

2024 SUPPLEMENTARY REPORT

Analysis of State and Territory Health Data





Australian
Orthopaedic
Association
National
Joint
Replacement
Registry



# **Analysis of State and Territory Health Data**

2024 Supplementary Report

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# Analysis of State and Territory Health Data 2024 Supplementary Report



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The Registry acknowledges the ongoing support of all hospitals, both public and private, that undertake arthroplasty surgery nationally. The support provided by each hospital through their nominated coordinator(s) is appreciated. A complete list of participating hospitals and coordinators is presented at the end of the Hip, Knee and Shoulder Arthroplasty Annual Report.

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. The AOANJRR, in collaboration with service provider SAHMRI, has curated and produced this report. Responsibility for data accuracy and collection remains with the jurisdictional departments of health.

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 2022 to 30 June 2023. 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 2022/23 by State/Territory

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Hip Replacement		•						
Primary Partial	1,966	1,771	1,419	572	653	158	197	6,736
	11.0%	11.4%	13.2%	9.1%	12.1%	7.2%	13.4%	11.3%
Primary Total	14,719	12,745	8,555	5,221	4,200	1,909	1,149	48,498
	82.0%	82.1%	79.7%	83.4%	77.8%	87.4%	78.2%	81.5%
Revision	1,262	1,003	764	464	542	118	123	4,276
	7.0%	6.5%	7.1%	7.4%	10.0%	5.4%	8.4%	7.2%
Total Hip	17,947	15,519	10,738	6,257	5,395	2,185	1,469	59,510
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Knee Replacement								
Patella/Trochlear	72	83	52	21	30	17	5	280
	0.3%	0.5%	0.3%	0.3%	0.4%	0.6%	0.3%	0.4%
Unicompartmental	533	1,042	661	533	277	141	116	3,303
	2.0%	6.4%	4.4%	6.7%	3.9%	5.2%	7.0%	4.3%
Primary Total	24,185	13,946	13,418	6,811	6,041	2,413	1,432	68,246
	91.9%	85.9%	88.5%	85.3%	86.0%	88.3%	86.6%	88.5%
Revision	1,518	1,165	1,023	623	680	161	100	5,270
	5.8%	7.2%	6.8%	7.8%	9.7%	5.9%	6.0%	6.8%
Total Knee	26,308	16,236	15,154	7,988	7,028	2,732	1,653	77,099
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Total Hip & Knee	44,255	31,755	25,892	14,245	12,423	4,917	3,122	136,609

Table G2 Number of Hip and Knee Replacements and Percentage Change between 2021/22 and 2022/23

Replacement Type	2021/22	2022/23	% Change
Hip Replacement			
Primary Partial	6380	6736	5.6
Primary Total	41613	48498	16.5
Revision	3955	4276	8.1
Total Hip	51948	59510	14.6
Knee Replacement	•	•	
Patella/Trochlear	232	280	20.7
Unicompartmental	3095	3303	6.7
Primary Total	55181	68246	23.7
Revision	4489	5270	17.4
Total Knee	62997	77099	22.4
Total Hip & Knee	114945	136609	18.8

Table G3 Number of Hip and Knee Replacements and Percentage Change between 2021/22 and 2022/23 by State/Territory

State/Territory	2021/22	2022/23	% Change
NSW	35740	44255	23.8
VIC	24486	31755	29.7
QLD	23489	25892	10.2
WA	12472	14245	14.2
SA	10936	12423	13.6
TAS	4518	4917	8.8
ACT/NT	3304	3122	-5.5
Total Hip & Knee	114945	136609	18.8

Figure G1 Hip and Knee Replacement between 2021/22 and 2022/23 by State/Territory

