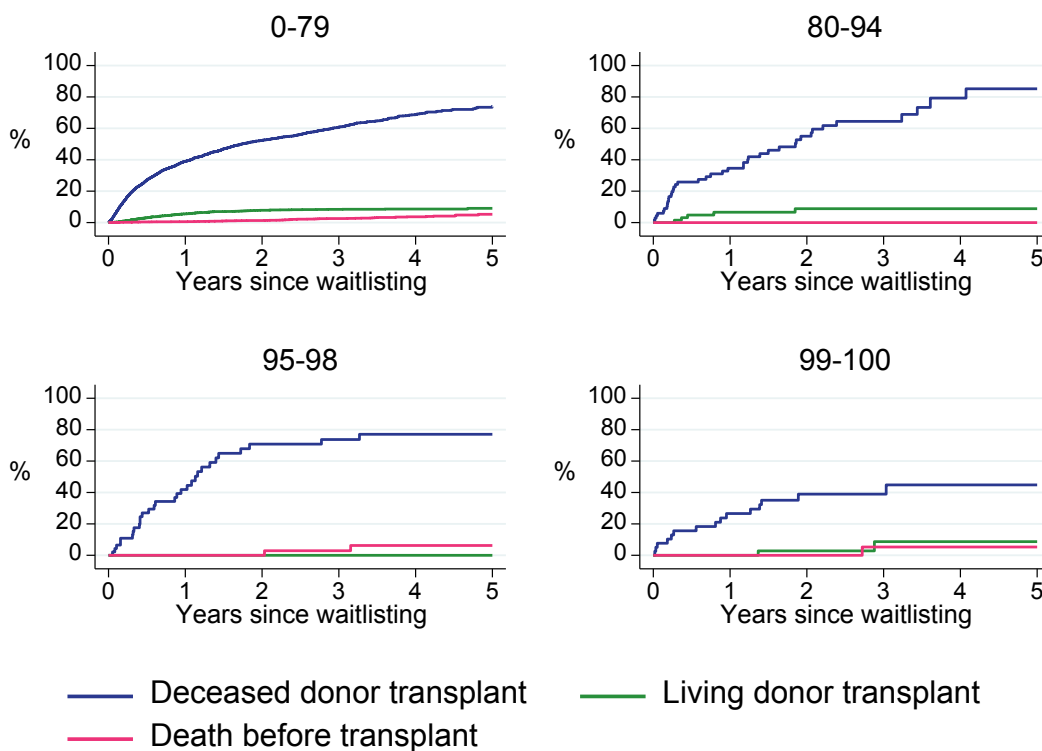


Figure 6.17
Outcomes after Wait-listing by PRA Category - Australian Incident Dialysis Patients 2017-2022



SURVIVAL AFTER WAIT-LISTING

Figure 6.18 shows the survival of patients who commenced dialysis in Australia over 2017-2022 and were subsequently wait-listed for a deceased donor kidney-only transplant. Survival is shown from the time of listing and is censored at transplantation (but not at removal from the list). Survival at 1 and 3 years was 99.3% and 94.1% respectively and the mortality rate was 1.7 deaths per 100 patient-years (95% CI 1.4-2.2). Figures 6.19 and 6.20 show the same data by age group and diabetes status.

Figure 6.18
Survival after Wait-listing - Australian Incident Dialysis Patients 2017-2022 Censored at Transplantation

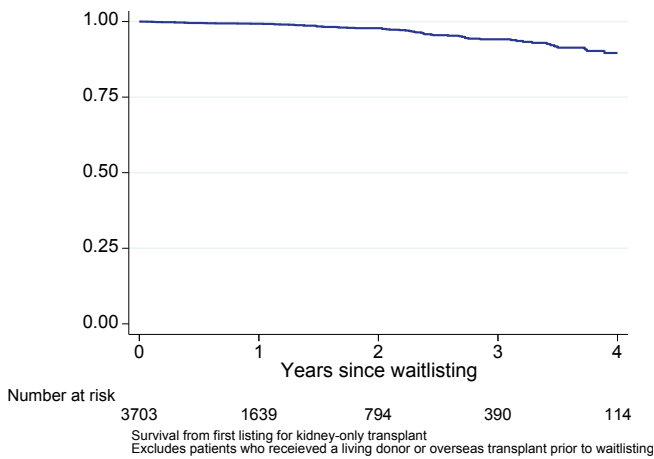


Figure 6.19
Survival after Wait-listing by Age Group - Australian Incident Dialysis Patients 2017-2022 Censored at Transplantation

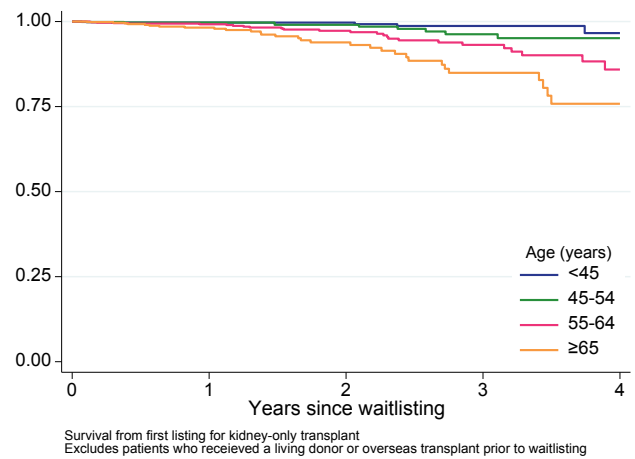
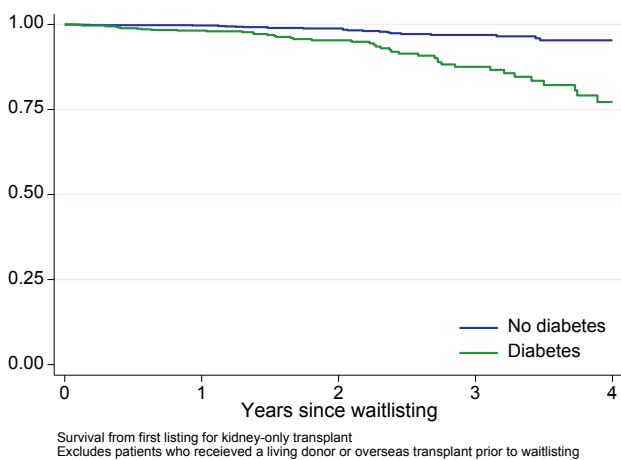
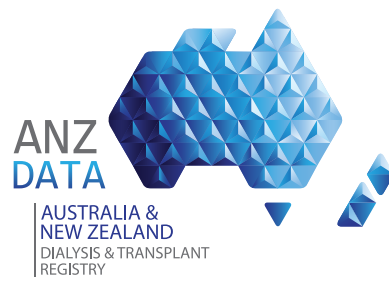


Figure 6.20
Survival after Wait-listing by Diabetes Status - Australian Incident Dialysis Patients 2017-2022 Censored at Transplantation





CHAPTER 6

Australian Transplant Waiting List