



CHAPTER 1

STOCK & FLOW

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The number of new patients in Australia decreased slightly to 2257 in 2010. While there is variation in this rate from year to year, the rate has clearly stabilised over the period from 2006 and possibly decreased over the period from 2008 to 2010. Reflecting both the changes in numbers of new patients and higher number of transplants, the number of prevalent dialysis patients (people receiving dialysis at the end of 2010) has not changed substantially from 2009.

In New Zealand there was a similar stability in rates of new patients, although there is greater variability reflecting a smaller population based.

Rates of prevalent patients and new patients are shown in Figures 1.1 to 1.3. Further data about stock and flow is shown in Figures 1.6 to 1.14.

The overall number of new transplants (846) increased by 9% in 2010 after a decrease of 5% in Australia in 2009. In 2010, there were 296 live donor transplants reported, a 9% decrease after the 8% decrease in 2009 (327 transplants).

The number of new transplants remained similar in 2010 in New Zealand (110 transplants), and numbers of live donor transplants (60) have decreased since 2009.

Figure 1.1		<i>updated on 9-Mar-2012</i>				
Prevalent Patients 2006 - 2010 (Number Per Million Population at 31st December)						
	2006	2007	2008	2009	2010	
Australia Total	16120 (779)	16842 (799)	17660 (822)	18317 (834)	18971 (849)	
No. Functioning Transplants • #	6860 (331)	7113 (338)	7500 (349)	7892 (359)	8382 (375)	
No. Dialysis Patients	9260 (447)	9729 (462)	10160 (473)	10425 (475)	10590 (474)	
Proportion Home *	31%	31%	31%	30%	28%	
Proportion Satellite HD	43%	45%	46%	47%	50%	
Proportion CAPD/APD	22%	22%	22%	21%	19%	
New Zealand Total	3244 (775)	3354 (793)	3454 (809)	3680 (852)	3820 (874)	
No. Functioning Transplants • #	1247 (298)	1283 (303)	1348 (316)	1400 (324)	1442 (330)	
No. Dialysis Patients	1997 (477)	2071 (490)	2106 (493)	2280 (528)	2378 (544)	
Proportion Home *	54%	52%	52%	51%	53%	
Proportion Satellite HD	17%	18%	19%	18%	17%	
Proportion CAPD/APD	38%	36%	36%	35%	35%	
• 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)						

Figure 1.2						
Patient Flow Summary 2006 - 2010 (Number Per Million Population at 31st December)						
* Country of Transplant						
	2006	2007	2008	2009	2010	
Australia						
Total New Patients	2432 (118)	2382 (113)	2545 (118)	2402 (109)	2257 (101)	
Total New Transplants *	641 (31)	615 (29)	813 (38)	773 (35)	846 (38)	
Living Donor Transplants	273	271	354	327	296	
Subsequent Transplants	92	88	105	99	102	
Total Deaths	1475	1629	1674	1687	1561	
Dialysis Patients	1325	1459	1493	1538	1401	
Transplant Patients	150	170	181	149	160	
New Zealand						
Total New Patients	499 (119)	469 (111)	497 (116)	583 (135)	503 (115)	
Total New Transplants *	90 (21)	123 (29)	122 (29)	121 (28)	110 (25)	
Living Donor Transplants	49	58	69	67	60	
Subsequent Transplants	10	11	11	12	6	
Total Deaths	367	343	388	365	353	
Dialysis Patients	333	296	360	331	319	
Transplant Patients	34	47	28	34	34	

