

Table 1A. Decomposition of the difference in the use of CT of all tertiary admissions between two periods

	Number of CT per admission	95% CI	
<b>The use of CT</b>			
The past period	0.131	0.129; 0.132	
The recent period	0.243	0.241; 0.245	
<b>Difference</b>	<b>0.112</b>	<b>0.110; 0.114</b>	
<b>Decomposition output</b>			
	Coefficient	95% CI	Percentage
Endowment component	0.069***	0.068; 0.070	62.7
Effect component	0.043***	0.041; 0.045	37.3
<b>1. Specific endowment component</b>			
Sex	-0.00039***	-0.00043; -0.00036	-0.4
Indigenous	0.000074***	0.000066; 0.000081	0.1
Age groups			
18-44 years	-0.00025***	-0.00027; -0.00023	-0.2
45-64 years	0.00010***	0.000089; 0.00011	0.1
65-74 years	-0.00025***	-0.00029; -0.00021	-0.2
75 + years	-0.0000039**	-0.0000066; -0.0000012	-0.004
SEIFA			
Least disadvantage	0.0000081	-0.0000085; 0.000025	0.01
Less disadvantage	-0.000020	-0.000053; 0.000013	-0.02
Moderate disadvantage	0.000056	-0.000060; 0.00017	0.1
High disadvantage	0.000061	-0.000015; 0.00014	0.1
Highest disadvantage	-0.00010	-0.00029; 0.000086	-0.1
Unknown	-0.000028	-0.000075; 0.000018	-0.2
ARIA			
Major cities	-0.00012**	-0.00020; -0.000034	-0.1
Inner regional areas	-0.00029*	-0.00052; -0.000055	-0.3
Outer regional areas	0.000076**	0.000027; 0.00013	0.1
Remote	0.000014	-0.0000095; 0.000037	0.01
Very Remote	0.000065**	0.000028; 0.00010	0.1
Unknown	-0.00015*	-0.00030; -0.0000086	-0.1
Major principal diagnoses			
Mental conditions	-0.00022***	-0.00028; -0.00017	-0.2
Circulatory conditions	0.00051***	0.00048; 0.00054	0.5
Digestive conditions	0.0010***	0.00096; 0.0011	0.9
Endocrine conditions	-0.00013***	-0.00016; -0.00011	-0.1
Musculoskeletal	0.0000029	-0.0000064; 0.000012	0.003
Respiratory	-0.000054***	-0.000080; -0.000028	-0.05
Injuries	0.0052***	0.0051; 0.0053	4.7
Cancer	0.000084***	0.000082; 0.000086	0.1
Number of morbidities			
0-1	-0.0021***	-0.0022; -0.0021	-1.9
2-5	0.0025***	0.0024; 0.0026	2.3
6 or more	0.0067***	0.0065; 0.0068	6.1
Private funding	0.0032***	0.0029; 0.0035	2.9

