

Australian Orthopaedic Association National Joint Replacement Registry

2022 Analysis of State & Territory
Health Data: All Arthroplasty
Supplementary Report



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National Joint Replacement Registry

**2022 Analysis of State & Territory Health Data:
All Arthroplasty
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The Registry greatly appreciates the participation of all joint replacement patients throughout Australia. Their contribution allows ongoing improvements in arthroplasty outcomes to be achieved.

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Introduction

Data presented in this report are for both the public and private hospital sector and have been obtained from State and Territory Health Departments for specific ICD-10-AM codes relating to hip, knee, shoulder, elbow, wrist, ankle and spinal disc replacement.

Data for each state are presented individually with the exception of data for the Australian Capital Territory (ACT) and Northern Territory (NT) which have been combined.

Wrist replacement procedures for South Australia (SA) and Western Australia (WA) have also been combined due to small numbers.

This report provides information on joint replacement for the financial year 1 July 2020 to 30 June 2021. It also includes long term data from as early as 1994/95 which provides a national perspective on the changing rates of hip and knee replacement since that time.

Hip and Knee Replacement

Table G1 Number and Percentage of Hip and Knee Replacements in 2020/21 by State/Territory

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Hip Replacement								
Primary Partial	1,823 10.2%	1,626 12.5%	1,262 12.9%	629 9.9%	623 12.7%	153 8.1%	151 12.3%	6,267 11.4%
Primary Total	14,734 82.4%	10,400 79.7%	7,781 79.3%	5,232 82.4%	3,847 78.5%	1,615 85.9%	941 76.9%	44,550 80.9%
Revision	1,314 7.4%	1,025 7.9%	766 7.8%	489 7.7%	430 8.8%	113 6.0%	131 10.7%	4,268 7.7%
Total Hip	17,871 100.0%	13,051 100.0%	9,809 100.0%	6,350 100.0%	4,900 100.0%	1,881 100.0%	1,223 100.0%	55,085 100.0%
Knee Replacement								
Patella/Trochlear	86 0.3%	81 0.6%	48 0.3%	29 0.3%	18 0.3%	2 0.1%	13 0.8%	277 0.4%
Unicompartmental	750 2.8%	835 6.6%	837 5.5%	847 9.8%	266 4.1%	152 6.3%	74 4.5%	3,761 5.1%
Primary Total	24,582 91.4%	10,702 84.3%	13,301 88.0%	7,098 82.5%	5,619 85.6%	2,132 88.3%	1,467 88.6%	64,901 87.8%
Revision	1,485 5.5%	1,077 8.5%	926 6.1%	633 7.4%	658 10.0%	129 5.3%	101 6.1%	5,009 6.8%
Total Knee	26,903 100.0%	12,695 100.0%	15,112 100.0%	8,607 100.0%	6,561 100.0%	2,415 100.0%	1,655 100.0%	73,948 100.0%
Total Hip & Knee	44,774	25,746	24,921	14,957	11,461	4,296	2,878	129,033

Table G2 Number of Hip and Knee Replacements and Percentage Change between 2019/20 and 2020/21

Replacement Type	2019/20	2020/21	% Change
Hip Replacement			
Primary Partial	6120	6267	2.4
Primary Total	37837	44550	17.7
Revision	4106	4268	3.9
Total Hip	48063	55085	14.6
Knee Replacement			
Patella/Trochlear	221	277	25.3
Unicompartmental	3323	3761	13.2
Primary Total	51739	64901	25.4
Revision	4724	5009	6.0
Total Knee	60007	73948	23.2
Total Hip & Knee	108070	129033	19.4

Table G3 Number of Hip and Knee Replacements and Percentage Change between 2019/20 and 2020/21 by State/Territory

State/Territory	2019/20	2020/21	% Change
NSW	33345	44774	34.3
VIC	25094	25746	2.6
QLD	21399	24921	16.5
WA	12551	14957	19.2
SA	9601	11461	19.4
TAS	3055	4296	40.6
ACT/NT	3025	2878	-4.9
Total Hip & Knee	108070	129033	19.4

Figure G1 Hip and Knee Replacement between 2019/20 and 2020/21 by State/Territory

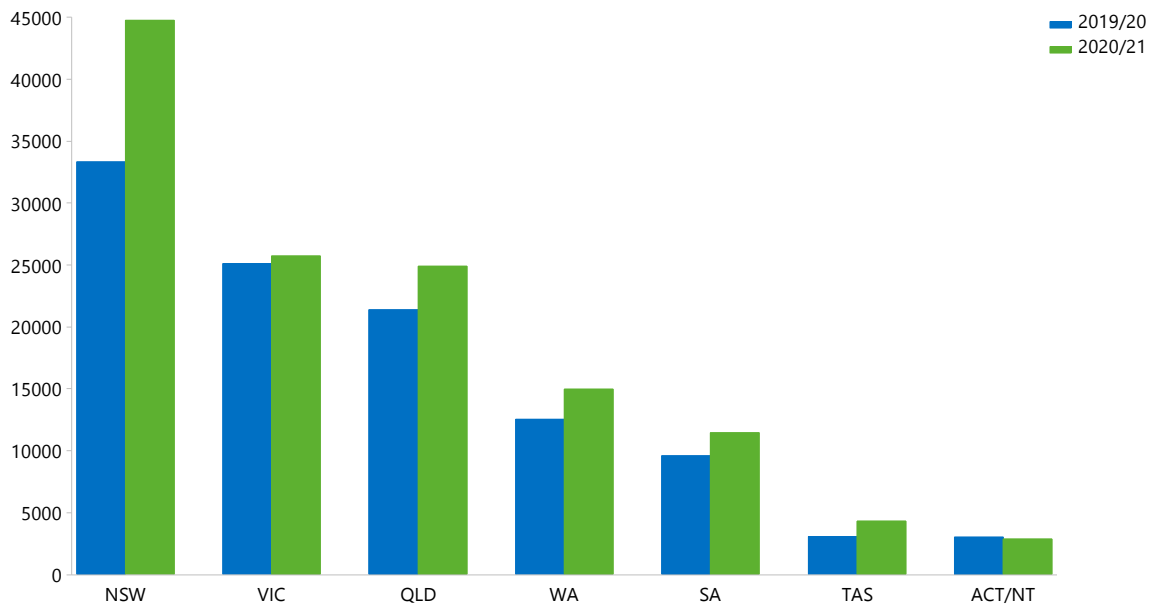


Table G4 Number of Hip and Knee Replacements and Percentage Change from Previous Year

