

# **CHAPTER 1**

## **STOCK AND FLOW**

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**Figure 1.1**

<b>Prevalent Patients 2000 - 2004</b> (Number Per Million Population at 31 <sup>st</sup> December)					
	2000	2001	2002	2003	2004
<b>Australia Total</b>	<b>11,673 (609)</b>	<b>12,318 (635)</b>	<b>13,009 (662)</b>	<b>13,682 (688)</b>	<b>14,221 (707)</b>
No. Functioning Transplants ● #	5261 (275)	5466 (282)	5740 (291)	5962 (300)	6269 (312)
No. Dialysis Patients	6412 (335)	6852 (353)	7269 (37)	7720 (388)	7952 (395)
Proportion Home *	38%	37%	35%	34%	32%
Proportion Satellite HD	34%	36%	37%	39%	42%
Proportion CAPD/APD	27%	26%	25%	24%	22%
<b>New Zealand Total</b>	<b>2360 (612)</b>	<b>2531 (652)</b>	<b>2716 (689)</b>	<b>2881 (719)</b>	<b>2994 (737)</b>
No. Functioning Transplants ● #	1024 (265)	1063 (274)	1116 (283)	1168 (291)	1224 (301)
No. Dialysis Patients	1336 (346)	1468 (378)	1600 (406)	1713 (427)	1770 (436)
Proportion Home *	65%	62%	62%	59%	56%
Proportion Satellite HD	10%	12%	14%	16%	16%
Proportion CAPD/APD	51%	49%	48%	45%	42%

● Country of Transplant  
# Patients lost to follow up are not included  
\* Proportion of all patients dialysing currently receiving home-based treatment (either PD or HD)

Recent trends towards a reduction in the proportion of home-based therapies (home haemodialysis and continuous ambulatory peritoneal dialysis or automated peritoneal dialysis) in favour of hospital and satellite based therapy continues in both Australia and New Zealand (fig 1.1).

**Figure 1.2**

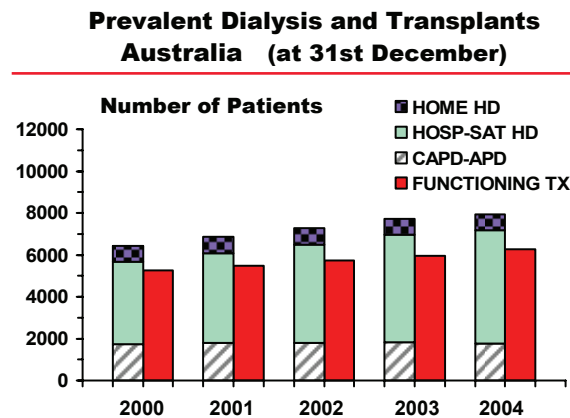
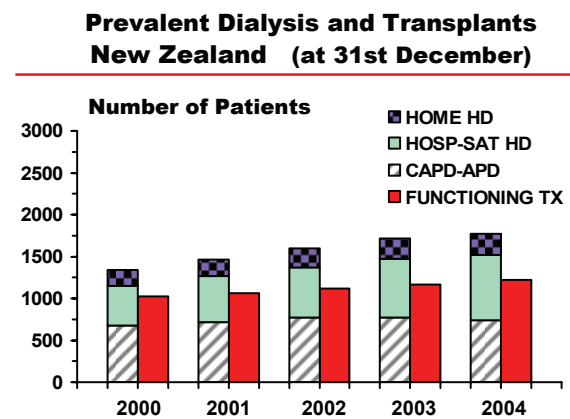
<b>Patient Flow Summary 2000 - 2004</b> (Number Per Million Population at 31 <sup>st</sup> December) * Country of Transplant					
	2000	2001	2002	2003	2004
<b>Australia</b>					
Total New Patients	1756 (92)	1911 (98)	1900 (97)	1985 (100)	1912 (95)
Total New Transplants *	531 (28)	541 (29)	604 (31)	543 (27)	649 (32)
Live Donor Transplants	181	213	230	218	243
Subsequent Transplants	55	53	67	71	67
Total Deaths	1146	1240	1191	1261	1330
Dialysis Patients	972	1082	1048	1120	1205
Transplant Patients	174	158	143	141	125
<b>New Zealand</b>					
Total New Patients	422 (109)	467 (120)	467 (119)	461 (115)	447 (110)
Total New Transplants *	106 (27)	110 (28)	117 (30)	111 (28)	105 (26)
Live Donor Transplants	31	43	48	44	48
Subsequent Transplants	15	9	14	17	7
Total Deaths	271	287	263	290	326
Dialysis Patients	245	262	232	264	301
Transplant Patients	26	25	31	26	25

The number of new patients in Australia decreased from the previous year to be similar to 2001 and 2002, while in New Zealand the number fell for the first time since 2000.

