

CHAPTER 2

NEW PATIENTS

COMMENCING TREATMENT IN 2005

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Figure 2.1

| Annual Intake of New Patients 2001 - 2005 (Number Per Million Population) | | | | | |
|--|------------------|------------------|-------------------|------------------|-------------------|
| | 2001 | 2002 | 2003 | 2004 | 2005 |
| Queensland | 338 (93) | 379 (102) | 420 (111) | 401 (103) | 455 (115) |
| New South Wales | 603 (95) | 583 (91) | 631 (97) | 560 (86) | 675 (103) |
| Aust. Capital Territory | 34 (66) | 49 (95) | 39 (75) | 44 (84) | 46 (87) |
| Victoria | 495 (103) | 470 (97) | 445 (90) | 462 (93) | 509 (101) |
| Tasmania | 37 (78) | 36 (76) | 41 (86) | 31 (64) | 37 (76) |
| South Australia | 153 (101) | 120 (79) | 152 (100) | 157 (102) | 173 (112) |
| Northern Territory | 65 (329) | 59 (297) | 55 (277) | 79 (395) | 79 (390) |
| Western Australia | 189 (99) | 204 (106) | 205 (105) | 216 (109) | 236 (117) |
| Australia | 1914 (99) | 1900 (97) | 1988 (100) | 1950 (97) | 2210 (109) |
| New Zealand | 466 (120) | 467 (119) | 462 (115) | 458 (113) | 436 (106) |

INTAKE OF NEW PATIENTS

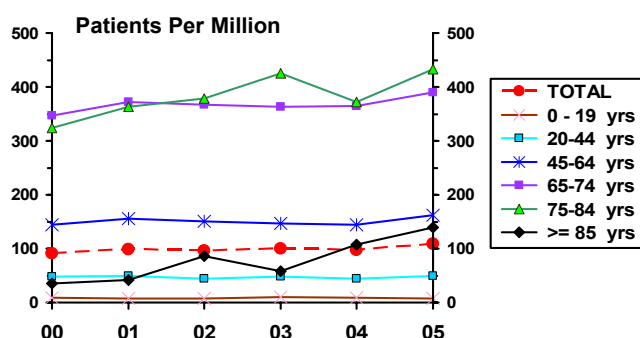
There were 2210 new patients who commenced treatment for end-stage renal failure in Australia in 2005, a rate of 109 per million population per year.

This was an increase of 13% from 2004, after a 2% decrease from 2003. The number for 2005 was the highest ever recorded.

In New Zealand, the number of new patients entering renal failure programs was 436, a rate of 106 per million of population. This was a decrease of 5% from 2004.

Figure 2.2

**Acceptance of New Patients 2000 - 2005
Age Specific Rates - Australia**



AGE OF NEW PATIENTS

In Australia in 2005, all age groups showed an increase in acceptance of new patients except the 0-19 year group, which decreased from 9 to 7 per million (50 to 39 patients).

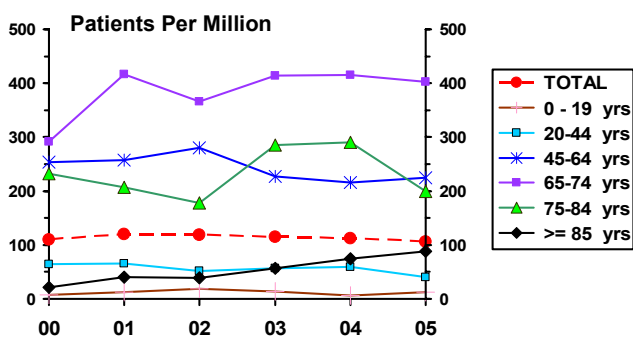
The largest increases were in the group 75-84 years, which rose from 372 to 433 per million (348 to 413 patients) and the ≥ 85 year group, 107 to 140 per million (32 to 44 patients) (Figure 2.2).

The mean age of patients entering programs in Australia in 2005 was 60.3 years and the median 62.5 years (Figure 2.5).

In New Zealand, the mean age of patients entering was 57.6 years and the median 59.6 years (Figure 2.5).

Figure 2.3

**Acceptance of New Patients 2000 - 2005
Age Specific Rates - New Zealand**



The age specific rates of acceptance increased in three groups, 0-19 years from 7 to 13 per million, 45-64 years from 216 to 225 per million and ≥ 85 year group from 74 to 88 per million.

The decreases were in the 20-44 year age group (from 59 to 40 per million), the 65-74 year age group (from 416 to 403 per million) but the largest decrease was in the 75-84 year age group (290 to 199 per million) shown in Figure 2.3.

Within the older age groups in Australia, all groups except the 65-69 year group increased (Figure 2.4). The largest increases were in the 80-84 year group (389 from 264 patients per million) followed by the 70-74 year group (475 from 390 patients per million) in 2004.

In New Zealand there were decreases in the 70-74, 75-79 and 80-84 year age groups.

Rates of new patients aged ≥ 85 years increased from 107 per million in 2004 to 133 per million in 2005 in Australia and from 74 to 88 per million in New Zealand.

| Figure 2.4 | | | | | | |
|--|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Acceptance of Elderly New Patients 2001 -2005 | | | | | | |
| (Number Per Million Population) | | | | | | |
| Country | Age Groups | 2001 | 2002 | 2003 | 2004 | 2005 |
| Australia | 60-64 years | 208 (253) | 193 (228) | 192 (221) | 189 (209) | 226 (239) |
| | 65-69 years | 240 (352) | 214 (306) | 232 (322) | 256(344) | 247 (320) |
| | 70-74 years | 252 (395) | 277 (435) | 258 (410) | 244 (390) | 298 (475) |
| | 75-79 years | 221 (426) | 235 (445) | 268 (498) | 246 (448) | 257 (465) |
| | 80-84 years | 88 (267) | 97 (278) | 117 (318) | 102 (264) | 156 (389) |
| | >=85 years | 11 (41) | 24 (87) | 17 (59) | 32 (107) | 42 (133) |
| | Total | 1020 (313) | 1040 (312) | 1084 (317) | 1069 (305) | 1226 (339) |
| New Zealand | 60-64 years | 67 (416) | 79 (469) | 63 (368) | 65 (368) | 66 (366) |
| | 65-69 years | 55 (420) | 51 (384) | 52 (384) | 58 (416) | 61 (419) |
| | 70-74 years | 49 (406) | 42 (347) | 54 (447) | 50 (415) | 46 (383) |
| | 75-79 years | 24 (249) | 21 (215) | 38 (380) | 38 (375) | 26 (254) |
| | 80-84 years | 9 (137) | 8 (123) | 10 (146) | 12 (169) | 9 (123) |
| | >=85 years | 2 (40) | 2 (39) | 3 (57) | 4 (74) | 5 (88) |
| | Total | 206 (330) | 203 (319) | 220 (340) | 227 (343) | 213 (314) |

STATE OF ORIGIN OF NEW PATIENTS

There was an overall increase in the number of new renal replacement therapy patients in Australia in 2005 in all States except the Northern Territory, which remained the same as the previous year (Figure 2.6).