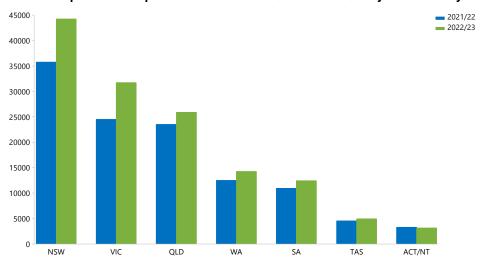


Table G4 Number of Hip and Knee Replacements and Percentage Change from Previous Year

V	Hip Rep	acement	Knee Re	placement	T	otal
Year	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
2021/22	51,948	-5.7	62,997	-14.8	114,945	-10.9
2022/23	59,510	14.6	77,099	22.4	136,609	18.8
*1994/95 to 2022/23		219.3		476.6		326.8

Note: N/A indicates not applicable
Bilaterals are counted as two replacements from 2000/01

 $<sup>^{*}</sup>$  % change for entire period 1994/95 to 2022/23 is relative to 1994/95



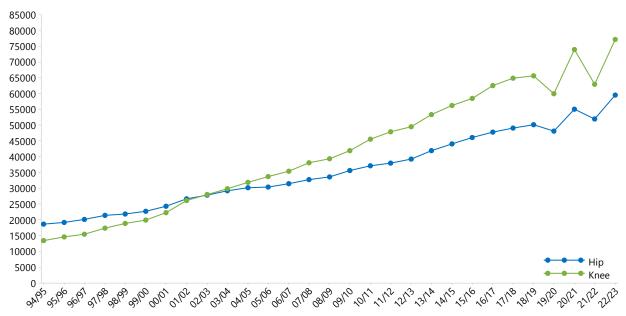


Table G5 Percentage Change between 1994/95 and 2022/23 for Hip and Knee Replacement by State/Territory

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Hip Replacement								
Primary Partial	36.7	38.3	121.7	35.9	26.3	37.4	233.9	50.7
Primary Total	279.6	307.1	451.9	411.4	257.8	350.2	372.8	324.6
Revision	39.9	35.5	93.9	78.5	66.3	63.9	151.0	55.9
Total Hip	188.6	201.2	315.6	267.6	167.5	257.6	318.5	219.3
Knee Replacement								
Primary Total	426.7	449.5	520.1	501.7	425.3	715.2	806.3	467.3
Primary (all primaries)	439.9	493.8	553.0	550.6	452.0	768.6	882.9	497.1
Revision	200.6	325.2	337.2	354.7	403.7	973.3	143.9	293.0
Total Knee	416.1	477.4	531.9	529.5	446.9	778.5	730.7	476.6
Total Hip & Knee	291.1	298.7	419.7	379.5	276.2	433.3	467.6	326.8

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 2022/23. 'Primary total' excludes patella/trochlear and unicompartmental and 'primary (all primaries)' includes patella/trochlear and unicompartmental.

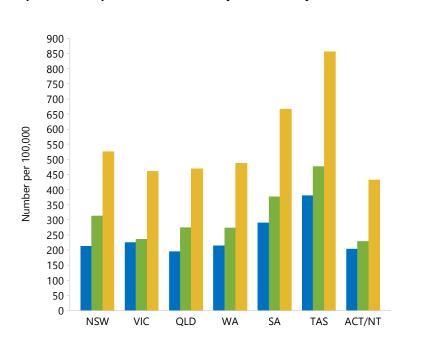
#### **INCIDENCE OF HIP AND KNEE REPLACEMENT**

Table G6 Incidence of Hip and Knee Replacement in 2022/23 by State/Territory per 100,000

