

Chapter 1

ALL RENAL REPLACEMENT THERAPY IN MALAYSIA

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SECTION 1.1: STOCK AND FLOW

Malaysia continues to see a linear increase in the number of new dialysis patients over the last 10 years - from 3167 in 2005 to 6985 in 2013 and at least 7055 in 2014. (Data for 2014 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 rise from 13 thousand in 2005 to almost 35 thousand in 2014.

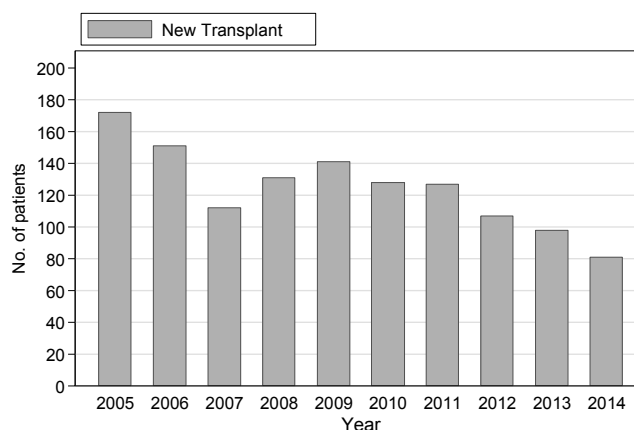
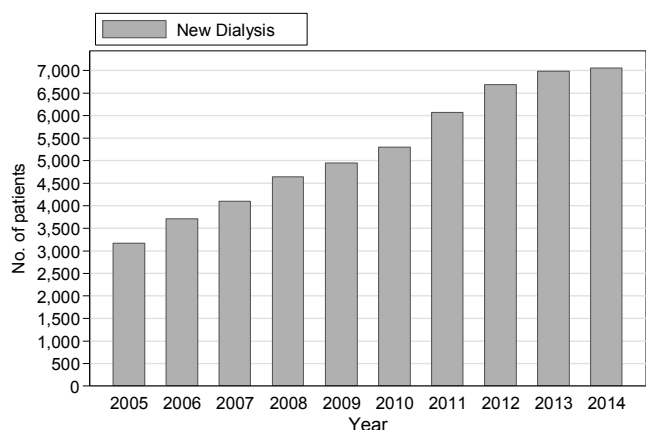
The number of new kidney transplant recipients has shown a decreasing trend most probably to the increasing proscription against commercial transplantation done overseas without a corresponding increase in the number of local kidney transplantations. The number of patients with functioning renal transplants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

Table 1.1: Stock and flow of RRT, Malaysia 2005-2014

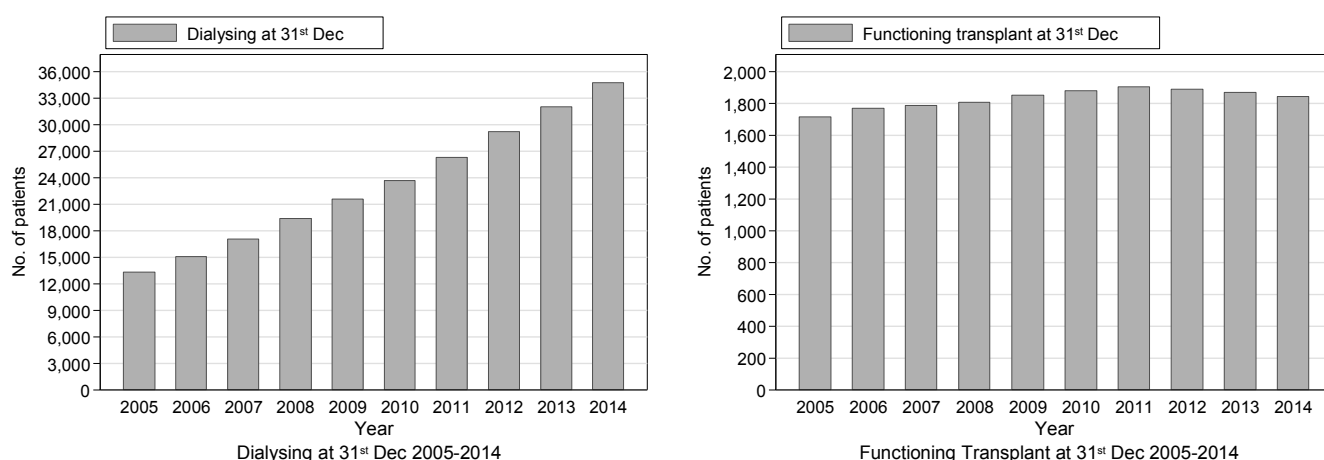
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
New Dialysis patients	3167	3709	4103	4640	4952	5305	6073	6690	6985	7055
New Transplants	172	151	112	131	141	128	127	107	98	81
Dialysis deaths	1515	1820	1987	2191	2601	3047	3292	3645	4001	4015
Transplant deaths	49	58	47	59	49	48	55	64	56	45
Dialyzing at 31 st December	13356	15080	17084	19388	21590	23709	26328	29223	32026	34767
Functioning transplant at 31 st December	1716	1771	1788	1808	1852	1881	1907	1891	1870	1844