Unplanned admission	0.055***	0.055; 0.056	50.0
Transferred from secondary hospitals	-0.00073***	-0.00081; -0.00065	-0.7
Had surgical procedures in hospital	-0.0010***	-0.0012; -0.00092	-0.9
<b>2. Specific effect component</b>			
Sex	-0.00043	-0.0015; 0.00059	-0.4
Indigenous	0.00059***	0.00026; 0.00091	0.5
Age groups			
18-44 years	-0.0031***	-0.0037; -0.0025	-2.8
45-64 years	-0.00023	-0.00075; 0.00029	-0.2
65-74 years	0.00050*	0.00011; 0.00089	0.5
75 + years	0.0021***	0.0017; 0.0025	1.9
SEIFA			
Least disadvantage	0.00080	-0.00050; 0.0021	0.7
Less disadvantage	0.00054	-0.00037; 0.0014	0.5
Moderate disadvantage	0.00060	-0.00033; 0.0015	0.5
High disadvantage	0.00044	-0.00046; 0.0013	0.4
Highest disadvantage	0.00055	-0.00018; 0.0013	0.5
Unknown	-0.000070	-0.00017; 0.000031	-0.1
ARIA			
Major cities	0.0060*	0.00086; 0.011	5.5
Inner regional areas	0.00014	-0.00029; 0.00056	0.1
Outer regional areas	-0.00013	-0.00038; 0.00011	-0.1
Remote	-0.00050***	-0.00065; -0.00035	-0.5
Very Remote	-0.00032***	-0.00044; -0.00021	-0.3
Unknown	0.000092**	0.000037; 0.00015	0.1
Major principal diagnoses			
Mental conditions	-0.00062***	-0.00077; -0.00048	-0.6
Circulatory conditions	-0.0011***	-0.0014; -0.00087	-1.0
Digestive conditions	-0.0011***	-0.0014; -0.00087	-1.0
Endocrine conditions	0.000037	-0.00012; 0.00019	-0.1
Musculoskeletal	-0.0015***	-0.0018; -0.0012	-1.4
Respiratory	-0.00093***	-0.0011; -0.00076	-0.8
Injuries	0.00015	-0.000048; 0.00034	0.1
Cancer	-0.0022***	-0.0024; -0.0020	-2.0
Number of morbidities			
0-1	0.0019***	0.0015; 0.0024	1.7
2-5	0.0035***	0.0024; 0.0045	3.2
6 or more	-0.00089***	-0.0010; -0.00078	-0.8
Private funding	-0.00037***	-0.00057; -0.00017	-0.3
Unplanned admission	-0.0054***	-0.0064; -0.0044	-4.9
Transferred from secondary hospitals	-0.00089***	-0.0010; -0.00075	-0.8
Had surgical procedures in hospital	-0.00021**	-0.00035; -0.000062	-0.2
Constant	0.046***	0.041; 0.051	41.8

Note: \*\*\* if  $p$ -value<0.001; \*\* if  $p$ -value<0.01; \* if  $p$ -value<0.05

Table 1B. Decomposition of the difference in the use of CT for unplanned admissions between two periods

	Number of CT per admission	95% CI	
<b>The use of CT</b>			
The past period	0.301	0.298; 0.304	
The recent period	0.418	0.414; 0.420	
<b>Difference</b>	<b>0.117</b>	<b>0.112; 0.120</b>	
<b>Decomposition of the difference</b>	Coefficient	95% CI	Percentage
Endowment component	0.020***	0.019; 0.021	17.1
Effect component	0.096***	0.092; 0.10	82.1
<b>Specific endowment</b>			
Sex	0.00096***	(0.00087; 0.0011)	0.8
Indigenous	-0.0024***	(-0.0026; -0.0021)	-2.0
<b>Age groups</b>			
18-44 years	0.0017***	(0.0016; 0.0019)	1.4
45-64 years	0.0011***	(0.00099; 0.0012)	0.9
65-74 years	-0.00011***	(-0.00012; -0.000092)	-0.1
75 + years	0.0000087***	(0.0000039; 0.000013)	0.01
<b>SEIFA</b>			
Least disadvantage	0.00023	(-0.000026; 0.00048)	0.2
Less disadvantage	0.000092	(-0.0000057; 0.00019)	0.1
Moderate disadvantage	0.00018	(-0.00021; 0.00057)	0.2
High disadvantage	-0.000023	(-0.000097; 0.000050)	-0.02
Highest disadvantage	-0.00036	(-0.0011; 0.00040)	-0.3
Unknown	-0.00021	(-0.00053; 0.00011)	-0.2
<b>ARIA</b>			
Major cities	-0.00043	(-0.0012; 0.00037)	-0.4
Inner regional areas	-0.00073	(-0.0019; 0.00040)	-0.6
Outer regional areas	-0.000031**	(-0.000053; -0.0000085)	-0.03
Remote	0.00000088	(-0.0000017; 0.0000035)	0.001
Very Remote	0.00014***	(0.000071; 0.00021)	0.1
Unknown	-0.00068	(-0.0013; -0.00048)	-0.6
<b>Major principal diagnoses</b>			
Mental conditions	0.00076***	(0.00065; 0.00087)	0.6
Circulatory conditions	-0.0039***	(-0.0043; -0.0036)	-3.3
Digestive conditions	0.00063***	(0.00058; 0.00069)	0.5
Endocrine conditions	0.00088***	(0.00073; 0.0010)	0.7
Musculoskeletal	-0.00062***	(-0.00077; -0.00047)	-0.5
Respiratory	0.0014***	(0.0011; 0.0016)	1.2
Injuries	0.0034***	(0.0032; 0.0035)	2.8
Cancer	-0.0042***	(-0.0044; -0.0040)	-3.5
<b>Number of morbidities</b>			
0-1	0.0020***	(0.0019; 0.0021)	1.7
2-5	0.0018***	(0.0017; 0.0019)	1.5