Replacement Type	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Hip Replacement								
Primary Partial	23.3	25.6	25.7	19.5	35.0	27.5	27.2	25.0
Primary Total	174.5	184.5	154.7	178.3	225.0	332.2	158.7	179.8
Revision	15.0	14.5	13.8	15.8	29.0	20.5	17.0	15.9
Total Hip	212.8	224.7	194.2	213.7	289.1	380.2	203.0	220.7
Knee Replacement								
Patella/Trochlear	0.9	1.2	0.9	0.7	1.6	3.0	0.7	1.0
Unicompartmental	6.3	15.1	12.0	18.2	14.8	24.5	16.0	12.2
Primary Total	286.7	201.9	242.7	232.6	323.7	419.9	197.8	253.1
Revision	18.0	16.9	18.5	21.3	36.4	28.0	13.8	19.5
Total Knee	311.9	235.1	274.1	272.8	376.6	475.4	228.4	285.9
Total Hip & Knee	524.7	459.8	468.4	486.5	665.6	855.6	431.3	506.6

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 2022/23 by State/Territory



Total HipTotal Knee

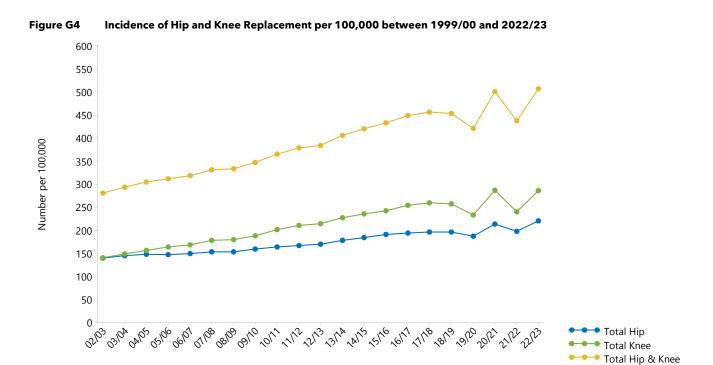
Total Hip & Knee

Table G7 Incidence of Hip and Knee Replacement per 100,000 between 2002/03 and 2022/23

Replacement Type	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
ABS Population	19881500	20111300	20328600	20605500	21017200	21374000	21874900	22342400	22620600	22683600
Hip Replacement										
Primary Partial	28.5	29.2	28.0	27.3	27.1	26.5	25.8	25.7	25.9	23.7
Primary Total	93.2	96.4	101.7	102.2	104.5	108.9	109.7	115.2	118.4	122.3
Revision	18.3	19.4	18.6	18.3	18.3	17.8	17.8	18.3	19.7	21.4
Total Hip	140.0	145.0	148.4	147.7	149.9	153.2	153.3	159.2	164.0	167.4
Knee Replacement										
Patella/Trochlear	1.5	1.5	2.2	2.5	2.1	2.0	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	9.8
Primary Total	108.3	115.0	125.1	131.3	137.2	147.2	151.7	159.8	173.2	183.2
Revision	13.1	14.6	13.5	13.2	13.8	14.4	13.1	13.2	15.9	16.1
Total Knee	140.8	148.7	156.8	163.7	168.6	178.0	180.0	187.8	201.5	211.1
Total Hip & Knee	280.8	293.7	305.2	311.5	318.6	331.2	333.3	347.1	365.5	378.4
	•									

2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22	2022/23
23130900	23490700	23877900	24127200	24598900	24992400	25522169	25689702	25766600	26268400	26966800
24.7	25.3	25.8	26.2	25.3	24.4	23.6	23.8	24.3	24.3	25.0
125.7	134.3	139.9	146.0	151.5	155.1	155.4	147.3	172.9	158.4	179.8
19.3	18.9	18.8	18.7	17.4	17.0	17.2	16.0	16.6	15.1	15.9
169.7	178.5	184.5	190.9	194.3	196.5	196.3	187.1	213.8	197.8	220.7
1.9	1.3	1.0	1.2	1.1	1.2	1.1	0.9	1.1	0.9	1.0
8.7	8.8	9.9	11.0	12.7	14.4	14.0	12.9	14.6	11.8	12.2
187.6	199.4	207.3	212.3	222.8	225.3	222.8	201.4	251.9	210.1	253.1
16.1	17.6	17.4	17.8	17.8	18.7	19.3	18.4	19.4	17.1	19.5
214.2	227.2	235.6	242.3	254.4	259.6	257.2	233.6	287.0	239.8	285.9
383.9	405.7	420.1	433.2	448.6	456.0	453.5	420.7	500.8	437.6	506.6