Year	Hip Replacement		Knee Replacement		Total	
	N	% Change	N	% Change	N	% Change
1994/95	18,635	N/A	13,371	N/A	32,006	N/A
1995/96	19,132	2.7	14,542	8.8	33,674	5.2
1996/97	20,127	5.2	15,456	6.3	35,583	5.7
1997/98	21,379	6.2	17,317	12.0	38,696	8.7
1998/99	21,800	2.0	18,832	8.7	40,632	5.0
1999/00	22,717	4.2	19,936	5.9	42,653	5.0
2000/01	24,281	6.9	22,230	11.5	46,511	9.0
2001/02	26,689	9.9	26,089	17.4	52,778	13.5
2002/03	27,833	4.3	28,003	7.3	55,836	5.8
2003/04	29,165	4.8	29,899	6.8	59,064	5.8
2004/05	30,166	3.4	31,870	6.6	62,036	5.0
2005/06	30,440	0.9	33,737	5.9	64,177	3.5
2006/07	31,508	3.5	35,445	5.1	66,953	4.3
2007/08	32,744	3.9	38,052	7.4	70,796	5.7
2008/09	33,541	2.4	39,364	3.4	72,905	3.0
2009/10	35,580	6.1	41,967	6.6	77,547	6.4
2010/11	37,096	4.3	45,571	8.6	82,667	6.6
2011/12	37,964	2.3	47,882	5.1	85,846	3.8
2012/13	39,260	3.4	49,551	3.5	88,811	3.5
2013/14	41,926	6.8	53,368	7.7	95,294	7.3
2014/15	44,064	5.1	56,250	5.4	100,314	5.3
2015/16	46,061	4.5	58,463	3.9	104,524	4.2
2016/17	47,784	3.7	62,575	7.0	110,359	5.6
2017/18	49,100	2.8	64,877	3.7	113,977	3.3
2018/19	50,095	2.0	65,654	1.2	115,749	1.6
2019/20	48,063	-4.1	60,007	-8.6	108,070	-6.6
2020/21	55,085	14.6	73,948	23.2	129,033	19.4
*1994/95 to 2020/21		195.6		453.0		303.2

Note: N/A indicates not applicable

Bilaterals are counted as two replacements from 2000/01

* % change for entire period 1994/95 to 2020/21 is relative to 1994/95

Figure G2 Number of Hip and Knee Replacements from 1994/95 to 2020/21

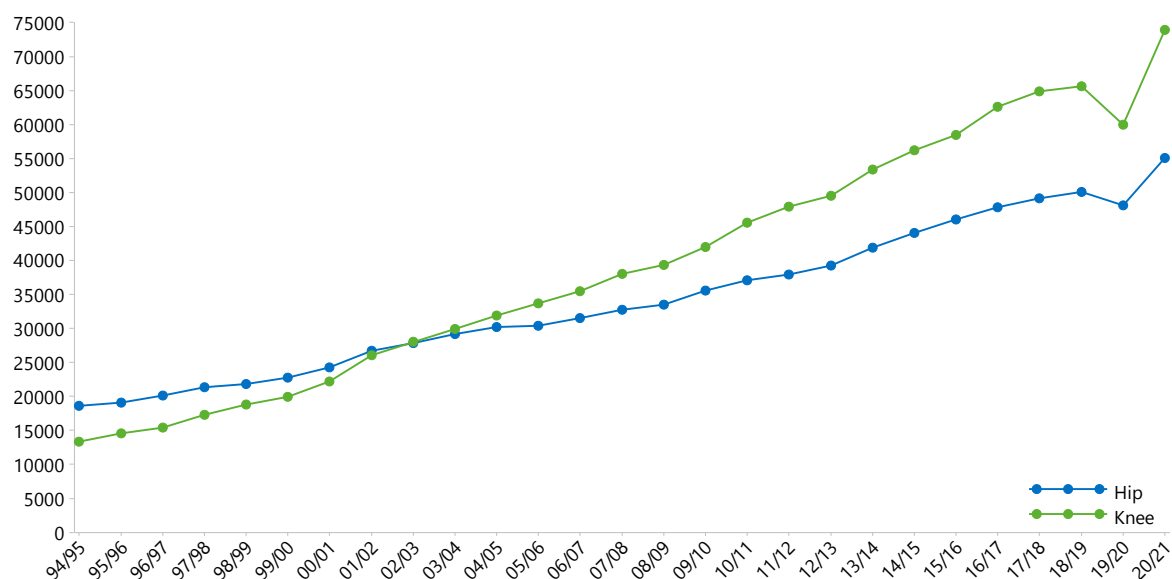


Table G5 Percentage Change between 1994/95 and 2020/21 for Hip and Knee Replacement by State/Territory

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Hip Replacement								
Primary Partial	26.8	26.9	97.2	49.4	20.5	33.0	155.9	40.2
Primary Total	279.9	232.2	402.0	412.4	227.7	280.9	287.2	290.1
Revision	45.7	38.5	94.4	88.1	31.9	56.9	167.3	55.6
Total Hip	187.4	153.3	279.6	273.1	142.9	207.9	248.4	195.6
Knee Replacement								
Primary Total	435.3	321.7	514.6	527.0	388.6	620.3	828.5	439.5
Primary (all primaries)	453.5	357.8	555.5	604.4	413.3	672.3	883.5	473.1
Revision	194.1	293.1	295.7	362.0	387.4	760.0	146.3	273.5
Total Knee	427.8	351.5	530.2	578.3	410.6	676.5	731.7	453.0
Total Hip & Knee	295.7	223.3	400.2	403.4	247.1	365.9	423.3	303.2

Note: Patella/trochlear and unicompartmental data are included in the 1994/95 year in the primary knee numbers. Separate ICD 10 codes for patella/trochlear and unicompartmental were introduced in 1999/00. The Registry believes that the numbers of patella/trochlear and unicompartmental joint replacement undertaken in 1994/95 would have been small. The above table shows percentage changes between 1994/95 primary knee (includes patella/trochlear and unicompartmental) and 2020/21. 'Primary total' excludes patella/trochlear and unicompartmental and 'primary (all primaries)' includes patella/trochlear and unicompartmental.