The highest acceptance rates were in the Northern Territory (390 per million) and Western Australia (117 per million) and the lowest in the ACT (87 per million) and Tasmania (76 per million) (Figure 2.1).

| Figure 2.5 | | | | | | | | | | | | | | | | | | | | |
|---|--------------------|------------|--------------------|------------|-------------------|-----------|--------------------|------------|-------------------|-----------|-------------------|-----------|------------------|-----------|-------------------|------------|----------------------|-------------|-------------------|-------------|
| Age and Gender of New Patients 1-Jan-2005 to 31-Dec-2005 | | | | | | | | | | | | | | | | | | | | |
| (n = Number of Patients) | | | | | | | | | | | | | | | | | | | | |
| Age Groups | Qld (n=455) | | NSW (n=675) | | ACT (n=46) | | Vic (n=509) | | Tas (n=37) | | SA (n=173) | | NT (n=79) | | WA (n=236) | | Aust (n=2210) | | NZ (n=436) | |
| | Years | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| 00-04 | - | 1 | - | 1 | - | - | - | - | - | - | - | - | - | - | - | 1 | - | 3 | - | - |
| 05-14 | 2 | 4 | 2 | 2 | - | - | 3 | 3 | - | - | - | 1 | - | - | - | 1 | 7 | 11 | 5 | 2 |
| 15-24 | 3 | 6 | 6 | 10 | 1 | 2 | 6 | 3 | 1 | - | 2 | - | - | - | - | 3 | 19 | 24 | 4 | 10 |
| 25-34 | 12 | 15 | 15 | 22 | 1 | 4 | 12 | 19 | - | 1 | 6 | 5 | 2 | 2 | 7 | 6 | 55 | 74 | 9 | 7 |
| 35-44 | 22 | 20 | 17 | 38 | 1 | 3 | 18 | 25 | 4 | - | 10 | 8 | 11 | 9 | 10 | 12 | 93 | 115 | 14 | 22 |
| 45-54 | 26 | 45 | 31 | 59 | 1 | 2 | 31 | 46 | 2 | 3 | 14 | 15 | 12 | 10 | 10 | 28 | 127 | 208 | 28 | 56 |
| 55-64 | 33 | 57 | 62 | 76 | 3 | 4 | 47 | 76 | 3 | 3 | 12 | 22 | 16 | 7 | 26 | 25 | 202 | 270 | 48 | 84 |
| 65-74 | 45 | 67 | 85 | 99 | 4 | 5 | 49 | 77 | 2 | 10 | 18 | 26 | 6 | 4 | 15 | 33 | 224 | 321 | 43 | 64 |
| 75-84 | 28 | 53 | 63 | 73 | 2 | 13 | 30 | 61 | 1 | 5 | 12 | 19 | - | - | 23 | 30 | 159 | 254 | 11 | 24 |
| >=85 | 7 | 9 | 7 | 7 | - | - | - | 3 | 1 | 1 | - | 3 | - | - | 4 | 2 | 19 | 25 | 2 | 3 |
| Total | 178 | 277 | 288 | 387 | 13 | 33 | 196 | 313 | 14 | 23 | 74 | 99 | 47 | 32 | 95 | 141 | 905 | 1305 | 164 | 272 |
| Mean (yrs) | 59.5 | 60.7 | 63.0 | 60.1 | 58.2 | 61.0 | 58.2 | 61.0 | 54.4 | 68.0 | 57.5 | 61.7 | 52.9 | 51.4 | 62.4 | 60.1 | 60.0 | 60.5 | 58.4 | 56.4 |
| All | 60.2 | | 61.4 | | 60.2 | | 59.9 | | 62.8 | | 59.9 | | 52.3 | | 61.0 | | 60.3 | | 57.6 | |
| Median (yrs) | 62.5 | | 64.7 | | 66.7 | | 62.0 | | 67.0 | | 61.1 | | 57.5 | | 62.3 | | 62.5 | | 59.6 | |
| Range | 2-90.2 | | 1.5-91.3 | | 20.8-82.0 | | 5.5-88.5 | | 21.8-86.8 | | 10.5-85.8 | | 29.4-73.3 | | 1.6-90.2 | | 1.5-91.3 | | 5.2-88.2 | |



Figure 2.6

Incidence rates (95% confidence intervals) for new RRT patients by State.
 Note different scales for each State.