6 or more	0.010***	(0.010; 0.011)	8.3
Private funding	0.0094***	(0.0084; 0.010)	7.8
Transferred from secondary hospitals	0.00049***	(0.00044; 0.00054)	0.4
Admission with surgical procedures	-0.0019***	(-0.0022; -0.0017)	-1.6
<b>Specific effect component</b>			
Sex	0.0035	(-0.00021; 0.0072)	2.9
Indigenous	0.00050	(-0.00051; 0.0015)	0.4
<b>Age groups</b>			
18-44 years	-0.013***	(-0.015; -0.010)	-10.8
45-64 years	-0.0011	(-0.0027; 0.00042)	-0.9
65-74 years	0.0015**	(0.00046; 0.0026)	1.3
75 + years	0.0083***	(0.0066; 0.0100)	6.9
<b>SEIFA</b>			
Least disadvantage	0.0024	(-0.0023; 0.0071)	2
Less disadvantage	0.0023	(-0.00092; 0.0055)	1.9
Moderate disadvantage	0.0018	(-0.0015; 0.0051)	1.5
High disadvantage	0.0015	(-0.0017; 0.0047)	1.3
Highest disadvantage	0.0020	(-0.00063; 0.0046)	1.7
Unknown	-0.00034	(-0.00086; 0.00017)	-0.3
<b>ARIA</b>			
Major cities	0.0024	(-0.016; 0.020)	2
Inner regional areas	0.00030	(-0.0013; 0.0019)	0.3
Outer regional areas	0.000092	(-0.00081; 0.00100)	0.1
Remote	-0.0016***	(-0.0021; -0.0010)	-1.3
Very Remote	-0.00099***	(-0.0014; -0.00056)	-0.8
Unknown	0.00058**	(0.00019; 0.00097)	0.5
<b>Major principal diagnoses</b>			
Mental conditions	-0.0031***	(-0.0043; -0.0019)	-2.6
Circulatory conditions	-0.0045***	(-0.0061; -0.0029)	-3.8
Digestive conditions	-0.0034***	(-0.0047; -0.0022)	-2.8
Endocrine conditions	0.0010***	(0.00033; 0.0017)	0.8
Musculoskeletal	-0.0019***	(-0.0026; -0.0012)	-1.6
Respiratory	-0.0032***	(-0.0045; -0.0020)	-2.7
Injuries	0.0037***	(0.0021; 0.0053)	3.1
Cancer	-0.0044***	(-0.0050; -0.0038)	-3.7
<b>Number of morbidities</b>			
0-1	0.0079***	(0.0064; 0.0093)	6.6
2-5	0.0024	(-0.00097; 0.0057)	2
6 or more	-0.0060***	(-0.0068; -0.0052)	-5
Private funding sources	-0.00020	(-0.00099; 0.00058)	-0.2
Transferred from secondary hospitals	-0.0090	(-0.010; -0.0078)	-7.5
Admission with surgical procedures	-0.0015**	(-0.0024; -0.00050)	-1.3
Constant	0.11***	(0.091; 0.12)	91.7

Note: \*\*\* if  $p$ -value<0.001; \*\* if  $p$ -value<0.01; \* if  $p$ -value<0.05