CHAPTER 4

METHOD AND LOCATION OF DIALYSIS

Stephen McDonald



Figure 4.1

Method and Location of Dialysis 1998 - 2002 **Mode of Treatment** 1998 1999 2000 2001 2002 APD 389 501 607 217 264 1308 PD CAPD 1402 1413 1347 1163 Total 1619 1677 1736 1809 1770 Aust. Hospital 1528 1636 1733 1837 2032 Home 657 705 737 767 763 HD Satellite 1735 1998 2200 2429 2640 4339 4670 5033 5435 Total 3920 APD 52 133 36 81 112 PD CAPD 598 619 599 603 634 Total 634 671 680 715 767 N.Z. 295 Hospital 339 373 368 246 179 200 188 199 224 Home HD Satellite 88 183 227 49 129 Total 495 562 755 819 656

Figure 4.2

State Distribution of Dialysis Dependent Patients 1998 - 2002 (Number Per Million Population)										
State	1998		1999		2000		2001		2002	
Queensland New South Wales * Aust. Capital Territory * Victoria Tasmania South Australia Northern Territory Western Australia	876 1937 157 1439 102 324 161 543	 (254) (315) (320) (310) (216) (218) (848) (298) 	954 2071 159 1594 101 376 165 596	 (272) (332) (321) (340) (214) (251) (856) (322) 	1045 2155 162 1705 121 396 178 644	 (293) (342) (324) (360) (257) (263) (910) (344) 	1093 2321 159 1854 124 435 210 646	 (301) (363) (313) (386) (263) (288) (1061) (340) 	1187 2392 172 1934 143 456 232 689	(320) (371) (333) (397) (303) (300) (1172) (357)
Australia	5539	(296)	6016	(318)	6406	(334)	6842	(352)	7205	(366)
New Zealand	1129	(296)	1233	(321)	1336	(346)	1470	(379)	1586	(403)
 NSW population excludes residents of the Southern Area Health Service *ACT population includes residents of the Southern Area Health Service (Medical services in the ACT service the Southern Area Region) 										

AUSTRALIA

During the past year, there was an increase of 363 (5%) in the total number of prevalent dialysis patients. There were 7,205 patients (366 per million) receiving dialysis treatment at the end of the year to 31st December, 2002.

The distribution of these patients across the modalities continues to slowly change (fig 4.1, 4.3). The majority (71%) were out of hospital: 35% were dialysing at home and 37% in satellite centres.

Sixteen percent of all prevalent dialysis patients were using continuous ambulatory peritoneal dialysis, 28% hospital based haemodialysis, 37% satellite haemodialysis, 11% home haemodialysis and 8% automated peritoneal dialysis.

Automated peritoneal dialysis continues to increase each year. In 2002 the increase was 21% (607 patients) compared to 501 patients in 2001 and 389 patients in 2000. Satellite haemodialysis increased by 9% and continuous ambulatory peritoneal dialysis continues to decrease; 11% (1,163 patients) in 2002 from 1,308 patients in 2001.

Forty four percent of all dialysis patients were 65 years and older and 75 patients (1%) were 85 years or more, an increase of 83% in 2002. An increase occurred in all age groups 45 years or older, especially in the age groups 65-84 years (8%, 236 patients) (fig 4.4).



Figure 4.3

The effect of age on selection of dialysis method and location is shown in the Appendix (page 6). For those <15 years, peritoneal dialysis was used in 69% (63% in 2001), for 25-34 years 19%, for 65-84 years 26% and >85 years 35%.

The number of patients rose in all States. The number of dialysis patients in relation to population in each State is shown in Figure 4.2.

In relation to State population, the highest prevalence rate of dialysis patients was in the Northern Territory (1,172 per million), with rates in other states similar; range 300 to 397 per million (fig 4.2).

Method and Location of Dialysis 1997 - 2002



Figure 4.4



Prevalent Dialysis Patients (Australia)





Figure 4.5

Method and Location of Dialysis 1997 - 2002



New Zealand

Figures 4.1, 4.2, 4.5 and 4.6.

There was an 8% increase in dialysis patient numbers from 2001 to 2002, mainly in the age groups 55-64, 65-74 and 75-84 years. Sixty two percent of patients were treated with a form of home dialysis (including 77% peritoneal dialysis patients).

Home automated peritoneal dialysis continues to become more popular (133 patients in December 2002 from 112 patients in 2001).

Continuous ambulatory peritoneal dialysis, whilst still the dominant mode of all dialysis, decreased from 41% in 2001 to 40% in 2002.

Together, satellite and hospital haemodialysis accounted for 38% of patients in 2002, the same as the previous year. Satellite haemodialysis has increased 24% (227 patients in 2002, from 183 patients in 2001).

Figure 4.6



Prevalent Dialysis Patients (New Zealand)



LATE REFERRAL RELATED TO TREATMENT AT 90 DAYS

Figure 4.7 shows the association of late referral with survival outcomes. The numbers for New Zealand are too small to draw conclusions, however, late referral to a nephrologist in Australia is associated with poorer survival.

Figure 4.7

ANZ DATA



Patient Survival Related to Referral (PD Treatment at 90 days)



Patient Survival Related to Referral (All Dialysis at 90 days)



Patient Survival Related to Referral (HD Treatment at 90 days)



Patient Survival Related to Referral (PD Treatment at 90 days)



Patient Survival Related to Referral (All Dialysis at 90 days)