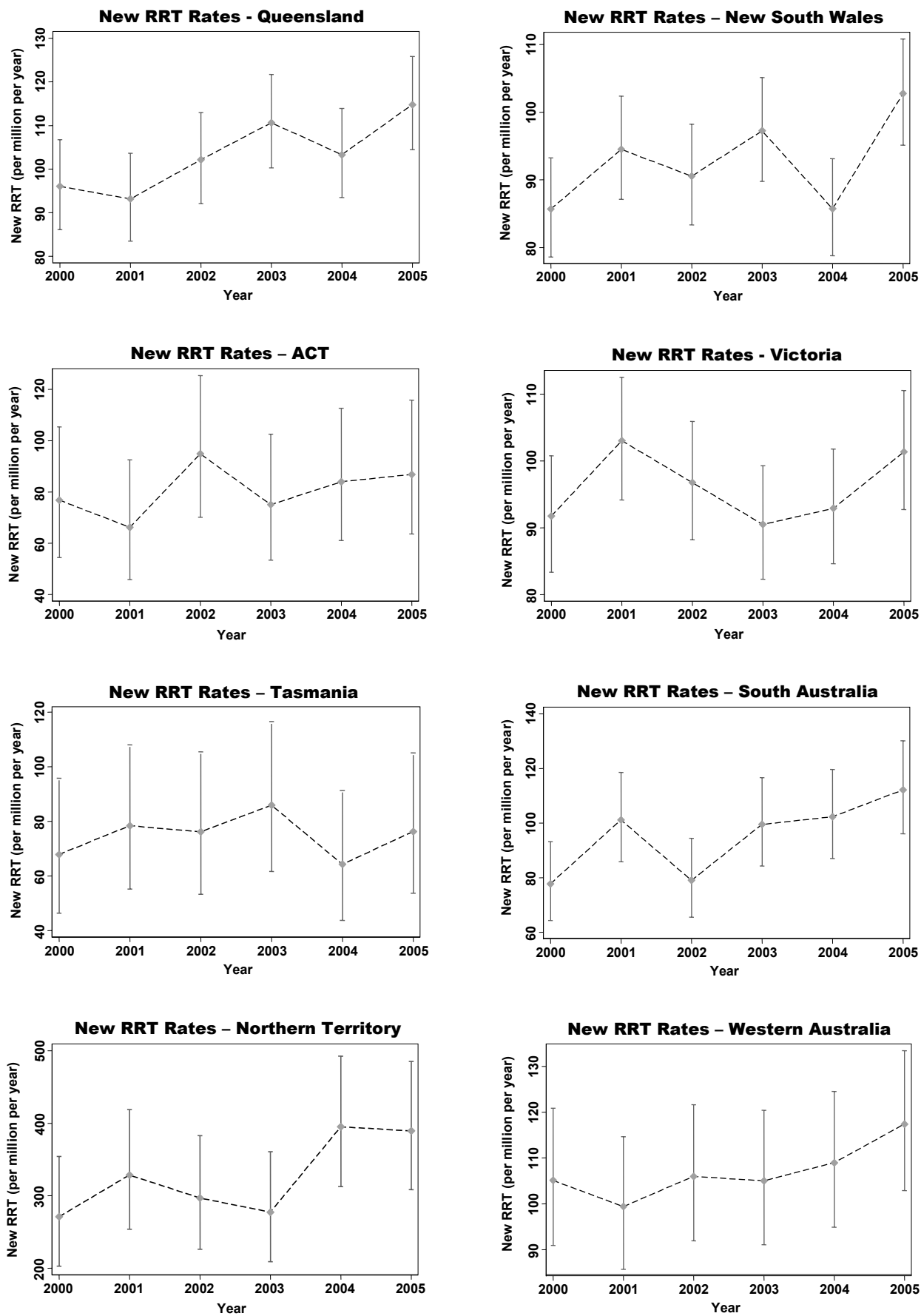
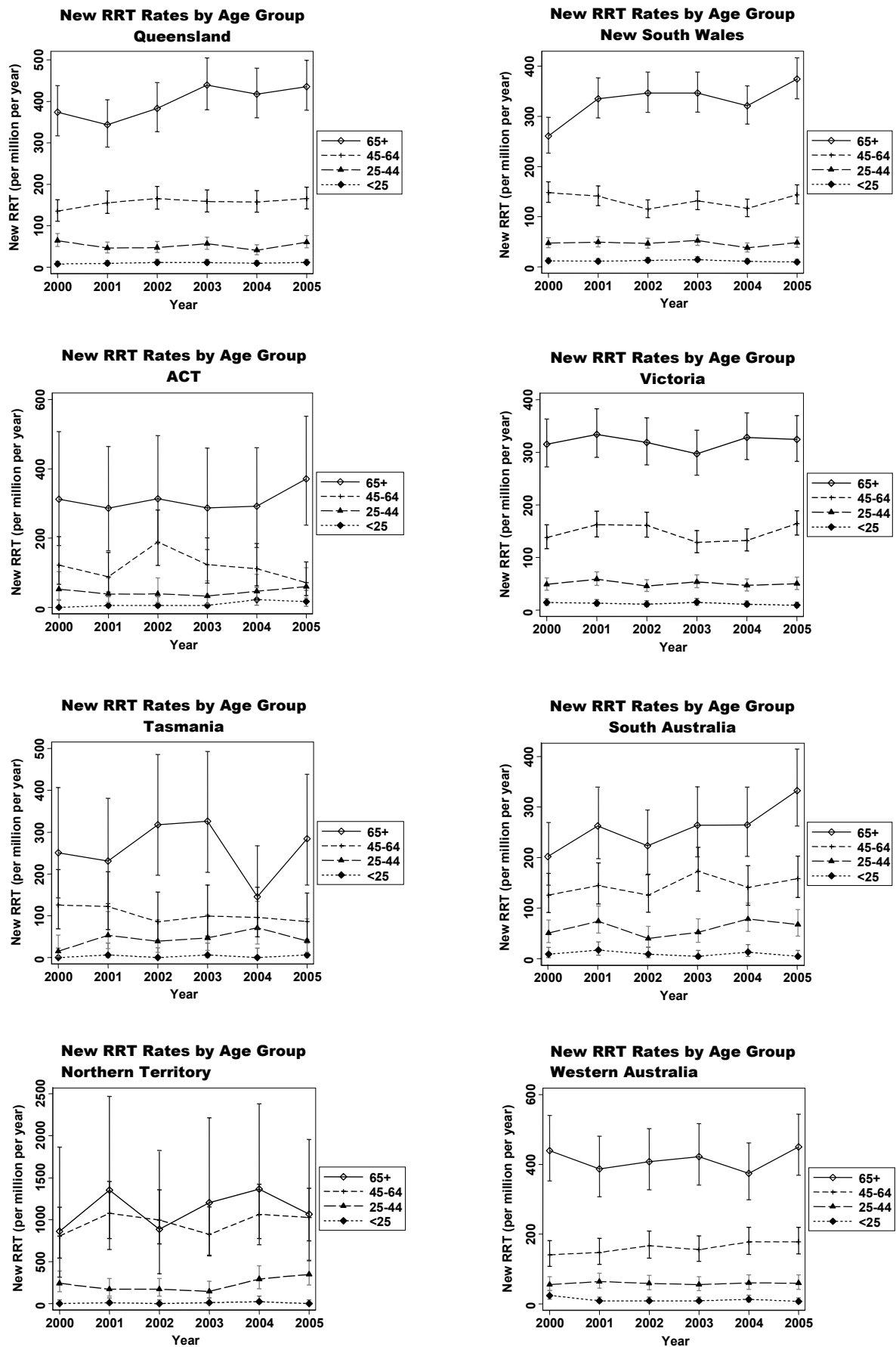