The number of new transplants increased for both deceased and live donors in Australia in 2004.

In New Zealand, although the live donors remained steady, the overall number decreased 5% from the previous year.

Further details are given for particular groups in Figures 1.4 to 1.9.

**Figure 1.3**

**Figure 1.4**

**Figure 1.5**

**Prevalence and Incidence by Indigenous Racial Origin  
2000 - 2004**

(Number Per Million Population Per Year for New Patients)

**Aboriginal and Torres Strait Islanders Combined**

Race		2000	2001	2002	2003	2004
<b>Australia</b>						
Aboriginal and Torres Strait Islanders	New Patients	150 (358)	175 (410)	172 (395)	172 (388)	188 (416)
	Dialysis	578 (1379)	643 (1506)	710 (1631)	767 (1729)	828 (1831)
	Functioning Transplants	119 (284)	120 (281)	120 (276)	119 (268)	127 (281)
	Transplant Operations	18 (43)	21 (49)	17 (39)	14 (32)	26 (58)
	Deaths	106 (253)	107 (251)	104 (239)	114 (257)	120 (265)
<b>New Zealand</b>						
Maori	New Patients	128 (223)	149 (254)	149 (249)	146 (239)	135 (217)
	Dialysis	420 (732)	459 (783)	534 (893)	586 (961)	593 (953)
	Functioning Transplants	101 (176)	104 (177)	105 (176)	112 (184)	116 (186)
	Transplant Operations	13 (23)	15 (26)	13 (22)	16 (26)	12 (19)
	Deaths	106 (185)	106 (181)	70 (117)	87 (143)	126 (202)
Pacific People	New Patients	72 (298)	68 (260)	58 (208)	79 (286)	65 (230)
	Dialysis	252 (1041)	277 (1058)	273 (1015)	308 (1116)	330 (1166)
	Functioning Transplants	42 (174)	45 (172)	56 (208)	63 (228)	70 (247)
	Transplant Operations	4 (17)	6 (23)	15 (56)	14 (51)	12 (42)
	Deaths	23 (95)	36 (137)	39 (145)	37 (134)	36 (127)

**Figure 1.6**
**National and State Stock and Flow 1-Jan-2004 to 31-Dec-2004**
**(31-Dec-2003 Figures)**
**# Patients Lost to Follow-up are not included**
**\* Resident State**

State	New Patients	Transplant Operations *	Deaths		Dialysis Dependent	Functioning Transplants # *	Total
			Dialysis	Transplant			
Queensland	401 (419)	106 (117)	226 (215)	30 (27)	1442 (1338)	1270 (1230)	<b>2712 (2568)</b>
New South Wales	530 (630)	207 (180)	405 (347)	41 (45)	2513 (2542)	1851 (1758)	<b>4364 (4300)</b>
Aust.Capital Territory	44 (39)	28 (14)	21 (16)	4 (2)	184 (186)	179 (162)	<b>363 (348)</b>
Victoria	457 (447)	138 (115)	306 (293)	16 (34)	2047 (1993)	1511 (1441)	<b>3558 (3434)</b>
Tasmania	31 (40)	12 (16)	27 (31)	2 (1)	147 (153)	138 (128)	<b>285 (281)</b>
South Australia	157 (152)	80 (55)	83 (67)	19 (13)	517 (505)	690 (652)	<b>1207 (1157)</b>
Northern Territory	79 (55)	13 (9)	39 (35)	3 (3)	277 (247)	72 (67)	<b>349 (314)</b>
Western Australia	213 (203)	65 (37)	98 (116)	10 (16)	825 (756)	575 (542)	<b>1400 (1298)</b>
<b>Australia</b>	<b>1912 (1985)</b>	<b>649 (543)</b>	<b>1205 (1120)</b>	<b>125 (141)</b>	<b>7952 (7720)</b>	<b>6286 (5980)</b>	<b>14,238 (13,700)</b>
<b>New Zealand</b>	<b>447 (461)</b>	<b>105 (111)</b>	<b>301 (264)</b>	<b>25 (26)</b>	<b>1770 (1713)</b>	<b>1207 (1150)</b>	<b>2977 (2863)</b>

