

## Chapter - 1

# **ALL RENAL REPLACEMENT THERAPY IN MALAYSIA**

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**SECTION 1.1: STOCK AND FLOW**

The number of new dialysis patients showed a linear increase over the last 10 years - from 2901 in 2004 to 6541 in 2012 and at least 6222 in 2013. (Data for 2013 however are preliminary since at the time of writing this report there was still many new patients yet to be notified to registry.) The number of prevalent dialysis patients showed a steeper linear almost 12 thousand in 2004 to about 32 thousand in 2013.

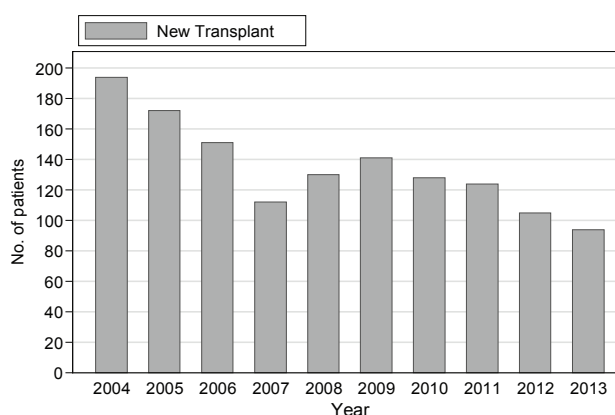
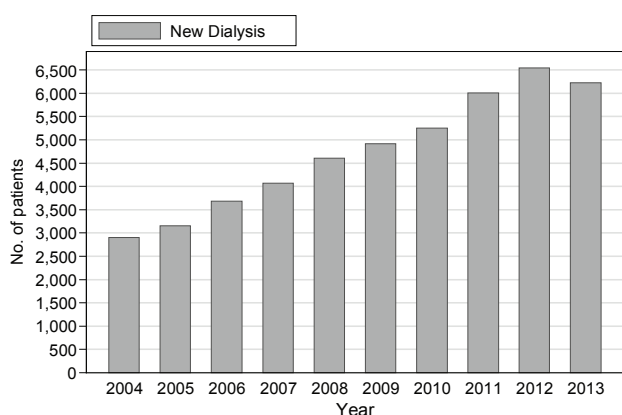
The number of new kidney transplant recipients has shown a decreasing trend since 2004 due most probably to the increasing proscription against commercial transplantation done overseas without a corresponding increase in the number of local kidney transplantations. The number of patients with functioning renal transplants is beginning to show a decreasing trend. (Table and Figure 1.1)

**Table 1.1:** Stock and flow of RRT, Malaysia 2004-2013

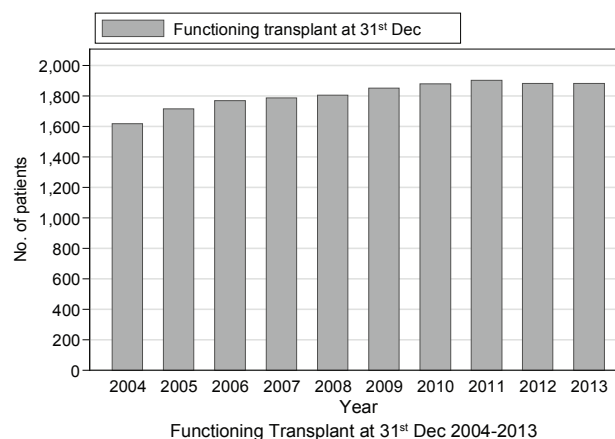
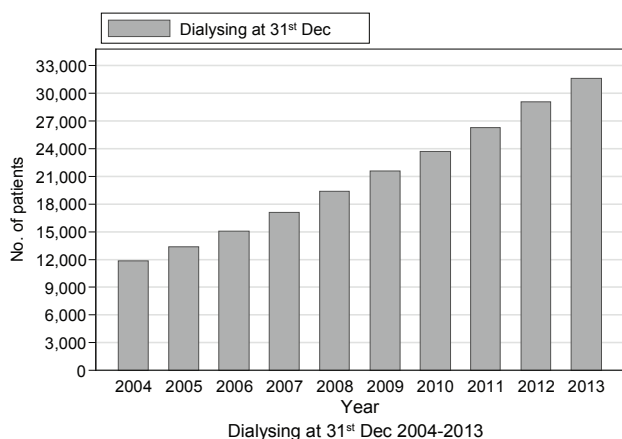
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Dialysis patients	2901	3155	3681	4070	4604	4920	5252	6009	6541	6222
New Transplants	194	172	151	112	130	141	128	124	105	94
Dialysis deaths	1322	1515	1820	1987	2191	2600	3045	3287	3598	3437
Transplant deaths	44	48	58	47	59	49	47	55	62	36
Dialyzing at 31 <sup>st</sup> December	11842	13355	15078	17081	19384	21584	23692	26272	29071	31637
Functioning transplant at 31 <sup>st</sup> December	1619	1717	1771	1787	1807	1851	1881	1902	1884	1882

