

Erratum:

CHAPTER 2: DIALYSIS IN MALAYSIA

Table 2.1.1(a): Stock and flow-**Haemodialysis** Patients 2004-2013

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New haemodialysis patients	2610	2839	3284	3554	4035	4372	4715	5394	5789	5491
Died	1166	1333	1643	1756	1914	2279	2692	2915	3201	3014
Transplanted	146	100	96	72	90	96	87	87	64	54
Lost to Follow-up	12	13	35	15	10	25	39	64	61	116
Dialysing at 31 st December	10718	12181	13761	15532	17634	19698	21703	24098	26525	28822

Table 2.1.1(b): Stock and flow- Chronic PD Patients 2004-2013

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New chronic PD patients	291	316	397	516	569	548	537	615	752	731
Died	156	182	177	231	277	321	353	372	397	423
Transplanted	13	22	25	18	21	15	12	17	14	17
Lost to Follow-up	1	4	3	5	3	4	6	3	0	6
Dialysing at 31 st December	1124	1174	1317	1549	1750	1886	1989	2174	2546	2815

Table 2.1.3(b): Gender Distribution of Dialysis Patients 2004-2013

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Dialysis patients	2901	3155	3681	4070	4604	4920	5252	6009	6541	6222
% Male	55	57	55	55	56	56	55	55	56	55
% Female	45	43	45	45	44	44	45	45	44	45
Dialysing at 31 st December	11842	13355	15078	17081	19384	21584	23692	26272	29071	31637
% Male	55	55.4	55	54.8	55	55.1	54.9	54.6	54.7	54.5
% Female	45	44.6	45	45.2	45	44.9	45.1	45.4	45.3	45.5

SECTION 2.2: DIALYSIS PROVISION IN MALAYSIA (Centre survey report)

2.2.1 Growth in dialysis in Malaysia by state and sector

Table 2.2.1: Number and density of Dialysis Centres in Malaysia by State and Sector, Year 2004 to 2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	132	5	177	6	179	6
	Private	117	5	219	8	375	13
	NGO	91	4	125	5	143	5
	Total	340	13	521	19	697	24
Perlis	Public	1	4	1	4	1	4
	Private	-	-	-	-	2	8
	NGO	-	-	1	4	1	4
	Total	1	4	2	9	4	17
Kedah	Public	10	6	11	6	10	5

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	Private	10	6	17	9	31	15
	NGO	4	2	6	3	7	3
	Total	24	13	34	18	48	24
Kedah & Perlis	Public	11	5	12	6	11	5
	Private	10	5	17	8	33	15
	NGO	4	2	7	3	8	4
	Total	25	12	36	17	52	23
Pulau Pinang	Public	8	5	10	6	9	6
	Private	11	7	17	11	35	21
	NGO	14	10	19	12	22	14
	Total	33	22	46	29	66	41
Perak	Public	14	6	19	8	18	7
	Private	13	6	23	10	37	15
	NGO	11	5	12	5	13	5
	Total	38	17	54	23	68	28
Selangor & WP Putrajaya	Public	12	3	19	4	18	3
	Private	22	5	56	11	102	18
	NGO	16	3	22	4	26	5
	Total	50	11	97	20	146	26
WP Kuala Lumpur	Public	14	9	14	8	11	6
	Private	20	13	20	12	31	18
	NGO	9	6	14	8	15	9
	Total	43	27	48	29	57	33
Selangor & WP Putrajaya & WP KL	Public	26	4	33	5	29	4
	Private	42	7	76	11	133	18
	NGO	25	4	36	5	41	5
	Total	93	15	145	22	203	27
Negeri Sembilan	Public	6	6	8	8	10	9
	Private	3	3	10	10	19	18
	NGO	4	4	5	5	8	7
	Total	13	14	23	23	37	35
Melaka	Public	3	4	4	5	5	6
	Private	7	10	15	20	17	20
	NGO	3	4	4	5	5	6
	Total	13	18	23	31	27	32
Johor	Public	16	5	16	5	16	5
	Private	17	6	35	11	52	15
	NGO	18	6	23	7	22	6
	Total	51	17	74	23	90	26
Pahang	Public	8	6	13	9	14	9
	Private	3	2	6	4	16	10
	NGO	3	2	5	3	5	3
	Total	14	10	24	16	35	22
Terengganu	Public	6	6	6	6	8	7
	Private	2	2	3	3	5	4
	NGO	1	1	2	2	3	3
	Total	9	9	11	11	16	14
Kelantan	Public	11	7	13	8	12	7
	Private	3	2	6	4	9	5

