

CHAPTER 2

NEW PATIENTS

COMMENCING TREATMENT IN 2007

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Figure 2.1

Annual Intake of New Patients 2003 - 2007 (Number Per Million Population)					
	2003	2004	2005	2006	2007
Queensland	423 (111)	399 (103)	465 (117)	497 (121)	450 (108)
New South Wales	622 (96)	559 (86)	722 (110)	771 (117)	743 (111)
Aust. Capital Territory	40 (77)	49 (94)	54 (102)	55 (102)	55 (101)
Victoria	441 (90)	462 (93)	526 (105)	567 (111)	534 (103)
Tasmania	43 (90)	29 (60)	38 (78)	50 (102)	54 (109)
South Australia	151 (99)	155 (101)	171 (111)	185 (118)	164 (104)
Northern Territory	57 (287)	81 (405)	84 (414)	75 (356)	70 (326)
Western Australia	204 (104)	215 (108)	238 (118)	234 (114)	241 (114)
Australia	1981 (100)	1949 (97)	2293 (113)	2433 (118)	2311 (110)
New Zealand	462 (115)	460 (115)	462 (112)	500 (119)	461 (109)

INTAKE OF NEW PATIENTS

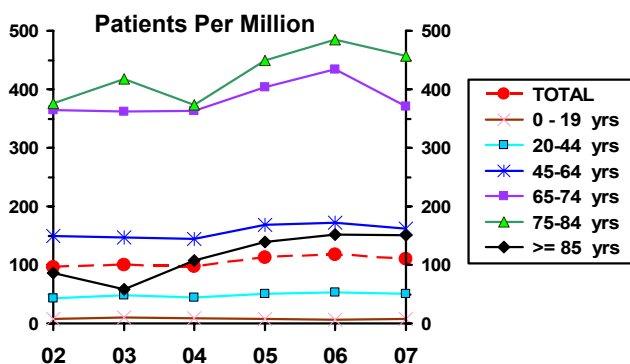
There were 2311 new patients who commenced treatment for end-stage renal failure in Australia in 2007, a rate of 110 per million population per year.

This was a decrease of 5% from 2006, after a 6% increase last year and an 18% increase in 2005.

In New Zealand, the number of new patients entering renal failure programs was 461, a rate of 109 per million of population. This was a decrease of 8% from last year after an increase of 8% (500 patients in 2006), which was the highest ever recorded.

Figure 2.2

Acceptance of New Patients 2002 - 2007
Age Specific Rates - Australia



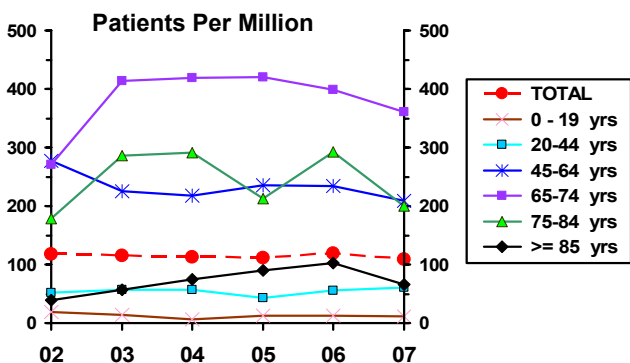
AGE OF NEW PATIENTS

In Australia in 2007, only two age groups showed an increase in acceptance of new patients, the 0-19 year age group, which increased from seven to eight per million (36 to 45 patients) and the ≥ 85 year age group, which increased from 49 to 52 patients but the rate decreased from 152 to 150 patients per million.

The largest decreases were in the groups 65-74 years, which fell from 434 to 370 per million (612 to 537 patients) and 75-84 years, which fell from 485 to 457 per million (464 to 441 patients) (Figure 2.2). The older age groups are examined in more detail in Figure 2.4.

Figure 2.3

Acceptance of New Patients 2002 - 2007
Age Specific Rates - New Zealand



The mean age of patients entering programs in Australia in 2007 was 60.2 years and the median 62.6 years (Figure 2.5).

In New Zealand, the mean age of patients entering was 55.9 years and the median 57.8 years (Figure 2.5).

The age specific rates of acceptance increased in only one group, 20-44 years from 56 to 61 per million (83 to 90 patients) and fell in all other age groups.

The largest decreases were in the 75-84 year group, from 292 to 200 per million (52 to 36 patients), the 65-74 year group, from 399 to 361 per million (110 to 103 patients) and the ≥ 85 year age group, 103 to 37 per million as shown in Figure 2.3.

Within the older age groups in Australia, only three groups increased in numbers in 2007. They were in the 60-64 year, the 80-84 year, with a small increase in the ≥ 85 year age group, as shown in Figure 2.4. Whether these changes are part of an overall change in the historical increase in rates among older people will not be apparent for several years.

In New Zealand there were decreases in all of the age groups.

Rates of new patients aged ≥ 85 years remained similar in Australia, 152 to 151 per million in 2007 but fell from 103 to 66 per million in New Zealand.

Rates in all age groups ≥ 70 years were higher in Australia than in New Zealand.