Figure 1.3

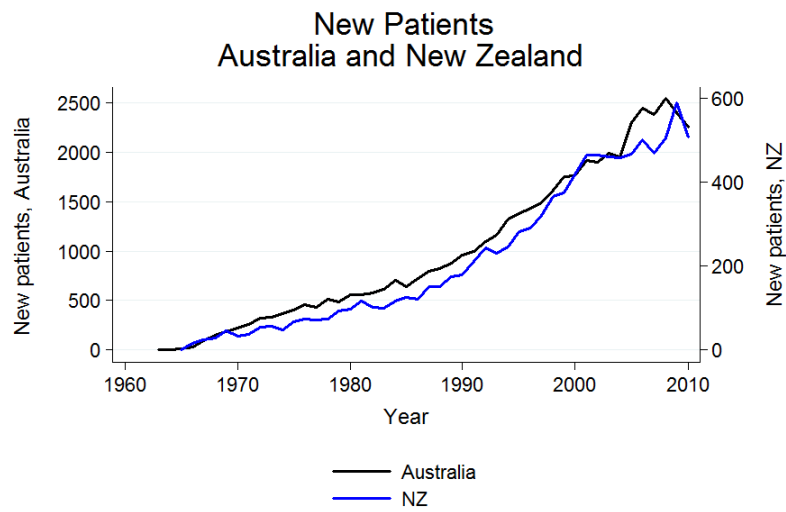


Figure 1.4

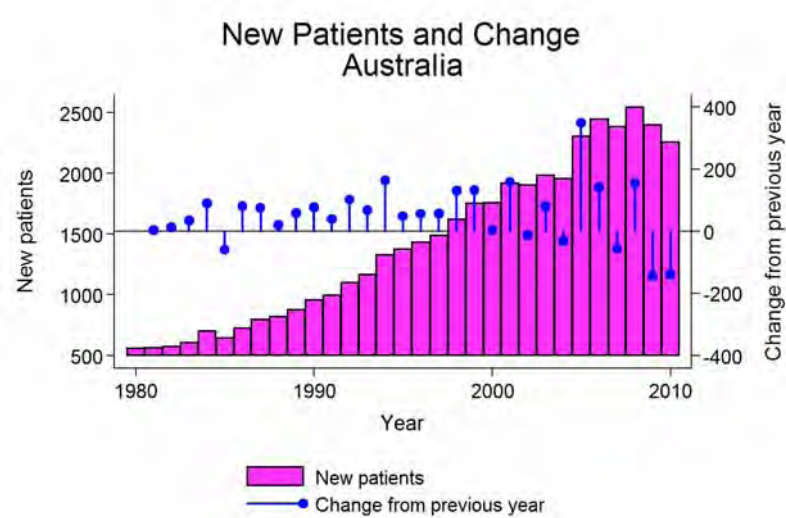


Figure 1.5

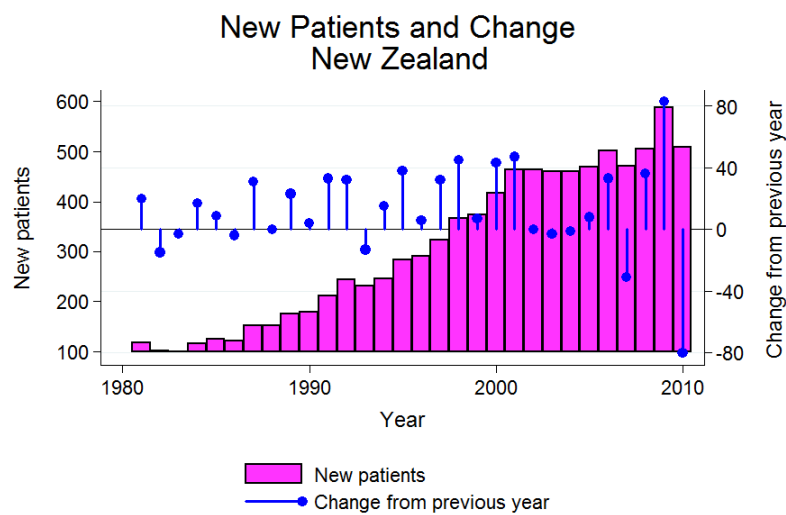




Figure 1.6

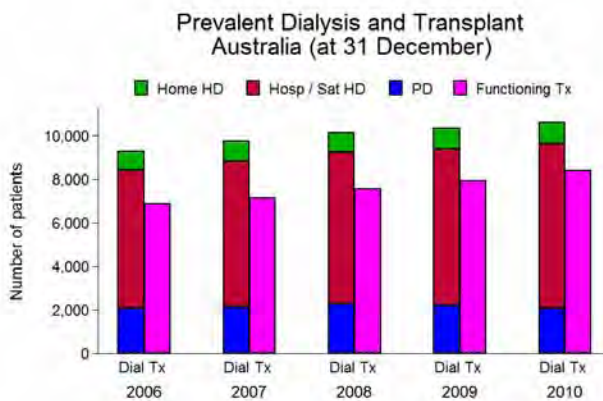
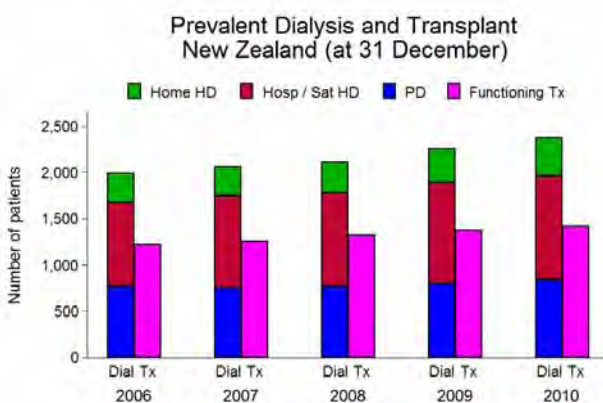


Figure 1.7



The incident rate among Australian Aboriginal, Maori and Pacific People is substantially higher than among non-indigenous people. However, among Australian Aboriginal people the incidence rate has clearly stabilised over the past 5 years (after a long period of steady increase since 1990). In New Zealand, rates among Maori are stable, while those among Pacific Peoples are increasing. Lower rates of transplantation, leads to higher rates of prevalent dialysis patients (Figure 1.8).

Figure 1.8

Prevalence and Incidence by Indigenous Racial Origin, 2006 - 2010
(Number Per Million Population Per Year for Patients)
Aboriginal and Torres Strait Islanders Combined

Race		2006	2007	2008	2009	2010
Australia						
	New Patients	221 (428)	239 (453)	251 (466)	195 (355)	198 (353)
