

Analysis of Kidney Allocation During 2015

National Organ Matching System

This is an analysis of the current status of the kidney transplant waiting list and kidney transplants matched by the National Organ Matching System (NOMS) from

1st January to 31st December 2015

The analysis is divided into 4 sections:

Section 1 – The Current Status of the Australian Kidney Transplant Waiting List

This section examines the patients still waiting for a kidney transplant who were listed on the NOMS.

Section 2 – Kidney Transplants During 2015

This section examines those patients who were transplanted with a kidney during 2015. In 2015 there were 3 patient from Noumea listed in the NOMS under the NSW centre, who were transplanted in NSW with deceased donor kidneys from Noumea. Data for this donor and recipient transplant was removed wherever possible from the analysis for those tables where n=717. Tables where n=720 included these transplants where it was not feasible to remove them.

Section 3 – Interstate Exchange of Deceased Donor Kidneys in 2015

This section examines the deceased donor kidney exchanges between centres and the patients who were transplanted with exchanged kidneys.

Section 4 – Miscellaneous Reports

This section presents additional information and requested reports.

Unless indicated otherwise, all data shown was obtained from the consolidated National Organ Matching System database on 1st April 2016.

In the report the term 'waiting time on dialysis' is defined as the time since the 'dialysis for matching' date. The dialysis for matching date is either

- the time since the patient first started on dialysis or
- the time since the patient recommenced dialysis if previously transplanted or
- a putative date if the patient was entered into the 'Ideal Trial'

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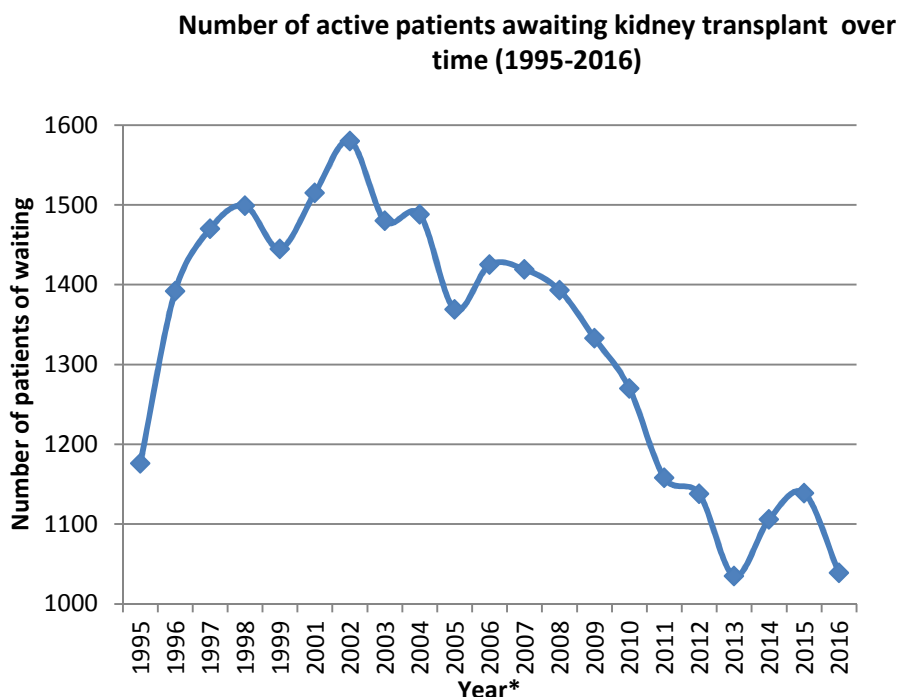
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1. THE CURRENT STATUS OF THE AUSTRALIAN KIDNEY TRANSPLANT WAITING LIST

1.1 Number of active patients awaiting kidney transplant over time (1995 – 2016)

Date	Number of patients waiting
4/1/1995	1176
2/1/1996	1392
4/2/1997	1470
9/1/1998	1499
7/1/1999	1445
7/3/2001	1515
8/1/2002	1580
6/1/2003	1480
6/1/2004	1488
15/4/2005	1369
3/4/2006	1425
16/3/2007	1419
4/4/2008	1393
31/3/2009	1333
16/4/2010	1270
8/4/2011	1158
3/4/2012	1138
1/4/2013	1035
1/4/2014	1106
1/4/2015	1139
1/4/2016	1039

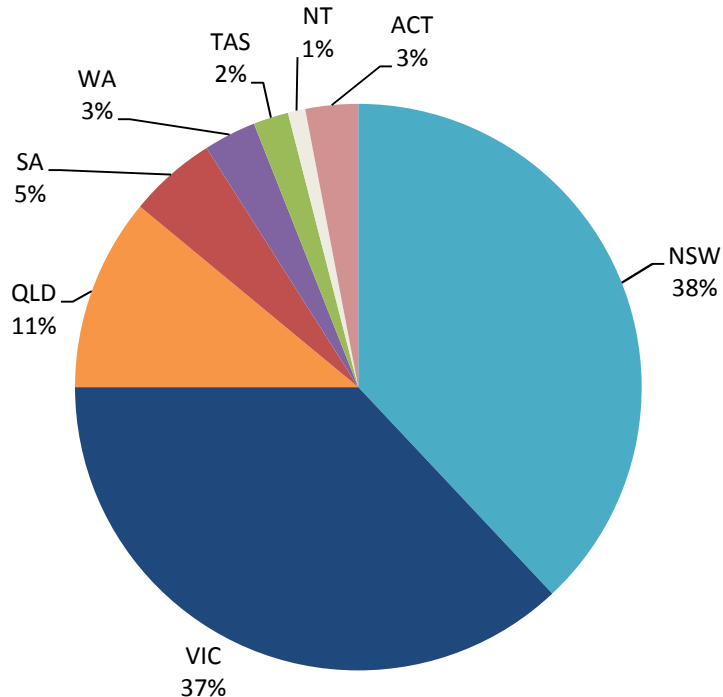


*data not available for 2000

1.2 Number of active patients awaiting kidney transplant by state or territory

State/ Territory	Number of active patients	Percentage of all patients
NSW	395	38%
VIC	383	37%
QLD	113	11%
SA	51	5%
WA	36	3%
TAS	19	2%
NT	14	1%
ACT	28	3%
ALL	1039	100%

Percentage of active patients awaiting kidney transplant by state or territory

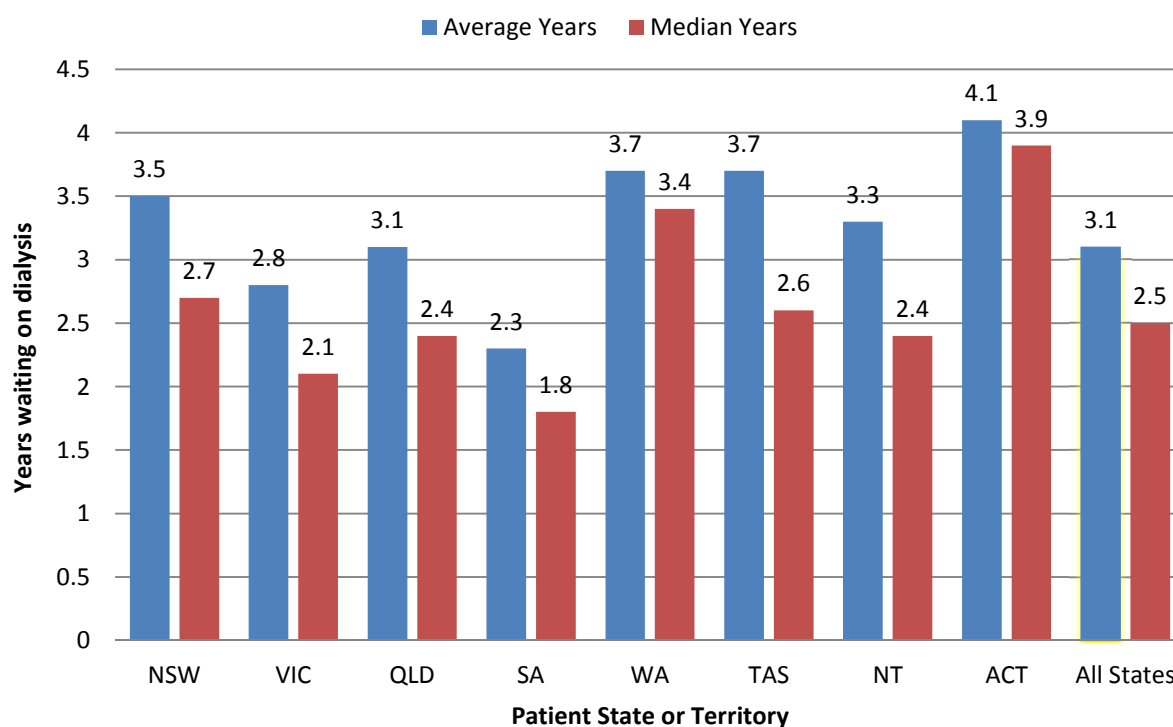


1.3 Time waiting on dialysis in years for active patients awaiting kidney transplant by patient state or territory

State/ Territory	Average wait (years)	Median wait (years)	Maximum wait (years)
NSW	3.5	2.7	19.7*
VIC	2.8	2.1	17.0
QLD	3.1	2.4	12.8
SA	2.3	1.8	11.1
WA	3.7	3.4	11.9
TAS	3.7	2.6	8.9
NT	3.3	2.4	9.5
ACT	4.1	3.9	12.1
ALL	3.1	2.5	19.7

*Longest waiting patient is from NSW with 0 previous transplants, 99% authorised combined class calculated PRA (cPRA) and blood group O

Time waiting on dialysis in years for active patients awaiting kidney transplant by patient state or territory

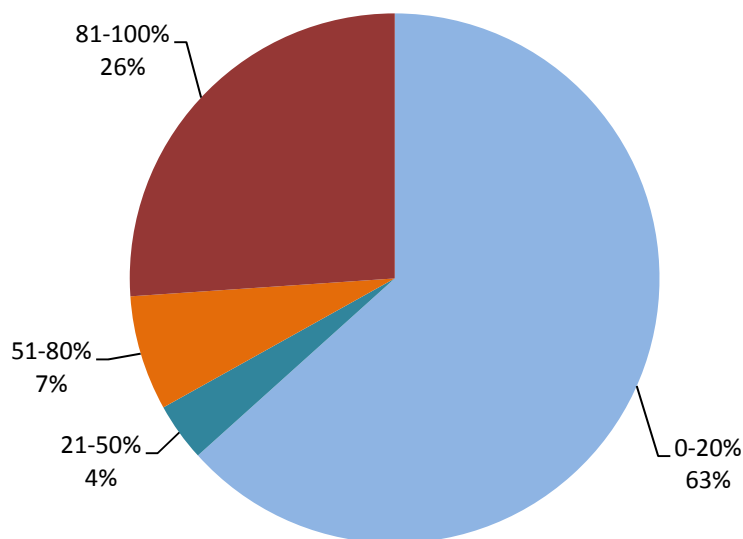


1.4 Authorised combined class calculated panel reactive antibody (cPRA) range of active patients awaiting kidney transplant

Patient authorised cPRA	Number of patients	Percentage of all patients
0– 20% #	658	63%
21- 50%	37	4%
51- 80%	73	7%
81-100%	271	26%
	1039	100%

#Patients with unknown authorised cPRA were assumed to be 0%

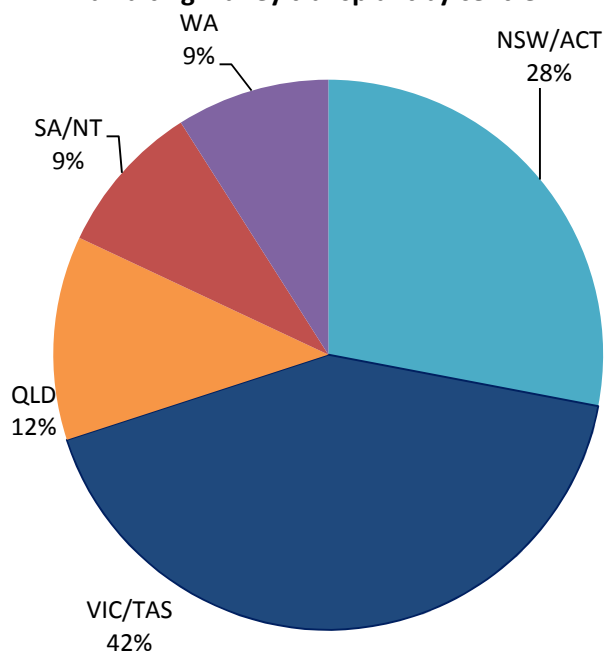
Authorised calculated combined class panel reactive antibody (cPRA) range of active patients awaiting kidney transplant



1.5 Highly sensitised active patients with authorised combined class calculated panel reactive antibodies (cPRA) > 50% awaiting kidney transplant by centre

Centre	Number of highly sensitised patients with authorised cPRA > 50%	% of all highly sensitised patients with authorised cPRA > 50%	Centre percentage of all patients waiting (from Table 1.2)
NSW/ACT	96	28%	41%
VIC/TAS	145	42%	39%
QLD	41	12%	11%
SA/NT	31	9%	6%
WA	31	9%	3%
ALL	344	100%	100%

Highly sensitised active patients with authorised combined class calculated panel reactive antibodies (cPRA) >50% awaiting kidney transplant by centre



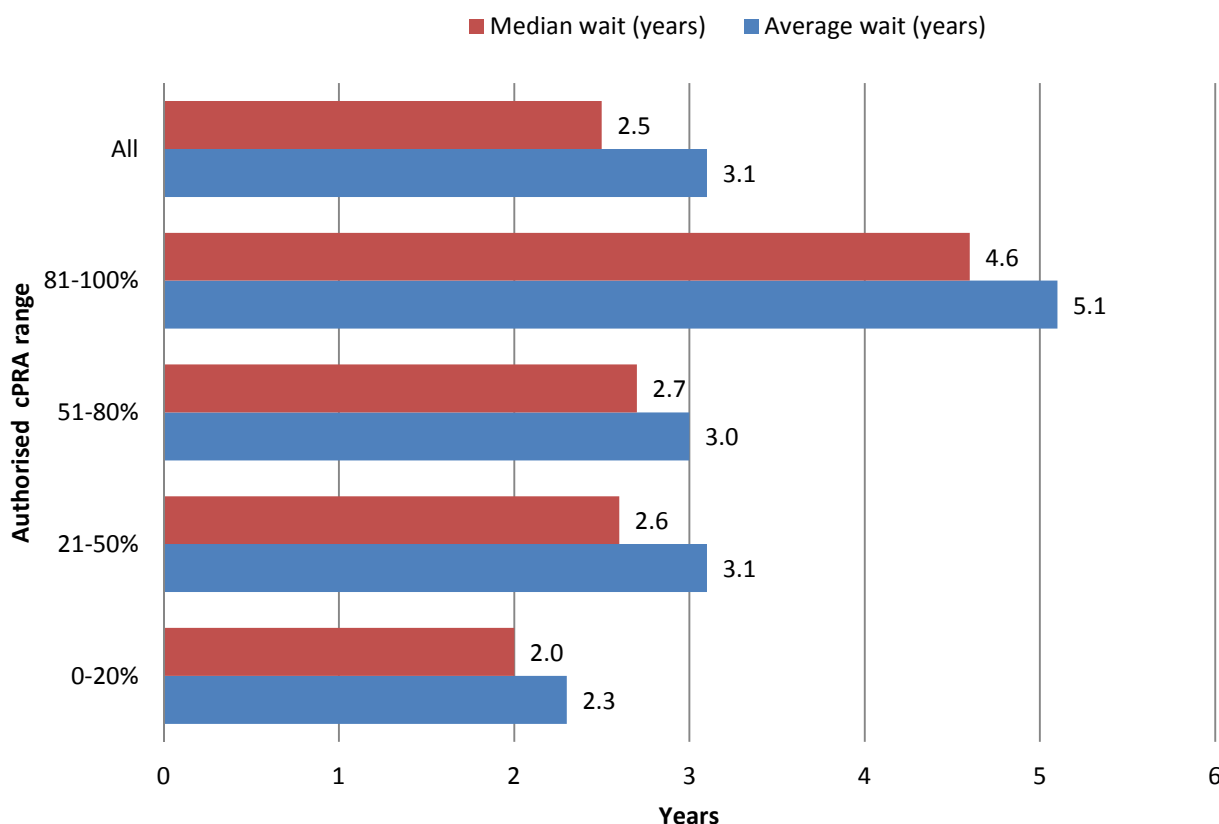
1.6 Time waiting on dialysis in years of active patients awaiting kidney transplant and patient authorised calculated combined class panel reactive antibody (cPRA) range

Patient authorised cPRA	% of all patients Waiting (from table 1.4)	Average wait (years)	Median wait (years)	Maximum wait (years)
0-20% [#]	63%	2.3	2.0	8.9
21-50%	4%	3.1	2.6	6.7
51-80%	7%	3.0	2.7	8.5
81-100%	26%	5.1	4.6	19.7
ALL	100%	3.1	2.5	19.7*

In this table Patients with no combined class authorised cPRA entered were assumed to be 0%

**Longest waiting patient is from NSW with 0 previous transplants, 99% authorised combined class cPRA and blood group O*

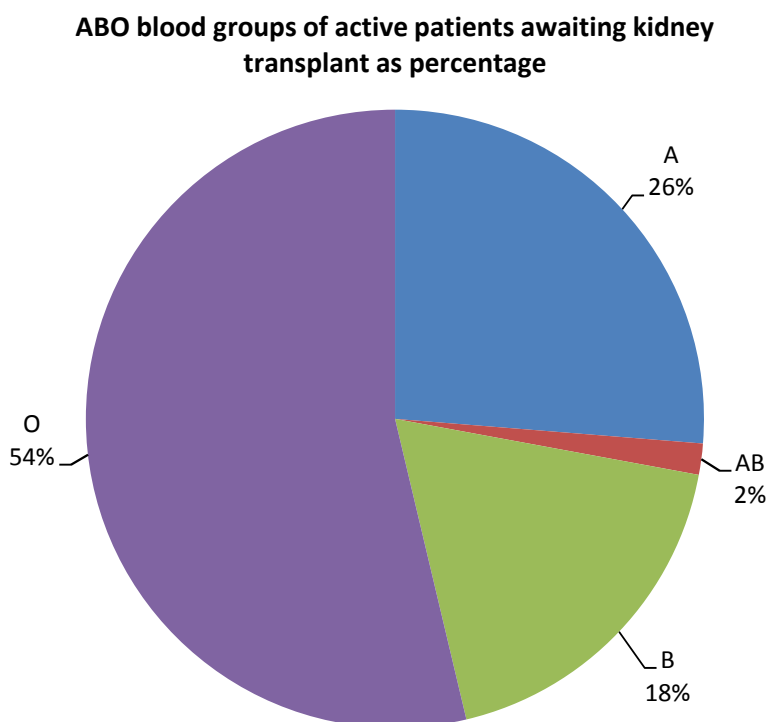
Time waiting on dialysis in years of active patients awaiting kidney transplant and patient authorised combined class calculated panel reactive antibody (cPRA) range