Figure 2.7

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





LATE REFERRAL

There were 25% (28% in 2004) of all new patients in Australia and 22% 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 8% in Tasmania ranging to 48% in the ACT. 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.

| Figure 2.8 | | | | | | | | | | |
|---|-------------------|-------------------|------------------|-------------------|------------------|-------------------|------------------|-------------------|--------------------|-------------------|
| Late Referral of New Patients 2005 | | | | | | | | | | |
| Number of Patients (% Patients) | | | | | | | | | | |
| Primary Renal Disease | Qld | NSW | ACT | Vic | Tas | SA | NT | WA | Aust | NZ |
| YES | | | | | | | | | | |
| Analgesic | 2 (2%) | 6 (4%) | - | - | - | - | - | - | 8 (1%) | - |
| Diabetes-I Insulin | 4 (3%) | 5 (4%) | - | 3 (3%) | - | 2 (4.5%) | - | 1 (1%) | 15 (2%) | 3 (3%) |
| Diabetes-II Insulin Req | 14 (12%) | 23 (14%) | 3 (20%) | 21 (18%) | - | 2 (4.5%) | 2 (7%) | 9 (14%) | 74 (14%) | 24 (25%) |
| Diabetes-II Non-Insulin | 16 (14%) | 11 (7%) | - | 12 (10%) | 1 (33%) | 2 (4.5%) | 13 (50%) | 10 (15%) | 65 (12%) | 14 (14%) |
| Glomerulonephritis | 23 (19%) | 34 (21%) | 2 (13%) | 34 (29%) | 1 (33%) | 17 (39%) | 5 (19%) | 13 (20%) | 129 (24%) | 18 (19%) |
| Hypertension | 17 (14%) | 24 (15%) | 3 (20%) | 15 (13%) | - | 3 (7%) | - | 13 (20%) | 75 (14%) | 13 (13%) |
| Miscellaneous | 17 (14%) | 31 (19%) | 1 (7%) | 21 (18%) | 1 (33%) | 8 (18%) | 3 (12%) | 16 (24%) | 98 (18%) | 18 (19%) |
| Polycystic | 5 (4%) | 9 (6%) | 2 (13%) | 1 (1%) | - | 2 (4.5%) | - | 2 (3%) | 21 (4%) | - |
| Reflux | 2 (2%) | 2 (1%) | 1 (7%) | 1 (1%) | - | 3 (7%) | - | - | 9 (1%) | - |
| Uncertain | 19 (16%) | 14 (9%) | 3 (20%) | 8 (7%) | - | 5 (11%) | 3 (12%) | 2 (3%) | 54 (10%) | 7 (7%) |
| Sub Total | 119 (26%) | 159 (24%) | 15 (48%) | 116 (23%) | 3 (8%) | 44 (25%) | 26 (33%) | 66 (28%) | 548 (25%) | 97 (22%) |
| No | | | | | | | | | | |
| Analgesic | 16 (5%) | 33 (6%) | 1 (3%) | 6 (2%) | - | 4 (3%) | - | 1 (1%) | 61 (4%) | 1 (1%) |
| Diabetes-I insulin | 9 (3%) | 23 (4%) | 1 (3%) | 17 (4%) | 2 (6%) | 4 (3%) | 1 (2%) | 3 (2%) | 60 (3%) | 11 (3%) |
| Diabetes-II Insulin Req | 46 (14%) | 76 (15%) | 6 (19%) | 64 (16%) | 5 (15%) | 19 (15%) | 2 (4%) | 22 (13%) | 240 (14%) | 68 (20%) |
| Diabetes-II Non-insulin | 52 (15%) | 54 (10%) | 3 (10%) | 55 (14%) | 4 (12%) | 11 (9%) | 34 (64%) | 30 (18%) | 243 (15%) | 57 (17%) |
| Glomerulonephritis | 81 (24%) | 114 (22%) | 5 (16%) | 105 (27%) | 9 (26%) | 29 (22%) | 7 (13%) | 45 (26%) | 395 (24%) | 80 (24%) |
| Hypertension | 43 (13%) | 86 (17%) | 6 (20%) | 43 (11%) | 2 (6%) | 20 (16%) | 2 (4%) | 38 (22%) | 240 (14%) | 35 (10%) |
| Miscellaneous | 36 (11%) | 40 (8%) | 4 (13%) | 32 (8%) | 3 (9%) | 15 (12%) | - | 15 (9%) | 145 (9%) | 30 (9%) |
| Polycystic | 21 (6%) | 52 (10%) | 4 (13%) | 39 (10%) | 2 (6%) | 16 (12%) | 1 (2%) | 11 (6%) | 146 (9%) | 32 (9%) |
| Reflux | 7 (2%) | 20 (4%) | 1 (3%) | 20 (5%) | 1 (3%) | 5 (4%) | - | 2 (1%) | 56 (3%) | 10 (3%) |
| Uncertain | 25 (7%) | 18 (4%) | - | 12 (3%) | 6 (18%) | 6 (4%) | 6 (11%) | 3 (2%) | 76 (5%) | 15 (4%) |
| Sub Total | 336 (74%) | 516 (76%) | 31 (67%) | 393 (77%) | 34 (92%) | 129 (75%) | 53 (67%) | 170 (72%) | 1662 (75%) | 339 (78%) |
| Total | 455 (100%) | 675 (100%) | 46 (100%) | 509 (100%) | 37 (100%) | 173 (100%) | 79 (100%) | 236 (100%) | 2210 (100%) | 436 (100%) |