Aboriginal and Torres Strait Islanders	Dialysis	989 (1916)	1092 (2072)	1159 (2153)	1177 (2141)	1208 (2151)
	Functioning Transplants *	148 (287)	148 (281)	159 (295)	160 (291)	177 (315)
	Transplant Operations	27 (52)	18 (34)	31 (58)	24 (44)	28 (50)
	Deaths	140 (271)	134 (254)	164 (305)	174 (316)	160 (285)
New Zealand						
	New Patients	169 (271)	147 (232)	157 (244)	176 (270)	154 (232)
Maori	Dialysis	684 (1096)	687 (1085)	688 (1070)	724 (1109)	759 (1143)
	Functioning Transplants *	111 (178)	113 (178)	117 (182)	127 (194)	138 (208)
	Transplant Operations	10 (16)	17 (27)	12 (19)	19 (29)	20 (30)
	Deaths	125 (200)	134 (212)	152 (236)	126 (193)	114 (172)
		New Patients	79 (262)	77 (248)	87 (273)	103 (314)
Pacific People	Dialysis	371 (1231)	409 (1318)	433 (1357)	485 (1480)	541 (1608)
	Functioning Transplants *	77 (255)	78 (251)	85 (266)	87 (265)	89 (265)
	Transplant Operations	7 (23)	6 (19)	10 (31)	6 (18)	9 (27)
	Deaths	54 (179)	34 (110)	55 (172)	48 (146)	50 (149)

* By Transplanting Country

Figure 1.9

National and State Stock and Flow 1-Jan-2010 to 31-Dec-2010
(31-Dec-2009 Figures)