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Sabah & WP Labuan	NGO	1	1	2	1	3	2
	Total	15	10	21	13	24	14
	Public	13	4	22	7	24	7
	Private	2	1	5	2	7	2
	NGO	4	1	5	2	5	1
Sarawak	Total	19	6	32	10	36	11
	Public	10	4	21	9	23	9
	Private	4	2	6	2	12	5
	NGO	3	1	5	2	8	3
Total	17	7	32	13	43	17	

Table 2.2.2: Number and density of HD centres in Malaysia by State and Sector, 2004-2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	112	4	150	5	150	5
	Private	114	4	213	8	366	12
	NGO	91	4	125	5	143	5
	Total	317	12	488	18	659	22
Perlis	Public	1	4	1	4	1	4
	Private	-	-	-	-	2	8
	NGO	-	-	1	4	1	4
	Total	1	4	2	9	4	17
Kedah	Public	10	6	10	5	9	4
	Private	10	6	17	9	31	15
	NGO	4	2	6	3	7	3
	Total	24	13	33	17	47	23
Kedah & Perlis	Public	11	5	11	5	10	4
	Private	10	5	17	8	33	15
	NGO	4	2	7	3	8	4
	Total	25	12	35	16	51	23
Pulau Pinang	Public	7	5	8	5	7	4
	Private	11	7	17	11	34	21
	NGO	14	10	19	12	22	14
	Total	32	22	44	28	63	39
Perak	Public	12	5	17	7	16	7
	Private	13	6	23	10	37	15
	NGO	11	5	12	5	13	5
	Total	36	16	52	22	66	27
Selangor & WP Putrajaya	Public	10	2	15	3	14	2
	Private	22	5	55	11	101	18
	NGO	16	3	22	4	26	5
	Total	48	10	92	19	141	25
WP Kuala Lumpur	Public	10	6	10	6	7	4
	Private	20	13	20	12	29	17
	NGO	9	6	14	8	15	9
	Total	39	25	44	26	51	29

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Selangor & WP Putrajaya & WP KL	Public	20	3	25	4	21	3
	Private	42	7	75	11	130	17
	NGO	25	4	36	5	41	5
	Total	87	14	136	20	192	26
Negeri Sembilan	Public	5	5	6	6	8	7
	Private	3	3	10	10	19	18
	NGO	4	4	5	5	8	7
	Total	12	13	21	21	35	33
Melaka	Public	2	3	3	4	4	5
	Private	6	8	14	19	17	20
	NGO	3	4	4	5	5	6
	Total	11	16	21	28	26	31
Johor	Public	13	4	13	4	13	4
	Private	16	5	32	10	49	14
	NGO	18	6	23	7	22	6
	Total	47	15	68	21	84	24
Pahang	Public	7	5	11	7	12	8
	Private	3	2	6	4	16	10
	NGO	3	2	5	3	5	3
	Total	13	9	22	15	33	21
Terengganu	Public	5	5	5	5	6	5
	Private	2	2	3	3	5	4
	NGO	1	1	2	2	3	3
	Total	8	8	10	10	14	13
Kelantan	Public	9	6	11	7	10	6
	Private	3	2	6	4	9	5
	NGO	1	1	2	1	3	2
	Total	13	9	19	12	22	13
Sabah & WP Labuan	Public	12	4	20	6	21	6
	Private	1	0	4	1	6	2
	NGO	4	1	5	2	5	1
	Total	17	6	29	9	32	9
Sarawak	Public	9	4	20	8	22	9
	Private	4	2	6	2	11	4
	NGO	3	1	5	2	8	3
	Total	16	7	31	13	41	16

Table 2.2.4: Number and density of HD machines in Malaysia by State and Sector, 2004-2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	1012	39	1452	53	1714	58
	Private	1183	46	2046	74	3897	132
	NGO	1376	53	1887	69	2311	78
	Total	3571	138	5385	196	7922	268
Perlis	Public	25	112	21	90	25	104
	Private	-	-	-	-	14	58
	NGO	-	-	15	64	17	70