| Figure 2.9 | | | | | | | |
|---|------------|-------------|-------------|-------------|-------------|------------|-------------------|
| Late Referral - All Modes of Treatment Including Pre-emptive Transplants 1-Jan-2001 to 31-Dec-2005 | | | | | | | |
| Country | Age Groups | | | | | | Total |
| | 0-19 | 20-44 | 45-64 | 65-74 | 75-84 | >=85 | |
| Australia | | | | | | | |
| Yes | 55 (24%) | 489 (29%) | 866 (24%) | 613 (24%) | 502 (28%) | 38 (30%) | 2563 (26%) |
| No | 172 (76%) | 1214 (71%) | 2733 (76%) | 1905 (76%) | 1285 (72%) | 90 (70%) | 7399 (74%) |
| Total (100%) | 227 | 1703 | 3599 | 2518 | 1787 | 128 | 9962 |
| New Zealand | | | | | | | |
| Yes | 30 (40%) | 101 (26%) | 243 (22%) | 126 (24%) | 56 (29%) | 3 (19%) | 559 (24%) |
| No | 45 (60%) | 291 (74%) | 850 (78%) | 392 (76%) | 139 (71%) | 13 (81%) | 1730 (76%) |
| Total (100%) | 75 | 392 | 1093 | 518 | 195 | 16 | 2289 |

| Figure 2.10 | | | | | | |
|--|-------------|-------------|-------------|-------------|-------------|--|
| Late Referral - All Modes of Treatment Including Pre-emptive Transplants 2001 to 2005 | | | | | | |
| Country | Years | | | | | |
| | 2001 | 2002 | 2003 | 2004 | 2005 | |
| Australia | | | | | | |
| Yes | 440 (23%) | 500 (26%) | 522 (26%) | 553 (28%) | 548 (25%) | |
| No | 1474 (77%) | 1400 (74%) | 1466 (74%) | 1397 (72%) | 1662 (75%) | |
| Total (100%) | 1914 | 1900 | 1988 | 1950 | 2210 | |
| New Zealand | | | | | | |
| Yes | 116 (25%) | 126 (27%) | 124 (27%) | 96 (21%) | 97 (22%) | |
| No | 350 (75%) | 341 (73%) | 338 (73%) | 362 (79%) | 339 (78%) | |
| Total (100%) | 466 | 467 | 462 | 458 | 436 | |

| Figure 2.11 | | | | | | | |
|--|------------|--------------------|-------------|------------|-------------------|----------|--|
| Late Referral - All Modes of Treatment Including Pre-emptive Transplants By Race 2001 to 2005 | | | | | | | |
| Country | Race | | | | | | |
| | Asian | Aboriginal/ TSI | Caucasoid | Maori | Pacific People | Other | |
| Australia | | | | | | | |
| Yes | 228 (31%) | 338 (37%) | 1888 (24%) | 21 (37%) | 65 (44%) | 4 (67%) | |
| No | 504 (69%) | 579 (63%) | 6131 (76%) | 36 (63%) | 84 (56%) | 2 (33%) | |
| Total (100%) | 732 | 917 | 8019 | 57 | 149 | 6 | |
| New Zealand | | | | | | | |
| Yes | 23 (17%) | - | 210 (19%) | 221 (31%) | 101 (30%) | 4 (67%) | |
| No | 115 (83%) | 1 (100%) | 881 (81%) | 493 (69%) | 238 (70%) | 2 (33%) | |
| Total (100%) | 138 | 1 | 1091 | 714 | 339 | 6 | |



CO-MORBID CONDITIONS

Co-morbid conditions at entry to RRT are shown in Figures 2.12 - 2.18. The incidence of Type II diabetes continues to be more common in New Zealand (37% of new patients), than in Australia (28% of new patients).

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

Figure 2.12

Co-morbid Conditions at Entry to Program 2005
Number of Patients (% Patients)

| Country | | Chronic Lung Disease | Coronary Artery Disease | Peripheral Vascular Disease | Cerebro-Vascular Disease | Smoking | Diabetes (Including Diabetic Nephropathy) |
|-----------------------------|-----------|----------------------|-------------------------|-----------------------------|--------------------------|-------------------|---|
| Australia n=2210 | Yes | 276 (12%) | 731 (33%) | 392 (18%) | 240 (11%) | Current 254 (11%) | Type I 86 (4%) |
| | Suspected | 731 (33%) | 156 (7%) | 134 (6%) | 60 (3%) | Former 902 (41%) | II-Ins Req 370 (17%) |
| | No | 1873 (85%) | 1323 (60%) | 1684 (76%) | 1910 (86%) | Never 1054 (48%) | II-Non Ins 464 (21%) No 1290 (58%) |
| New Zealand n=436 | Yes | 61 (14%) | 111 (25%) | 64 (15%) | 39 (9%) | Current 70 (16%) | Type I 14 (3%) |
| | Suspected | 24 (6%) | 51 (12%) | 25 (6%) | 12 (3%) | Former 178 (41%) | II-Ins Req 99 (23%) |
| | No | 351 (80%) | 274 (63%) | 347 (79%) | 385 (88%) | Never 188 (43%) | II-Non Ins 86 (20%) No 237 (54%) |