Figure 2.4

Acceptance of Elderly New Patients 2003 - 2007 (Number Per Million Population)						
Country	Age Groups	2003	2004	2005	2006	2007
Australia	60-64 years	193 (223)	187 (207)	239 (253)	256 (259)	264 (248)
	65-69 years	231 (321)	254 (341)	261 (338)	281 (361)	245 (304)
	70-74 years	258 (410)	244 (390)	304 (485)	331 (526)	292 (454)
	75-79 years	263 (489)	246 (448)	266 (481)	301 (546)	268 (487)
	80-84 years	115 (312)	103 (267)	163 (406)	163 (402)	173 (417)
	≥ 85 years	17 (59)	32 (107)	44 (140)	49 (152)	52 (151)
	Total	1077 (315)	1066 (304)	1277 (353)	1381 (376)	1294 (339)
New Zealand	60-64 years	62 (361)	67 (377)	68 (373)	61 (327)	56 (284)
	65-69 years	52 (383)	59 (422)	63 (429)	61 (392)	56 (343)
	70-74 years	54 (448)	50 (416)	49 (409)	49 (408)	47 (384)
	75-79 years	38 (381)	38 (376)	28 (275)	30 (290)	27 (259)
	80-84 years	10 (148)	12 (170)	9 (124)	22 (297)	9 (119)
	≥ 85 years	3 (58)	4 (75)	5 (90)	6 (103)	4 (66)
	Total	219 (338)	230 (347)	222 (327)	229 (328)	199 (275)

STATE OF ORIGIN OF NEW PATIENTS

Age at start of dialysis varied between States (Figure 2.5). There was an overall decrease in the rate of new renal replacement therapy patients in Australia in 2007 in all States except Western Australia and the Tasmania (Figure 2.6).

The highest acceptance rates were in the Northern Territory (326 per million) and Western Australia (114 per million) and the lowest in the ACT (101 per million) and Victoria (103 per million) (Figure 2.1).

Figure 2.5

Age and Gender of New Patients 1-Jan-2007 to 31-Dec-2007 (n = Number of Patients)																				
Age Groups Years	QLD (n=450)		NSW (n=743)		ACT (n=55)		VIC (n=534)		TAS (n=54)		SA (n=164)		NT (n=70)		WA (n=241)		AUST (n=2311)		NZ (n=461)	
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M
00-04	0	2	2	3	0	0	0	2	0	0	0	1	0	0	0	0	2	8	2	1
05-14	1	3	5	2	0	0	3	1	0	0	0	0	0	0	0	2	9	8	3	1
15-24	4	7	6	11	0	0	5	7	0	1	4	1	1	0	2	3	22	30	8	7
25-34	8	13	20	17	1	2	12	13	1	1	6	9	6	3	7	3	61	61	17	9
35-44	15	31	26	37	5	1	19	29	3	3	10	12	7	8	11	11	96	132	22	34
45-54	29	52	37	72	1	1	25	54	3	5	7	15	10	12	18	28	130	239	30	56
55-64	29	48	52	102	4	7	48	79	3	8	9	20	9	10	26	29	180	303	49	79
65-74	41	59	74	103	8	12	36	91	8	9	15	22	1	3	17	38	200	337	39	64
75-84	34	52	68	92	2	9	28	75	3	4	7	25	0	0	9	33	151	290	12	24
≥ 85	10	12	5	9	0	2	1	6	0	2	1	0	0	0	0	4	17	35	2	2
Total	171	279	295	448	21	34	177	357	21	33	59	105	34	36	90	151	868	1443	184	277
Mean	61.6	59.9	60.6	61.2	59.3	67.4	57.7	61.8	60.7	60.9	54.8	59.9	47.3	51.0	56.3	62.3	58.8	61.0	53.8	57.2
All	60.5		60.9		64.3		60.5		60.8		58.1		49.2		60.1		60.2		55.9	
Median (yrs)	63.0		63.5		67.7		62.8		63.2		61.7		49.4		61.6		62.6		57.8	
Range	0.9 - 95.8		0.9 - 94.2		27 - 88		0.4 - 89.1		17.8 - 87.3		0.8 - 86.6		23.5 - 69.4		7.9 - 86.9		0.4 - 95.8		0.4 - 89.6	



Figure 2.6

Incidence rates (95% confidence intervals) for new RRT patients by State.
 Note different scales for each State; these are crude incidence rates, not age-adjusted.