1.7 ABO blood groups of active patients awaiting kidney transplant

Patient ABO blood group	Number of patients	Percentage of all patients	Australian Reference* ABO groups as percentage
A	273	26%	38%
AB	17	2%	3%
B	191	18%	10%
O	558	54%	49%
ALL	1039	100%	100%

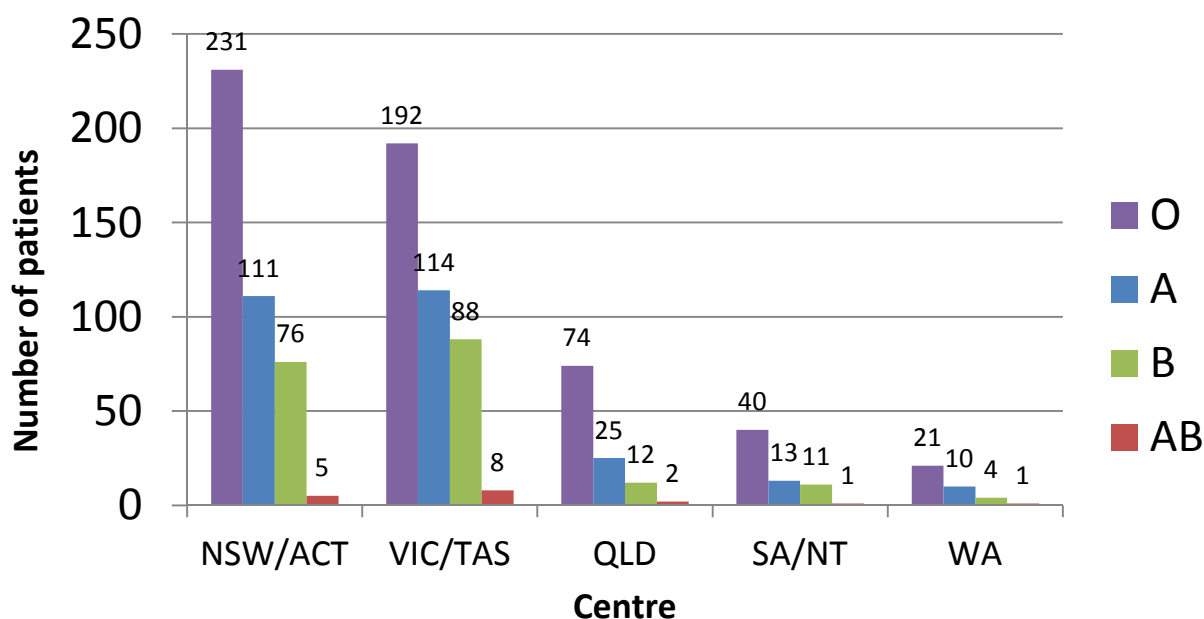
*as published on the Blood Service website
<http://www.donateblood.com.au/learn/about-blood>



1.8 ABO blood groups of active patients awaiting kidney transplant by Centre

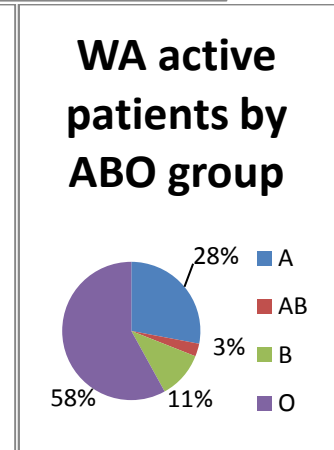
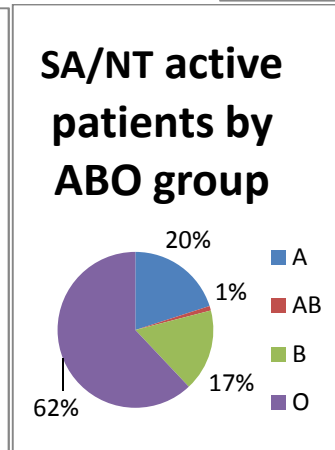
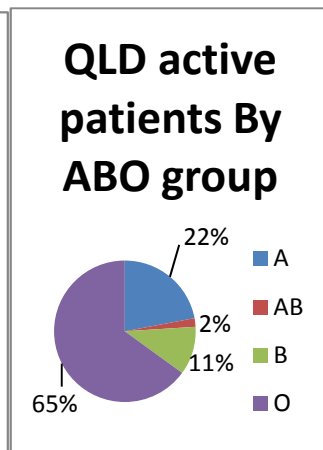
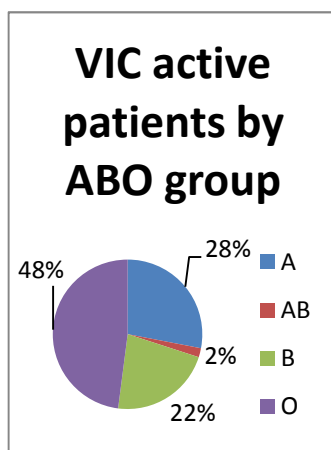
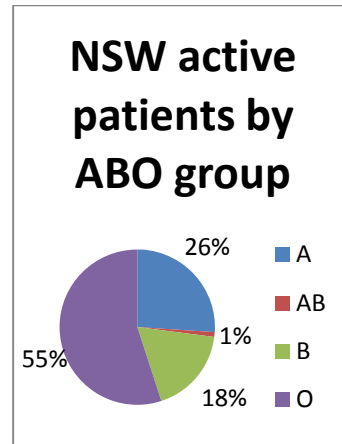
Centre	A	AB	B	O	Total
NSW/ACT	111	5	76	231	423
VIC/TAS	114	8	88	192	402
QLD	25	2	12	74	113
SA/NT	13	1	11	40	65
WA	10	1	4	21	36
ALL	273	17	191	558	1039

ABO blood groups of active patients awaiting kidney transplant by Centre



1.9 Active patients' ABO blood groups % of all patients awaiting kidney transplant for the centre

Centre	A	AB	B	O
NSW/ACT	26%	1%	18%	55%
VIC/TAS	28%	2%	22%	48%
QLD	22%	2%	11%	65%
SA/NT	20%	1%	17%	62%
WA	28%	3%	11%	58%
All	26%	2%	18%	54%
<i>Australian Reference*</i>	<i>38%</i>	<i>3%</i>	<i>10%</i>	<i>49%</i>



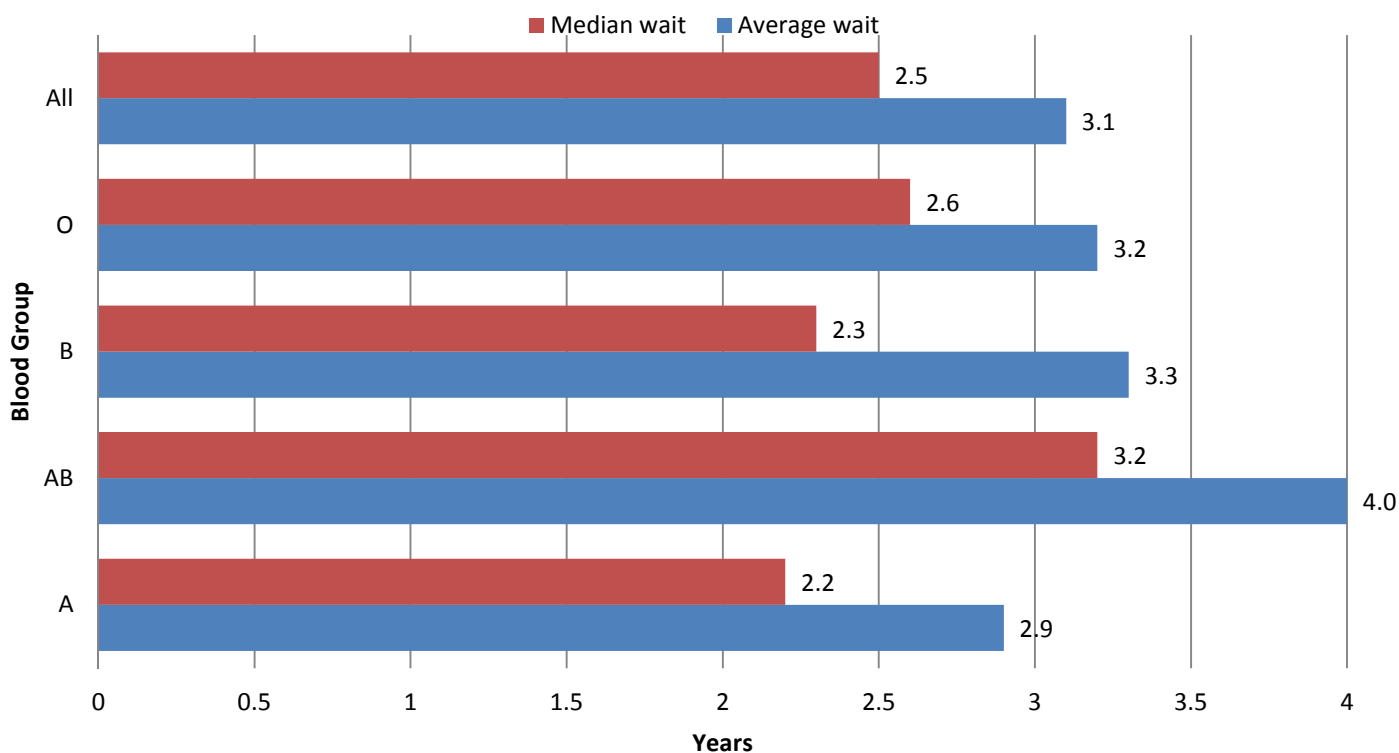
**as published on the Blood Service website
<http://www.donateblood.com.au/learn/about-blood>*

1.10 Time waiting on dialysis in years of active patients awaiting kidney transplant and patient ABO blood group

Patient ABO blood group	Average wait (years)	Median Wait (years)	Maximum wait (years)
A	2.9	2.2	12.8
AB	4.0	3.2	9.4
B	3.3	2.3	19.1
O	3.2	2.6	19.7
ALL	3.1	2.5	19.7*

*Longest waiting patient is from NSW with 0 previous transplants, 99% authorised combined class cPRA and blood group O

Time waiting on dialysis in years of active patients awaiting kidney transplant and patient ABO blood group

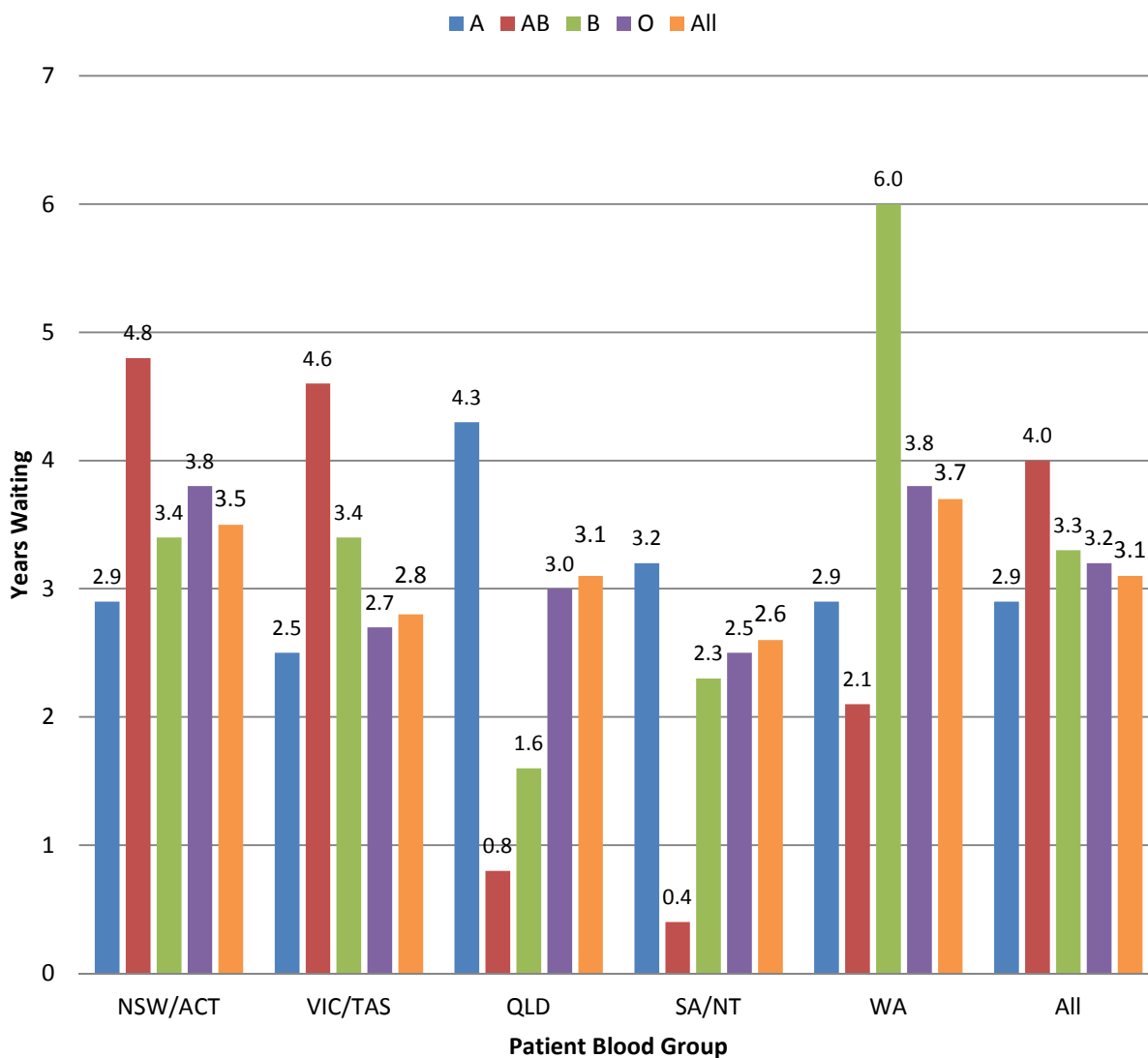


1.11 Time waiting on dialysis in years by Centre and patient ABO blood group

Patient Centre	Average Wait (years)					Median Wait (years)	Maximum Wait (years)
	A	AB	B	O	All ABO		
NSW/ACT	2.9	4.8	3.4	3.8	3.5	2.8	19.7*
VIC/TAS	2.5	4.6	3.4	2.7	2.8	2.1	17.0
QLD	4.3	0.8	1.6	3.0	3.1	2.4	12.8
SA/NT	3.2	0.4	2.3	2.5	2.6	1.9	11.1
WA	2.9	2.1	6.0	3.8	3.7	3.4	11.9
ALL	2.9	4.0	3.3	3.2	3.1	2.5	19.7

*Longest waiting patient is from NSW with 0 previous transplants, 99% authorised cPRA antibodies and blood group O

Average time waiting on dialysis in years centre and patient ABO blood group

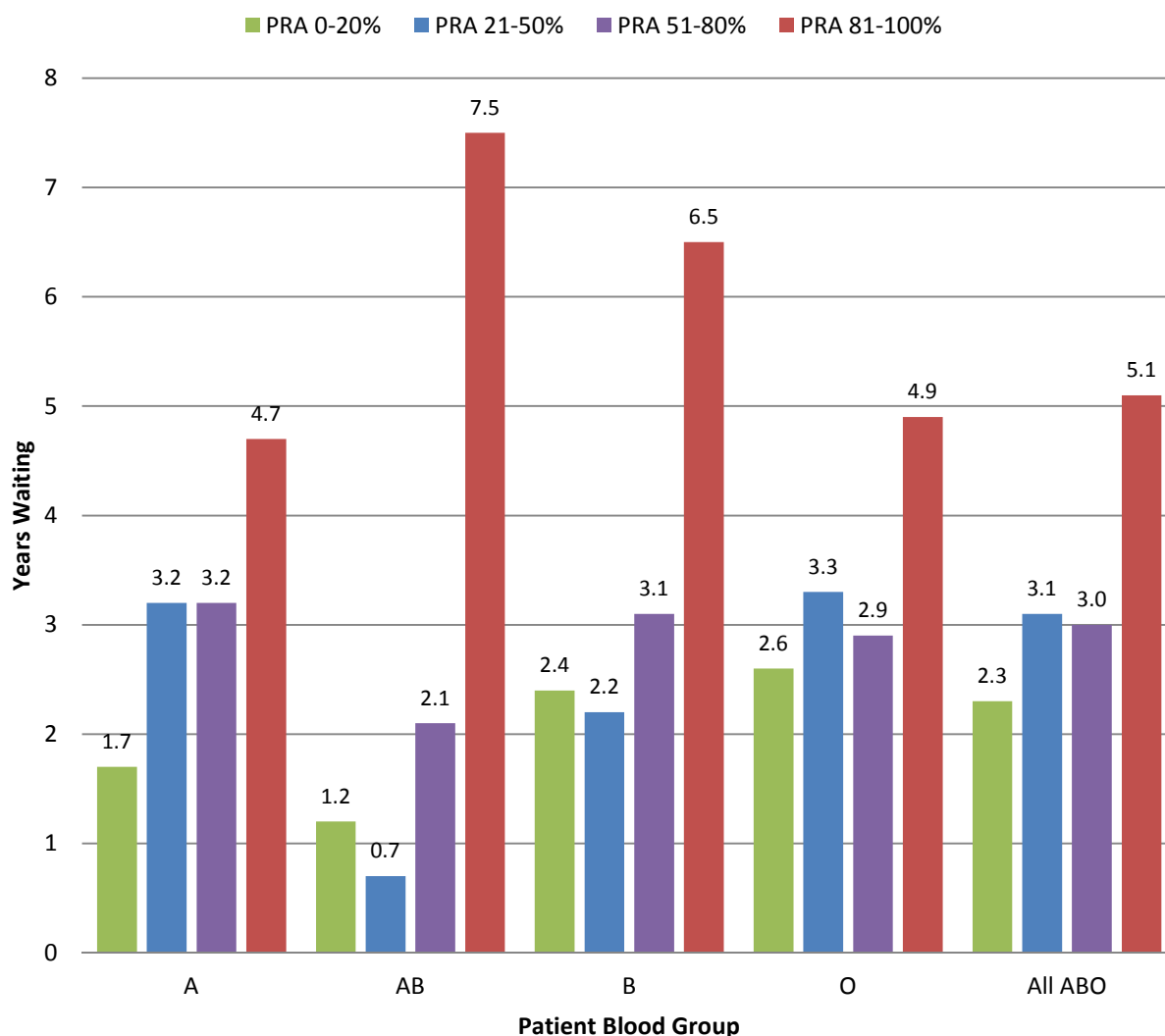


1.12 Time waiting on dialysis in years by authorised combined class calculated panel reactive antibody (cPRA) range and patient ABO blood group