INCIDENCE OF HIP AND KNEE REPLACEMENT

Table G6 Incidence of Hip and Knee Replacement in 2020/21 by State/Territory per 100,000

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Hip Replacement								
Primary Partial	22.5	24.8	24.0	22.8	34.5	26.9	21.5	24.3
Primary Total	182.0	158.5	147.8	189.4	212.9	283.4	133.9	172.9
Revision	16.2	15.6	14.5	17.7	23.8	19.8	18.6	16.6
Total Hip	220.8	199.0	186.3	229.9	271.2	330.1	174.1	213.8
Knee Replacement								
Patella/Trochlear	1.1	1.2	0.9	1.0	1.0	0.4	1.9	1.1
Unicompartmental	9.3	12.7	15.9	30.7	14.7	26.7	10.5	14.6
Primary Total	303.7	163.1	252.6	257.0	311.0	374.2	208.8	251.9
Revision	18.3	16.4	17.6	22.9	36.4	22.6	14.4	19.4
Total Knee	332.3	193.5	287.0	311.6	363.2	423.8	235.6	287.0
Total Hip & Knee	553.1	392.5	473.3	541.5	634.4	753.9	409.6	500.8

Note: The incidence for each year may differ slightly from previous years due to updating of the Australian population statistics. The Australian population includes Cocos (Keeling) Islands, Christmas Island and Jervis Bay Territory. The values of hip and knee replacement rates per 100,000 population may not equal total values due to rounding. The population statistics were obtained from the Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release>

Figure G3 Incidence of Hip and Knee Replacement in 2020/21 by State/Territory

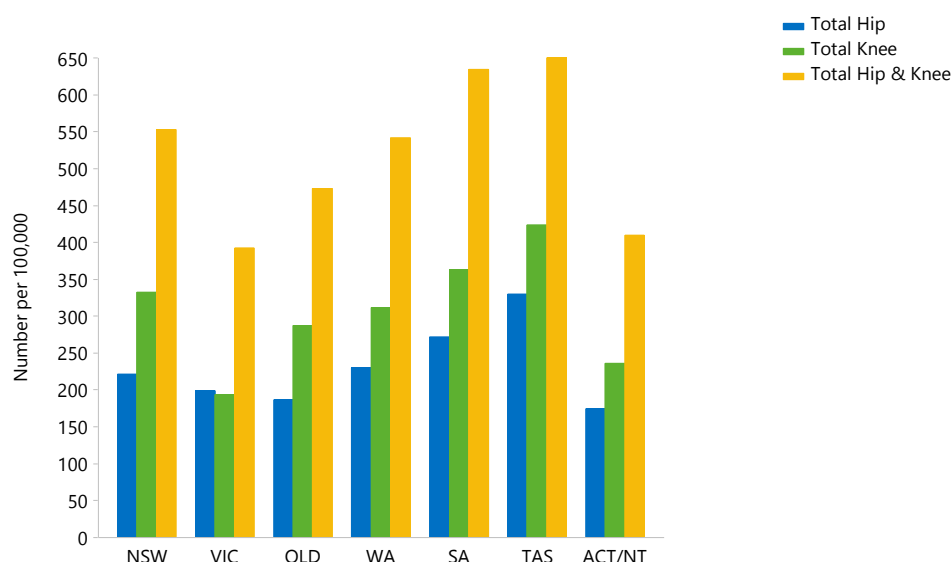


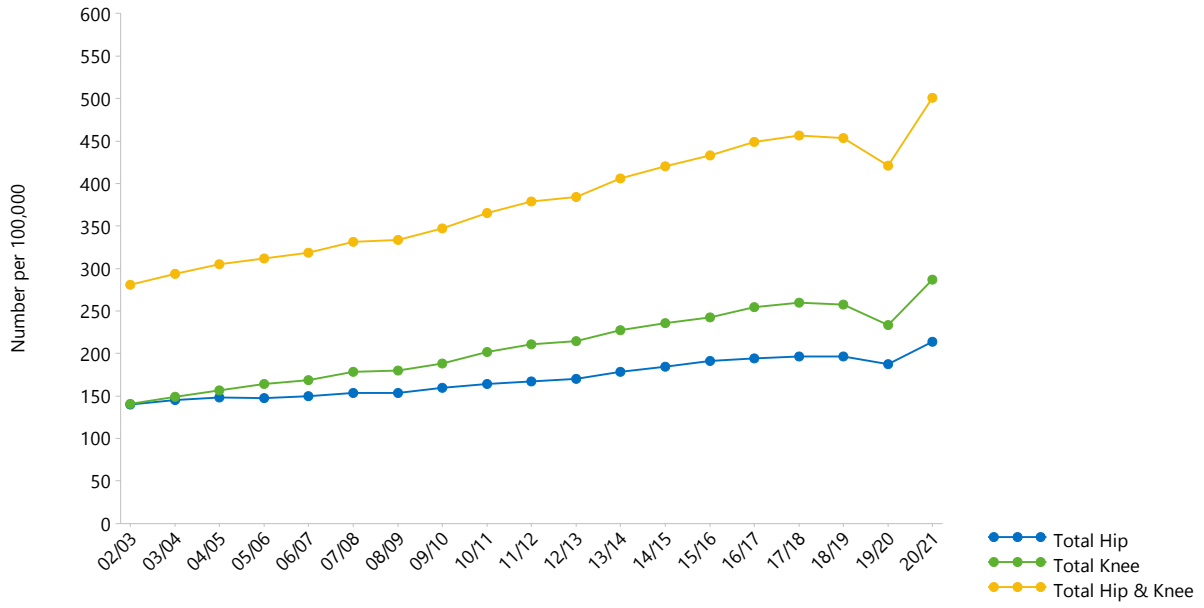
Table G7 Incidence of Hip and Knee Replacement per 100,000 between 2002/03 and 2020/21

Replacement Type	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
<i>ABS Population</i>	<i>19881500</i>	<i>20111300</i>	<i>20328600</i>	<i>20605500</i>	<i>21017200</i>	<i>21374000</i>	<i>21874900</i>	<i>22342400</i>	<i>22620600</i>
Hip Replacement									
Primary Partial	28.5	29.2	28.0	27.3	27.1	26.5	25.8	25.7	25.9
Primary Total	93.2	96.4	101.7	102.2	104.5	108.9	109.7	115.2	118.4
Revision	18.3	19.4	18.6	18.3	18.3	17.8	17.8	18.3	19.7
Total Hip	140.0	145.0	148.4	147.7	149.9	153.2	153.3	159.2	164.0
Knee Replacement									
Patella/Trochlear	1.5	1.5	2.2	2.5	2.1	2.0	2.0	2.0	2.0
Unicompartmental	17.9	17.5	16.0	16.7	15.6	14.4	13.2	12.8	10.3
Primary Total	108.3	115.0	125.1	131.3	137.2	147.2	151.7	159.8	173.2
Revision	13.1	14.6	13.5	13.2	13.8	14.4	13.1	13.2	15.9
Total Knee	140.8	148.7	156.8	163.7	168.6	178.0	180.0	187.8	201.5
Total Hip & Knee	280.8	293.7	305.2	311.5	318.6	331.2	333.3	347.1	365.5