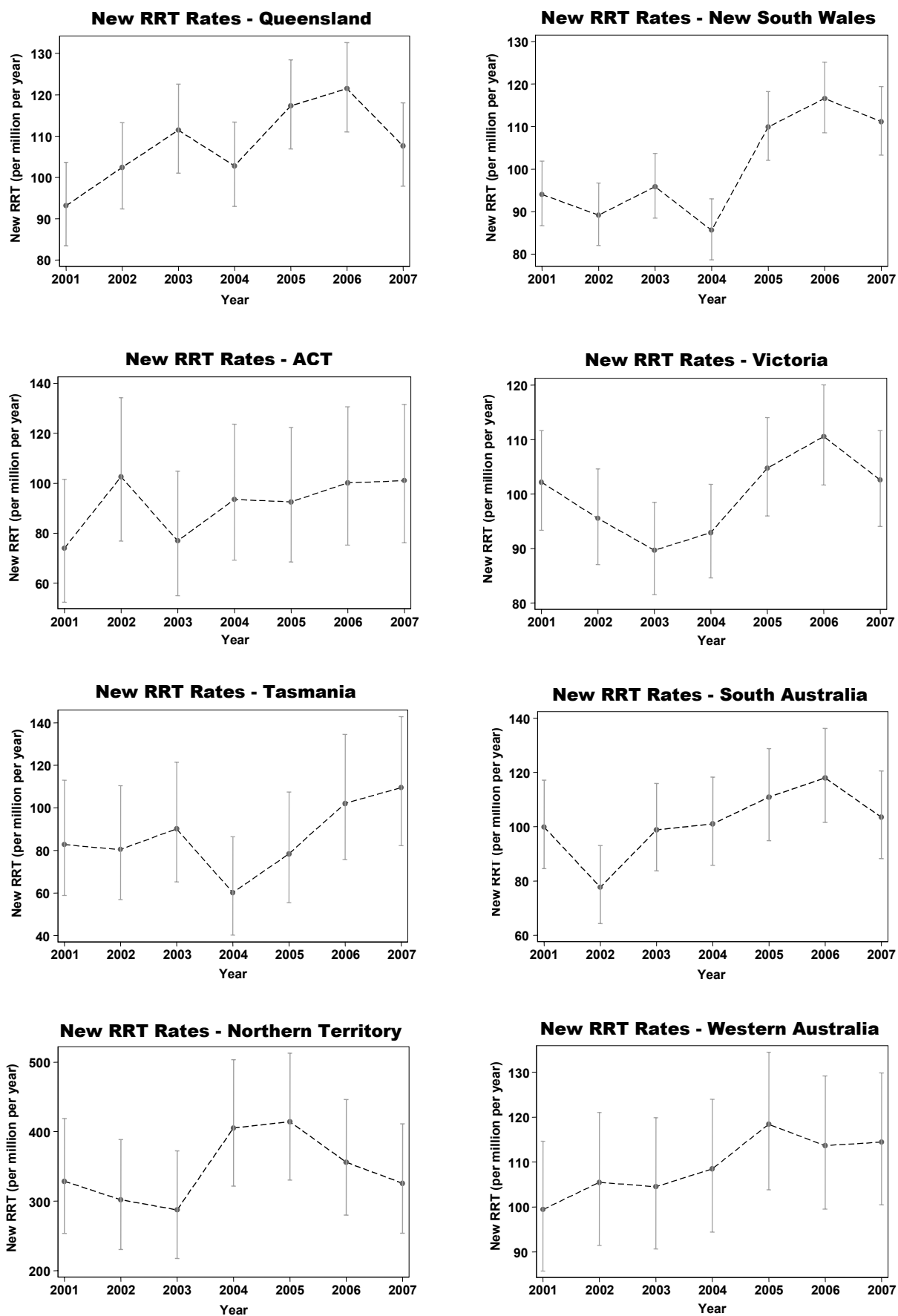
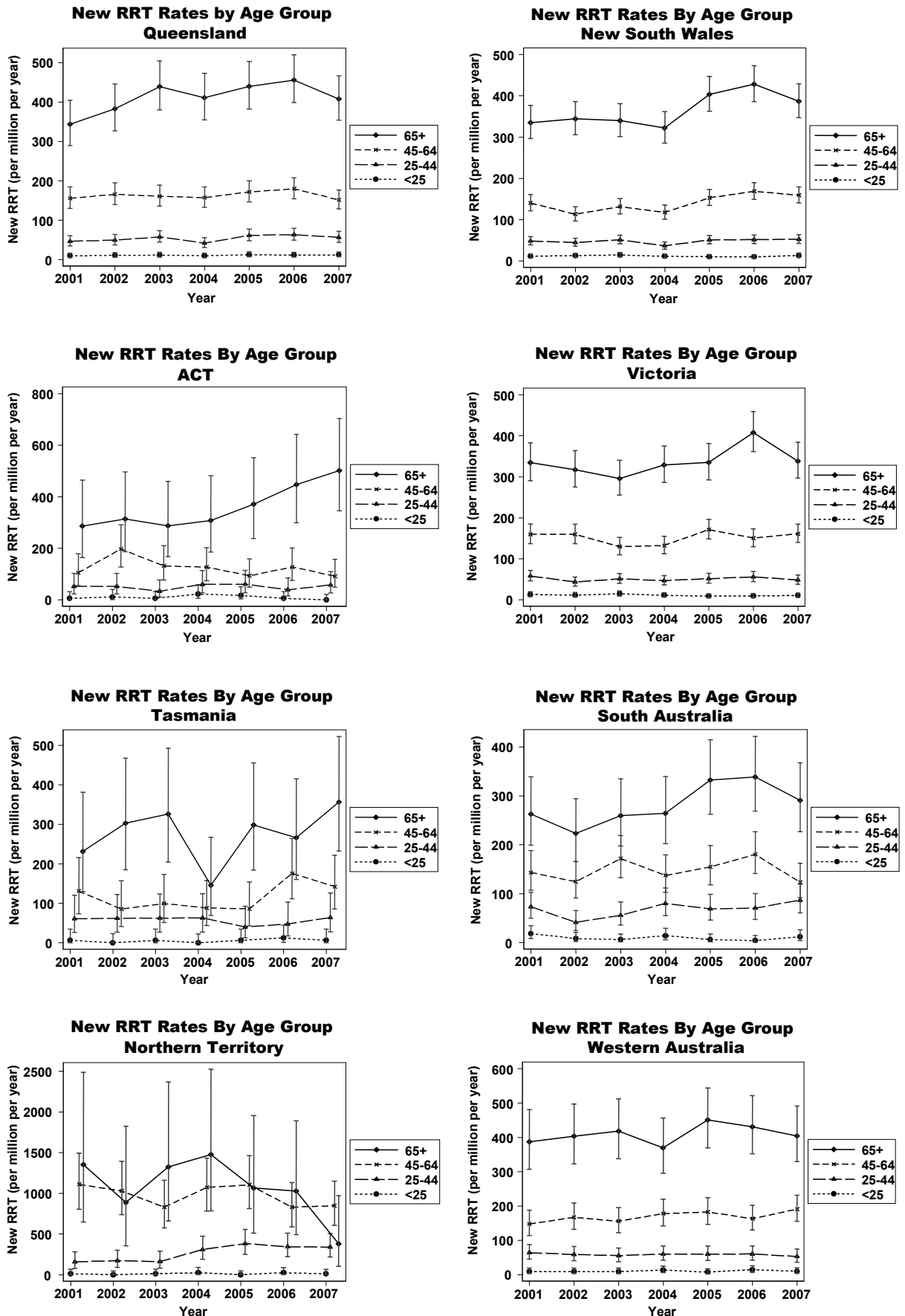


Figure 2.7

Incidence rates (95% confidence intervals) for new RRT patients by State by age group.
 Note the Y axis scales for each State are different.