**Figure 1.7**
**Prevalent Transplant and Dialysis Patients 1983 - 2004**
**Country of Transplant**
**# Patients Lost to Follow-up are not included**
**(Number Per Million Population at 31<sup>st</sup>December)**

Year	Australia			New Zealand		
	Transplant #	Dialysis	Total	Transplant #	Dialysis	Total
1983	1771 (115)	2019 (131)	<b>3790 (246)</b>	318 (99)	339 (105)	<b>657 (203)</b>
1984	1971 (127)	2152 (138)	<b>4123 (265)</b>	348 (107)	370 (113)	<b>718 (220)</b>
1985	2163 (137)	2230 (141)	<b>4393 (278)</b>	377 (115)	402 (122)	<b>779 (237)</b>
1986	2392 (149)	2339 (146)	<b>4731 (295)</b>	426 (129)	402 (122)	<b>828 (250)</b>
1987	2574 (158)	2526 (155)	<b>5100 (314)</b>	452 (135)	437 (131)	<b>889 (266)</b>
1988	2798 (169)	2675 (162)	<b>5473 (331)</b>	484 (145)	482 (144)	<b>966 (289)</b>
1989	3054 (182)	2750 (164)	<b>5804 (345)</b>	531 (158)	527 (156)	<b>1058 (313)</b>
1990	3265 (191)	2955 (173)	<b>6220 (364)</b>	579 (171)	557 (162)	<b>1136 (331)</b>
1991	3493 (202)	3138 (182)	<b>6631 (384)</b>	607 (174)	630 (180)	<b>1237 (354)</b>
1992	3698 (211)	3384 (193)	<b>7082 (405)</b>	677 (192)	674 (191)	<b>1351 (383)</b>
1993	3869 (219)	3704 (210)	<b>7573 (429)</b>	706 (198)	721 (202)	<b>1427 (399)</b>
1994	4058 (227)	4098 (230)	<b>8156 (457)</b>	732 (202)	784 (217)	<b>1516 (419)</b>
1995	4227 (234)	4520 (250)	<b>8747 (484)</b>	784 (213)	851 (232)	<b>1635 (445)</b>
1996	4436 (242)	4884 (267)	<b>9320 (509)</b>	825 (221)	935 (250)	<b>1760 (471)</b>
1997	4681 (253)	5189 (280)	<b>9870 (533)</b>	883 (233)	1018 (269)	<b>1901 (503)</b>
1998	4897 (262)	5536 (296)	<b>10,433 (558)</b>	937 (246)	1128 (296)	<b>2065 (541)</b>
1999	5064 (268)	6021 (318)	<b>11,085 (586)</b>	986 (257)	1232 (321)	<b>2218 (578)</b>
2000	5261 (275)	6412 (335)	<b>11,673 (609)</b>	1024 (265)	1336 (346)	<b>2360 (612)</b>
2001	5466 (282)	6852 (353)	<b>12,318 (635)</b>	1063 (274)	1468 (378)	<b>2531 (652)</b>
2002	5740 (292)	7269 (370)	<b>13,009 (662)</b>	1116 (283)	1600 (406)	<b>2716 (689)</b>
2003	5962 (300)	7720 (388)	<b>13,682 (688)</b>	1168 (291)	1713 (427)	<b>2881 (719)</b>
2004	6269 (312)	7952 (395)	<b>14,221 (707)</b>	1224 (301)	1770 (436)	<b>2994 (737)</b>

**Figure 1.8**

**Comparison of Prevalent Transplant and Dialysis Dependent Patients  
2000 - 2004**  
(Number Per Million Population at 31<sup>st</sup> December)