Replacement Type	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
<i>ABS Population</i>	<i>22683600</i>	<i>23130900</i>	<i>23490700</i>	<i>23877900</i>	<i>24127200</i>	<i>24598900</i>	<i>24992400</i>	<i>25522169</i>	<i>25689702</i>	<i>25766600</i>
Hip Replacement										
Primary Partial	23.7	24.7	25.3	25.8	26.2	25.3	24.4	23.6	23.8	24.3
Primary Total	122.3	125.7	134.3	139.9	146.0	151.5	155.1	155.4	147.3	172.9
Revision	21.4	19.3	18.9	18.8	18.7	17.4	17.0	17.2	16.0	16.6
Total Hip	167.4	169.7	178.5	184.5	190.9	194.3	196.5	196.3	187.1	213.8
Knee Replacement										
Patella/Trochlear	2.0	1.9	1.3	1.0	1.2	1.1	1.2	1.1	0.9	1.1
Unicompartmental	9.8	8.7	8.8	9.9	11.0	12.7	14.4	14.0	12.9	14.6
Primary Total	183.2	187.6	199.4	207.3	212.3	222.8	225.3	222.8	201.4	251.9
Revision	16.1	16.1	17.6	17.4	17.8	17.8	18.7	19.3	18.4	19.4
Total Knee	211.1	214.2	227.2	235.6	242.3	254.4	259.6	257.2	233.6	287.0
Total Hip & Knee	378.4	383.9	405.7	420.1	433.2	448.6	456.0	453.5	420.7	500.8

Note: The incidence for each year may differ slightly from previous years due to updates from the Australian population statistics. The Australian population includes Cocos (Keeling) Islands, Christmas Island and Jervis Bay Territory. The population statistics were obtained from the Australian Bureau of Statistics. <https://www.abs.gov.au/statistics/people/population/national-state-and-territory-population/latest-release>

Figure G4 Incidence of Hip and Knee Replacement per 100,000 between 1999/00 and 2020/21



REVISION HIP AND KNEE REPLACEMENT

Figure G5 Percentage of Revision Hip Replacement of all Hip Replacements in 2020/21 by State/Territory

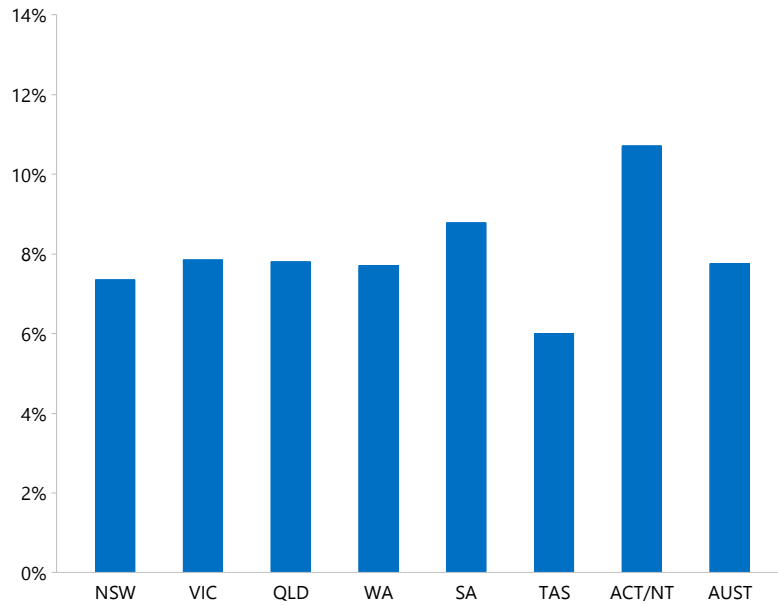
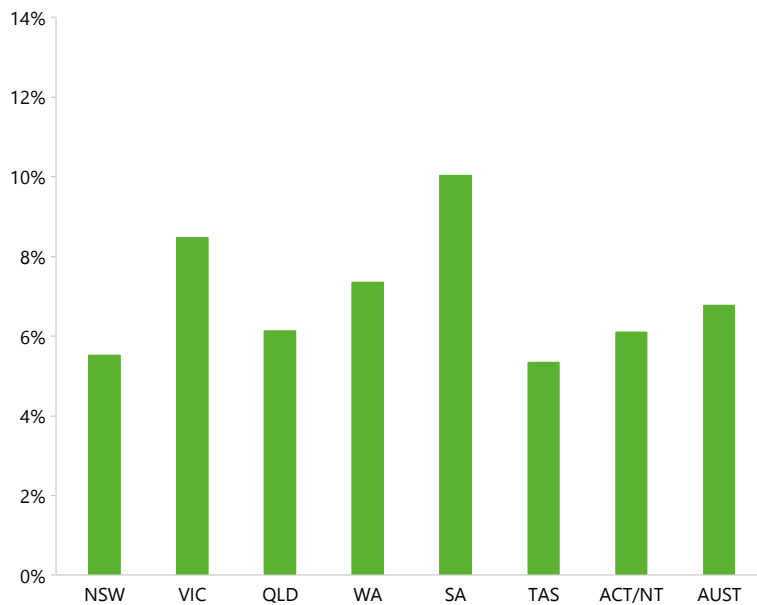


Figure G6 Percentage of Revision Knee Replacement of all Knee Replacements in 2020/21 by State/Territory



HIP AND KNEE REPLACEMENT BY PUBLIC AND PRIVATE SECTOR

Table G8 Hip Replacement in 2020/21 by Public and Private Sector and State/Territory

Hip Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	108	274	272	81	124	7	1	867
Primary Total	9,307	7,465	5,595	3,821	2,971	1,178	758	31,095
Revision	630	631	403	253	249	49	59	2,274
Total Private	10,045	8,370	6,270	4,155	3,344	1,234	818	34,236
Public								
Primary Partial	1,715	1,352	990	548	499	146	150	5,400
Primary Total	5,427	2,935	2,186	1,411	876	437	183	13,455
Revision	684	394	363	236	181	64	72	1,994
Total Public	7,826	4,681	3,539	2,195	1,556	647	405	20,849

Table G9 Knee Replacement in 2020/21 by Public and Private Sector and State/Territory

Knee Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Patella/Trochlear	70	75	40	27	18	1	11	242
Unicompartmental	572	758	749	686	240	143	69	3,217
Primary Total	16,129	8,051	10,170	5,656	4,425	1,712	1,266	47,409
Revision	971	824	601	436	508	105	67	3,512
Total Private	17,742	9,708	11,560	6,805	5,191	1,961	1,413	54,380
Public								
Patella/Trochlear	16	6	8	2	0	1	2	35
Unicompartmental	178	77	88	161	26	9	5	544
Primary Total	8,453	2,651	3,131	1,442	1,194	420	201	17,492
Revision	514	253	325	197	150	24	34	1,497
Total Public	9,161	2,987	3,552	1,802	1,370	454	242	19,568