Patient Authorised PRA	Average Wait (years)					Median Wait (years)	Maximum Wait (years)
	A	AB	B	O	All ABO		
0-20%	1.7	1.2	2.4	2.6	2.3	2.0	8.9
21-50%	3.2	0.7	2.2	3.3	3.1	2.6	6.7
51-80%	3.2	2.1	3.1	2.9	3.0	2.7	8.5
81-100%	4.7	7.5	6.5	4.9	5.1	4.6	19.7*
ALL	2.9	4.0	3.3	3.2	3.1	2.5	19.7

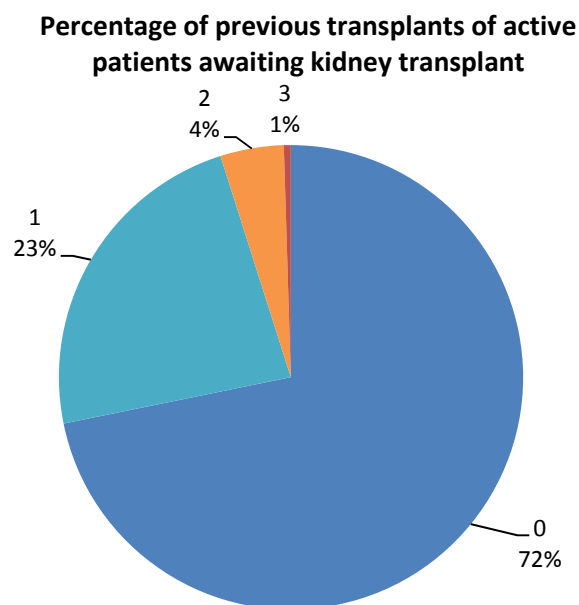
*Longest waiting patient is from NSW with 0 previous transplants, 99% authorised combined class cPRA and blood group O

Average time waiting on dialysis in years by authorised combined class calculated panel reactive antibody (cPRA) range and patient ABO blood group



1.13 Number of previous transplants of active patients awaiting kidney transplant

Number of previous transplants	Number of patients	% of all patients waiting
0	746	72%
1	242	23%
2	46	4%
3	5	<1%
ALL	1039	100%

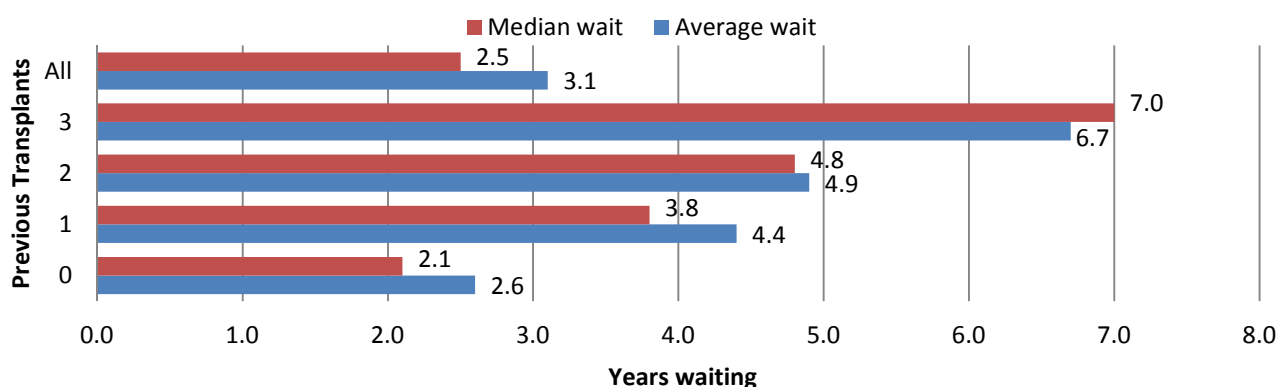


1.14 Time waiting on dialysis in years for active patients awaiting kidney transplant and number of previous transplants

Previous transplants	Number of patients	Average Wait (years)	Median Wait (years)	Maximum Wait (years)
0	746	2.6	2.1	19.7*
1	242	4.4	3.8	19.1
2	46	4.9	4.8	12.8
3	5	6.7	7.0	10.7
ALL	1039	3.1	2.5	19.7*

*Longest waiting patient is from NSW with 0 previous transplants, 99% authorised combined class cPRA and blood group O

Time waiting on dialysis in years for active patients awaiting kidney transplant and number of previous transplants



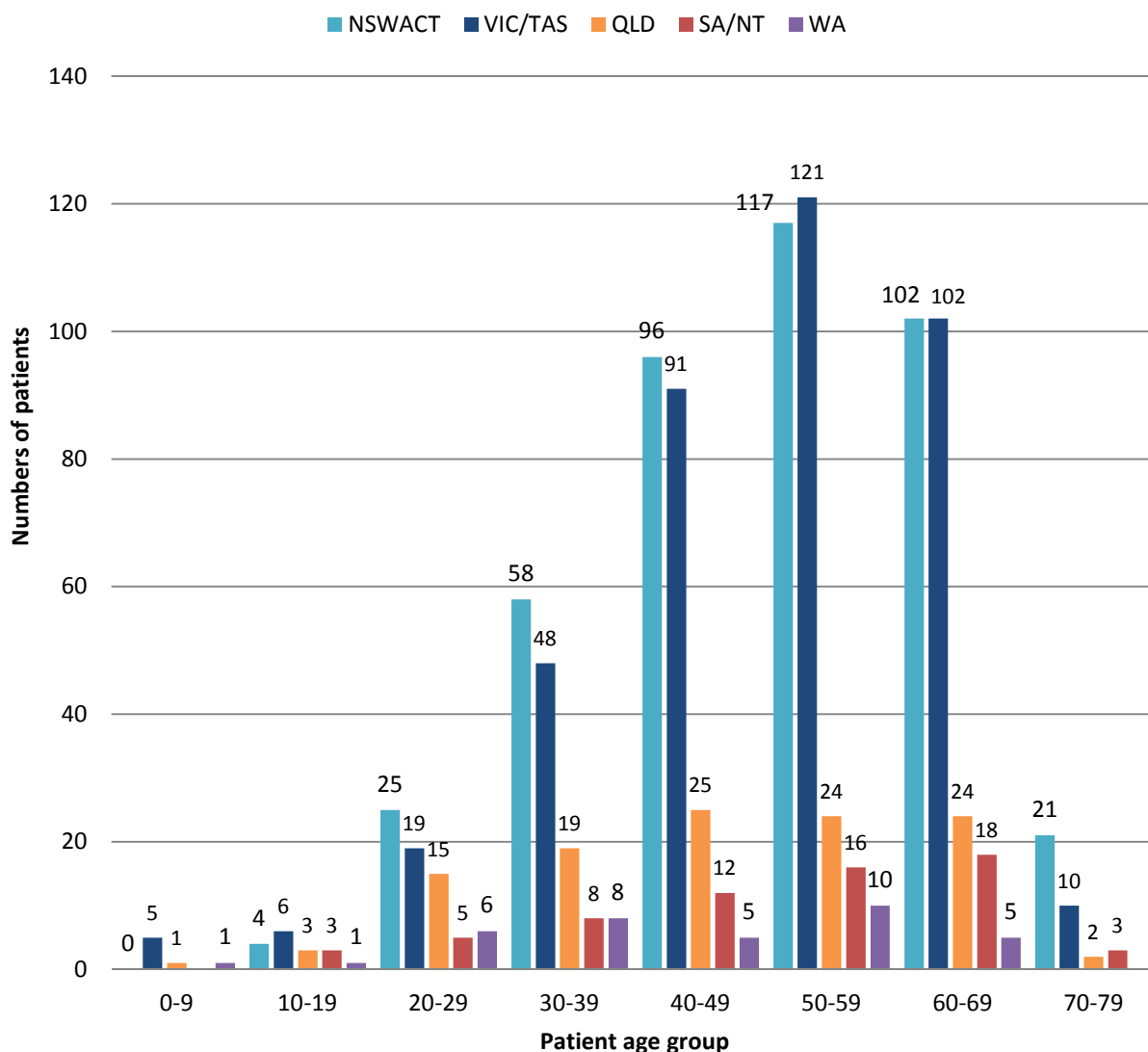
1.15 Age groups of active patients awaiting kidney transplant

Centre	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	ALL
NSW/ACT	0	4	25	58	96	117	102	21	423
VIC/TAS	5	6	19	48	91	121	102	10	402
QLD	1	3	15	19	25	24	24	2	113
SA/NT	0	3	5	8	12	16	18	3	65
WA	1	1	6	8	5	10	5	0	36
ALL	7	17	70	141	229	288	251	36	1039
% of total	<<1%	2%	7%	14%	22%	28%	24%	3%	100%

*The oldest patient on the waiting list is a 76 year old from New South Wales (NWST)

#The youngest patient on the waiting list is a 1 year old from Victoria (VRCH)

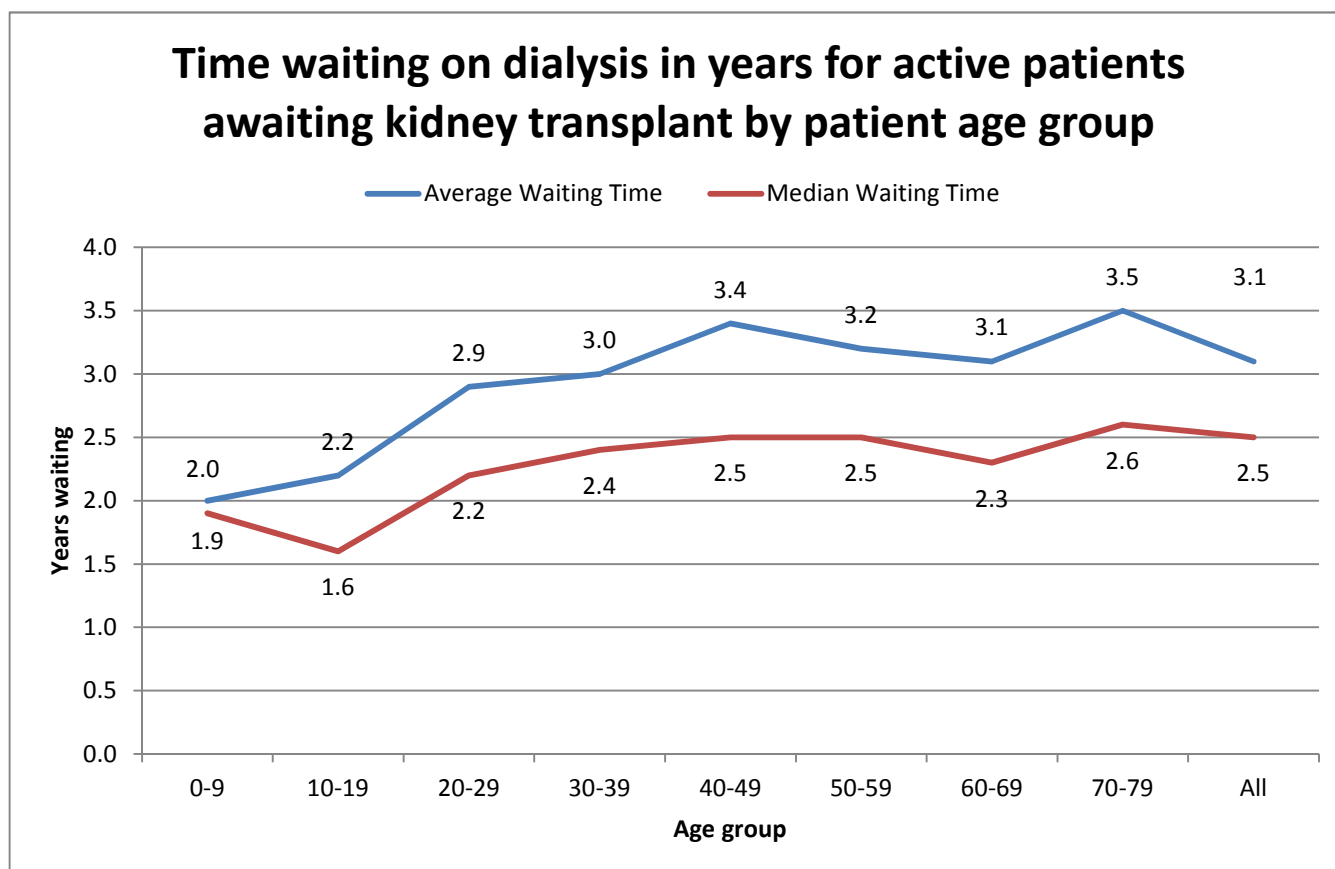
Age groups of active patients awaiting kidney transplant



1.16 Time waiting on dialysis in years for active patients awaiting kidney transplant by patient age group

Age group	Number of patients	Average Wait (years)	Median Wait (years)	Maximum Wait (years)
0-9	7	2.0	1.9	3.4
10-19	17	2.2	1.6	5.7
20-29	70	2.9	2.2	9.0
30-39	141	3.0	2.4	11.9
40-49	229	3.4	2.5	19.7*
50-59	288	3.2	2.5	12.5
60-69	251	3.1	2.3	19.1
70-79	36	3.5	2.6	13.2
ALL	1039	3.1	2.5	19.7*

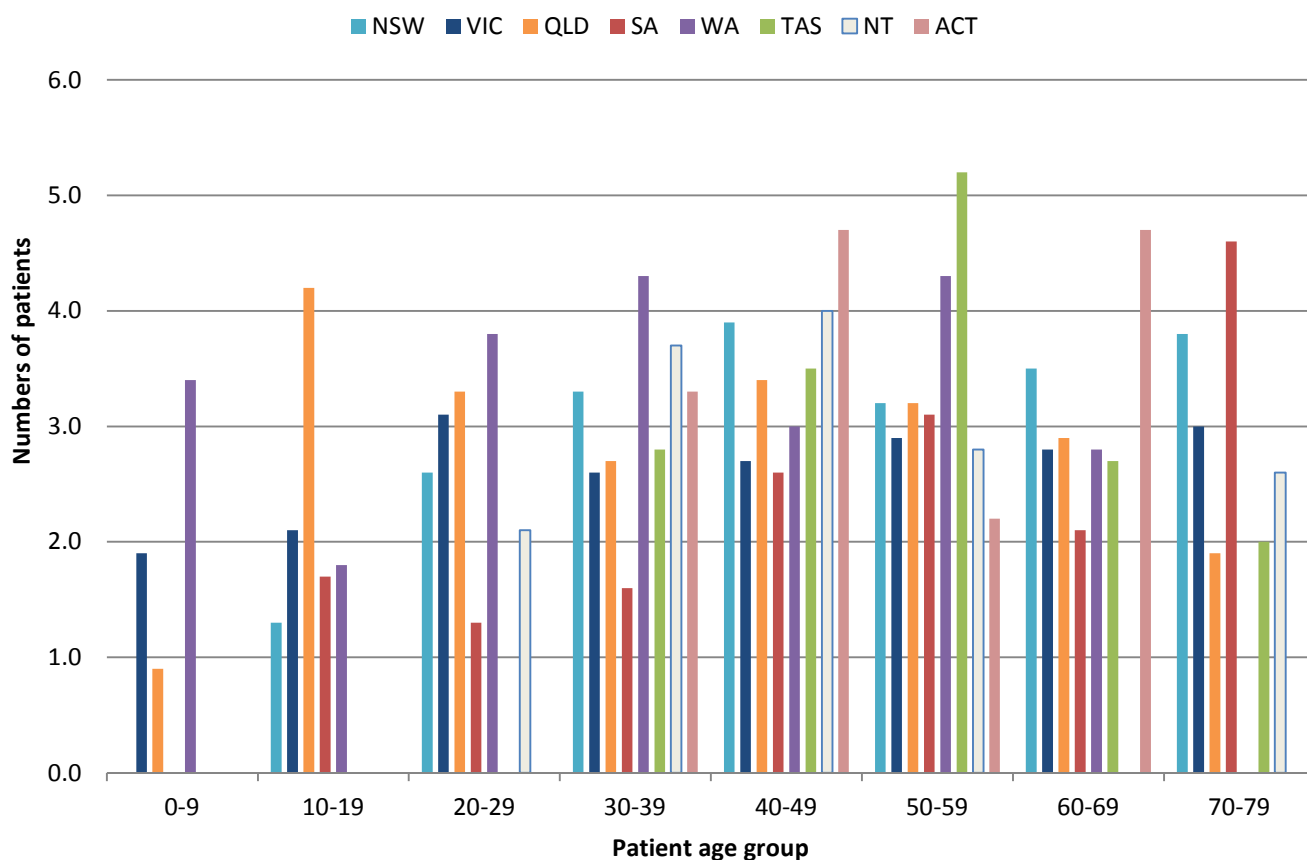
*Patient waiting longest on dialysis is a 45 year old from NJHH with 0 previous transplants, 99% authorised combined class cPRA and blood group O



1.17 Average Time waiting on dialysis in years for active patients awaiting kidney transplant by age group and patient state or territory

State/ Territory	Patient age group								
	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	ALL
NSW	0	1.3	2.6	3.3	3.9	3.2	3.5	3.8	3.5
VIC	1.9	2.1	3.1	2.6	2.7	2.9	2.8	3.0	2.8
QLD	0.9	4.2	3.3	2.7	3.4	3.2	2.9	1.9	3.1
SA	0	1.7	1.3	1.6	2.6	3.1	2.1	4.6	2.3
WA	3.4	1.8	3.8	4.3	3.0	4.3	2.8	0	3.6
TAS	0	0	0	2.8	3.5	5.2	2.7	2.0	3.9
NT	0	0	2.1	3.7	4.0	2.8	0	2.6	3.3
ACT	0	0	0	3.3	4.7	2.2	4.7	0	4.1
ALL	2.0	2.2	2.9	3.0	3.4	3.2	3.1	3.5	3.1

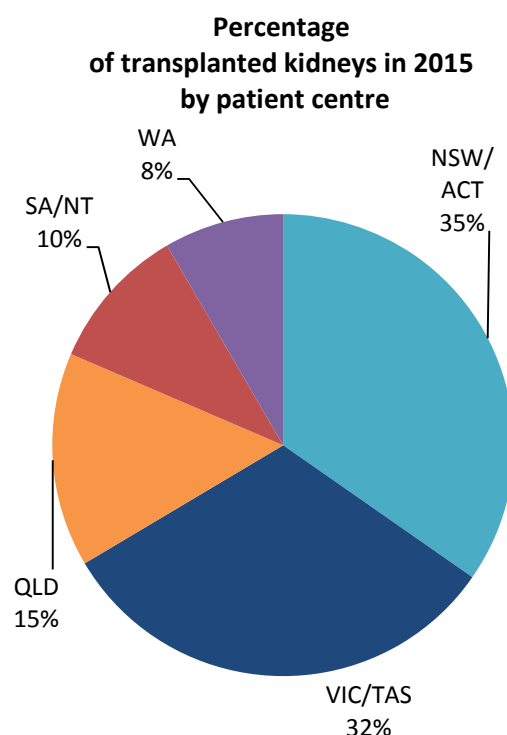
Average time waiting on dialysis in years for active patients awaiting kidney transplant by age group and patient state/territory