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	Total	25	112	36	154	56	232
Kedah	Public	73	40	87	45	110	54
	Private	84	46	138	72	255	126
	NGO	56	31	84	44	105	52
	Total	213	118	309	161	470	233
Kedah & Perlis	Public	98	48	108	50	135	60
	Private	84	41	138	64	269	119
	NGO	56	28	99	46	122	54
	Total	238	117	345	160	526	232
Pulau Pinang	Public	63	43	73	47	66	41
	Private	165	112	228	146	375	230
	NGO	142	97	223	143	279	171
	Total	370	252	524	335	720	442
Perak	Public	110	50	145	61	162	66
	Private	155	70	242	101	478	196
	NGO	158	72	196	82	206	85
	Total	423	192	583	243	846	347
Selangor & WP Putrajaya	Public	119	26	215	43	159	28
	Private	217	47	517	104	1057	185
	NGO	265	57	355	72	415	72
	Total	601	130	1087	219	1631	285
WP Kuala Lumpur	Public	97	61	129	77	87	50
	Private	214	135	254	151	316	182
	NGO	127	80	224	133	232	134
	Total	438	277	607	361	635	367
Selangor & WP Putrajaya & WP KL	Public	216	35	344	52	246	33
	Private	431	69	771	116	1373	184
	NGO	392	63	579	87	647	87
	Total	1039	167	1694	255	2266	304
Negeri Sembilan	Public	43	46	50	51	70	65
	Private	22	23	66	67	136	127
	NGO	75	80	113	114	164	153
	Total	140	149	229	232	370	346
Melaka	Public	24	34	37	49	50	59
	Private	63	89	112	149	191	224
	NGO	97	137	86	114	80	94
	Total	184	259	235	313	321	377
Johor	Public	107	35	125	39	160	46
	Private	152	50	291	90	647	186
	NGO	300	98	346	107	416	120
	Total	559	183	762	236	1223	352
Pahang	Public	60	42	111	74	153	97
	Private	16	11	34	23	128	81
	NGO	32	23	56	37	81	52
	Total	108	76	201	134	362	230
Terengganu	Public	55	57	79	77	107	96
	Private	6	6	15	15	48	43
	NGO	15	15	23	22	36	32

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	Total	76	78	117	114	191	172
Kelantan	Public	56	37	87	54	111	67
	Private	38	25	45	28	98	59
	NGO	10	7	21	13	37	22
	Total	104	69	153	95	246	148
Sabah & WP Labuan	Public	108	35	159	49	250	73
	Private	4	1	25	8	47	14
	NGO	31	10	35	11	61	18
	Total	143	47	219	67	358	104
Sarawak	Public	72	32	134	55	204	79
	Private	47	21	79	32	107	42
	NGO	68	30	110	45	182	71
	Total	187	82	323	133	493	191

Table 2.2.5: Number and Prevalence Rate of Dialysis Patients (HD & PD) in Malaysia by State and Sector, 2004-2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	4045	157	6551	238	8574	290
	Private	3663	142	7072	257	14191	480
	NGO	3660	142	5659	205	7341	249
	Total	11368	440	19282	700	30106	1019
Perlis	Public	81	364	98	419	92	381
	Private	-	-	-	-	38	157
	NGO	-	-	40	171	50	207
	Total	81	364	138	589	180	746
Kedah	Public	243	134	387	202	523	259
	Private	407	225	469	245	913	452
	NGO	123	68	261	136	352	174
	Total	773	427	1117	582	1788	885
Kedah & Perlis	Public	324	159	485	225	615	272
	Private	407	200	469	218	951	420
	NGO	123	60	301	140	402	178
	Total	854	420	1255	583	1968	870
Pulau Pinang	Public	252	171	403	258	450	276
	Private	559	380	665	426	1314	807
	NGO	373	254	601	385	718	441
	Total	1184	805	1669	1069	2482	1524
Perak	Public	315	143	468	195	607	249
	Private	331	150	955	399	1826	749
	NGO	360	163	609	254	588	241
	Total	1006	457	2032	848	3021	1240
Selangor & WP Putrajaya	Public	433	93	910	183	945	165
	Private	709	153	1831	369	3396	593
	NGO	582	126	933	188	1169	204
	Total	1724	372	3674	740	5510	962