Table G10 Percentage Change from Previous Year for Hip and Knee Replacement by Public and Private Sector

Year	Public		Private		Total	
	N	%	N	%	N	%
1999/00	19,193	N/A	23,460	N/A	42,653	N/A
2000/01	19,256	0.3	27,255	16.2	46,511	9.0
2001/02	20,852	8.3	31,926	17.1	52,778	13.5
2002/03	21,797	4.5	34,039	6.6	55,836	5.8
2003/04	23,070	5.8	35,994	5.7	59,064	5.8
2004/05	24,022	4.1	38,014	5.6	62,036	5.0
2005/06	26,015	8.3	38,162	0.4	64,177	3.5
2006/07	26,079	0.2	40,874	7.1	66,953	4.3
2007/08	26,880	3.1	43,916	7.4	70,796	5.7
2008/09	27,417	2.0	45,488	3.6	72,905	3.0
2009/10	28,990	5.7	48,557	6.7	77,547	6.4
2010/11	30,052	3.7	52,615	8.4	82,667	6.6
2011/12	30,119	0.2	55,727	5.9	85,846	3.8
2012/13	31,066	3.1	57,745	3.6	88,811	3.5
2013/14	33,957	9.3	61,337	6.2	95,294	7.3
2014/15	34,784	2.4	65,530	6.8	100,314	5.3
2015/16	36,048	3.6	68,476	4.5	104,524	4.2
2016/17	38,360	6.4	71,999	5.1	110,359	5.6
2017/18	39,415	2.8	74,562	3.6	113,977	3.3
2018/19	40,075	1.7	75,674	1.5	115,749	1.6
2019/20	34,783	-13.2	73,287	-3.2	108,070	-6.6
2020/21	40,417	16.2	88,616	20.9	129,033	19.4

Note: As private hospital data for ACT is unavailable, an estimate has been applied based on AOANJRR data from 2016-2020

Figure G7 Number of Hip and Knee Replacements in 2020/21 by State/Territory and Public Private Sector

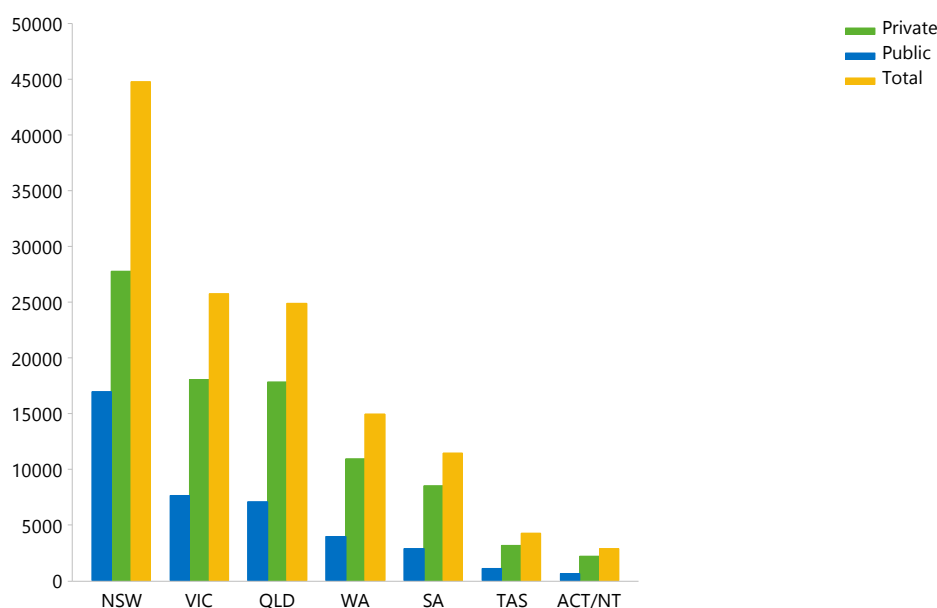


Table G11 Percentage Change from Previous Year for Hip Replacement by Public and Private Sector

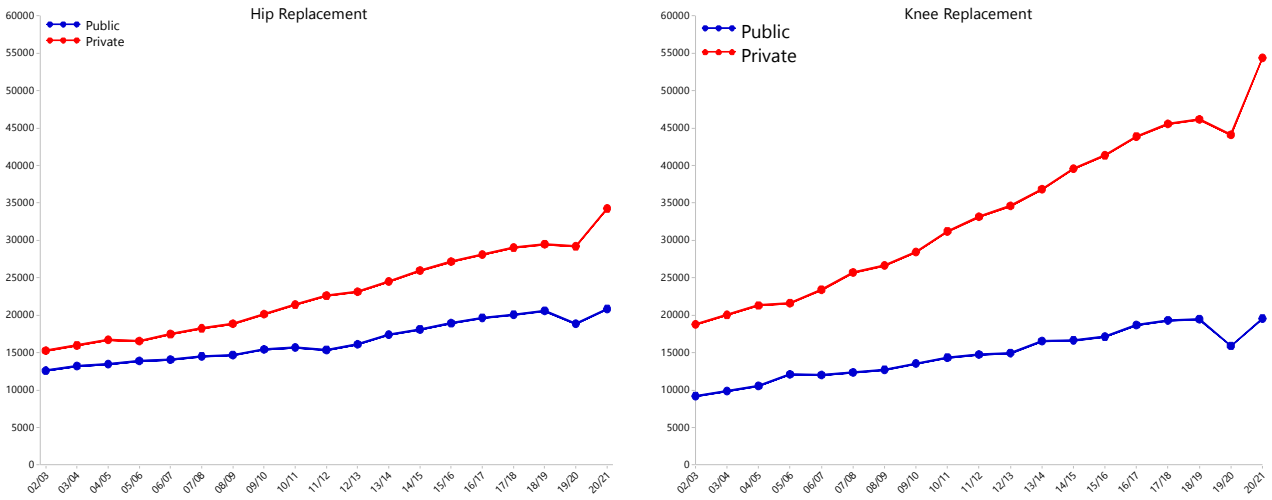
Year	Public		Private		Total	
	N	%	N	%	N	%
1999/00	11,493	N/A	11,224	N/A	22,717	N/A
2000/01	11,543	0.4	12,738	13.5	24,281	6.9
2001/02	12,179	5.5	14,510	13.9	26,689	9.9
2002/03	12,577	3.3	15,256	5.1	27,833	4.3
2003/04	13,193	4.9	15,972	4.7	29,165	4.8
2004/05	13,451	2.0	16,715	4.7	30,166	3.4
2005/06	13,909	3.4	16,531	-1.1	30,440	0.9
2006/07	14,051	1.0	17,457	5.6	31,508	3.5
2007/08	14,520	3.3	18,224	4.4	32,744	3.9
2008/09	14,693	1.2	18,848	3.4	33,541	2.4
2009/10	15,452	5.2	20,128	6.8	35,580	6.1
2010/11	15,701	1.6	21,395	6.3	37,096	4.3
2011/12	15,373	-2.1	22,591	5.6	37,964	2.3
2012/13	16,108	4.8	23,152	2.5	39,260	3.4
2013/14	17,418	8.1	24,508	5.9	41,926	6.8
2014/15	18,112	4.0	25,952	5.9	44,064	5.1
2015/16	18,922	4.5	27,139	4.6	46,061	4.5
2016/17	19,668	3.9	28,116	3.6	47,784	3.7
2017/18	20,090	2.1	29,010	3.2	49,100	2.8
2018/19	20,593	2.5	29,502	1.7	50,095	2.0
2019/20	18,877	-8.3	29,186	-1.1	48,063	-4.1
2020/21	20,849	10.4	34,236	17.3	55,085	14.6