2. KIDNEY TRANSPLANTS DURING 2015

2.1 Number of kidneys transplanted from all donors in 2015 by patient centre

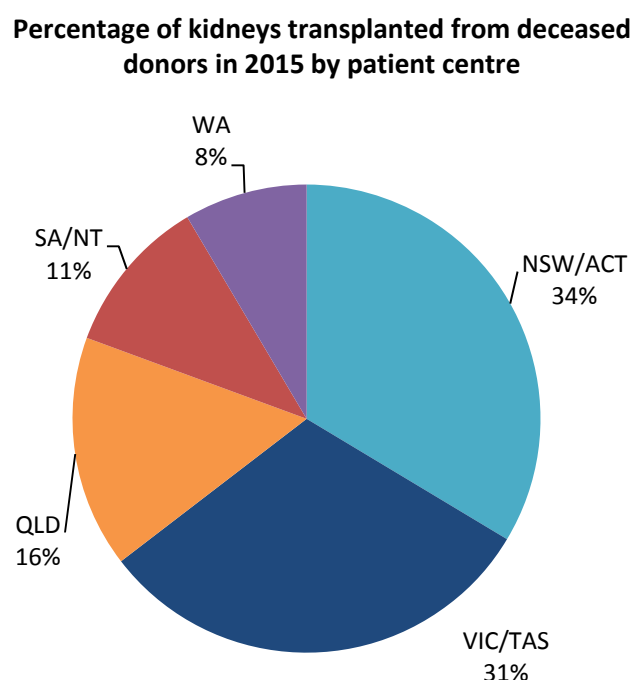
Patient Centre	Number of transplanted kidneys	Percentage of all kidneys transplanted	Percentage of all patients waiting in each centre (from table 1.5)
NSW/ACT	331*	35%	41%
VIC/TAS	303	32%	39%
QLD	143	15%	11%
SA/NT	97	10%	6%
WA	80	8%	3%
ALL	954	100%	100%



*Excluding three deceased donors from Noumea transplanted in NSW into patients from Noumea

2.2 Number of kidneys transplanted from deceased donors in 2015 by patient centre

Patient Centre	Number of deceased donor transplants	Percentage of all deceased donor kidney transplants	Percentage of all patients waiting in each centre (from table 1.5)
NSW/ACT	241*	34%	41%
VIC/TAS	222	31%	39%
QLD	115	16%	11%
SA/NT	78	11%	6%
WA	61	8%	3%
ALL	717	100%	100%

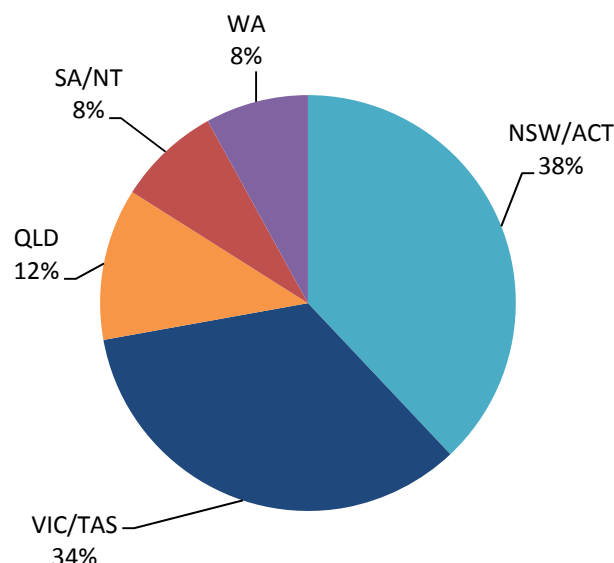


*Excluding three deceased donors from Noumea transplanted in NSW into patients from Noumea

2.3 Number of kidneys transplanted from live donors in 2015 by patient centre

Patient Centre	Number of live donor transplants	Percentage of all live donor kidney transplants	Percentage of all patients waiting in each centre (from table 1.5)
NSW/ACT	90	38%	41%
VIC/TAS	81	34%	39%
QLD	28	12%	11%
SA/NT	19	8%	6%
WA	19	8%	3%
ALL	237	100%	100%

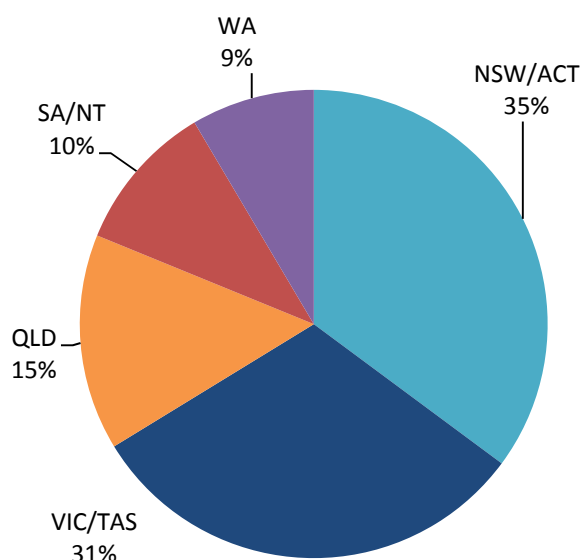
Percentage of kidneys transplanted from live donors in 2015 by patient centre



2.4 Number of kidneys transplanted from deceased donors in 2015 by transplant centre

Transplant centre	Number of deceased donor transplants	Percentage of all deceased donor kidney transplants	Percentage of all patients waiting in each centre (from table 1.5)
NSW/ACT	252	35%	41%
VIC/TAS	223	31%	39%
QLD	107	15%	11%
SA/NT	74	10%	6%
WA	61	9%	3%
ALL	717	100%	100%

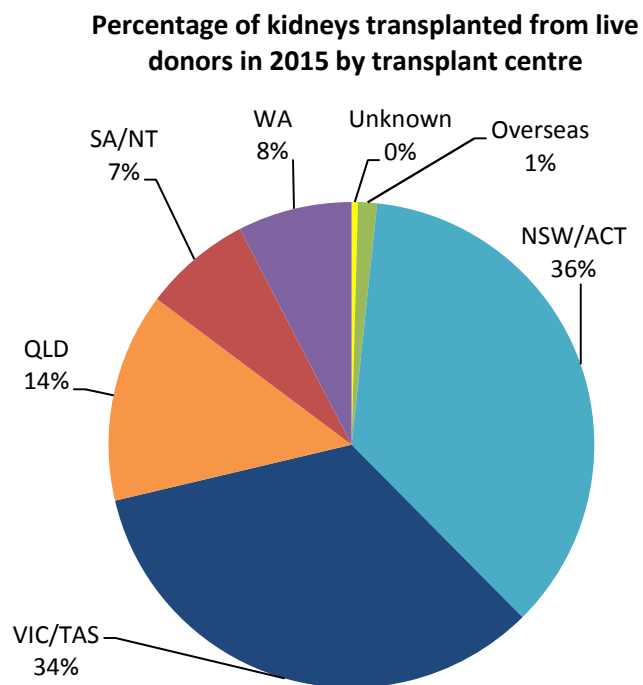
Percentage of kidneys transplanted from deceased donors in 2015 by transplant centre



*Excluding three deceased donors from Noumea transplanted in NSW into patients from Noumea

2.5 Number of kidneys transplanted from live donors in 2015 by transplant centre

Transplant Centre	Number of kidneys transplanted from live donors	Percentage of all live donor kidneys	Percentage of all patients waiting in each centre (from table 1.5)
Unknown	1	<<1%	0%
Overseas	3 [#]	<1%	0%
NSW/ACT	85	36%	41%
VIC/TAS	80	34%	39%
QLD	33	14%	11%
SA/NT	17	7%	6%
WA	18	8%	3%
ALL	237	100%	100%

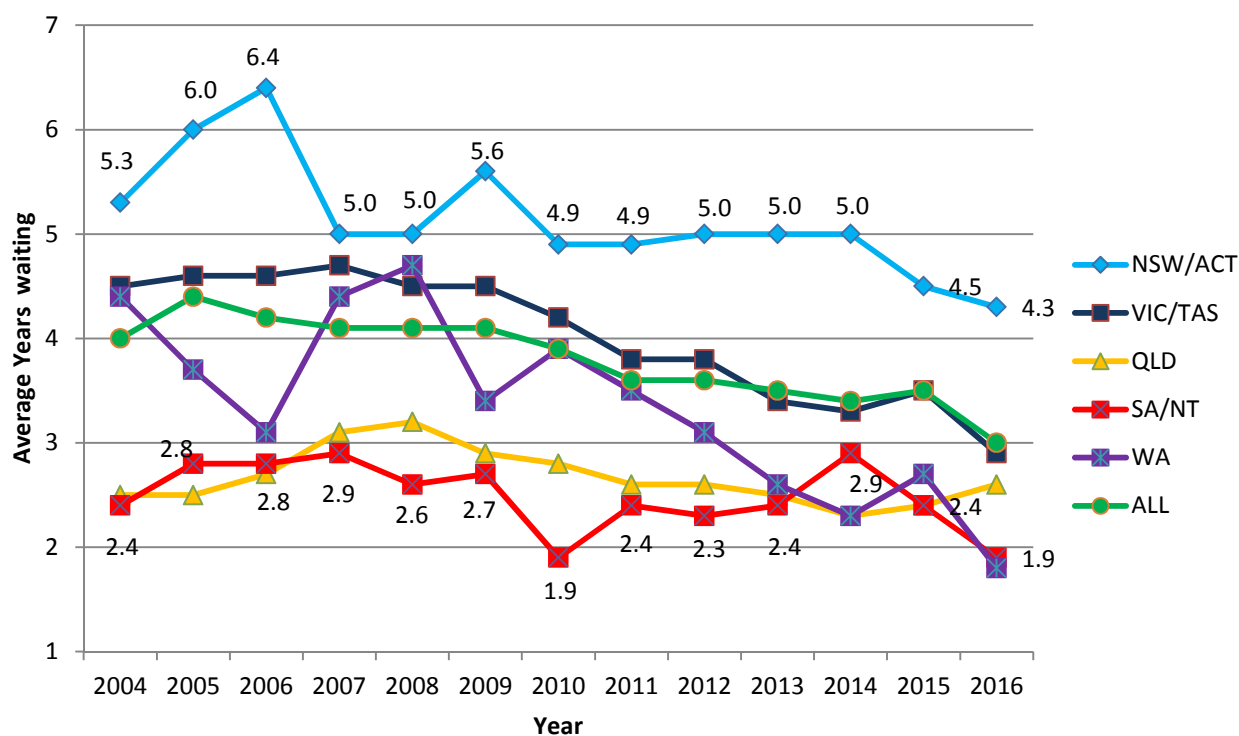


#One patient was transplanted in an unlisted Australian hospital, one patient was transplanted in Korea, one in the Phillipines and another in an unlisted overseas hospital.

2.6 Average time waiting on dialysis in years for patients transplanted with deceased donor kidney by centre and year (to 1/4/2016)

Centre	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016 (as at 1/4/16)
NSW/ACT	5.3	6.0	6.4	5.0	5.0	5.6	4.9	4.9	5.0	5.0	5.0	4.5	4.3
VIC/TAS	4.5	4.6	4.6	4.7	4.5	4.5	4.2	3.8	3.8	3.4	3.3	3.5	2.9
QLD	2.5	2.5	2.7	3.1	3.2	2.9	2.8	2.6	2.6	2.5	2.3	2.4	2.6
SA/NT	2.4	2.8	2.8	2.9	2.6	2.7	1.9	2.4	2.3	2.4	2.9	2.4	1.9
WA	4.4	3.7	3.1	4.4	4.7	3.4	3.9	3.5	3.1	2.6	2.3	2.7	1.8
ALL	4.0	4.4	4.2	4.1	4.1	4.1	3.9	3.6	3.6	3.5	3.4	3.5	3.0

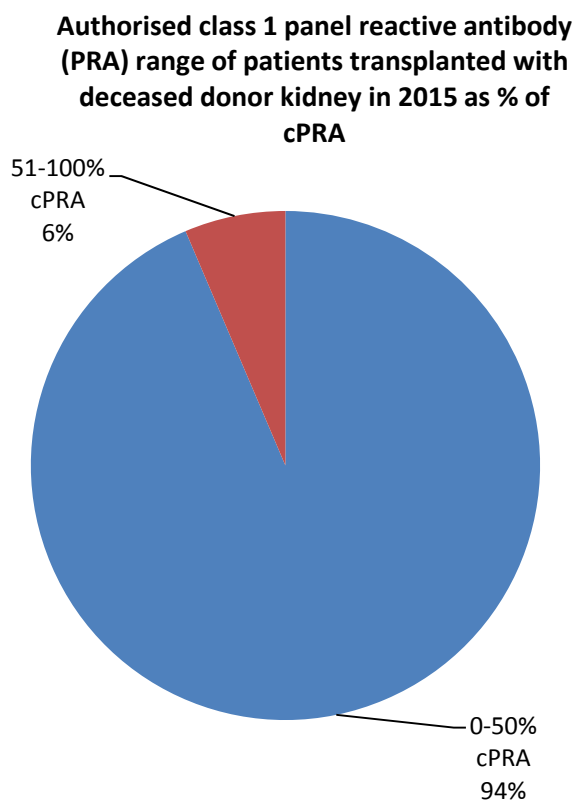
Average time waiting on dialysis in years for patients transplanted with deceased donor kidney by centre and year (to 1/4/2016)



2.7 Authorised combined class 1 panel reactive antibody (PRA) range of patients transplanted with deceased donor kidney in 2015

Patient Authorised class 1 PRA	Number of patients transplanted	Percentage of patients transplanted	% of patients on transplant waiting list with cPRA range (from table 1.4)
0-50%	671	94%	67%
51-100%	46	6%	33%
ALL	717*	100%	100%

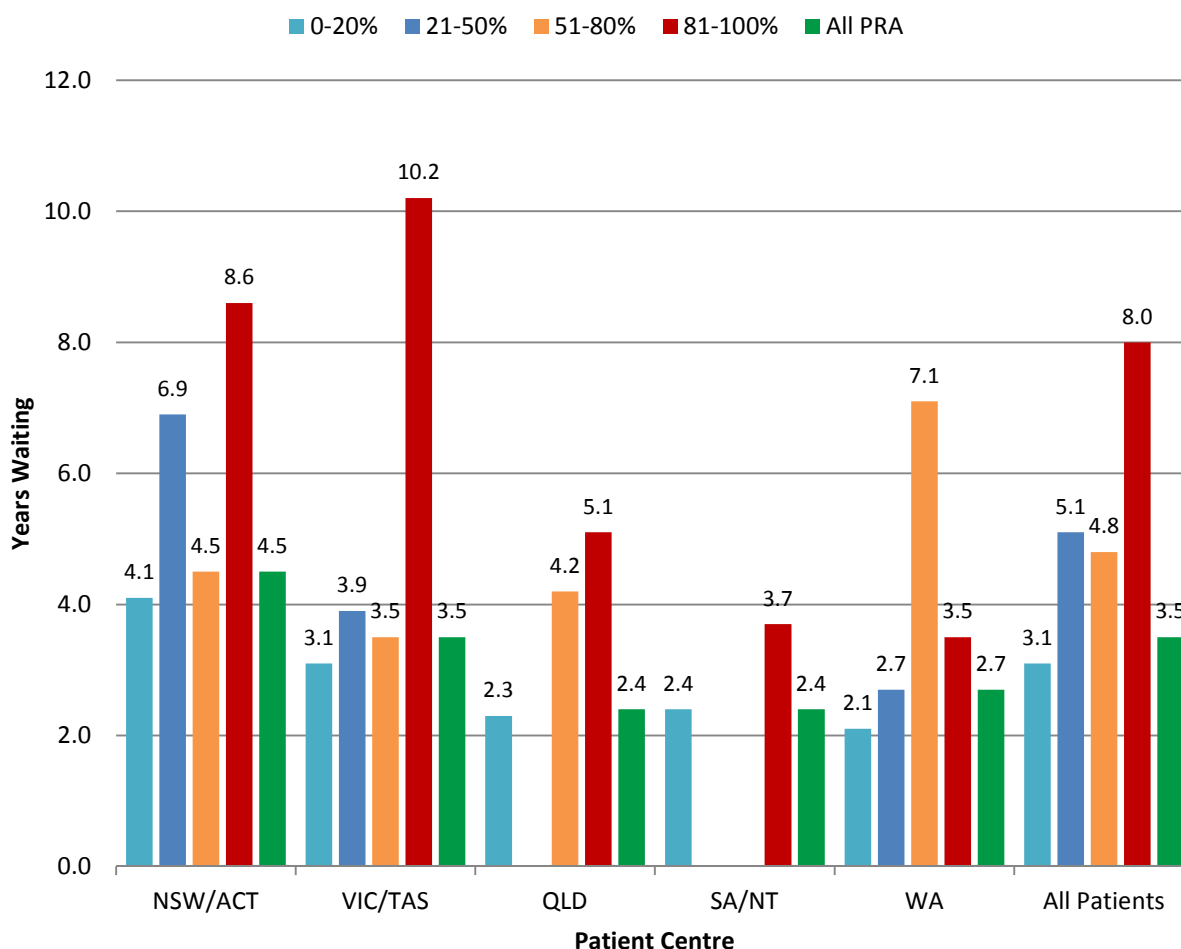
*Excluding three deceased donors from Noumea transplanted in NSW into patients from Noumea



2.8 Time waiting on dialysis in years for patients transplanted with deceased donor kidney in 2015 by patient authorised combined class panel reactive antibody (cPRA) range and patient centre (n=720)

Patient Centre	Authorised Combined class calculated PRA range				Average wait (years)	Median Wait (years)	Maximum Wait (years)
	0-20%	21-50%	51-80%	81-100%			
NSW/ACT	4.1	6.9	4.5	8.6	4.5	4.5	22.3
VIC/TAS	3.1	3.9	3.5	10.2	3.5	3.3	26.3
QLD	2.3	0	4.2	5.1	2.4	1.6	13.4
SA/NT	2.4	0	0	3.7	2.4	2.2	8.2
WA	2.1	2.7	7.1	3.5	2.7	1.8	10.3
ALL Centres	3.1	5.1	4.8	8.0	3.5	3.0	26.3

Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by authorised cPRA range and patient centre (n=720)



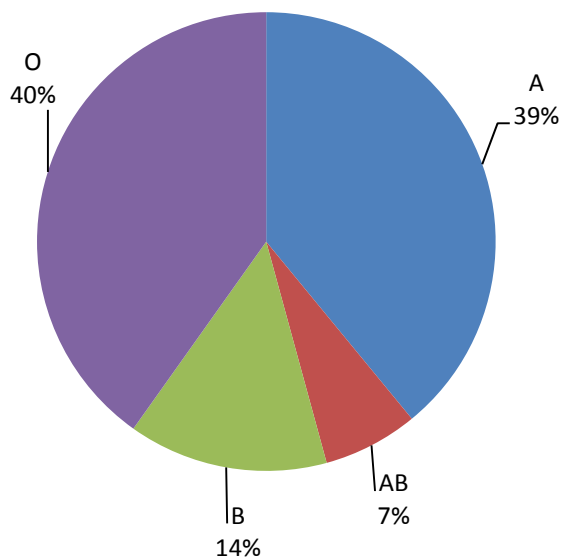
2.9 ABO blood group of patients transplanted with a deceased donor kidney in 2015

Patient ABO blood group	Number of transplants	Percentage of transplants	Australian Reference* ABO groups as percentage
A	280	39%	38%
AB	48	7%	3%
B	101	14%	10%
O	288	40%	49%
ALL	717[#]	100%	100%

[#]Excluding three patients from Noumea listed and transplanted in NSW with deceased donor kidneys from Noumea

*as published on the Blood Service website <http://www.donateblood.com.au/learn/about-blood>

ABO group of patients transplanted with a deceased donor kidney in 2015 as percentage



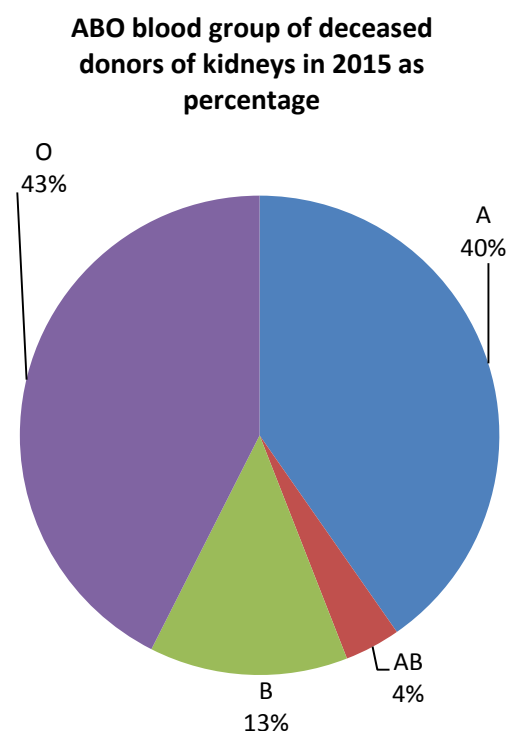
2.10 ABO blood group of deceased donors of kidneys transplanted in 2015

Donor ABO blood group	Number of transplants	Percentage of transplants	Australian Reference* ABO groups as percentage
A	289	40%	38%
AB	27	4%	3%
B	96	13%	10%
O	305	43%	49%
ALL	717[#]	100%	100%

*as published on the Blood Service website

<http://www.donateblood.com.au/learn/about-blood>

[#]Excluding three deceased donor kidneys from Noumea that were listed and transplanted in NSW into patients from Noumea



2.11 Comparative ABO groups of patients transplanted with deceased donor kidney and deceased donors in 2015

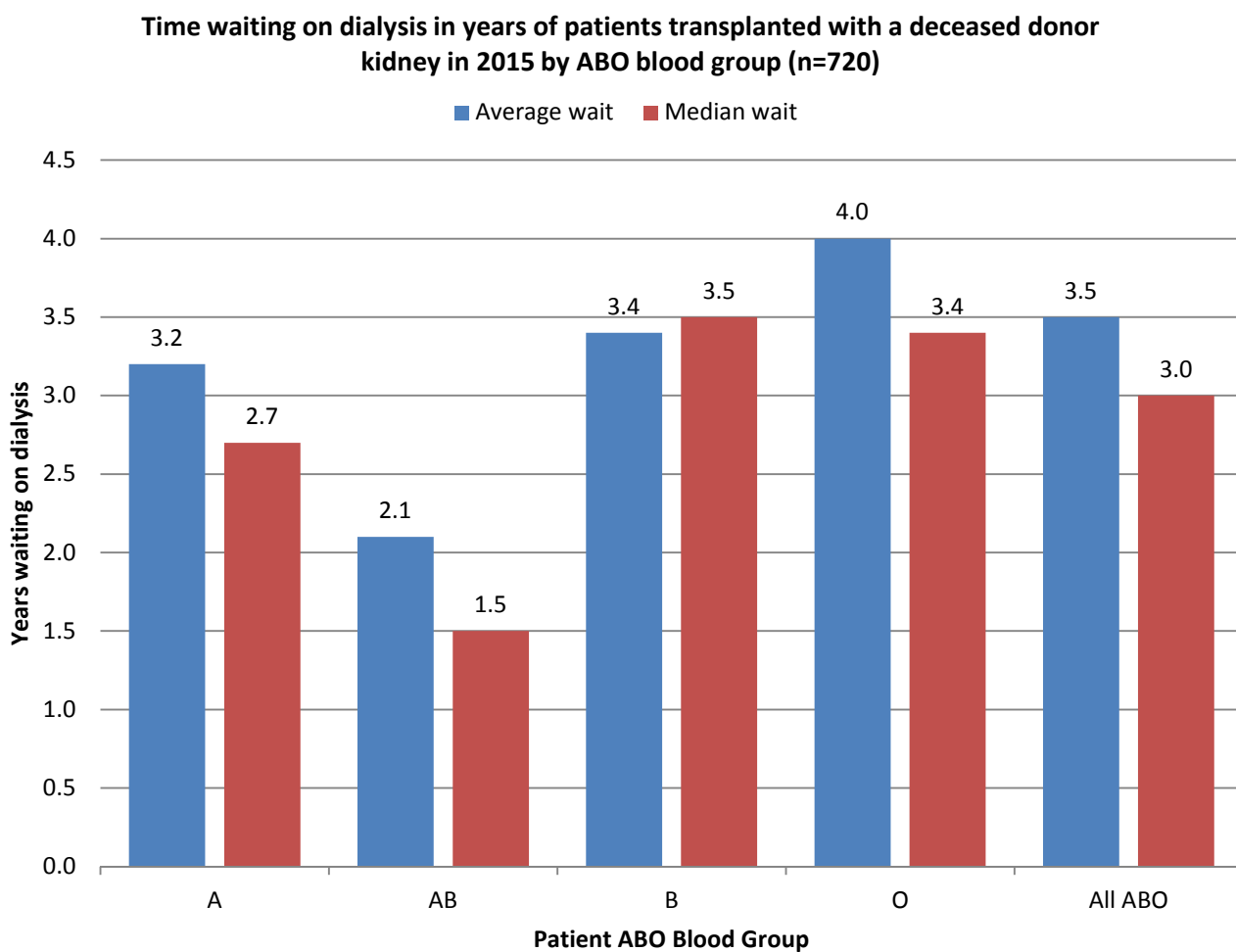
Donor ABO blood group	Blood group of patient receiving kidney				
	Number of patients				
	A	AB	B	O	ALL
A	273	15	1	0	289
AB	1	24	2	0	27
B	0	7	89	0	96
O	6	2	9	288	305
ALL	280	48	101	288	717[#]

Bold red font indicates instances where patient and donor are known to be not ABO identical.

[#]Excluding three deceased donor kidneys from Noumea that were transplanted in NSW into patients from Noumea listed under NSW

2.12 Time waiting on dialysis in years of patients transplanted with a deceased donor kidney in 2015 patient ABO blood group (n=720)

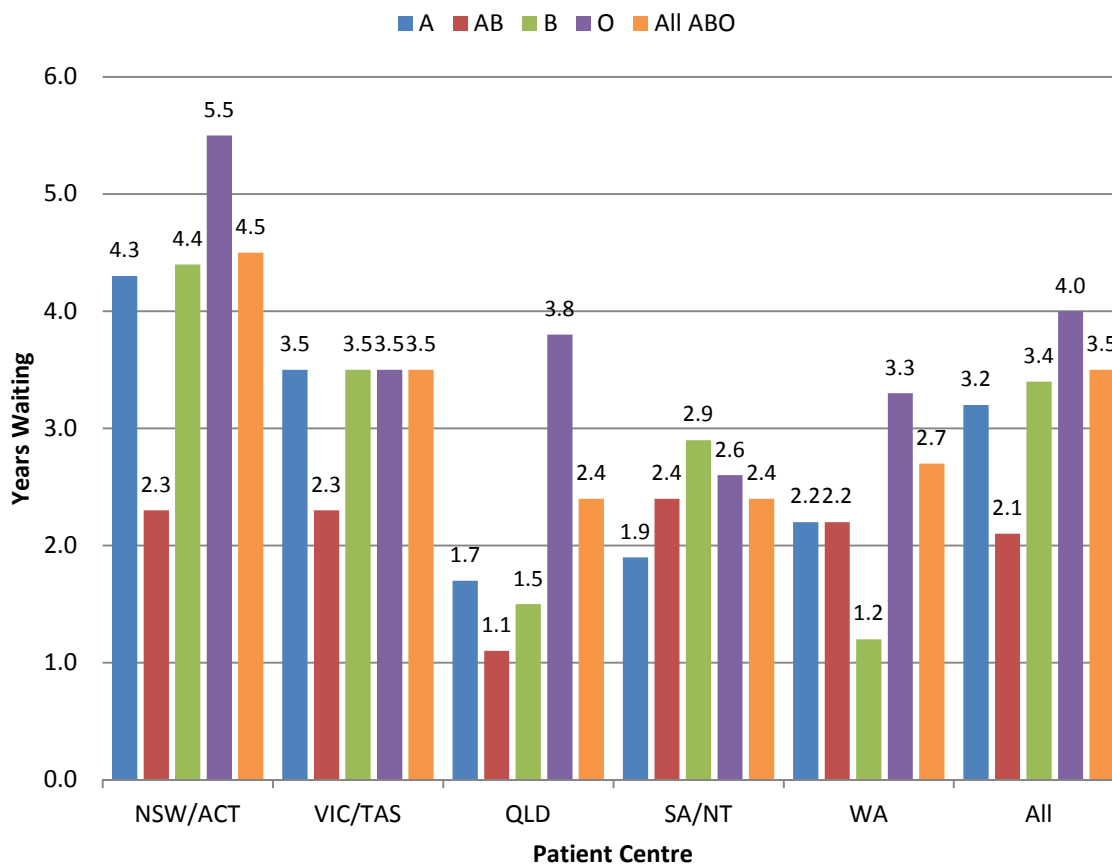
Patient ABO group	Average wait (years)	Median Wait (years)	Maximum Wait (years)
A	3.2	2.7	26.3
AB	2.1	1.5	11.1
B	3.4	3.5	15.3
O	4.0	3.4	20.7
ALL ABO	3.5	3.0	26.3



2.13 Time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient ABO blood group and patient centre (n=720)

Patient Centre	Patient ABO blood group Average Wait (years)					Median Wait (years) From table 2.8	Maximum Wait (years) From table 2.8
	A	AB	B	O	All ABO		
NSW/ACT	4.3	2.3	4.4	5.5	4.5	4.5	22.3
VIC/TAS	3.5	2.3	3.5	3.5	3.5	3.3	26.3
QLD	1.7	1.1	1.5	3.8	2.4	1.6	13.4
SA/NT	1.9	2.4	2.9	2.6	2.4	2.2	8.2
WA	2.2	2.2	1.2	3.3	2.7	1.8	10.3
ALL Centres	3.2	2.1	3.4	4.0	3.5	3.0	26.3

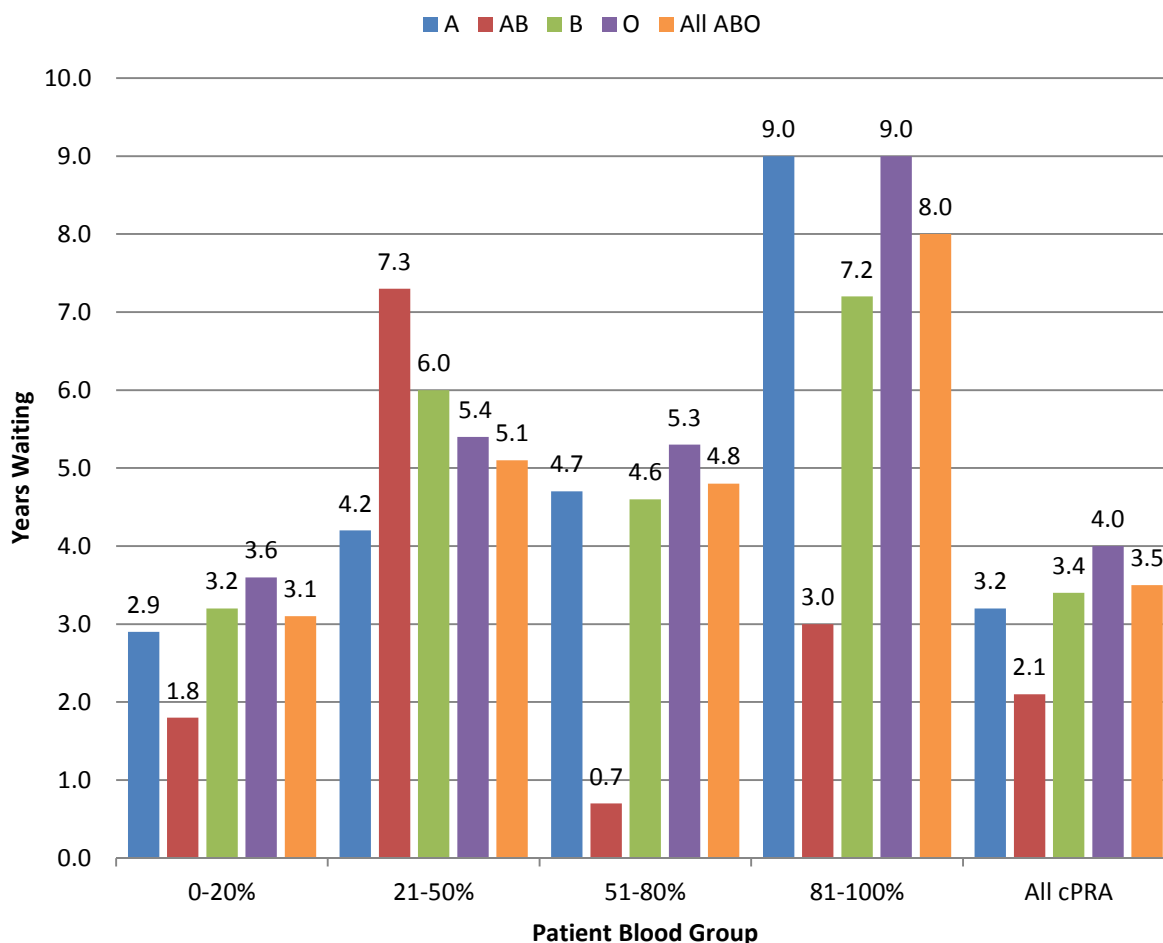
Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient ABO blood group and patient centre (n=720)



2.14 Time waiting on dialysis in years of patients transplanted with a deceased donor kidney in 2015 and authorised class 1 panel reactive antibody (PRA) range by patient ABO blood group (n=720)

Patient Authorised Class I PRA	Patient ABO group Average Wait (years)				Average Wait (years)	Median Wait (years)	Maximum Wait (years)
	A	AB	B	O			
0-20%	2.9	1.8	3.2	3.6	3.1	2.7	13.4
21-50%	4.2	7.3	6.0	5.4	5.1	4.7	14.8
51-80%	4.7	0.7	4.6	5.3	4.8	4.3	13.6
81-100%	9.0	3.0	7.2	9.0	8.0	6.3	26.3
ALL PRA	3.2	2.1	3.4	4.0	3.5	3.0	26.3

Average time waiting on dialysis in years of patients transplanted with a deceased donor kidney in 2015 and authorised class 1 panel reactive antibody (PRA) range by patient ABO blood group (n=720)

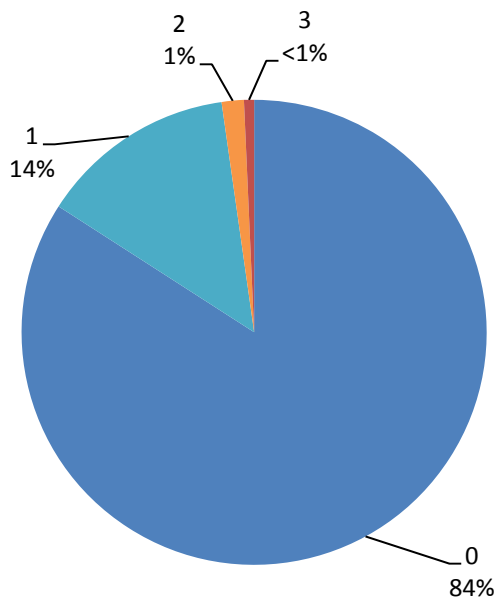


2.15 Number of previous transplants for patients transplanted with a deceased donor kidney in 2015 (n=717)

Number of previous transplants	Number of patients transplanted	Percentage of patients transplanted	% of patients on transplant waiting list with previous transplant number (from table 1.13)
0	603	84%	72%
1	98	14%	23%
2	11	1%	4%
3	5	<1%	1%
ALL	717[#]	100%	100%

[#]Excluding three patients from Noumea that were listed and transplanted in NSW with deceased donor kidneys from Noumea