LATE REFERRAL

There were 24% (23% in 2006) of all new patients in Australia and 20% (22% in 2006) of new patients in New Zealand who were referred late to nephrological care, i.e. less than three months before first treatment (Figure 2.8).

Among the States/Territories, the lowest was 22% in Tasmania ranging to 27% in Western Australia.

Variation of this rate with age is shown in Figure 2.9, trends over time in Figure 2.10 and by racial origin in Figure 2.11. Late referral rates were particularly high in the ≥ 85 year age group.

Figure 2.8

Late Referral of New Patients 2007										
Number of Patients (% Patients)										
Primary Renal Disease	QLD	NSW	ACT	VIC	TAS	SA	NT	WA	AUST	NZ
YES										
Analgesic	3 (3%)	2 (1%)	-	-	-	-	-	-	5 (1%)	-
Diabetes-I Insulin	4 (4%)	3 (2%)	-	4 (3%)	-	2 (6%)	-	1 (1%)	14 (3%)	1 (1%)
Diabetes-II Insulin Req	14 (13%)	19 (10%)	3 (23%)	11 (9%)	1 (8%)	5 (16%)	4 (24%)	7 (11%)	64 (12%)	18 (19%)
Diabetes-II Non-Insulin	11 (11%)	25 (14%)	-	20 (16%)	-	3 (9%)	5 (29%)	21 (33%)	85 (15%)	16 (17%)
Glomerulonephritis	18 (17%)	46 (25%)	2 (15%)	41 (33%)	3 (25%)	8 (25%)	4 (24%)	12 (19%)	134 (24%)	19 (20%)
Hypertension	13 (13%)	31 (17%)	3 (23%)	14 (11%)	2 (17%)	6 (19%)	3 (17%)	11 (17%)	83 (15%)	9 (10%)
Miscellaneous	21 (20%)	37 (20%)	2 (15%)	22 (17%)	3 (25%)	3 (9%)	1 (6%)	9 (14%)	98 (18%)	22 (24%)
Polycystic	5 (5%)	3 (2%)	-	2 (2%)	-	2 (6%)	-	-	12 (2%)	1 (1%)
Reflux	1 (1%)	2 (1%)	-	-	1 (8%)	-	-	-	4 (1%)	2 (2%)
Uncertain	14 (13%)	14 (8%)	3 (23%)	11 (9%)	2 (17%)	3 (9%)	-	3 (5%)	50 (9%)	6 (6%)
Sub Total	104 (23%)	182 (24%)	13 (24%)	125 (23%)	12 (22%)	32 (20%)	17 (24%)	64 (27%)	549 (24%)	94 (20%)
No										
Analgesic	11 (3%)	21 (4%)	-	3 (1%)	-	1 (1%)	-	1 (<1%)	37 (2%)	3 (1%)
Diabetes-I insulin	5 (1%)	12 (2%)	1 (2%)	18 (4%)	2 (5%)	8 (6%)	-	9 (5%)	55 (3%)	9 (3%)
Diabetes-II Insulin Req	49 (14%)	107 (19%)	4 (10%)	75 (18%)	6 (14%)	21 (16%)	5 (9%)	38 (21%)	305 (17%)	82 (22%)
Diabetes-II Non-insulin	42 (12%)	49 (9%)	6 (14%)	42 (10%)	-	12 (9%)	20 (38%)	19 (11%)	190 (11%)	63 (17%)
Glomerulonephritis	71 (21%)	143 (25%)	9 (22%)	98 (24%)	9 (21%)	42 (32%)	10 (19%)	58 (33%)	440 (25%)	95 (26%)
Hypertension	72 (21%)	88 (16%)	11 (26%)	56 (14%)	10 (24%)	11 (8%)	13 (25%)	25 (14%)	286 (16%)	40 (11%)
Miscellaneous	44 (13%)	51 (9%)	3 (7%)	39 (10%)	1 (2%)	11 (8%)	-	8 (5%)	157 (9%)	30 (8%)
Polycystic	19 (5%)	38 (7%)	2 (5%)	45 (11%)	3 (7%)	10 (8%)	1 (2%)	10 (6%)	128 (7%)	27 (7%)
Reflux	9 (3%)	17 (3%)	1 (2%)	18 (4%)	4 (10%)	8 (6%)	-	6 (3%)	63 (4%)	8 (2%)
Uncertain	24 (7%)	35 (6%)	5 (12%)	15 (4%)	7 (17%)	8 (6%)	4 (7%)	3 (2%)	101 (6%)	10 (3%)
Sub Total	346 (77%)	561 (76%)	42 (76%)	409 (77%)	42 (78%)	132 (80%)	53 (76%)	177 (73%)	1762 (76%)	367 (80%)
Total (100%)	450	743	55	534	54	164	70	241	2311	461