Note: As private hospital data for ACT is unavailable, an estimate has been applied based on AOANJRR data from 2016-2021

Table G12 Percentage Change from Previous Year for Knee Replacement by Public and Private Sector

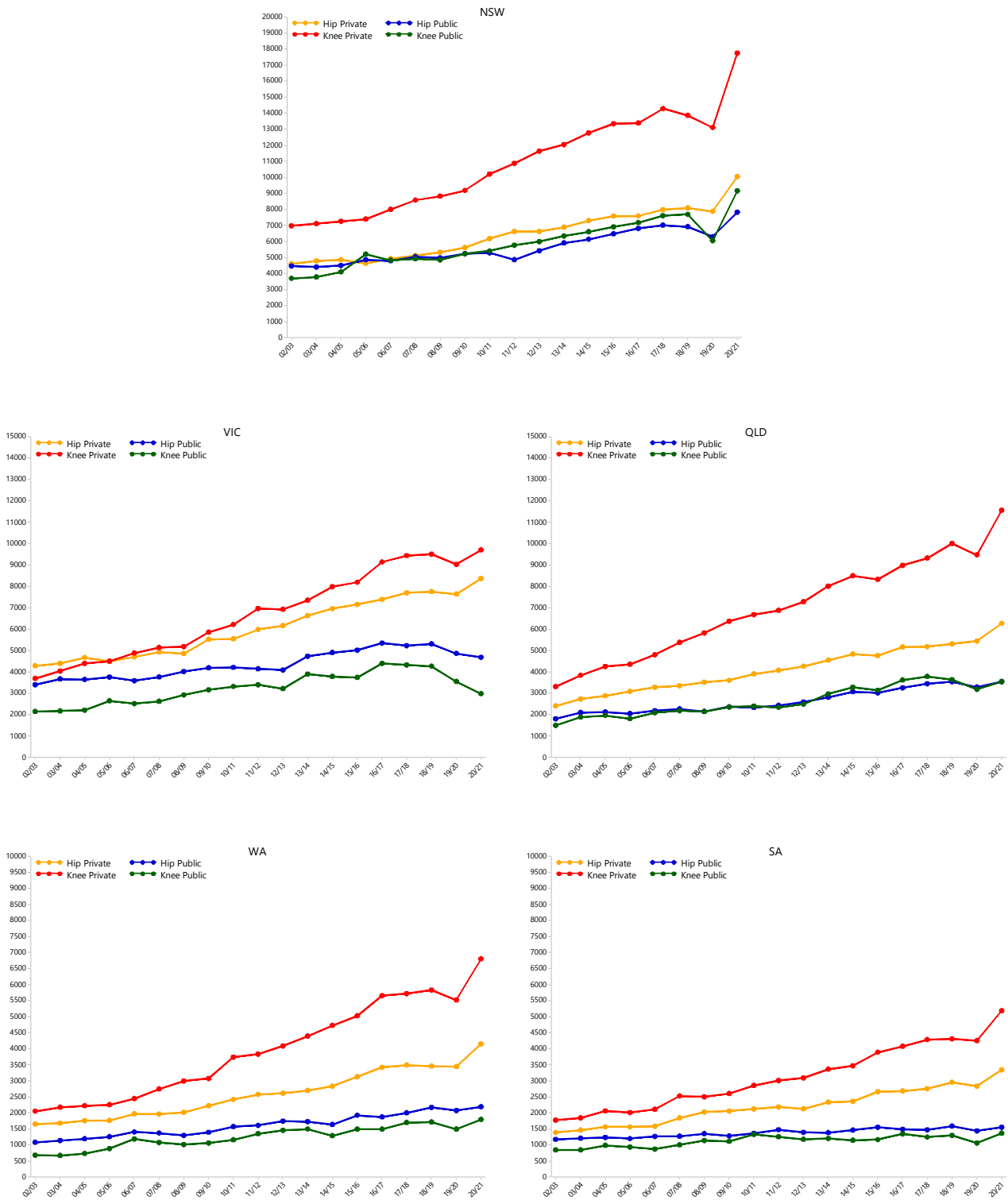
Year	Public		Private		Total	
	N	%	N	%	N	%
1999/00	7,700	N/A	12,236	N/A	19,936	N/A
2000/01	7,713	0.2	14,517	18.6	22,230	11.5
2001/02	8,673	12.4	17,416	20.0	26,089	17.4
2002/03	9,220	6.3	18,783	7.8	28,003	7.3
2003/04	9,877	7.1	20,022	6.6	29,899	6.8
2004/05	10,571	7.0	21,299	6.4	31,870	6.6
2005/06	12,106	14.5	21,631	1.6	33,737	5.9
2006/07	12,028	-0.6	23,417	8.3	35,445	5.1
2007/08	12,360	2.8	25,692	9.7	38,052	7.4
2008/09	12,724	2.9	26,640	3.7	39,364	3.4
2009/10	13,538	6.4	28,429	6.7	41,967	6.6
2010/11	14,351	6.0	31,220	9.8	45,571	8.6
2011/12	14,746	2.8	33,136	6.1	47,882	5.1
2012/13	14,958	1.4	34,593	4.4	49,551	3.5
2013/14	16,539	10.6	36,829	6.5	53,368	7.7
2014/15	16,672	0.8	39,578	7.5	56,250	5.4
2015/16	17,126	2.7	41,337	4.4	58,463	3.9
2016/17	18,692	9.1	43,883	6.2	62,575	7.0
2017/18	19,325	3.4	45,552	3.8	64,877	3.7
2018/19	19,482	0.8	46,172	1.4	65,654	1.2
2019/20	15,906	-18.4	44,101	-4.5	60,007	-8.6
2020/21	19,568	23.0	54,380	23.3	73,948	23.2