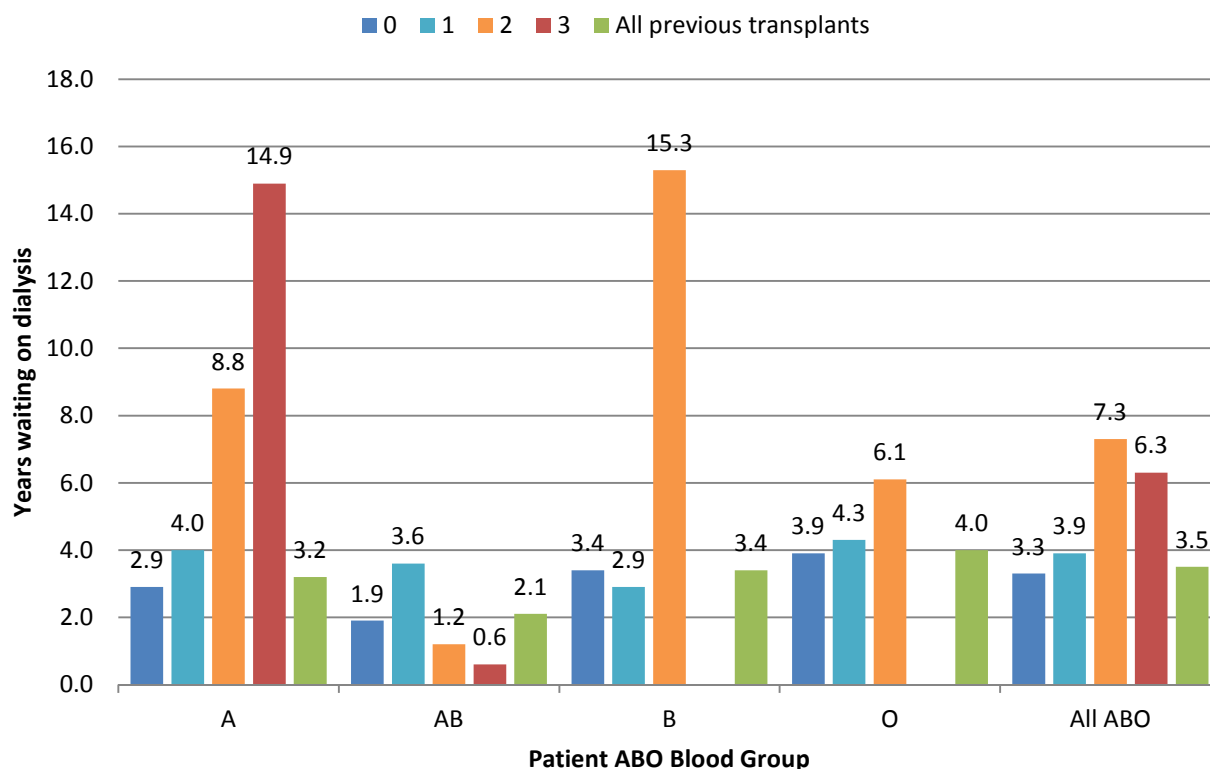
Number of previous transplants for patients transplanted with a deceased donor kidney in 2015 as percentage of total



2.16 Time waiting on dialysis in years for patients transplanted with deceased donor kidney in 2015 and previous transplants by patient ABO blood group (n=720)

Number of previous transplants	Patient ABO group				Average Wait (years)	Median Wait (years)	Maximum Wait (years)
	A	AB	B	O			
0	2.9	1.9	3.4	3.9	3.3	3.0	13.4
1	4.0	3.6	2.9	4.3	3.9	2.7	20.7
2	8.8	1.2	15.3	6.1	7.3	4.1	26.3
3	14.9	0.6	-	-	6.3	1.2	22.3
All Transplants	3.2	2.1	3.4	4.0	3.5	2.7	26.3

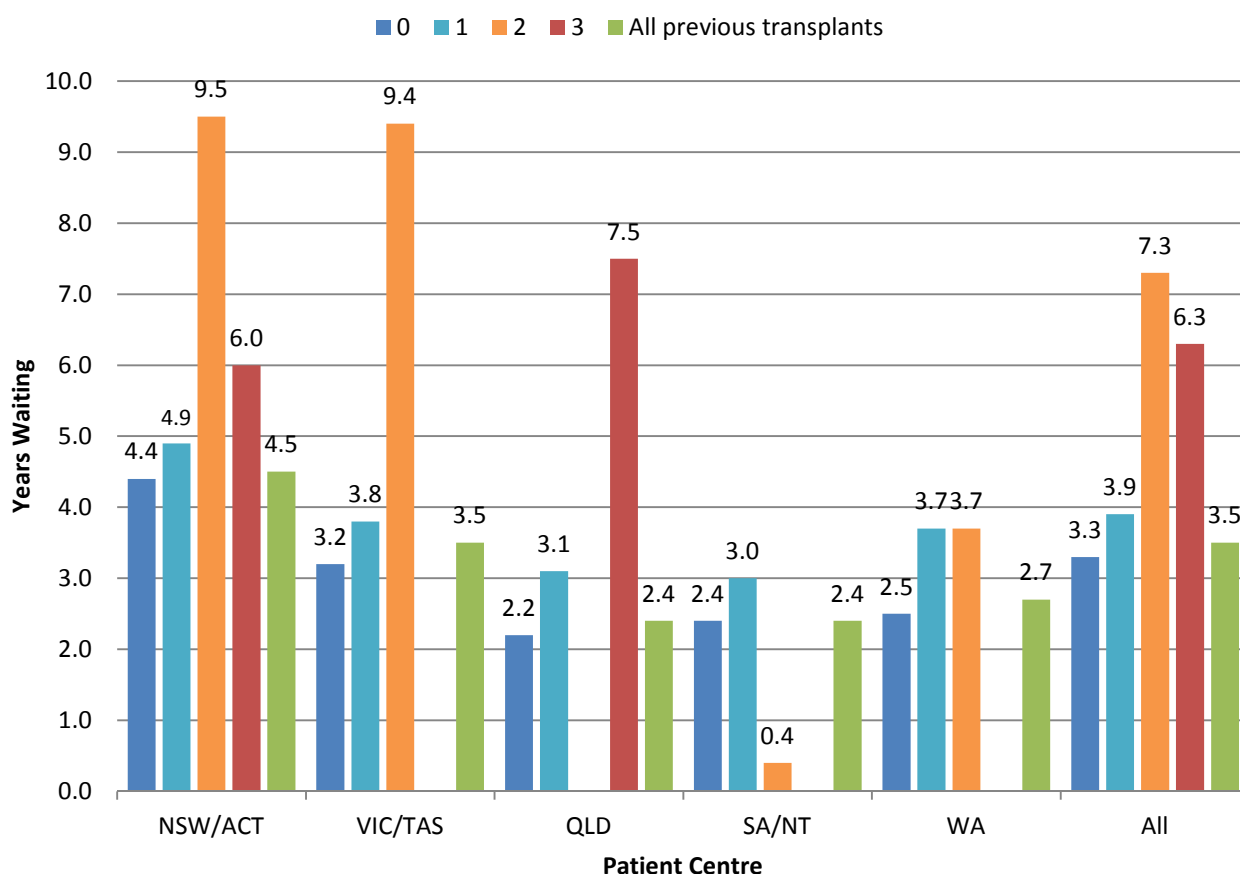
Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 and previous transplants by patient ABO blood group (n=720)



2.17 Time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient previous transplant number and patient centre (n=720)

Patient Centre	Patient Previous transplant number					Median Wait (years) From table 2.8	Maximum Wait (years) From table 2.8
	Average wait (years)	0	1	2	3		
NSW/ACT	4.4	4.9	9.5	6.0	4.5	4.5	22.3
VIC/TAS	3.2	3.8	9.4	-	3.5	3.3	26.3
QLD	2.2	3.1	-	7.5	2.4	1.6	13.4
SA/NT	2.4	3.0	0.4	-	2.4	2.2	8.2
WA	2.5	3.7	3.7	-	2.7	1.8	10.3
ALL Centres	3.3	3.9	7.3	6.3	3.5	3.0	26.3

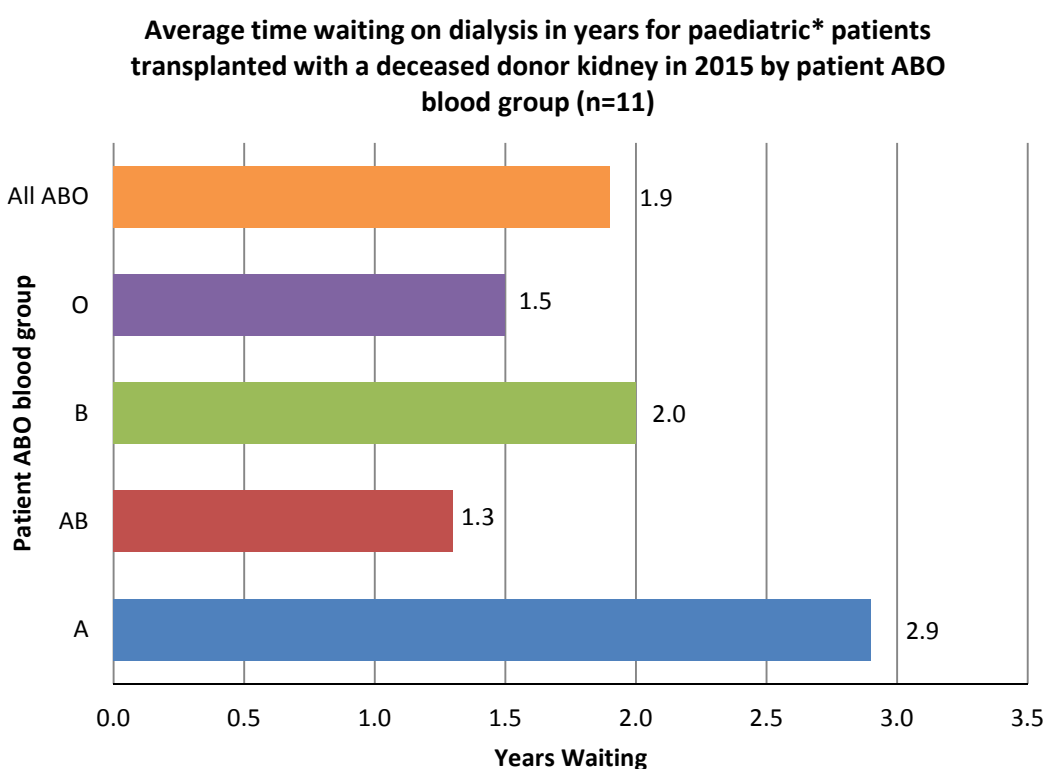
Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient previous transplant number and patient centre (n=720)



2.18 Average time waiting on dialysis in years for paediatric patients transplanted with a deceased donor kidney in 2015 by patient ABO blood group (n=11)

Patient status	A	AB	B	O	All ABO
Paediatric* (n=11)	2.9	1.3	2.0	1.5	1.9
ALL Patients	3.2	2.1	3.4	4.0	3.5

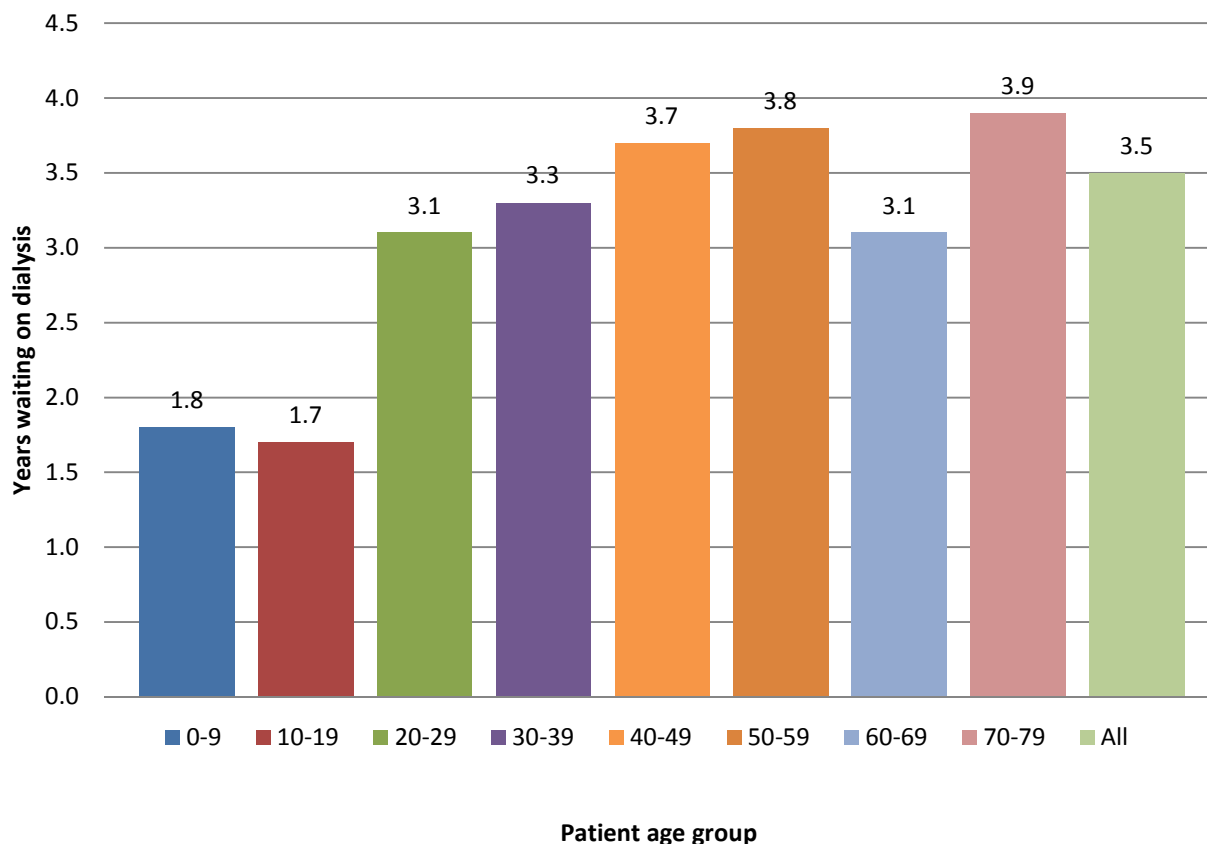
*Paediatric status in NOMS is currently defined in NOMS as patients whose current age is less than 18 years, first dialysis date was at an age less than 17 years, and time since 'dialysis for matching' date is greater than 1 year.



2.19 Time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient age group (n=720)

Age group	Number of patients transplanted	Percentage of patients transplanted	Average waiting time (years)	Median waiting time (years)	Maximum waiting time (years)
0-9	4	<1%	1.8	1.7	2.4
10-19	10	1%	1.7	1.4	3.4
20-29	43	6%	3.1	2.4	11.2
30-39	91	13%	3.3	2.4	15.3
40-49	156	22%	3.7	3.1	26.3
50-59	202	28%	3.8	3.3	22.3
60-69	184	26%	3.1	2.7	11.4
70-79	30	4%	3.9	3.9	7.2
ALL	720	100%	3.5	3.0	26.3

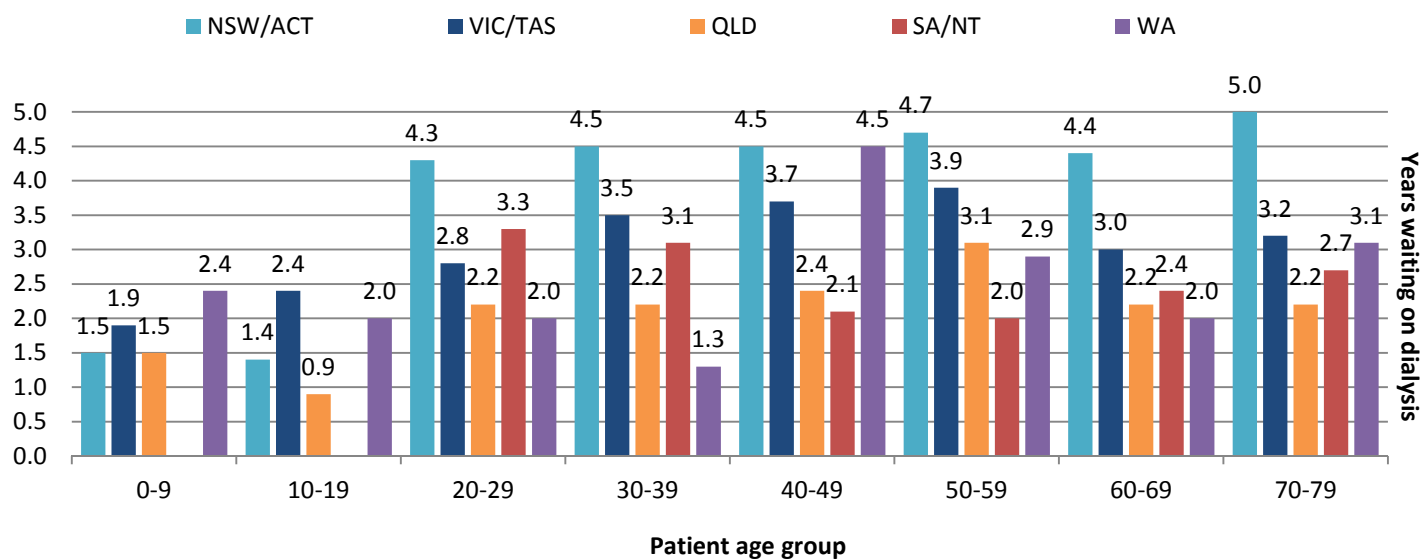
Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient age group (n=720)



2.20 Time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 by patient age group and patient centre

Centre	0-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	Average waiting time (years)	Median waiting time (years)	Maximum waiting time (years)
NSW/ACT	1.5	1.4	4.3	4.5	4.5	4.7	4.4	5.0	4.5	4.5	22.3
VIC/TAS	1.9	2.4	2.8	3.5	3.7	3.9	3.0	3.2	3.5	3.3	26.3
QLD	1.5	0.9	2.2	2.2	2.4	3.1	2.2	2.2	2.4	1.6	13.4
SA/NT	-	-	3.3	3.1	2.1	2.0	2.4	2.7	2.4	2.2	8.2
WA	2.4	2.0	2.0	1.3	4.5	2.9	2.0	3.1	2.7	1.8	10.3
ALL Centres	1.8	1.7	3.1	3.3	3.7	3.8	3.1	3.9	3.5	3.0	26.3

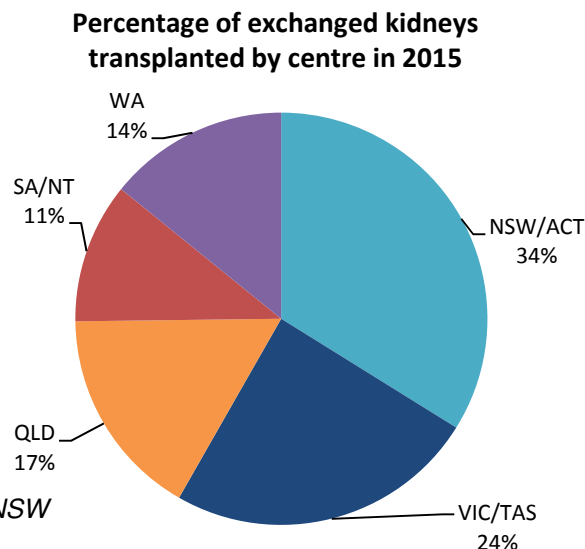
Average time waiting on dialysis in years for patients transplanted with a deceased donor kidney in 2015 and patient age group and patient centre