Figure 2.9							
Late Referral - All Modes of Treatment Including Pre-emptive Transplants 1-Jan-2003 to 31-Dec-2007							
Country	Age Groups						Total
	0-19	20-44	45-64	65-74	75-84	>=85	
Australia							
Yes	55 (25%)	505 (28%)	924 (23%)	654 (24%)	524 (25%)	65 (34%)	2727 (25%)
No	168 (75%)	1312 (72%)	3047 (77%)	2047 (76%)	1537 (75%)	129(66%)	8240 (75%)
Total (100%)	223	1817	3971	2701	2061	194	10,967
New Zealand							
Yes	28 (41%)	105 (26%)	221 (20%)	110 (20%)	56 (25%)	3 (14%)	523 (22%)
No	40 (59%)	299 (74%)	867 (80%)	430 (80%)	167 (75%)	19 (86%)	1822 (78%)
Total (100%)	68	404	1088	540	223	22	2345

Figure 2.10						
Late Referral - All Modes of Treatment Including Pre-emptive Transplants 2003 to 2007						
Country	Years					
	2003	2004	2005	2006	2007	
Australia						
Yes	518 (26%)	543 (28%)	556 (24%)	561 (23%)	549 (24%)	
No	1463 (74%)	1406 (72%)	1737 (76%)	1872 (77%)	1762 (76%)	
Total (100%)	1981	1949	2293	2433	2311	
New Zealand						
Yes	123 (27%)	96 (21%)	100 (22%)	110 (22%)	94 (20%)	
No	339 (73%)	364 (79%)	362 (78%)	390 (78%)	367 (80%)	
Total (100%)	462	460	462	500	461	

Figure 2.11						
Late Referral - All Modes of Treatment Including Pre-emptive Transplants By Race 2003 to 2007						
Country	Race					
	Asian	Aboriginal/ TSI	Caucasoid	Maori	Pacific People	Other
Australia						
Yes	226 (27%)	346 (34%)	2033 (23%)	21 (33%)	67 (37%)	34 (29%)
No	614 (73%)	674 (66%)	6711 (77%)	42 (67%)	114 (63%)	85 (71%)
Total (100%)	840	1020	8744	63	181	119
New Zealand						
Yes	21 (15%)	-	206 (19%)	203 (27%)	92 (25%)	1 (17%)
No	118 (85%)	-	879 (81%)	539 (73%)	281 (75%)	5 (83%)
Total (100%)	139	-	1085	742	373	6



CO-MORBID CONDITIONS

Co-morbid conditions at entry to RRT are shown in Figures 2.12 - 2.18. The proportion of people with Type II diabetes as a primary renal disease continues to be more common in New Zealand.

(See Appendix II and III for further analyses of co-morbid conditions)

Figure 2.12

Co-morbid Conditions at Entry to Program 2007
Number of Patients (% Patients)

Country		Chronic Lung Disease	Coronary Artery Disease	Peripheral Vascular Disease	Cerebro-Vascular Disease	Smoking	Diabetes (Including Diabetic Nephropathy)
Australia n=2311	Yes	280 (12%)	766 (33%)	399 (17%)	265 (11%)	Current 283 (12%)	Type I 77 (3%)
	Suspected	96 (4%)	141 (6%)	185 (8%)	84 (4%)	Former 947 (41%)	II Ins Req 443 (19%)
	No	1935 (84%)	1404 (61%)	1727 (75%)	1962 (85%)	Never 1081 (47%)	II Non Ins 454 (20%) No 1337 (58%)
New Zealand n=461	Yes	48 (10%)	111 (24%)	71 (15%)	59 (13%)	Current 78 (17%)	Type I 10 (2%)
	Suspected	26 (6%)	47 (10%)	30 (7%)	7 (1%)	Former 167 (36%)	II Ins Req 106 (23%)
	No	387 (84%)	303 (66%)	360 (78%)	395 (86%)	Never 216 (47%)	II Non Ins 100 (22%) No 245 (53%)