Figure 2.13

Comorbid Conditions at Entry to RRT
Australia

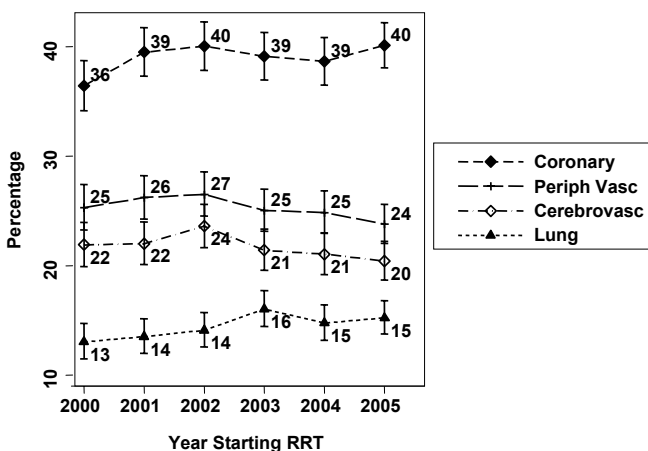


Figure 2.14

Comorbid Conditions at Entry to RRT
New Zealand

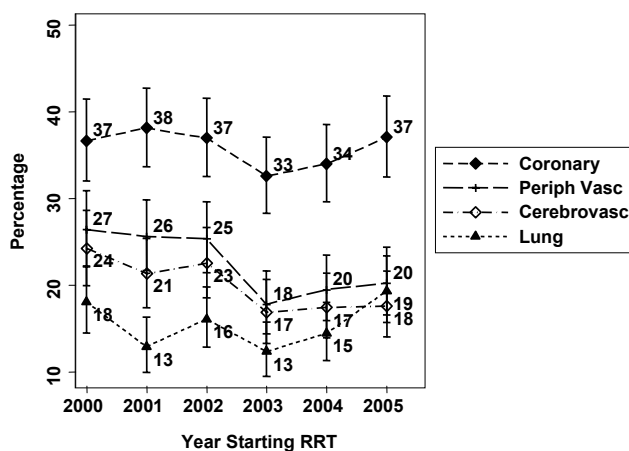


Figure 2.15

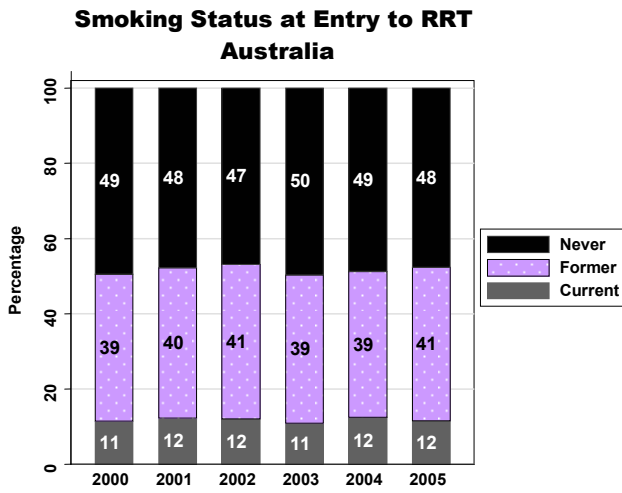


Figure 2.16

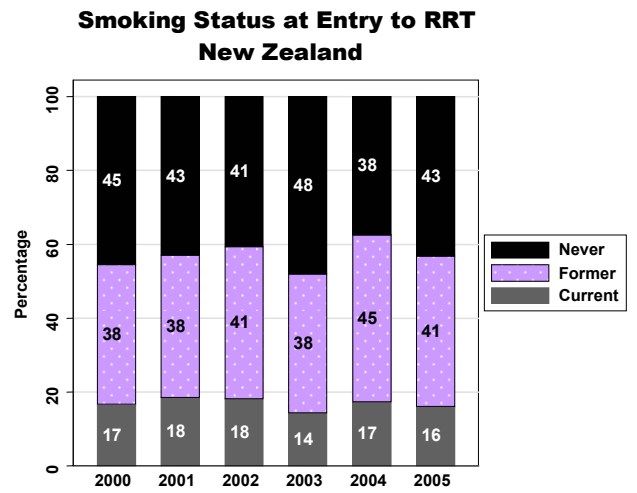


Figure 2.17

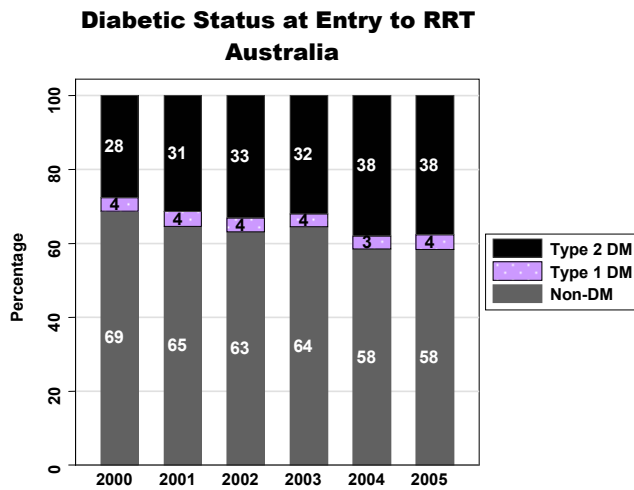
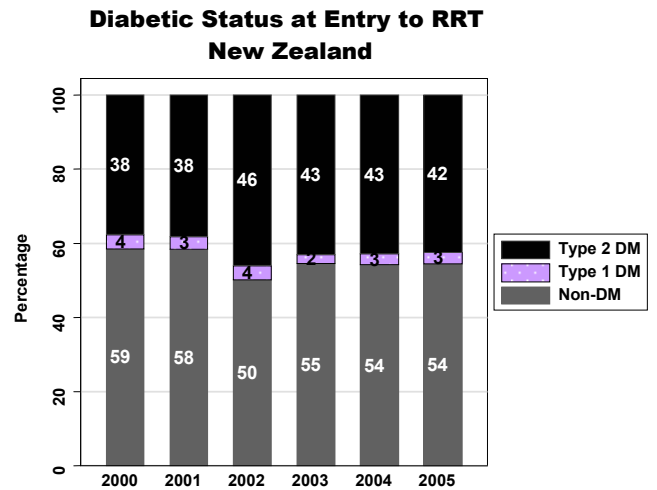


Figure 2.18





PRIMARY RENAL DISEASE OF NEW PATIENTS

AUSTRALIA

Diabetic nephropathy (32% of all new patients), continues for the second year in Succession as the most common cause of primary renal disease (Figure 2.19).

Glomerulonephritis (24%) was the next most common cause of ESRD, followed by hypertension (14%), polycystic kidney disease (7%), reflux nephropathy (3%) and analgesic nephropathy (3%). The number of **analgesic nephropathy** patients rose from 46 to 69 patients in 2005.

IgA mesangioproliferative GN (24% of all GN) was the most common histologically proven form of glomerulonephritis (31% of biopsy proven glomerulonephritis), followed by **focal sclerosing GN, including primary and secondary focal sclerosing** (16%) (Figure 2.20).

Amongst the **miscellaneous diseases** causing end stage renal failure, there were 15 cases of haemolytic uraemic syndrome, eleven cases attributed to lithium toxicity and ten to cyclosporin nephrotoxicity (Figure 2.21).

A **renal biopsy** based diagnosis was reported in 30% of cases: glomerulonephritis 77%, hypertension 16%, analgesic nephropathy 12%, diabetes (types I and II) 11%, reflux 9% and polycystic kidney disease 2% (Figure 2.22).

The biopsy rate in Australia continues to decline (Figure 2.23), although it remains steady for those with a primary diagnosis of glomerulonephritis.