3. INTERSTATE EXCHANGE OF DECEASED DONOR KIDNEYS IN 2015

3.1 Number of exchanged kidneys transplanted by centre in 2015

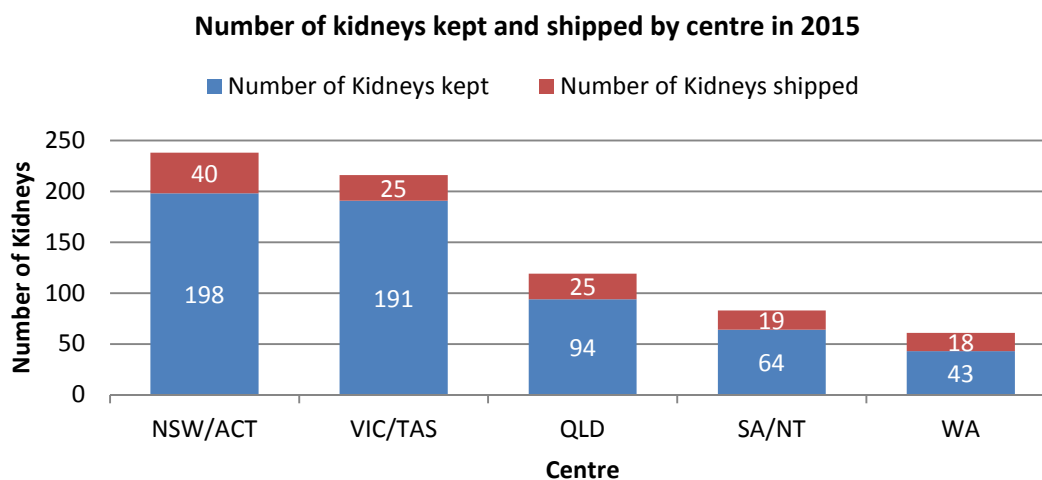
Transplant Centre	Number of exchanged kidneys transplanted	Percentage of exchanged kidneys transplanted
NSW/ACT	43*	34%
VIC/TAS	31	24%
QLD	21	17%
SA/NT	14	11%
WA	18	14%
ALL	127*	100%



*excluding three deceased donors from Noumea transplanted in NSW into patients from Noumea listed under NSW centre

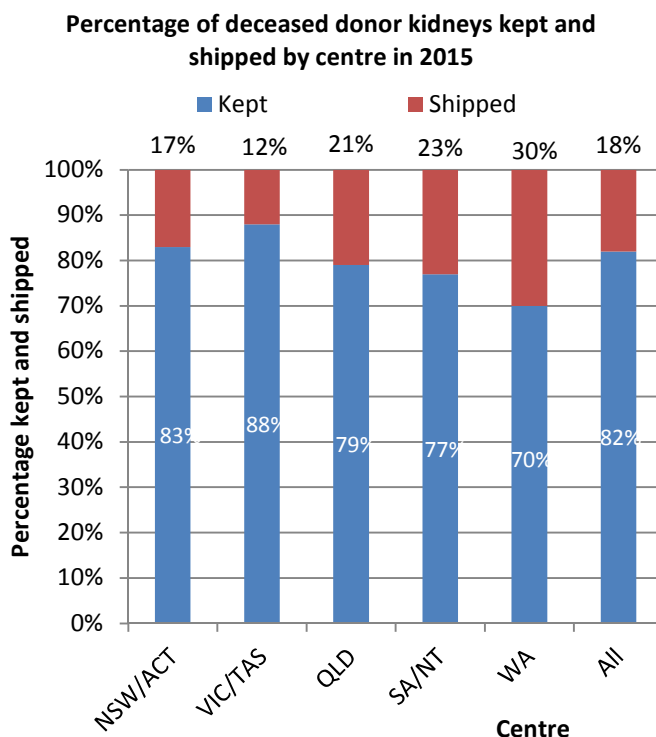
3.2 Number of kidneys kept and shipped by centre in 2015

Transplant Centre	Number of kidneys kept	Number of kidneys shipped	Total number of kidneys from centre
NSW/ACT	198	40	238
VIC/TAS	191	25	216
QLD	94	25	119
SA/NT	64	19	83
WA	43	18	61
ALL	590	127	717



3.3 Percentage of deceased donor kidneys kept and shipped by centre in 2015

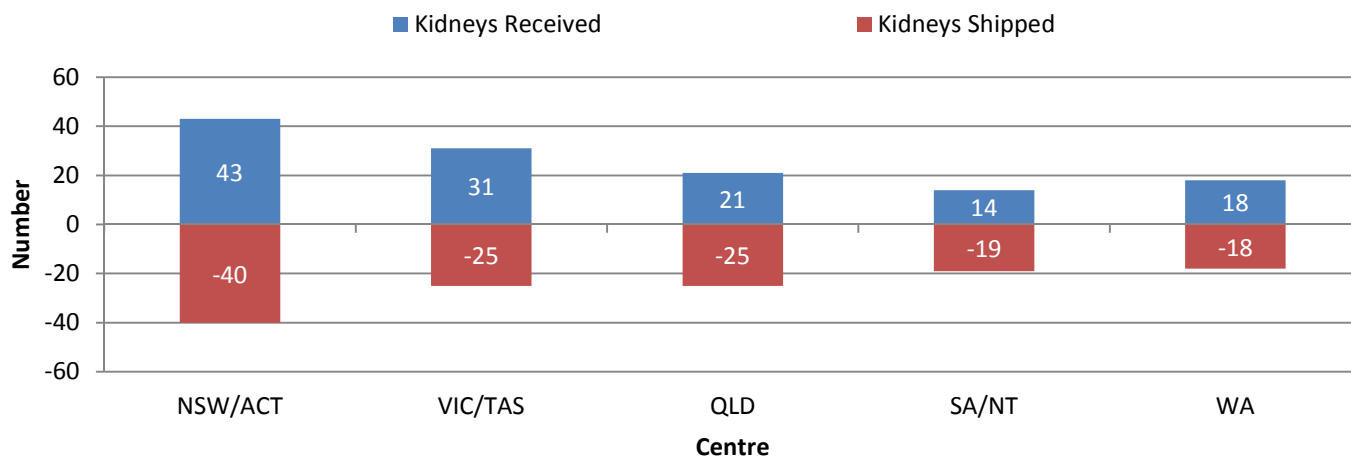
Transplant Centre	Percentage kept	Percentage shipped
NSW/ACT	83%	17%
VIC/TAS	88%	12%
QLD	79%	21%
SA/NT	77%	23%
WA	70%	30%
ALL	82%	18%



3.4 Number of kidneys received and shipped by centre in 2015

Transplant Centre	Number of kidneys received	Number of kidneys shipped	Difference (received – shipped)
NSW/ACT	43	40	3
VIC/TAS	31	25	6
QLD	21	25	-4
SA/NT	14	19	-5
WA	18	18	0
ALL	127	127	0

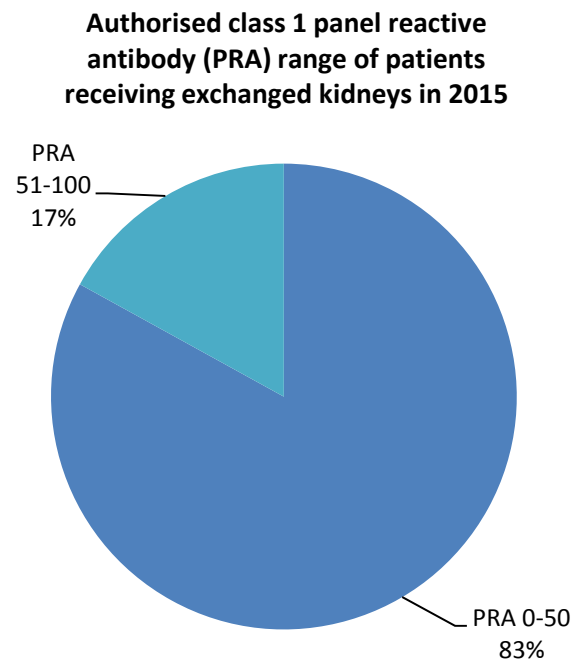
Number of Kidneys received and shipped by centre in 2015



3.5 Authorised class 1 panel reactive antibody (PRA) range of patients receiving exchanged kidneys in 2015

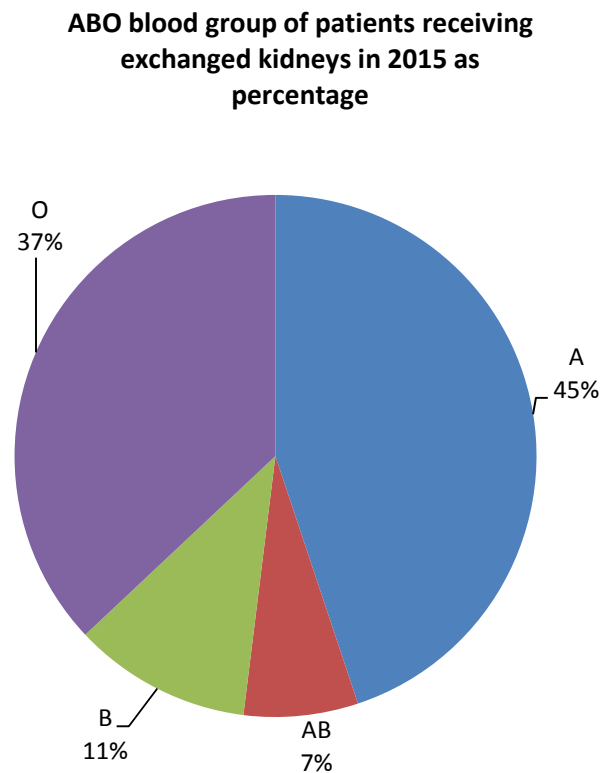
Patient Authorised Class 1 PRA	Number of exchanged kidneys transplanted	Percentage of exchanged kidneys transplanted
0-50 % [#]	105	83 %
51-100%	22	17%
ALL	127	100%

[#]Patients with unknown authorised class I PRA were assumed to be 0%



3.6 ABO blood group of patients receiving exchanged kidneys in 2015

Patient ABO blood group	Number of exchanged kidneys transplanted	Percentage of exchanged kidneys transplanted
A	57	45%
AB	9	7%
B	14	11%
O	47	37%
ALL	127	100%



3.7 Computerised Interstate Exchange Balances

'+' implies a cumulative net outflow of kidneys to the date given; '-' implies a cumulative net inflow of kidneys to the date given

DATE	NSW/A CT	QLD	SA/ NT	VIC/ TAS	WA
22/8/1991	-4	+8	+5	-9	n/a
31/8/1992	-13	+24	+8	-19	n/a
5/1/1993	-12	+28	+1	-17	n/a
2/9/1994	-5	+6	-1	-4	+4
4/1/1995	+2	+2	0	-8	+4
2/1/1996	-2	+2	-1	-3	+4
4/2/1997	-2	+5	+8	-8	-3
10/3/1998	-8	+1	+10	+1	-4
7/1/1999	+1	-1	+7	-1	-6
4/4/2000	+1	0	+4	-2	-3
15/3/2001	-5	+3	+5	-2	-1
3/4/2002	0	+1	+3	+1	-5
6/1/2003	-2	+2	+6	0	-6
6/7/2004	-3	+2	+7	-5	-1
29/4/2005	-9	-1	+11	0	-1
3/4/2006	-6	0	+11	-3	-2
16/3/2007	-1	+1	+5	-1	-4
2/4/2008	-1	0	+4	0	-3
31/3/2009	-2	0	+4	0	-2
16/4/2010	-2	0	+3	-1	0
8/4/2011	-2	0	+3	0	-1
3/4/2012	-5	+3	+2	-2	+2
1/4/2013	-3	+1	+5	0	-3
1/4/2014	-1	-1	+6	-3	-1
1/4/2015	-5	-1	-3	-3	+12
1/4/2016	-5	+4	-2	-4	+7

3.8 Kidney matching national algorithm prior to 1st March 2016

On 1st March 2016 all the Australian Tissue Typing Laboratories changed the data in the Class 1 PRA field of Active patients in the NOMS database to reflect the combined class I and class II calculated PRA (cPRA). The impact of this is that the algorithm criteria for Levels 1 to 6 have all now effectively changed. However for the purpose of this analysis, in 2015 the National Kidney matching algorithms were as listed below:

Algorithm	Match Level	Criteria	Score
Australian National	1	Base Score if (HLA A + B + DR mismatches = 0) and (Class 1 authorised Panel Reactive Antibodies not < 50%) (Level 1 match)	60 000 000
	2	Base Score if (HLA A + B + DR mismatches = 1) and (Class 1 authorised Panel Reactive Antibodies > 80%) (Level 2 match)	59 000 000
	3	Base Score if (HLA A + B + DR mismatches = 2) and (Class 1 authorised Panel Reactive Antibodies > 80%) (Level 3 match)	58 000 000
	4	Base Score if (HLA A + B + DR mismatches = 0) and (Class 1 authorised Panel Reactive Antibodies < 50%) (Level 4 match)	57 000 000
	5	Base Score if (HLA DR mismatches = 0) and (HLA A+B mismatches = 1) and (Class 1 authorised Panel Reactive Antibodies not > 80%) and centre credit difference (donor centre credit – patient centre credit) <= -3 (Level 5 match)	56 000 000
	6	Base Score if (HLA DR mismatches = 0) and (HLA A+B mismatches = 2) and (Class 1 authorised Panel Reactive Antibodies not > 80%) and centre credit difference (donor centre credit – patient centre credit) <= -6 (Level 6 match)	55 000 000
	7	Base Score if score is null and centre credit difference (donor centre credit – patient centre credit) < -20 (Level 7 match)	54 000 000
		Paediatric	+30 000
		If donor centre = patient centre	+50 000
		Centre credit balance	+(1000 + patient centre credit)
		Each month Waiting on dialysis	+1
		Lower Threshold for National Algorithm	54 000 000
Australian National Override		Base Score	0
		Paediatric	+30 000
		Antibody (for each % of authorised antibody > threshold of 50%)	+1000
		Each month Waiting on dialysis	+100

3.9 Levels of matching of exchanged kidneys transplanted in 2015 by patient centre

Patient Centre	Level of matching on national algorithm								Matches with score less than national threshold	All
	1	2	3	4	5	6	7			
NSW/ACT	3	0	2	7	1	0	0	30 <small>&x10, *x16,%x3, !x1</small>	43	
VIC/TAS	3	1	3	7	5	4	0	8 <small>&x2,*x6</small>	31	
QLD	0	0	0	1	2	10	0	8 <small>&x8</small>	21	
SA/NT	0	0	0	0	4	3	0	7 <small>&x4,*x3</small>	14	
WA	1	1	0	1	1	6	6	2 <small>!</small>	18	
ALL	7	2	5	16	13	23	6	55	127	
%	5%	2%	4%	13%	10%	18%	5%	43%	100%	

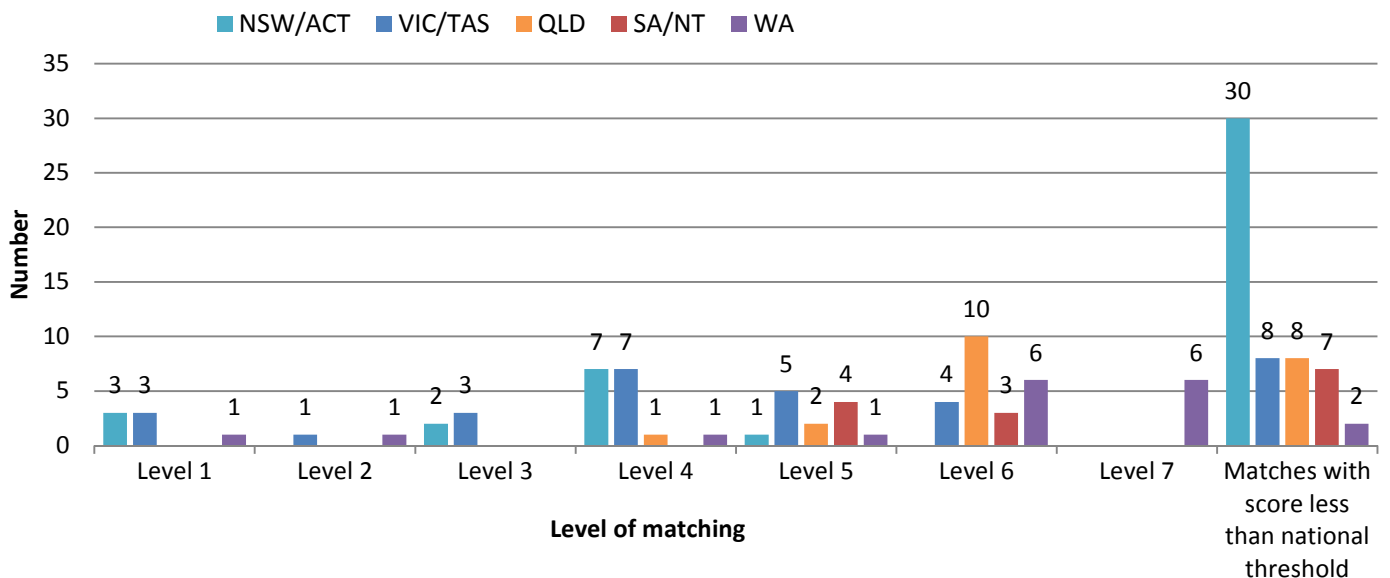
& Manually allocated for multi-organ transplant

* National Override Used to allocate blood group A, B or AB donor kidneys

! NOMS allocation error which has been rectified

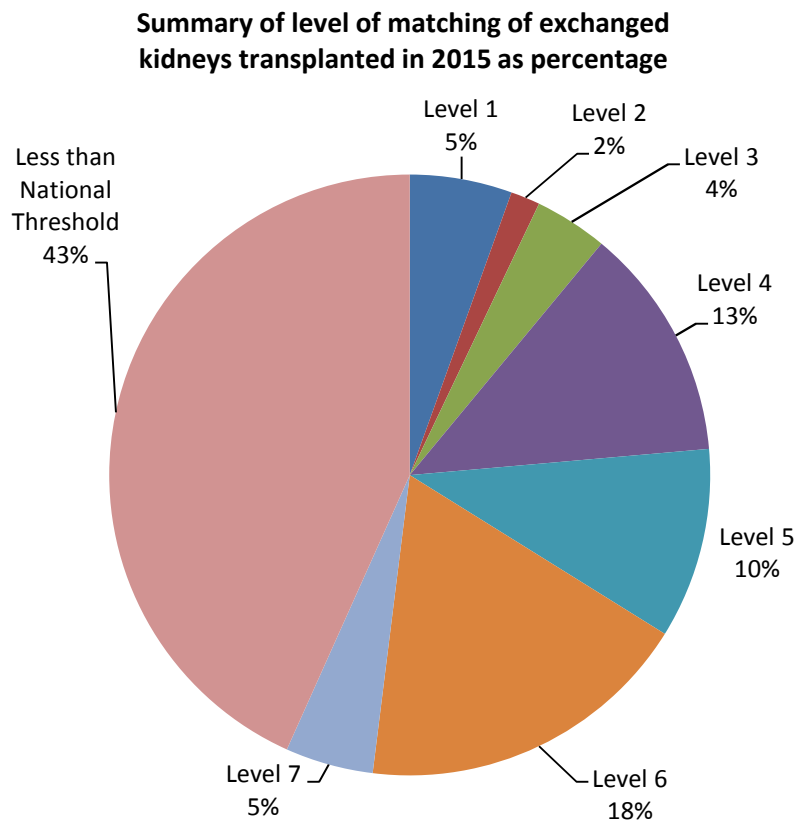
% Patient has moved state since transplant or interstate donor was matched in NSW