Figure 2.13

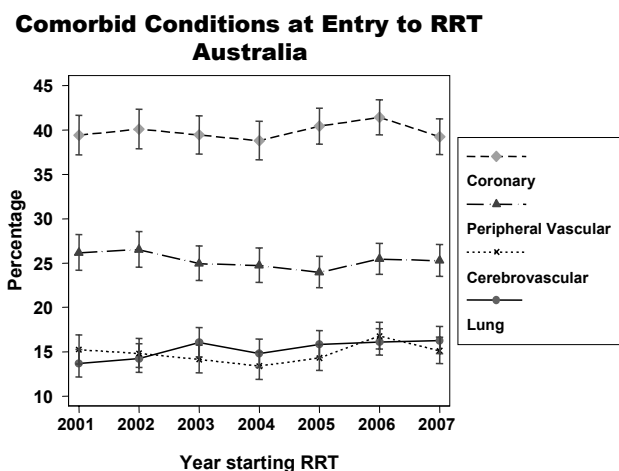


Figure 2.14

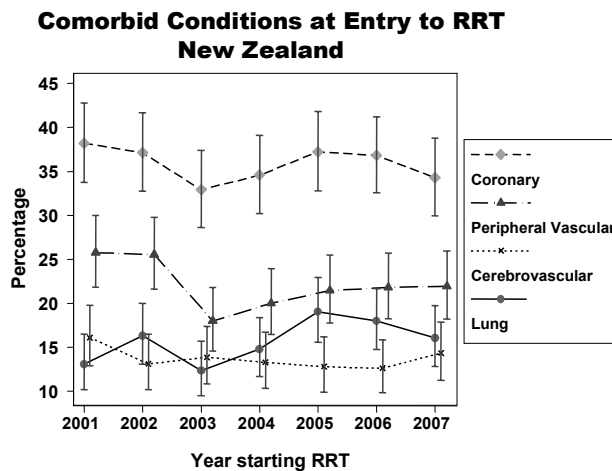


Figure 2.15

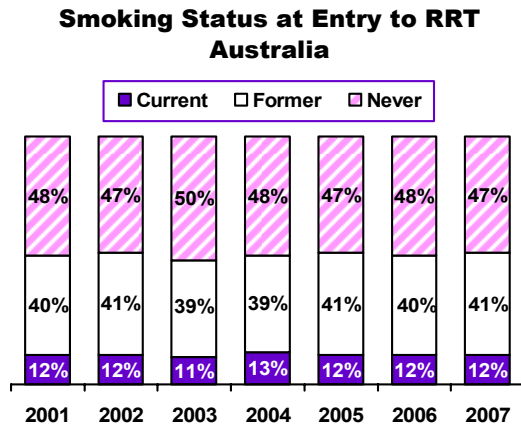


Figure 2.16

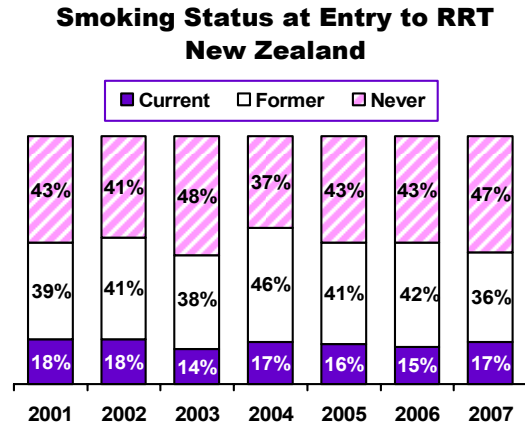


Figure 2.17

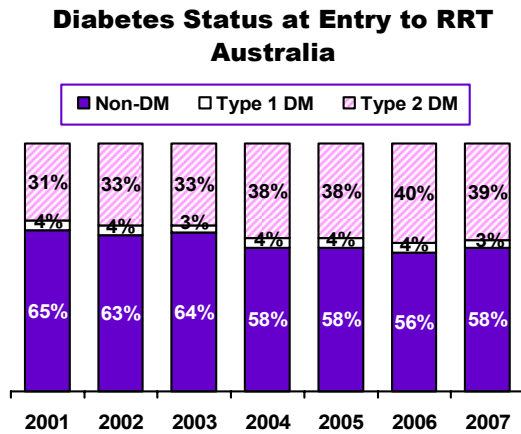
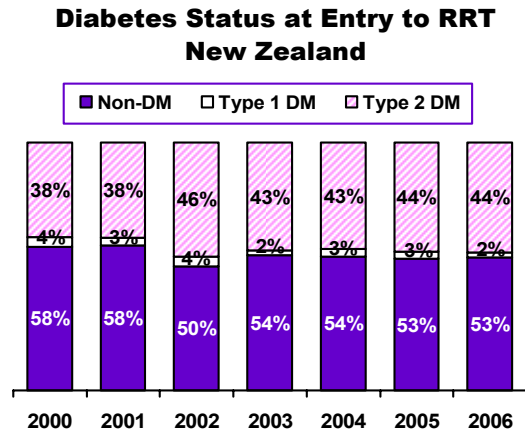


Figure 2.18





PRIMARY RENAL DISEASE OF NEW PATIENTS

AUSTRALIA

Diabetic nephropathy (31% of all new patients), continues for the fourth year in succession as the most common cause of primary renal disease (Figure 2.19).

Diabetes Type II (non-insulin and insulin requiring) represented 90% of diabetic nephropathy.

Glomerulonephritis (25%) was the next most common cause of ESRD, followed by hypertension (16%), polycystic kidney disease (6%), reflux nephropathy (3%) and analgesic nephropathy (2%). The number of **analgesic nephropathy** patients fell from 54 to 42 patients in 2007.

IgA mesangioproliferative GN (25% of all GN) was the most common histologically proven form of glomerulonephritis (33% of biopsy proven glomerulonephritis), followed by **focal sclerosing GN, including primary and secondary focal sclerosing** (15%) (Figure 2.20).

Amongst the **miscellaneous diseases** causing end stage renal failure, there were 44 cases of multiple myeloma, 30 interstitial nephritis, 18 amyloid, twelve lithium toxicity, nine cortical necrosis, eight haemolytic uraemic syndrome and six due to cyclosporin nephrotoxicity (Figure 2.21).

A **renal biopsy** based diagnosis was reported in 33% of cases: glomerulonephritis 74%, hypertension 22%, diabetes (types I and II) 15%, reflux 13%, polycystic kidney disease 10% and analgesic nephropathy 5% (Figure 2.22).

NEW ZEALAND

Diabetic nephropathy (41%) was the most common cause of ESRD followed by glomerulonephritis (25%) and hypertension (11%).

Diabetes Type II (non-insulin and insulin requiring) represented 95% of diabetic nephropathy.

Focal sclerosing GN, including primary and secondary focal sclerosing (22%) and **IgA mesangioproliferative GN** (20%) represented 53% of biopsy proven glomerulonephritis (Figure 2.20).

Biopsy rates (31%) were lower than those in Australia (33%) in 2007, although rates in both countries are rising.