NEW ZEALAND

Diabetic nephropathy (41%) was the most common cause of ESRD followed by glomerulonephritis (22%) and hypertension (11%).

Diabetes Type II (non-insulin and insulin requiring) represented 92% of diabetic nephropathy.

Focal sclerosing GN, including primary and secondary focal sclerosing (20%) and **IgA mesangioproliferative** (13%), represented 45% of biopsy proven glomerulonephritis (Figure 2.20).

Biopsy rates (27%) were lower than those in Australia (30%) in 2005.

Figure 2.19

| Causes of ESRD 2002 - 2005 | | | | |
|---------------------------------|--------------------|--------------------|--------------------|--------------------|
| Number of Patients (% Patients) | | | | |
| Disease | 2002 | 2003 | 2004 | 2005 |
| Australia | | | | |
| Glomerulonephritis | 509 (27%) | 534 (27%) | 492 (25%) | 524 (24%) |
| Analgesic Nephropathy | 79 (4%) | 72 (4%) | 47 (2%) | 69 (3%) |
| Polycystic Kidney | 109 (6%) | 113 (5%) | 127 (7%) | 167 (7%) |
| Reflux Nephropathy | 73 (4%) | 74 (4%) | 55 (3%) | 65 (3%) |
| Hypertension | 302 (16%) | 304 (15%) | 260 (13%) | 315 (14%) |
| Diabetic Nephropathy | 507 (27%) | 512 (26%) | 586 (30%) | 697 (32%) |
| Miscellaneous | 208 (11%) | 238 (12%) | 251 (13%) | 243 (11%) |
| Uncertain Diagnosis | 113 (5%) | 141 (7%) | 130 (7%) | 130 (6%) |
| Total | 1900 (100%) | 1988 (100%) | 1950 (100%) | 2210 (100%) |
| New Zealand | | | | |
| Glomerulonephritis | 110 (24%) | 117 (25%) | 108 (24%) | 98 (22%) |
| Analgesic Nephropathy | 2 (<1%) | - | 2 (<1%) | 1 (<1%) |
| Polycystic Kidney | 20 (4%) | 22 (5%) | 24 (5%) | 32 (7%) |
| Reflux Nephropathy | 17 (3%) | 10 (2%) | 12 (3%) | 10 (2%) |
| Hypertension | 40 (9%) | 44 (10%) | 72 (16%) | 48 (11%) |
| Diabetic Nephropathy | 208 (45%) | 190 (41%) | 185 (40%) | 177 (41%) |
| Miscellaneous | 52 (11%) | 47 (10%) | 30 (7%) | 48 (11%) |
| Uncertain Diagnosis | 18 (4%) | 32 (7%) | 23 (5%) | 22 (5%) |
| Total | 467 (100%) | 462 (100%) | 458 (100%) | 436 (100%) |

Figure 2.20

| Types of Glomerulonephritis | | |
|------------------------------------|-------------------|------------------|
| 1-Jan-2005 to 31-Dec-2005 | | |
| Number (% of all GN) | | |
| | Australia | New Zealand |
| Presumed GN - No Biopsy performed | 112 (21%) | 19 (20%) |
| Focal Sclerosing | 63 (12%) | 9 (9%) |
| Primary Focal Sclerosing | 15 (3%) | 11 (11%) |
| Secondary Focal Sclerosing | 8 (1%) | - |
| MCGN - Type I | 16 (3%) | 6 (6%) |
| MCGN - Type II | 5 (1%) | - |
| Membranous GN | 27 (5%) | 7 (7%) |
| Rapidly Progressive GN | 11 (2%) | 1 (1%) |
| Mesangioproliferative IgA + | 125 (24%) | 13 (13%) |
| Mesangioproliferative IgA - | 10 (2%) | - |
| Mesangioproliferative No I.F. | 3 (<1%) | - |
| Focal & Segmental Proliferative GN | 24 (5%) | 6 (6%) |
| Advanced GN (end-stage type) | 14 (3%) | 8 (8%) |
| Goodpasture's Syndrome | 7 (1%) | - |
| Systemic Lupus | 21 (4%) | 6 (6%) |
| Henoch-Schonlein Purpura | 1 (<1%) | 1 (1%) |
| Wegener's Granulomatosis | 14 (3%) | 3 (3%) |
| Microscopic Polyarteritis | 14 (3%) | 1 (1%) |
| Scleroderma | 6 (1%) | 1 (1%) |
| GN Other | 10 (2%) | 2 (2%) |
| Familial GN (including Alports) | 12 (2%) | - |
| Anti GBM (no haemoptysis) | 2 (<1%) | 1 (1%) |
| GN (with systemic disease) | 4 (<1%) | 3 (3%) |
| Total | 524 (100%) | 98 (100%) |

Figure 2.21

| Miscellaneous Causes of ESRD 1-Jan-2005 to 31-Dec-2005 Number (% of all GN) | | | | | |
|---|---------------|------------|---|---------------|------------|
| Renal Disease | Aust (243) | NZ (48) | Renal Disease | Aust (243) | NZ (48) |
| Interstitial Nephritis | 21 | 4 | Calculi | 10 | 3 |
| Lithium Toxicity | 11 | 2 | Medullary Cystic | 4 | |
| Cyclosporin Nephrotoxicity | 10 | 1 | Cystinosis | 1 | - |
| Loss Single Kidney | 3 | - | Gout | - | 1 |
| Thrombotic Microangiopathy | 3 | - | | | |
| Balkan Nephropathy | 2 | - | Amyloid | 21 | 4 |
| Hepatorenal Syndrome | 2 | | Congenital Renal Hypoplasia and Dysplasia | 6 | 1 |
| Pyelonephritis | 2 | 1 | Congenital Nephrotic Syndrome | - | 1 |
| Sarcoidosis | 2 | - | Light Chain Nephropathy (Benign) | 1 | - |
| Bartter's Syndrome | 1 | - | | | |
| Calcineurin Toxicity | 1 | 2 | Multiple Myeloma | 39 | 6 |
| Contrast Nephropathy | 1 | - | Renal Cell Carcinoma | 17 | 5 |
| Gentamycin Toxicity | 1 | - | Transitional Cell Carcinoma | 5 | 1 |
| Lead Nephropathy | 1 | - | Acute Myeloid Leukaemia | 1 | - |
| Non Diabetic Nodular Glomerulosclerosis | 1 | - | Bilateral Oncocytoma | 1 | - |
| Oxalosis | 1 | 1 | Bone Marrow Transplant Nephropathy | 1 | - |
| Primary Hyperparathyroidism | 1 | - | Von Hippel-Lindau Syndrome | 1 | - |
| Renal Tuberculosis | - | 1 | Waldenstrom's Macroglobulinaemia | 1 | - |
| Senior-Loken Syndrome | 1 | - | Wilm's Tumour | 1 | 1 |
| Severe Cardiomyopathy | 1 | - | | | |
| Vater Syndrome | - | 1 | Haemolytic Uraemic Syndrome | 15 | 1 |
| | | | Cortical Necrosis | 12 | 4 |
| Obstructive Nephropathy | 11 | 1 | | | |
| Posterior Urethral Valves | 9 | 1 | | | |
| Ureteric Obstructive Nephropathy | 9 | 2 | | | |
| Bladder Neck Obstruction | 4 | - | | | |
| Neuropathic Bladder | 3 | 1 | | | |
| Pelvic Ureteric Junction Obstruction | 2 | - | | | |
| Lower Urinary Tract Abnormalities (R) Nephrectomy (L) Ileal Conduit (1) | - | 1 | | | |
| Megaureter | 1 | - | | | |
| Spina Bifida or Myelomeningocele | 1 | 1 | | | |