	2000	2001	2002	2003	2004
<b>TRANSPLANTS **</b>					
Queensland	1072 (301)	1128 (311)	1179 (318)	1230 (324)	1270 (327)
New South Wales *	1579 (251)	1599 (251)	1667 (259)	1758 (271)	1851 (283)
Aust. Capital Territory *	126 (252)	134 (261)	146 (283)	162 (312)	179 (342)
Victoria	1266 (267)	1329 (277)	1405 (289)	1441 (293)	1511 (304)
Tasmania	109 (231)	112 (237)	121 (256)	128 (268)	138 (286)
South Australia	567 (376)	598 (396)	626 (412)	652 (427)	690 (450)
Northern Territory	64 (327)	66 (334)	68 (342)	67 (338)	72 (360)
Western Australia	492 (262)	515 (271)	544 (283)	542 (278)	575 (290)
<b>Australia</b>	<b>5275 (275)</b>	<b>5481 (282)</b>	<b>5756 (293)</b>	<b>5980 (301)</b>	<b>6286 (313)</b>
<b>New Zealand</b>	<b>1010 (262)</b>	<b>1048 (270)</b>	<b>1100 (279)</b>	<b>1150 (287)</b>	<b>1207 (297)</b>
** By Resident State and Country					
<b>DIALYSIS</b>					
Queensland	1044 (293)	1094 (301)	1203 (324)	1338 (352)	1442 (371)
New South Wales *	2163 (343)	2335 (366)	2429 (377)	2542 (392)	2513 (385)
Aust. Capital Territory *	162 (324)	159 (313)	177 (343)	186 (358)	184 (351)
Victoria	1704 (359)	1851 (385)	1934 (398)	1993 (405)	2047 (412)
Tasmania	121 (257)	123 (260)	143 (303)	153 (321)	147 (305)
South Australia	396 (263)	434 (287)	457 (301)	505 (331)	517 (337)
Northern Territory	178 (910)	210 (1061)	233 (1173)	247 (1245)	277 (1386)
Western Australia	644 (344)	646 (340)	693 (360)	756 (387)	825 (416)
<b>Australia</b>	<b>6412 (335)</b>	<b>6852 (353)</b>	<b>7269 (370)</b>	<b>7720 (388)</b>	<b>7952 (395)</b>
<b>New Zealand</b>	<b>1336 (346)</b>	<b>1468 (378)</b>	<b>1600 (406)</b>	<b>1713 (427)</b>	<b>1770 (436)</b>
* 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 this Southern Area Region) Transplanted patients lost to follow up have been excluded					

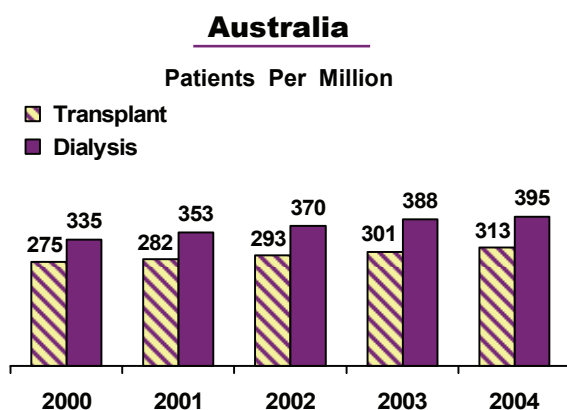
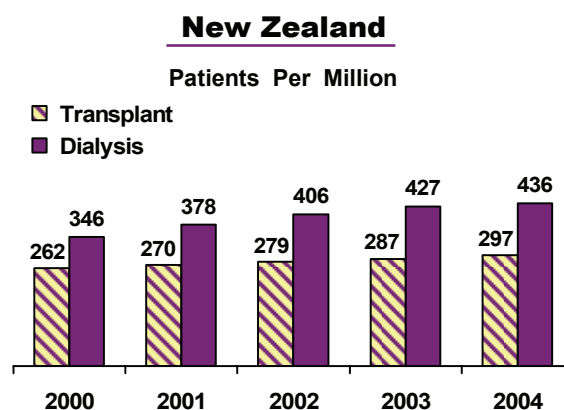
**Figure 1.9**

**Figure 1.10**




Figure 1.11

Comparison of Transplant and Dialysis Dependent Patients 2000 - 2004