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
WP Kuala Lumpur	Public	502	317	545	324	742	428
	Private	764	483	844	501	1218	703
	NGO	417	263	625	371	785	453
	Total	1683	1063	2014	1197	2745	1585
Selangor & WP Putrajaya & WP KL	Public	935	150	1455	219	1687	226
	Private	1473	237	2675	403	4614	619
	NGO	999	161	1558	234	1954	262
	Total	3407	548	5688	856	8255	1107
Negeri Sembilan	Public	191	203	244	247	374	350
	Private	31	33	228	231	418	391
	NGO	229	244	424	429	596	557
	Total	451	480	896	906	1388	1297
Melaka	Public	102	144	153	203	256	300
	Private	204	288	338	450	630	739
	NGO	263	371	233	310	235	276
	Total	569	802	724	963	1121	1315
Johor	Public	600	197	771	239	785	226
	Private	384	126	1173	363	2775	798
	NGO	857	281	1139	352	1482	426
	Total	1841	603	3083	954	5042	1450
Pahang	Public	200	141	490	327	628	399
	Private	40	28	60	40	431	274
	NGO	65	46	127	85	250	159
	Total	305	215	677	452	1309	832
Terengganu	Public	223	230	427	418	705	634
	Private	2	2	46	45	195	175
	NGO	36	37	73	71	109	98
	Total	261	269	546	534	1009	907
Kelantan	Public	222	148	389	242	459	276
	Private	98	65	154	96	407	244
	NGO	33	22	65	40	115	69
	Total	353	236	608	378	981	589
Sabah & WP Labuan	Public	365	120	696	214	1122	327
	Private	1	0	77	24	190	55
	NGO	80	26	85	26	189	55
	Total	446	146	858	264	1501	438
Sarawak	Public	316	139	570	234	886	344
	Private	133	58	232	95	440	171
	NGO	242	106	444	182	703	273
	Total	691	303	1246	512	2029	788

Table 2.2.6: Number and Prevalence Rate of Hemodialysis Patients in Malaysia by State and Sector, 2004-2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	2940	114	4836	176	6058	205

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	Private	3658	142	7043	256	14180	480
	NGO	3660	142	5659	205	7341	249
	Total	10258	397	17538	637	27579	934
Perlis	Public	81	364	98	419	92	381
	Private	-	-	-	-	38	157
	NGO	-	-	40	171	50	207
	Total	81	364	138	589	180	746
Kedah	Public	243	134	349	182	412	204
	Private	407	225	469	245	913	452
	NGO	123	68	261	136	352	174
	Total	773	427	1079	563	1677	830
Kedah & Perlis	Public	324	159	447	208	504	223
	Private	407	200	469	218	951	420
	NGO	123	60	301	140	402	178
	Total	854	420	1217	565	1857	821
Pulau Pinang	Public	124	84	212	136	201	123
	Private	559	380	665	426	1313	806
	NGO	373	254	601	385	718	441
	Total	1056	718	1478	946	2232	1371
Perak	Public	270	123	388	162	495	203
	Private	331	150	955	399	1826	749
	NGO	360	163	609	254	588	241
	Total	961	436	1952	815	2909	1194
Selangor & WP Putrajaya	Public	337	73	564	114	450	79
	Private	709	153	1831	369	3394	593
	NGO	582	126	933	188	1169	204
	Total	1628	351	3328	671	5013	876
WP Kuala Lumpur	Public	142	90	248	147	259	150
	Private	764	483	844	501	1214	701
	NGO	417	263	625	371	785	453
	Total	1323	836	1717	1020	2258	1304
Selangor & WP Putrajaya & WP KL	Public	479	77	812	122	709	95
	Private	1473	237	2675	403	4608	618
	NGO	999	161	1558	234	1954	262
	Total	2951	475	5045	759	7271	975
Negeri Sembilan	Public	126	134	161	163	233	218
	Private	31	33	228	231	418	391
	NGO	229	244	424	429	596	557
	Total	386	411	813	822	1247	1165
Melaka	Public	83	117	113	150	158	185
	Private	203	286	338	450	630	739
	NGO	263	371	233	310	235	276
	Total	549	774	684	910	1023	1200
Johor	Public	442	145	551	170	609	175
	Private	381	125	1144	354	2773	797
	NGO	857	281	1139	352	1482	426
	Total	1680	550	2834	877	4864	1399
Pahang	Public	166	117	393	262	554	352
	Private	40	28	60	40	431	274