**Figure 1.1:** Stock and flow of RRT, Malaysia 2004-2013

(a) New dialysis and transplant patients



(b) Patients dialysing and with functioning transplant at 31<sup>st</sup> December, 2004-2013



## SECTION 1.2: TREATMENT PROVISION RATE

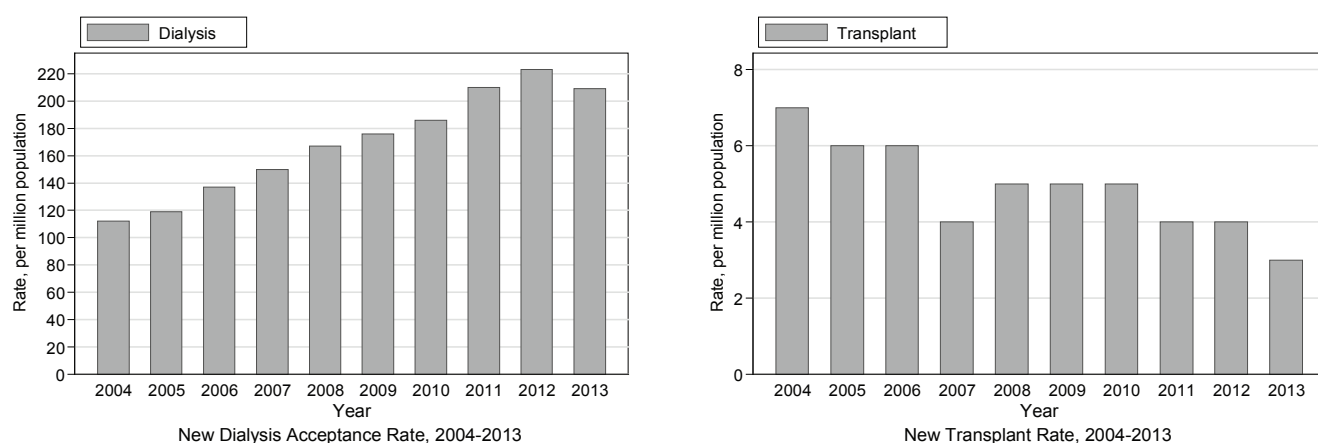
Dialysis acceptance rates doubled in 10 years from 112 per million population (pmp) in 2004 to 223 pmp in 2012. Data for 2013 however is preliminary since at the time of writing this report there was still many new patients yet to be notified to registry. Dialysis prevalence rate increased 2-fold over the last 10 years, from 457 per million population in 2004 to at least 991 in 2012 and at least 1065 pmp in 2013.

New transplant recipient rate which has decreased by almost 50%; from 7 pmp in 2004 to about 4 per million population 10 years later. With the decreasing transplantation rate, the prevalence rate of kidney transplantation has also begun to show a decreasing trend.

**Table 1.2:** New dialysis acceptance rate and new transplant rate per million population, 2004-2013

Acceptance rate	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
New Dialysis	112	119	137	150	167	176	186	210	223	209
New Transplant	7	6	6	4	5	5	5	4	4	3

**Figure 1.2:** New dialysis acceptance and new transplant rate, 2004-2013



**Table 1.3:** RRT prevalence rate per million population, 2004-2013

Prevalence rate	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Dialysis	457	504	562	628	704	774	839	920	991	1065
Transplant	62	65	66	66	66	66	67	67	64	63

**Figure 1.3:** Dialysis and transplant prevalence rate per million population, 2004-2013