Figure 2.19

Causes of ESRD 2004 - 2007				
Number of Patients (% Patients)				
Disease	2004	2005	2006	2007
Australia				
Glomerulonephritis	493 (25%)	541 (24%)	548 (23%)	574 (25%)
Analgesic Nephropathy	47 (2%)	69 (3%)	54 (2%)	42 (2%)
Polycystic Kidney	130 (7%)	174 (7%)	153 (6%)	140 (6%)
Reflux Nephropathy	57 (3%)	65 (3%)	93 (4%)	67 (3%)
Hypertension	258 (13%)	331 (14%)	361 (15%)	369 (16%)
Diabetic Nephropathy	590 (30%)	723 (32%)	792 (33%)	713 (31%)
Miscellaneous	247 (13%)	255 (11%)	300 (12%)	255 (11%)
Uncertain Diagnosis	127 (7%)	135 (6%)	132 (5%)	151 (6%)
Total	1949 (100%)	2293 (100%)	2433 (100%)	2311 (100%)
New Zealand				
Glomerulonephritis	107 (23%)	102 (22%)	106 (21%)	114 (25%)
Analgesic Nephropathy	2 (<1%)	1 (<1%)	1 (<1%)	3 (1%)
Polycystic Kidney	25 (5%)	33 (7%)	36 (7%)	28 (6%)
Reflux Nephropathy	12 (3%)	11 (2%)	14 (3%)	10 (2%)
Hypertension	72 (16%)	51 (11%)	60 (12%)	49 (11%)
Diabetic Nephropathy	187 (41%)	194 (42%)	211 (42%)	189 (41%)
Miscellaneous	30 (7%)	48 (11%)	38 (8%)	52 (11%)
Uncertain Diagnosis	25 (5%)	22 (5%)	34 (7%)	16 (3%)
Total	460 (100%)	462 (100%)	500 (100%)	461 (100%)

Figure 2.20

Types of Glomerulonephritis		
1-Jan-2007 to 31-Dec-2007		
Number (% of all GN)		
	Australia	New Zealand
Presumed GN - No Biopsy performed	120 (21%)	22 (19%)
Focal Sclerosing	46 (8%)	10 (9%)
Primary Focal Sclerosing	31 (5%)	13 (11%)
Secondary Focal Sclerosing	7 (1%)	2 (2%)
MCGN - Type I	11 (2%)	6 (5%)
MCGN - Type II	3 (<1%)	-
Membranous GN	37 (6%)	6 (5%)
Rapidly Progressive GN	10 (2%)	2 (2%)
Mesangioproliferative IgA +	144 (25%)	23 (20%)
Mesangioproliferative IgA -	9 (2%)	1 (1%)
Mesangioproliferative No I.F. Studies	4 (<1%)	-
Focal & Segmental Proliferative GN	25 (4%)	2 (2%)
Advanced GN (end-stage type)	16 (3%)	4 (3%)
Goodpasture's Syndrome	11 (2%)	3 (3%)
Systemic Lupus	30 (5%)	10 (9%)
Henoch-Schonlein Purpura	2 (<1%)	1 (1%)
Wegener's Granulomatosis	15 (3%)	3 (3%)
Microscopic Polyarteritis	15 (3%)	2 (2%)
Scleroderma	5 (<1%)	1 (1%)
GN Other	14 (2%)	1 (1%)
Familial GN (including Alports)	15 (3%)	1 (1%)
Anti GBM (no haemoptysis)	3 (<1%)	1 (1%)
GN (with systemic disease)	1 (<1%)	-
Total	574	114

Figure 2.21

Miscellaneous Causes of ESRD 1-Jan-2007 to 31-Dec-2007					
Renal Disease	Aust (255)	NZ (52)	Renal Disease	Aust (255)	NZ (52)
Interstitial Nephritis	30	6	Obstructive Nephropathy	21	4
Lithium Toxicity	12	1	Ureteric Obstructive Nephropathy	10	-
Cyclosporin Nephrotoxicity	6	1	Bladder Neck Obstruction	5	1
Calcineurin Toxicity	2	1	Spina Bifida or Myelomeningocele	3	1
Lead Nephropathy	2	-	Pelvi-Ureteric Junction Obstruction	2	-
Retroperitoneal Fibrosis	2	-	Posterior Urethral Valves	2	-
Severe Congestive Cardiac Failure	2	-	Lower Urinary Tract Abnormalities	1	-
Alagille Syndrome	1	-	Enterovesical Fistula-Radiotherapy (1)		
Anti Phospholipid Syndrome	1	-	Megaureter	1	-
Contrast Induced Nephropathy	1	-	Neuropathic Bladder	1	-
Denys Drasch Syndrome	1	1	(R) Atrophied - (L) Obstructed	-	1
Hepatorenal Syndrome	1	1			
Hypercalcaemia	1	-	Amyloid	18	2
Ischaemic Cardiomyopathy	1	-	Congenital Renal Hypoplasia and Dysplasia	17	3
Jouberts Syndrome	1	-	Congenital Nephrotic Syndrome	1	1
Nail Patella Syndrome	1	-			
Post Partum Nephropathy	-	1	Multiple Myeloma	44	13
Primary Biliary Cirrhosis	1	-	Renal Cell Carcinoma	6	1
Primary Hyperparathyroidism	-	1	Transitional Cell Carcinoma	6	1
Pyelonephritis	1	-	Chemotherapy	3	-
Renal Agenesis	1	-	Bilateral Wilms Tumour	1	-
Renal Tuberculosis	1	-	Cisplatin Induced Nephrotoxicity	1	-
Sarcoidosis	1	-	(L) Renal Cell - (R) Renal Artery Stenosis	1	-
Secondary Chronic NSAID Use	1	-	(L) TCC - (R) Small Shrunken Kidney	1	-
Small Kidneys	1	1	Severe ATN from Ifosphamide	1	-
Tacrolimus Toxicity	1	1			
Thrombotic Purpura	1	-	Cortical Necrosis	9	2
Calculi	10	3	Haemolytic Uraemic Syndrome	8	2
Gout	3	2			
Medullary Cystic	3	-			
Medullary Sponge Kidneys	2	-			

Renal biopsy rates vary widely with different types of disease (Figure 2.23), but have been falling in Australia for several years. However, this in part reflects the changing patterns of primary renal disease. Among patients with glomerulonephritis as a primary renal disease, there has been little change (Figure 2.24). Biopsy rates in New Zealand are lower, particularly for diabetic nephropathy (Figure 2.25).