Figure 2.22

Biopsy of New Patients 2005

| Biopsy | Primary Renal Disease | Qld | NSW | ACT | Vic | Tas | SA | NT | WA | Aust | NZ |
|------------|-------------------------------|------------|------------|-----------|------------|-----------|------------|-----------|------------|-------------|------------|
| Yes | Analgesic | 2 | 4 | - | 2 | - | - | - | - | 8 | - |
| | Diabetes-I Insulin Dependent | 3 | 1 | - | 3 | 1 | 1 | - | 1 | 10 | - |
| | Diabetes-II Insulin Requiring | 4 | 12 | - | 11 | - | 3 | 1 | 1 | 32 | 9 |
| | Diabetes-II Non-Insulin | 5 | 11 | - | 12 | - | 2 | 4 | 3 | 37 | 10 |
| | Glomerulonephritis | 86 | 113 | 5 | 108 | 7 | 39 | 5 | 38 | 401 | 74 |
| | Hypertension | 10 | 19 | 1 | 12 | - | 3 | - | 4 | 49 | 4 |
| | Miscellaneous | 17 | 28 | 1 | 25 | 1 | 12 | - | 15 | 99 | 17 |
| | Polycystic | - | 3 | - | 1 | - | 1 | - | - | 5 | 1 |
| | Reflux | - | 1 | - | 4 | - | 1 | - | - | 6 | 1 |
| | Uncertain | 2 | - | 1 | - | - | 3 | 2 | - | 8 | 3 |
| | Sub Total | 129 | 192 | 8 | 178 | 9 | 65 | 12 | 62 | 655 | 119 |
| No | Analgesic | 16 | 35 | 1 | 4 | - | 4 | - | 1 | 61 | 1 |
| | Diabetes-I Insulin Dependent | 10 | 27 | 1 | 17 | 1 | 5 | 1 | 3 | 65 | 14 |
| | Diabetes-II Insulin Requiring | 56 | 87 | 9 | 74 | 5 | 18 | 3 | 30 | 282 | 83 |
| | Diabetes-II Non-insulin | 63 | 54 | 3 | 55 | 5 | 11 | 43 | 37 | 271 | 61 |
| | Glomerulonephritis | 18 | 35 | 2 | 31 | 3 | 7 | 7 | 20 | 123 | 24 |
| | Hypertension | 50 | 91 | 8 | 46 | 2 | 20 | 2 | 47 | 266 | 44 |
| | Miscellaneous | 36 | 43 | 4 | 28 | 3 | 11 | 3 | 16 | 144 | 31 |
| | Polycystic | 26 | 58 | 6 | 39 | 2 | 17 | 1 | 13 | 162 | 31 |
| | Reflux | 9 | 21 | 2 | 17 | 1 | 7 | - | 2 | 59 | 9 |
| | Uncertain | 42 | 32 | 2 | 20 | 6 | 8 | 7 | 5 | 122 | 19 |
| | Sub Total | 326 | 483 | 38 | 331 | 28 | 108 | 67 | 174 | 1555 | 317 |
| | Total | 455 | 675 | 46 | 509 | 37 | 173 | 79 | 236 | 2210 | 436 |

Sixteen per cent of all patients with diabetic nephropathy in Australia (675/4222) and 6% (94/1497) in New Zealand, have had a biopsy proven diagnosis since this data was first collected by the Registry from 1st April, 1997.

Figure 2.23

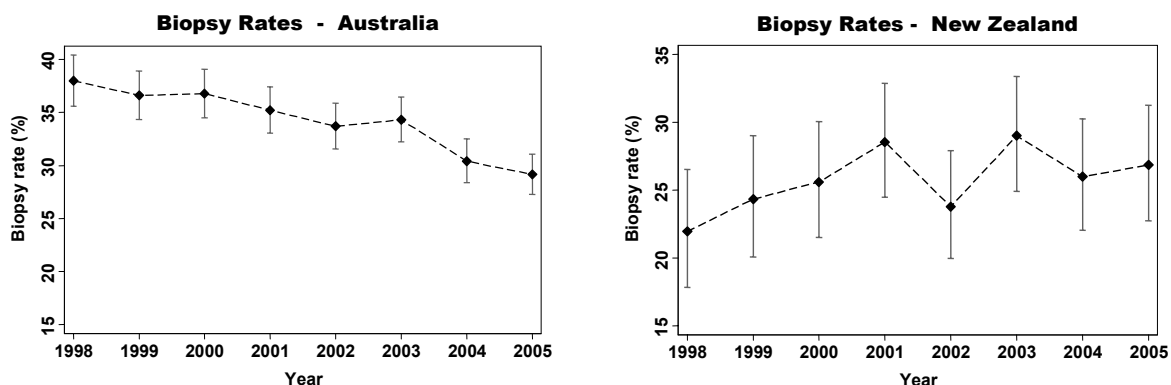


Figure 2.24