Levels of matching of exchanged kidneys transplanted in 2015 by patient centre



3.10 Summary of level of matching of exchanged kidneys transplanted in 2015

Level of matching	Percentage of exchanged kidneys
Level 1 (60 000 000 +)	5%
Level 2 (59 000 000 – 59 999 999)	2%
Level 3 (58 000 000 – 58 999 999)	4%
Level 4 (57 000 000 – 57 999 999)	13%
Level 5 (56 000 000 – 56 999 999)	10%
Level 6 (55 000 000 – 55 999 999)	18%
Level 7 (54 000 000 – 54 999 999)	5%
Less than 54 000 000	43%
ALL	100%



4. MISCELLANEOUS REPORTS

4.1 Number of active patients awaiting kidney transplant on 1/4/2016 by patient state or territory as percentage of dialysing patients as at 31/12/2014[#]

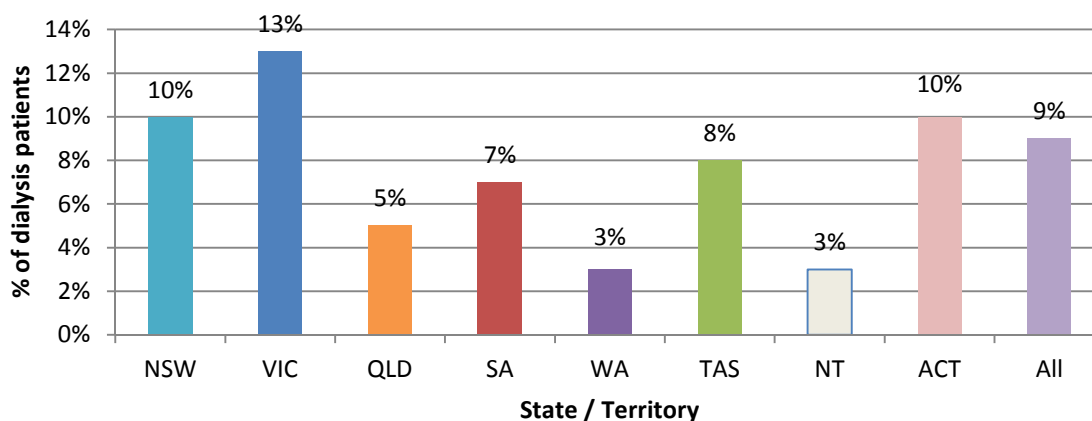
State / Territory	Number of active patients (1/4/2016) (from table 1.2)	% of all patients on active waiting list (1/4/2016) (from table 1.2)	Number of patients on dialysis as at 31/12/2014 [#]	State / Territory % of total dialysing patients [#]	Number of active patients on waiting list as % of total patients on dialysis from that State/ Territory
NSW	395	38%	3825	32%	10%
VIC	383	37%	2978	25%	13%
QLD	113	11%	2262	19%	5%
SA	51	5%	742	6%	7%
WA	36	3%	1219	10%	3%
TAS	19	2%	227	2%	8%
NT	14	1%	557	4%	3%
ACT	28	3%	281	2%	10%
ALL	1039	100%	12091	100%	9%

[#]Dialysis Data reported has been published by the Australia and New Zealand Dialysis and Transplant Registry in the 'Table 1.2 Stock and Flow by State and Country 2014' report found at

http://www.anzdata.org.au/anzdata/AnzdataReport/38thReport/c01_anzdata_incidence_v1.0_20160108_web.pdf

The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

Percentage of active patients awaiting kidney transplant on 1/4/2016 by patient state or territory as percentage of dialysing patients as at 31/12/2014[#]



4.2 Number of transplanted kidneys in 2015 by patient state or territory (live and deceased donors) as percentage of patients dialysing at 31/12/2014

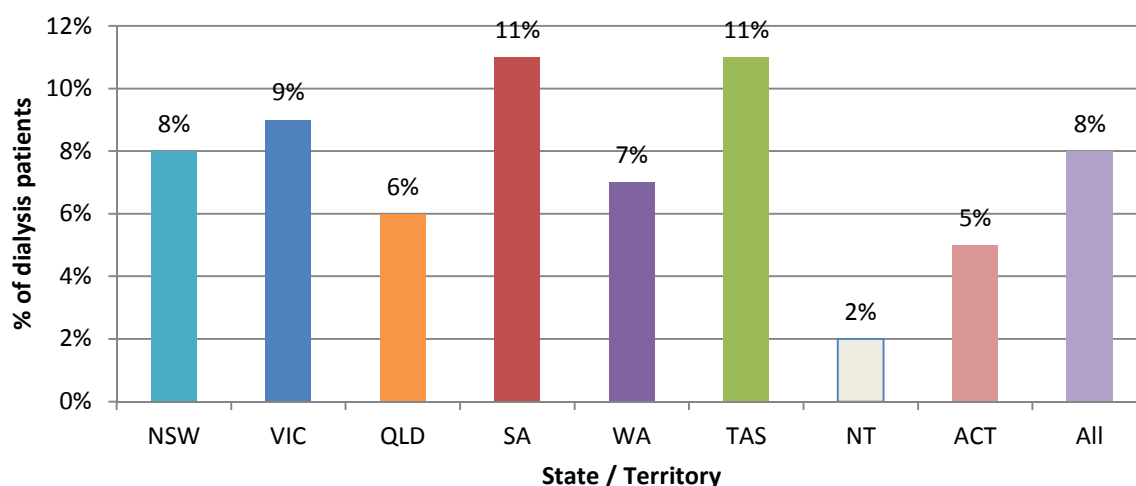
Patient State / Territory	Number of transplanted kidneys in 2015	% of all kidneys transplanted in 2015	Number of patients on dialysis as at 31/12/2014 [#]	Number of transplanted patients in 2015 as a % of total patients on dialysis for that State/Territory as at 31/12/2014
NSW	318	33%	3825	8%
VIC	279	29%	2978	9%
QLD	143	15%	2262	6%
SA	85	9%	742	11%
WA	80	9%	1219	7%
TAS	24	3%	227	11%
NT	12	1%	557	2%
ACT	13	1%	281	5%
ALL	954	100%	12091	8%

[#]Dialysis Data reported has been published by the Australia and New Zealand Dialysis and Transplant Registry in the 'Table 1.2 Stock and Flow by State and Country 2014' report found at

http://www.anzdata.org.au/anzdata/AnzdataReport/38thReport/c01_anzdata_incidence_v1.0_20160108_web.pdf

The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

Percentage of transplanted kidneys in 2015 by patient state or territory (live and deceased donors) as percentage of patients dialysing as at 31/12/2014[#]



4.3 Number of kidneys transplanted from deceased donors in 2015 by patient state or territory as percentage of patients dialysing as at 31/12/2014[#]

Patient State / Territory	Number of deceased donor transplants in 2015	Percentage of all deceased donor kidney transplants in 2015	Number of patients on dialysis as at 31/12/2014 [#]	Number of transplanted patients in 2015 with deceased donor kidney as a % of total patients on dialysis from that State/Territory as at 31/12/2014
NSW	233	32%	3825	6%
VIC	207	29%	2978	7%
QLD	115	16%	2262	5%
SA	67	9%	742	9%
WA	61	9%	1219	5%
TAS	15	2%	227	7%
NT	11	2%	557	2%
ACT	8	1%	281	3%
ALL	717	100%	12091	6%

[#]Dialysis Data reported has been published by the Australia and New Zealand Dialysis and Transplant Registry in the 'Table 1.2 Stock and Flow by State and Country 2014' report found at

http://www.anzdata.org.au/anzdata/AnzdataReport/38thReport/c01_anzdata_incidence_v1.0_20160108_web.pdf

The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

Percentage of kidneys transplanted from deceased donors in 2015 by patient state or territory as percentage of patients dialysing as at 31/12/2014[#]



4.4 Number of living donor kidney transplants in 2015 by patient state or territory as percentage of patients dialysing as at 31/12/2014[#]

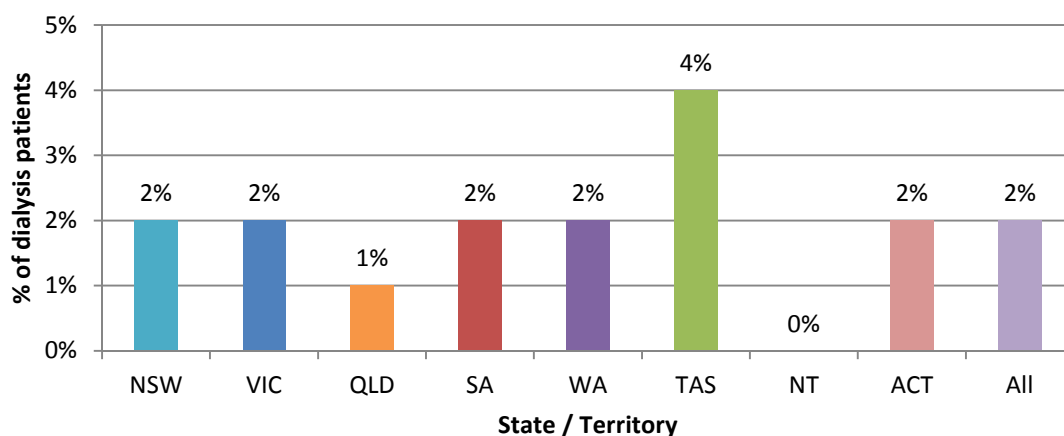
Patient State / Territory	Number of kidneys transplanted from live donors in 2015	Percentage of all live donor kidney transplants in 2015	Number of patients on dialysis as at 31/12/2014 [#]	Number of transplanted patients in 2015 with live donor kidney as a % of total patients on dialysis from that State/Territory as at 31/12/2014
NSW	85	36%	3825	2%
VIC	72	30%	2978	2%
QLD	28	12%	2262	1%
SA	18	8%	742	2%
WA	19	8%	1219	2%
TAS	9	4%	227	4%
NT	1	<<1%	557	<<1%
ACT	5	2%	281	2%
ALL	237	100%	12091	2%

[#]Dialysis Data reported has been published by the Australia and New Zealand Dialysis and Transplant Registry in the 'Table 1.2 Stock and Flow by State and Country 2014' report found at

http://www.anzdata.org.au/anzdata/AnzdataReport/38thReport/c01_anzdata_incidence_v1.0_20160108_web.pdf

The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

Percentage of living donor kidney transplants in 2015 by patient state or territory as percentage of patients dialysing as at 31/12/2014[#]



4.5 Number of patients on the kidney transplant waiting list at any time during 2015 by patient centre as percentage of patients dialysing as at 31/12/2014[#]

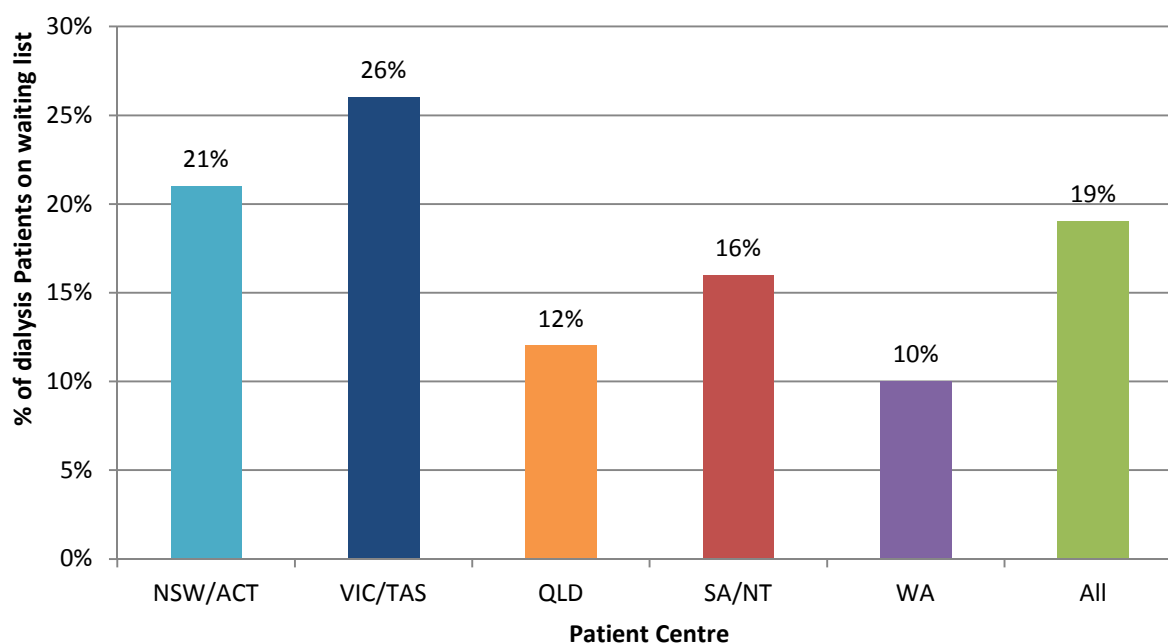
Patient State / Territory	Number of patients on the waiting list at any time during 2015	Number of patients on dialysis as at 31/12/2014 [#]	Number of patients on the waiting list at any time during the year of 2015 as % of total patients on dialysis from that state/territory as at 31/12/2014
NSW/ACT	867	4106	21%
VIC/TAS	820	3205	26%
QLD	280	2262	12%
SA/NT	206	1299	16%
WA	118	1219	10%
ALL	2291	12091	19%

#Dialysis Data reported has been published by the Australia and New Zealand Dialysis and Transplant Registry in the 'Table 1.2 Stock and Flow by State and Country 2014' report found at

http://www.anzdata.org.au/anzdata/AnzdataReport/38thReport/c01_anzdata_incidence_v1.0_20160108_web.pdf

The interpretation and reporting of these data are the responsibility of the authors and in no way should be seen as an official policy or interpretation of the Australia and New Zealand Dialysis and Transplant Registry.

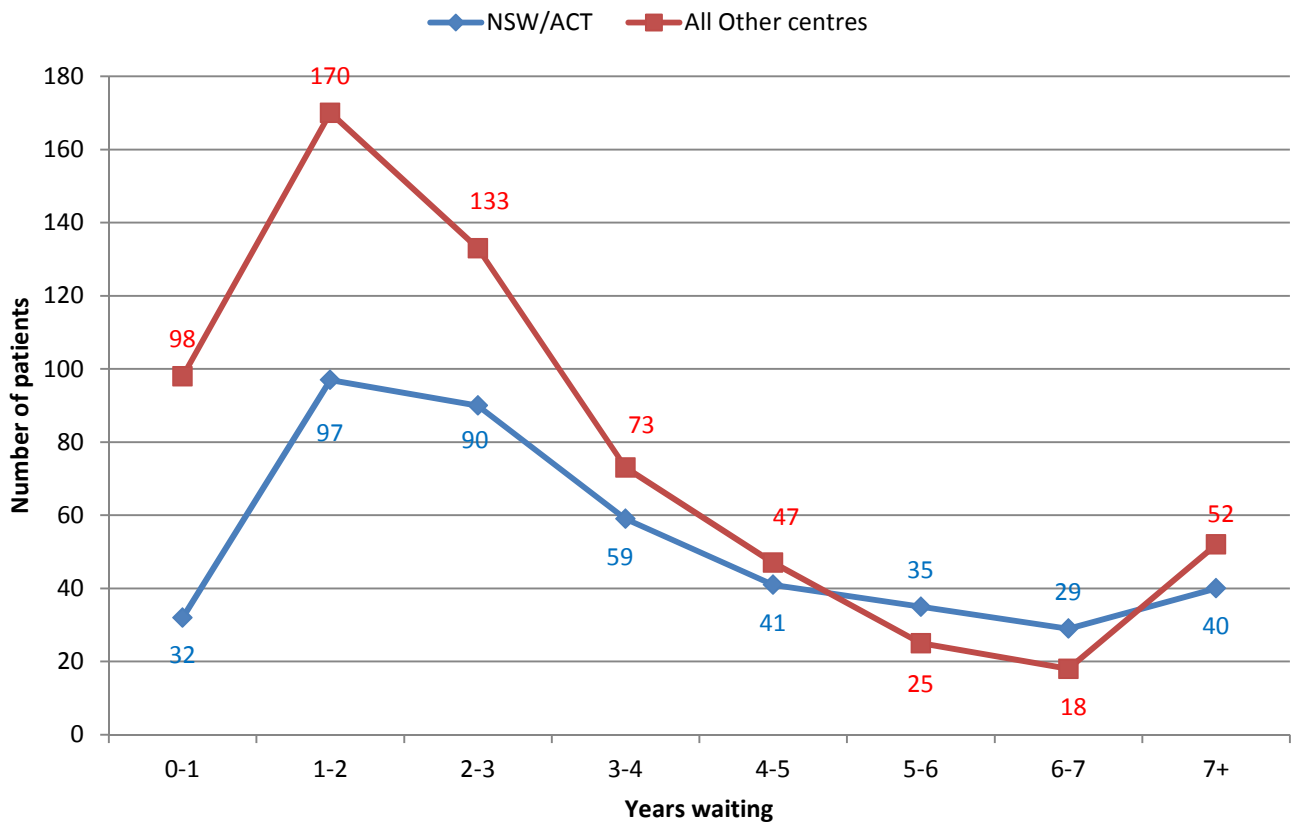
Percentage of patients on the kidney transplant waiting list at any time during 2015 by patient centre as percentage of patients dialysing as at 31/12/2014[#]



4.6 Years waiting for first kidney transplant for NSW/ACT and other centres on 1/4/2016 (from program entry date)

Centre	Years Waiting								Total
	0-1	1-2	2-3	3-4	4-5	5-6	6-7	7+	
NSW/ACT	32	97	90	59	41	35	29	40	423
All other centres	98	170	133	73	47	25	18	52	616
ALL	130	267	223	132	88	60	47	92	1039

Years waiting for first kidney transplant for NSW/ACT and other centres on 1/4/2016



5. END OF DOCUMENT