Figure 1.1: Stock and flow of RRT, Malaysia 2005-2014

(a) New dialysis and transplant patients



(b) Patients dialysing and with functioning transplant at 31st December, 2005-2014



SECTION 1.2: TREATMENT PROVISION RATE

Dialysis acceptance rates doubled in 10 years from 120 per million population (pmp) in 2005 to 235 pmp in 2013. Data for 2014 however is preliminary since at the time of writing this report there was still many new patients yet to be notified to registry. This increasing trend is expected to continue for sometime to come as there is still wide variation between dialysis provision rates from 100 pmp to more than 300 pmp between the various states of Malaysia. Singapore, a developed state with similar demographics to Malaysia has a dialysis treatment rate of 285 pmp in 2012.

Dialysis prevalence rate also doubled over the last 10 years, from 504 pmp in 2005 to 1078 in 2013 and at least 1155 in 2014.

New kidney transplantation rate decreased by 50% over the last 10 years to about 3 pmp in 2014. There are multiple reasons for this decline: proscription of overseas commercial transplantation, and the decreasing trend of live related transplantation due to easy availability of dialysis treatment.

The continued decline in transplantation rate was the main cause of the decreasing prevalence rate of kidney transplantation.

Table 1.2: New dialysis acceptance rate and new transplant rate per million population, 2005-2014

Acceptance rate	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
New Dialysis	120	138	151	168	178	186	210	228	235	234
New Transplant	6	6	4	5	5	4	4	4	3	3

Figure 1.2: New dialysis acceptance and new transplant rate, 2005-2014

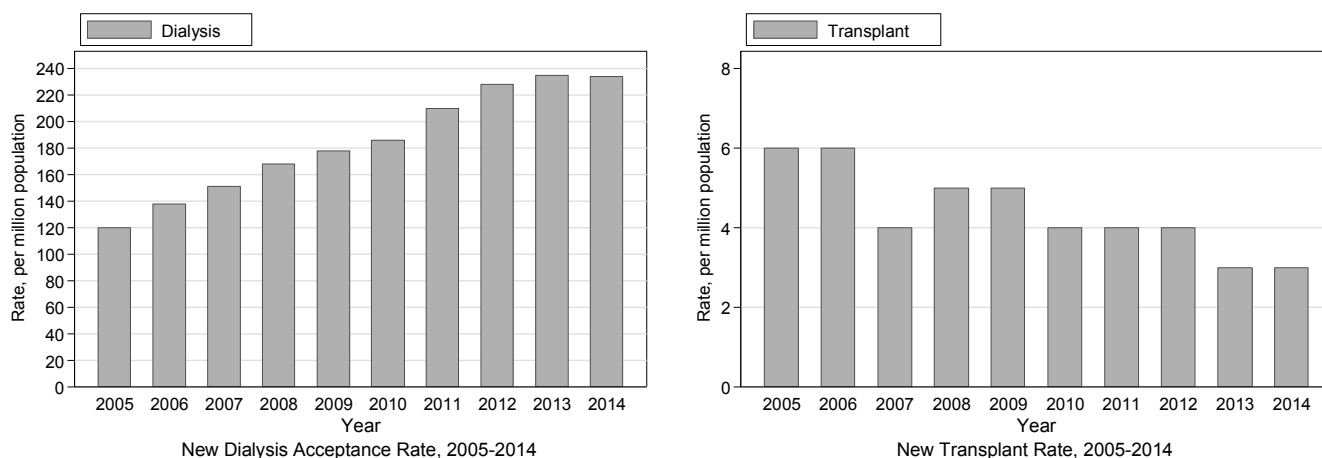


Table 1.3: RRT prevalence rate per million population, 2005-2014

Prevalence rate	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Dialysis	504	562	628	704	774	829	909	996	1078	1155
Transplant	65	66	66	66	66	66	66	64	63	61

Figure 1.3: Dialysis and transplant prevalence rate per million population, 2005-2014