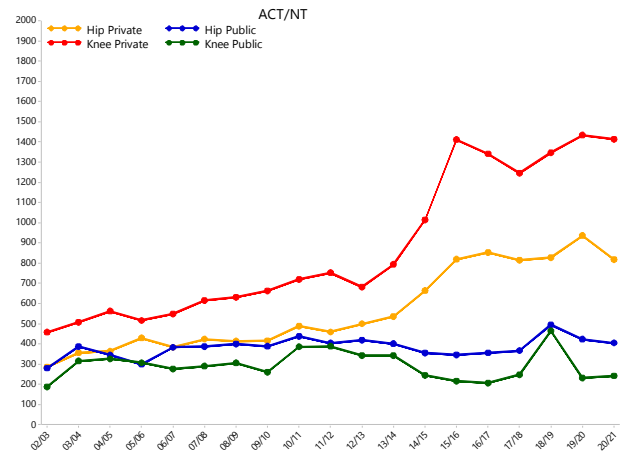
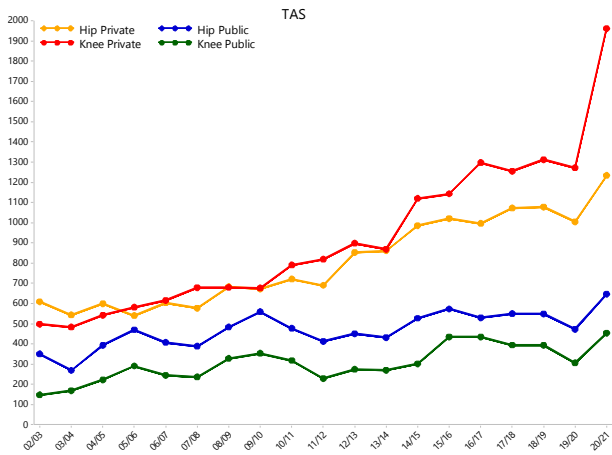
Figure G8 Number of Hip and Knee Replacements by Public and Private Sector and Year



PUBLIC AND PRIVATE SECTOR BY STATE/TERRITORY

Figure G9 Hip and Knee Replacement by Hospital Sector and State/Territory





Shoulder Replacement 2020/21

Table G13 Number and Percentage of Shoulder Replacements in 2020/21 by State/Territory

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Shoulder Replacement								
Primary Partial	87	34	75	9	14	10	9	238
	2.9%	2.0%	3.6%	0.7%	1.8%	3.5%	4.0%	2.6%
Primary Total	2,669	1,483	1,850	1,091	685	262	188	8,228
	88.1%	89.4%	88.3%	90.6%	89.3%	91.9%	84.3%	88.8%
Revision	273	142	170	104	68	13	26	796
	9.0%	8.6%	8.1%	8.6%	8.9%	4.6%	11.7%	8.6%
Total Shoulder	3,029	1,659	2,095	1,204	767	285	223	9,262
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G14 Incidence of Shoulder Replacement in 2020/21 by State/Territory per 100,000

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Shoulder Replacement								
Primary Partial	1.1	0.5	1.4	0.3	0.8	1.8	1.3	0.9
Primary Total	33.0	22.6	35.1	39.5	37.9	46.0	26.8	31.9
Revision	3.4	2.2	3.2	3.8	3.8	2.3	3.7	3.1
Total Shoulder	37.4	25.3	39.8	43.6	42.5	50.0	31.7	35.9

Table G15 Shoulder Replacement in 2020/21 by Public and Private Sector and State/Territory

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	43	21	33	8	5	2	5	117
Primary Total	1,862	1,117	1,433	814	560	209	127	6,122
Revision	163	111	93	68	49	6	10	500
Total Private	2,068	1,249	1,559	890	614	217	142	6,739
Public								
Primary Partial	44	13	42	1	9	8	4	121
Primary Total	807	366	417	277	125	53	61	2,106
Revision	110	31	77	36	19	7	16	296
Total Public	961	410	536	314	153	68	81	2,523

Table G16 Number of Shoulder Replacements and Percentage Change between 2019/20 and 2020/21

Shoulder Replacement	2019/20	2020/21	% Change
Shoulder Replacement			
Primary Partial	208	238	14.4
Primary Total	6,342	8,228	29.7
Revision	745	796	6.8
Total Shoulder	7,295	9,262	27.0

Elbow Replacement 2020/21

Table G17 Number and Percentage of Elbow Replacements in 2020/21 by State/Territory

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Elbow Replacement								
Primary Partial	106	123	102	22	36	14	18	421
	53.5%	64.1%	63.4%	45.8%	50.0%	66.7%	81.8%	59.0%
Primary Total	65	55	48	16	26	5	2	217
	32.8%	28.6%	29.8%	33.3%	36.1%	23.8%	9.1%	30.4%
Revision	27	14	11	10	10	2	2	76
	13.6%	7.3%	6.8%	20.8%	13.9%	9.5%	9.1%	10.6%
Total Elbow	198	192	161	48	72	21	22	714
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G18 Incidence of Elbow Replacement in 2020/21 by State/Territory per 100,000

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Elbow Replacement								
Primary Partial	1.3	1.9	1.9	0.8	2.0	2.5	2.6	1.6
Primary Total	0.8	0.8	0.9	0.6	1.4	0.9	0.3	0.8
Revision	0.3	0.2	0.2	0.4	0.6	0.4	0.3	0.3
Total Elbow	2.4	2.9	3.1	1.7	4.0	3.7	3.1	2.8

Table G19 Elbow Replacement in 2020/21 by Public and Private Sector and State/Territory

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	37	44	46	10	22	4	3	166
Primary Total	32	27	20	7	13	3	1	103
Revision	16	6	8	4	6	2	1	43
Total Private	85	77	74	21	41	9	5	312
Public								
Primary Partial	69	79	56	12	14	10	15	255
Primary Total	33	28	28	9	13	2	1	114
Revision	11	8	3	6	4	0	1	33
Total Public	113	115	87	27	31	12	17	402

Table G20 Number of Elbow Replacements and Percentage Change between 2019/20 and 2020/21

Elbow Replacement	2019/20	2020/21	% Change
Elbow Replacement			
Primary Partial	353	421	19.3
Primary Total	193	217	12.4
Revision	103	76	-26.2
Total Elbow	649	714	10.0

Wrist Replacement 2020/21

Table G21 Number and Percentage of Wrist Replacement in 2020/21 by State/Territory