Figure 2.22

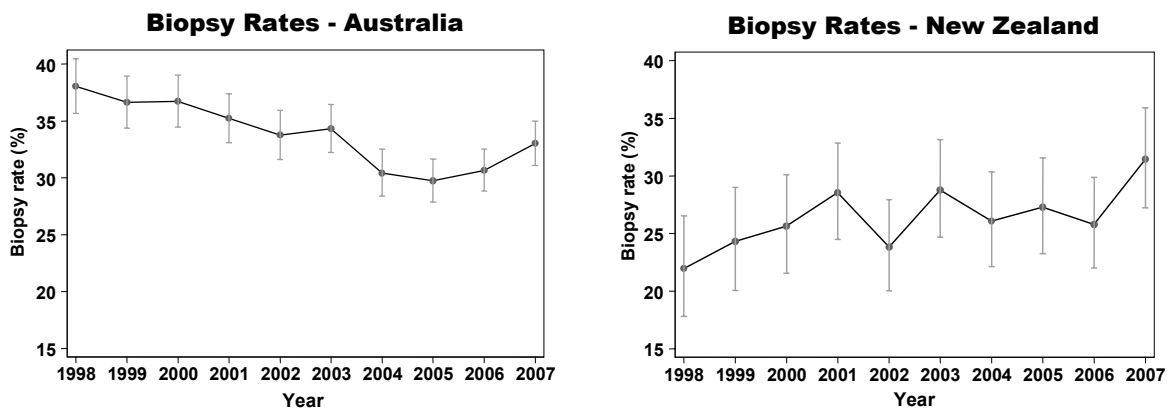




Figure 2.23

Biopsy of New Patients 2007											
Biopsy	Primary Renal Disease	Qld	NSW	ACT	Vic	Tas	SA	NT	WA	Aust	NZ
Yes	Analgesic	-	2	-	-	-	-	-	-	2	-
	Diabetes-I Insulin Dependent	2	1	1	8	1	4	-	1	18	1
	Diabetes-II Insulin Requiring	8	24	2	14	-	7	1	2	58	9
	Diabetes-II Non-Insulin	6	10	1	14	-	1	1	1	34	6
	Glomerulonephritis	76	138	9	115	12	41	5	47	443	91
	Hypertension	23	29	2	17	5	3	1	-	80	12
	Miscellaneous	28	33	4	17	1	4	-	5	92	19
	Polycystic	1	4	-	7	-	1	1	-	14	1
	Reflux	1	1	-	5	2	-	-	-	9	-
	Uncertain	4	5	-	1	2	-	1	-	13	6
	Sub Total	149	247	19	198	23	61	10	56	763	145
No	Analgesic	14	21	-	3	-	1	-	1	40	3
	Diabetes-I Insulin Dependent	7	14	-	14	1	6	-	9	51	9
	Diabetes-II Insulin Requiring	55	102	5	72	7	19	8	43	311	91
	Diabetes-II Non-insulin	47	64	5	48	-	14	24	39	241	73
	Glomerulonephritis	13	51	2	24	-	9	9	23	131	23
	Hypertension	62	90	12	53	7	14	15	36	289	37
	Miscellaneous	37	55	1	44	3	10	1	12	163	33
	Polycystic	23	37	2	40	3	11	-	10	126	27
	Reflux	9	18	1	13	3	8	-	6	58	10
	Uncertain	34	44	8	25	7	11	3	6	138	10
	Sub Total	301	496	36	336	31	103	60	185	1548	316
	Total	450	743	55	534	54	164	70	241	2311	461

Sixteen per cent of all patients with diabetic nephropathy in Australia (905/5762) and 7% (136/1920) in New Zealand, have had a biopsy proven diagnosis since this data was first collected by the Registry from 1st April, 1997

Figure 2.24

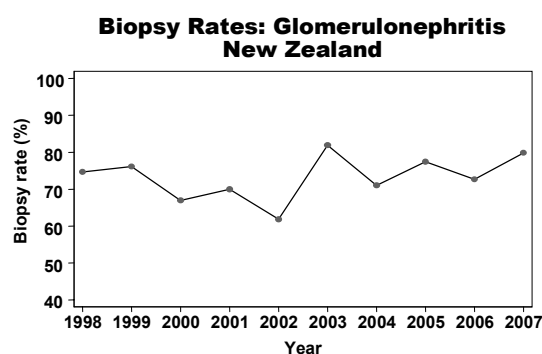
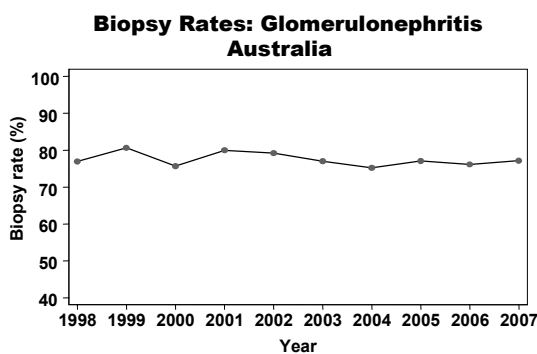


Figure 2.25