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	NGO	65	46	127	85	250	159
	Total	271	191	580	387	1235	785
Terengganu	Public	159	164	314	307	443	398
	Private	2	2	46	45	195	175
	NGO	36	37	73	71	109	98
	Total	197	203	433	424	747	671
Kelantan	Public	180	120	321	199	391	235
	Private	98	65	154	96	407	244
	NGO	33	22	65	40	115	69
	Total	311	208	540	336	913	548
Sabah & WP Labuan	Public	315	103	631	194	971	283
	Private	-	-	77	24	190	55
	NGO	80	26	85	26	189	55
	Total	395	129	793	244	1350	394
Sarawak	Public	272	119	493	202	790	307
	Private	133	58	232	95	438	170
	NGO	242	106	444	182	703	273
	Total	647	284	1169	480	1931	750

2.2.2 Manpower in Dialysis Centres

Table 2.2.9: Number & density of Certified Dialysis Nurses/ Medical technicians in Malaysia by State and Sector, 2004-2013

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
Malaysia	Public	755	29	1023	37	1162	39
	Private	309	12	488	18	905	31
	NGO	196	8	259	9	354	12
	Total	1260	49	1770	64	2421	82
Perlis	Public	11	49	11	47	12	50
	Private	-	-	-	-	3	12
	NGO	-	-	3	13	3	12
	Total	11	49	14	60	18	75
Kedah	Public	59	33	65	34	72	36
	Private	25	14	37	19	62	31
	NGO	8	4	12	6	17	8
	Total	92	51	114	59	151	75
Kedah & Perlis	Public	70	34	76	35	84	37
	Private	25	12	37	17	65	29
	NGO	8	4	15	7	20	9
	Total	103	51	128	59	169	75
Pulau Pinang	Public	50	34	61	39	70	43
	Private	43	29	56	36	79	49
	NGO	23	16	29	19	44	27
	Total	116	79	146	93	193	119
Perak	Public	74	34	102	43	111	46
	Private	29	13	45	19	91	37

State	Sector	Year 2004		Year 2008		Year 2013	
		n	pmp	n	pmp	n	pmp
	NGO	15	7	23	10	31	13
	Total	118	54	170	71	233	96
Selangor & WP Putrajaya	Public	63	14	105	21	101	18
	Private	61	13	123	25	245	43
	NGO	39	8	48	10	57	10
	Total	163	35	276	56	403	70
WP Kuala Lumpur	Public	75	47	79	47	55	32
	Private	56	35	59	35	97	56
	NGO	18	11	33	20	34	20
	Total	149	94	171	102	186	107
Selangor & WP Putrajaya & WP KL	Public	138	22	184	28	156	21
	Private	117	19	182	27	342	46
	NGO	57	9	81	12	91	12
	Total	312	50	447	67	589	79
Negeri Sembilan	Public	44	47	60	61	76	71
	Private	7	7	18	18	40	37
	NGO	13	14	19	19	23	21
	Total	64	68	97	98	139	130
Melaka	Public	15	21	21	28	39	46
	Private	20	28	33	44	40	47
	NGO	17	24	12	16	15	18
	Total	52	73	66	88	94	110
Johor	Public	81	27	83	26	95	27
	Private	33	11	63	19	127	37
	NGO	37	12	40	12	61	18
	Total	151	49	186	58	283	81
Pahang	Public	46	32	78	52	94	60
	Private	5	4	8	5	33	21
	NGO	4	3	8	5	13	8
	Total	55	39	94	63	140	89
Terengganu	Public	42	43	45	44	60	54
	Private	6	6	8	8	14	13
	NGO	4	4	5	5	12	11
	Total	52	54	58	57	86	77
Kelantan	Public	58	39	74	46	85	51
	Private	10	7	15	9	26	16
	NGO	2	1	4	2	2	1
	Total	70	47	93	58	113	68
Sabah & WP Labuan	Public	76	25	120	37	160	47
	Private	1	0	5	2	14	4
	NGO	6	2	6	2	10	3
	Total	83	27	131	40	184	54
Sarawak	Public	61	27	119	49	132	51
	Private	13	6	18	7	34	13
	NGO	10	4	17	7	32	12
	Total	84	37	154	63	198	77