

**Appendix 1.** CPT codes for general surgery cases, percent transfused, and the change in transfusion rate.

CPT4	No. of Cases	Transfused % 2011-13	Transfused % 2014-16	Change in Transfusion Rate	Exact p-value
All Cases	23440	6.4%	4.8%	-1.7%	0.000
1100	54	25.0%	20.0%	-5.0%	0.748
1104	68	31.6%	20.0%	-11.6%	0.407
1912	401	0.0%	0.0%	0.0%	1.000
1930	1444	1.4%	0.8%	-0.5%	0.453
4328	278	1.3%	0.8%	-0.4%	1.000
4363	66	20.8%	16.7%	-4.2%	1.000
4364	635	2.0%	0.4%	-1.6%	0.080
4377	525	1.3%	1.0%	-0.3%	1.000
4384	61	41.2%	22.2%	-19.0%	0.171
4412	224	21.4%	19.4%	-2.0%	0.740
4414	1554	24.6%	17.2%	-7.5%	0.000
4415	325	31.9%	22.6%	-9.3%	0.063
4416	461	24.9%	12.9%	-12.0%	0.001
4418	103	5.3%	6.5%	1.3%	1.000
4420	2683	5.4%	4.0%	-1.4%	0.104
4421	431	5.1%	4.7%	-0.4%	1.000
4462	370	4.5%	4.1%	-0.5%	1.000
4464	34	33.3%	31.6%	-1.8%	1.000
4497	1099	0.4%	0.7%	0.3%	0.687
4511	258	18.8%	12.3%	-6.4%	0.171
4512	81	17.9%	35.7%	17.8%	0.085
4513	110	3.2%	0.0%	-3.2%	0.282
4539	240	6.9%	3.6%	-3.3%	0.369
4712	545	18.0%	8.7%	-9.3%	0.002
4713	79	31.3%	8.5%	-22.7%	0.015
4756	1372	0.7%	0.5%	-0.3%	0.727
4760	125	9.1%	3.4%	-5.7%	0.279
4814	251	10.8%	7.6%	-3.2%	0.489
4815	500	22.6%	8.9%	-13.7%	0.000
4900	153	27.2%	18.0%	-9.1%	0.244
4920	82	16.3%	15.4%	-0.9%	1.000
4950	473	0.0%	0.4%	0.4%	1.000
4956	1681	4.0%	1.4%	-2.6%	0.002
4958	821	1.1%	0.6%	-0.5%	0.474
4965	1312	0.4%	0.0%	-0.4%	0.300
6022	397	0.0%	0.0%	0.0%	1.000

6024	747	0.4%	0.5%	0.1%	1.000
6025	386	0.4%	0.0%	-0.4%	1.000
6050	885	0.0%	0.0%	0.0%	1.000
Other	2126	7.3%	3.3%	-3.9%	0.000