State	New Patients	Transplant Operations *	Deaths		Dialysis Dependent +	Functioning Transplants # * +	Total
			Dialysis	Transplant			
Queensland	439 (491)	141 (136)	293 (311)	36 (29)	1994 (1944)	1631 (1567)	3625 (3511)
New South Wales	690 (747)	239 (223)	448 (497)	53 (54)	3441 (3374)	2376 (2232)	5817 (5606)
Aust. Capital Territory	53 (41)	21 (14)	26 (27)	3 (4)	245 (239)	215 (199)	460 (438)
Victoria	563 (541)	247 (211)	297 (347)	25 (21)	2598 (2513)	2186 (2028)	4784 (4541)
Tasmania	47 (57)	31 (20)	28 (27)	2 (1)	192 (194)	203 (190)	395 (384)
South Australia	175 (205)	82 (82)	114 (107)	19 (19)	674 (670)	911 (861)	1585 (1531)
Northern Territory	64 (72)	5 (5)	43 (45)	0 (4)	439 (418)	69 (68)	508 (486)
Western Australia	226 (243)	80 (82)	152 (177)	56 (51)	1007 (989)	818 (781)	1825 (1770)
Australia	2257 (2402)	846 (773)	1401 (1538)	160 (149)	10590 (10341)	8409 (7926)	18999 (18267)
New Zealand	503 (583)	110 (121)	319 (331)	34 (34)	2378 (2260)	1415 (1379)	3793 (3639)

Patients lost to follow-up are not included * Resident State + Point Prevalence at 31 December

Figure 1.10

Prevalent Transplant and Dialysis Patients 1985 to 2010
Country of Transplant

Patients Lost of Follow-up are not included
(Number Per Million Population at 31 December)

Year	Australia			New Zealand		
	Transplant #	Dialysis	Total	Transplant #	Dialysis	Total
1985	2163 (137)	2230 (141)	4393 (278)	377 (114)	402 (122)	779 (236)
1986	2392 (149)	2339 (146)	4731 (295)	426 (129)	402 (121)	828 (250)
1987	2574 (158)	2526 (155)	5100 (314)	452 (135)	437 (131)	889 (266)
1988	2798 (169)	2675 (162)	5473 (331)	484 (145)	482 (144)	966 (289)
1989	3054 (182)	2750 (164)	5804 (345)	531 (158)	527 (156)	1058 (314)
1990	3265 (191)	2956 (173)	6221 (365)	579 (170)	557 (163)	1136 (333)
1991	3493 (202)	3138 (182)	6631 (384)	607 (174)	630 (180)	1237 (354)
1992	3699 (211)	3383 (193)	7082 (405)	677 (192)	674 (191)	1351 (382)
1993	3872 (219)	3703 (210)	7575 (429)	705 (197)	721 (202)	1426 (399)
1994	4064 (228)	4099 (230)	8163 (457)	731 (202)	784 (216)	1515 (418)
1995	4236 (234)	4518 (250)	8754 (484)	783 (213)	850 (231)	1633 (444)
1996	4449 (243)	4882 (267)	9331 (510)	824 (221)	934 (250)	1758 (471)
1997	4697 (254)	5190 (280)	9887 (534)	882 (233)	1017 (269)	1899 (502)
1998	4921 (263)	5536 (296)	10457 (559)	936 (245)	1126 (295)	2062 (540)
1999	5091 (269)	6019 (318)	11110 (587)	983 (256)	1230 (321)	2213 (577)
2000	5294 (276)	6409 (335)	11703 (611)	1023 (265)	1331 (345)	2354 (610)
2001	5507 (284)	6851 (353)	12358 (637)	1063 (273)	1462 (376)	2525 (650)
2002	5782 (294)	7263 (370)	13045 (664)	1116 (282)	1594 (403)	2710 (686)
2003	6003 (302)	7719 (388)	13722 (690)	1168 (290)	1711 (425)	2879 (715)
2004	6292 (313)	8004 (398)	14296 (710)	1221 (299)	1774 (434)	2995 (733)
2005	6545 (321)	8640 (424)	15185 (745)	1239 (300)	1878 (454)	3117 (754)
2006	6860 (331)	9260 (447)	16120 (779)	1247 (298)	1997 (477)	3244 (775)
2007	7113 (338)	9729 (462)	16842 (799)	1283 (303)	2071 (490)	3354 (793)
2008	7500 (349)	10160 (473)	17660 (822)	1348 (316)	2106 (493)	3454 (809)
2009	7892 (359)	10425 (475)	18317 (834)	1400 (324)	2280 (528)	3680 (852)
2010	8382 (375)	10590 (474)	18972 (849)	1442 (330)	2378 (544)	3820 (874)



There is substantial variation in incidence rates and especially transplant rates leading to differences in the balance between dialysis and transplantation in various States (Figure 1.11 to 1.14). In 2010 Tasmania joined South Australia as states with a greater number of prevalent transplants than dialysis patients.