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Wrist Replacement								
Primary Partial	1	2	3	1	1	0	3	11
	1.5%	6.3%	10.3%	50.0%	16.7%	0.0%	60.0%	7.9%
Primary Total	46	27	19	1	5	0	2	100
	70.8%	84.4%	65.5%	50.0%	83.3%	0.0%	40.0%	71.9%
Revision	18	3	7	0	0	0	0	28
	27.7%	9.4%	24.1%	0.0%	0.0%	0.0%	0.0%	20.1%
Total Wrist	65	32	29	2	6	0	5	139
	100.0%	100.0%	100.0%	100.0%	100.0%	0.0%	100.0%	100.0%

Table G22 Incidence of Wrist Replacement in 2020/21 by State/Territory per 100,000

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Wrist Replacement								
Primary Partial	0.0	0.0	0.1	0.0	0.1	0.0	0.4	0.0
Primary Total	0.6	0.4	0.4	0.0	0.3	0.0	0.3	0.4
Revision	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.1
Total Wrist	0.8	0.5	0.6	0.1	0.3	0.0	0.7	0.5

Table G23 Wrist Replacement in 2020/21 by Public and Private Sector and State/Territory

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	0	0	1	1	1	0	3	6
Primary Total	35	20	17	1	4	0	1	78
Revision	8	1	5	0	0	0	0	14
Total Private	43	21	23	2	5	0	4	98
Public								
Primary Partial	1	2	2	0	0	0	0	5
Primary Total	11	7	2	0	1	0	1	22
Revision	10	2	2	0	0	0	0	14
Total Public	22	11	6	0	1	0	1	41

Table G24 Number of Wrist Replacements and Percentage Change between 2019/20 and 2020/21

Wrist Replacement	2019/20	2020/21	% Change
Wrist Replacement			
Primary Partial	6	11	83.3
Primary Total	99	100	1.0
Revision	29	28	-3.4
Total Wrist	134	139	3.7

Ankle Replacement 2020/21

Table G25 Number and Percentage of Ankle Replacements in 2020/21 by State/Territory

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Ankle Replacement								
Primary Total	218	108	55	45	14	27	4	471
	87.9%	80.6%	91.7%	78.9%	73.7%	90.0%	80.0%	85.2%
Revision	30	26	5	12	5	3	1	82
	12.1%	19.4%	8.3%	21.1%	26.3%	10.0%	20.0%	14.8%
Total Ankle	248	134	60	57	19	30	5	553
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G26 Incidence of Ankle Replacement in 2020/21 by State/Territory per 100,000

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Ankle Replacement								
Primary Total	2.7	1.6	1.0	1.6	0.8	4.7	0.6	1.8
Revision	0.4	0.4	0.1	0.4	0.3	0.5	0.1	0.3
Total Ankle	3.1	2.0	1.1	2.1	1.1	5.3	0.7	2.1

Table G27 Ankle Replacement in 2020/21 by Public and Private Sector and State/Territory

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Total	182	103	49	44	12	24	1	415
Revision	19	24	4	11	4	2	0	64
Total Private	201	127	53	55	16	26	1	479
Public								
Primary Total	36	5	6	1	2	3	3	56
Revision	11	2	1	1	1	1	1	18
Total Public	47	7	7	2	3	4	4	74

Table G28 Number of Ankle Replacements and Percentage Change between 2019/20 and 2020/21

Ankle Replacement	2019/20	2020/21	% Change
Ankle Replacement			
Primary Total	334	471	41.0
Revision	55	82	49.1
Total Ankle	389	553	42.2

Spinal Disc Replacement 2020/21

Table G29 Number and Percentage of Spinal Disc Replacement in 2020/21 by State/Territory

Spinal Disc Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Spinal Disc Replacement								
Insertion of Disc (1 Level)	329	239	448	131	21	91	17	1,276
	87.7%	80.5%	89.6%	77.1%	87.5%	79.1%	56.7%	84.4%
Insertion of Disc (> 2 Levels)	23	19	18	27	1	19	13	120
	6.1%	6.4%	3.6%	15.9%	4.2%	16.5%	43.3%	7.9%
Revision of Disc (1 Level)	21	36	32	10	1	5	0	105
	5.6%	12.1%	6.4%	5.9%	4.2%	4.3%	0.0%	6.9%
Revision of Disc (> 2 Levels)	2	3	2	2	1	0	0	10
	0.5%	1.0%	0.4%	1.2%	4.2%	0.0%	0.0%	0.7%
Total Spinal Disc	375	297	500	170	24	115	30	1,511
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G30 Incidence of Spinal Disc Replacement in 2020/21 by State/Territory per 100,000

Spinal Disc Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
<i>ABS Population June 2021</i>	<i>8095400</i>	<i>6559900</i>	<i>5265000</i>	<i>2762200</i>	<i>1806600</i>	<i>569800</i>	<i>702600</i>	<i>25766600</i>
Spinal Disc Replacement								
Insertion of Disc (1 Level)	4.1	3.6	8.5	4.7	1.2	16.0	2.4	5.0
Insertion of Disc (> 2 Levels)	0.3	0.3	0.3	1.0	0.1	3.3	1.9	0.5
Revision of Disc (1 Level)	0.3	0.5	0.6	0.4	0.1	0.9	0.0	0.4
Revision of Disc (> 2 Levels)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0
Total Spinal Disc	4.6	4.5	9.5	6.2	1.3	20.2	4.3	5.9

Table G31 Spinal Disc Replacement in 2020/21 by Public and Private Sector and State/Territory

Spinal Disc Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Insertion of Disc (1 Level)	292	232	418	128	17	81	15	1,183
Insertion of Disc (> 2 Levels)	17	19	17	27	0	19	12	111
Revision of Disc (1 Level)	20	36	29	10	1	2	0	98
Revision of Disc (> 2 Levels)	2	2	2	1	0	0	0	7
Total Private	331	289	466	166	18	102	27	1,399
Public								
Insertion of Disc (1 Level)	37	7	30	3	4	10	2	93
Insertion of Disc (> 2 Levels)	6	0	1	0	1	0	1	9
Revision of Disc (1 Level)	1	0	3	0	0	3	0	7
Revision of Disc (> 2 Levels)	0	1	0	1	1	0	0	3
Total Public	44	8	34	4	6	13	3	112

Table G32 Number of Spinal Disc Replacements and Percentage Change between 2019/20 and 2020/21

Spinal Disc Replacement	2019/20	2020/21	% Change
Spinal Disc Replacement			
Insertion of Disc (1 Level)	1,258	1,276	1.4
Insertion of Disc (> 2 Levels)	120	120	0.0
Revision of Disc (1 Level)	114	105	-7.9
Revision of Disc (> 2 Levels)	11	10	-9.1
Total Spinal Disc	1,503	1,511	0.5

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