Figure 1.11

Comparison of Prevalent Transplant and Dialysis Dependent Patients
2006 - 2010
(Number Per Million Population at 31 December)

	2006	2007	2008	2009	2010
Transplants **					
Queensland	1356 (331)	1403 (334)	1483 (344)	1556 (351)	1631 (361)
New South Wales*	1992 (301)	2034 (304)	2133 (314)	2234 (323)	2376 (338)
Aust. Capital Territory*	188 (347)	193 (351)	197 (353)	198 (349)	215 (373)
Victoria	1688 (329)	1766 (338)	1887 (354)	2028 (372)	2186 (394)
Tasmania	154 (314)	165 (335)	177 (355)	190 (378)	203 (400)
South Australia	746 (476)	784 (494)	830 (517)	862 (531)	911 (554)
Northern Territory	73 (347)	78 (363)	74 (336)	67 (296)	69 (300)
Western Australia	681 (331)	703 (333)	744 (342)	782 (348)	818 (356)
Australia	6878 (332)	7126 (338)	7525 (350)	7917 (360)	8409 (376)
New Zealand	1229 (294)	1270 (300)	1323 (310)	1375 (318)	1415 (324)
** By Resident State and Country					
Dialysis					
Queensland	1704 (417)	1809 (431)	1885 (438)	1957 (442)	1994 (442)
New South Wales*	3025 (458)	3192 (477)	3356 (493)	3408 (493)	3441 (490)
Aust. Capital Territory*	206 (380)	215 (391)	235 (421)	239 (421)	245 (425)
Victoria	2348 (458)	2411 (462)	2482 (466)	2524 (463)	2598 (468)
Tasmania	163 (333)	175 (355)	179 (359)	198 (393)	192 (378)
South Australia	604 (385)	626 (395)	631 (393)	682 (420)	674 (410)
Northern Territory	334 (1586)	368 (1713)	398 (1805)	417 (1844)	439 (1911)
Western Australia	876 (425)	933 (442)	994 (457)	1000 (445)	1007 (439)
Australia	9260 (447)	9729 (462)	10160 (473)	10425 (475)	10590 (474)
New Zealand	1997 (477)	2071 (490)	2106 (493)	2280 (528)	2378 (544)
* 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 1.12

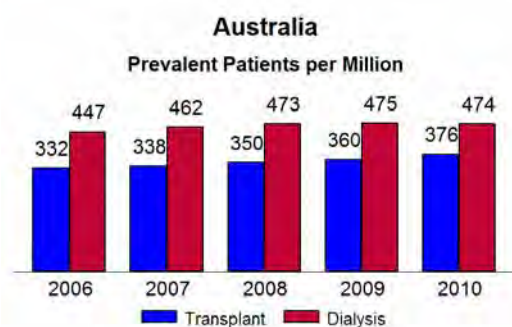


Figure 1.13

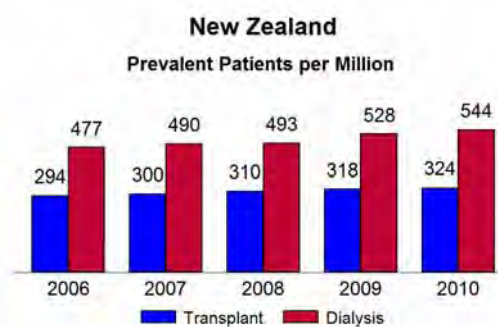


Figure 1.14

Comparison of Transplant and Dialysis Dependent Patients 2006 - 2010