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



#### **REVISION HIP AND KNEE REPLACEMENT**

Figure G5 Percentage of Revision Hip Replacement of all Hip Replacements in 2022/23 by State/Territory

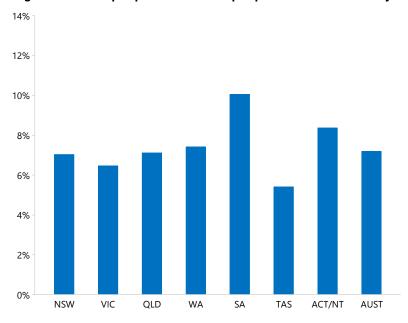
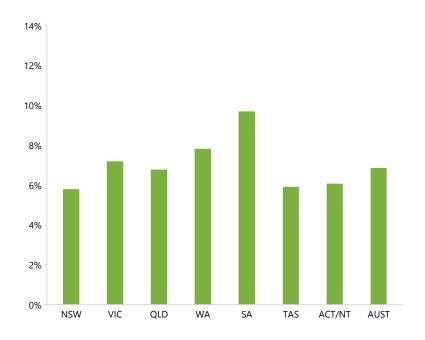


Figure G6 Percentage of Revision Knee Replacement of all Knee Replacements in 2022/23 by State/Territory



#### HIP AND KNEE REPLACEMENT BY PUBLIC AND PRIVATE SECTOR

Table G8 Hip Replacement in 2022/23 by Public and Private Sector and State/Territory

Hip Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	90	230	235	50	109	12	1	727
Primary Total	9,691	8,857	6,487	3,798	3,269	1,386	794	34,282
Revision	504	584	382	206	281	36	49	2,042
Total Private	10,285	9,671	7,104	4,054	3,659	1,434	844	37,051
Public								
Primary Partial	1,876	1,541	1,184	522	544	146	196	6,009
Primary Total	5,028	3,888	2,068	1,423	931	523	355	14,216
Revision	758	419	382	258	261	82	74	2,234
Total Public	7,662	5,848	3,634	2,203	1,736	751	625	22,459

Note: As private hospital data is unavailable, an estimate has been applied based on AOANJRR data in ACT from 2016-2023 and WA from 2020-21

Table G9 Knee Replacement in 2022/23 by Public and Private Sector and State/Territory

Knee Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private			•		•		•	
Patella/Trochlear	61	75	44	19	27	14	3	243
Unicompartmental	446	911	639	468	253	127	99	2,943
Primary Total	16,676	10,081	10,743	5,478	4,925	1,774	1,052	50,729
Revision	931	834	651	419	518	107	42	3,502
Total Private	18,114	11,901	12,077	6,384	5,723	2,022	1,196	57,417
Public								
Patella/Trochlear	11	8	8	2	3	3	2	37
Unicompartmental	87	131	22	65	24	14	17	360
Primary Total	7,509	3,865	2,675	1,333	1,116	639	380	17,517
Revision	587	331	372	204	162	54	58	1,768
Total Public	8,194	4,335	3,077	1,604	1,305	710	457	19,682

Note: As private hospital data is unavailable, an estimate has been applied based on AOANJRR data in ACT from 2016-2023 and WA from 2020-21

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

V	Pul	blic	Priv	ate	Total		
Year	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	
2021/22	32,306	-20.1	82,639	-6.7	114,945	-10.9	
2022/23	42,141	30.4	94,468	14.3	136,609	18.8	

Note: As private hospital data is unavailable, an estimate has been applied based on AOANJRR data in ACT from 2016-2023 and WA from 2020-21

Figure G7 Number of Hip and Knee Replacements in 2022/23 by State/Territory and Public/Private Sector

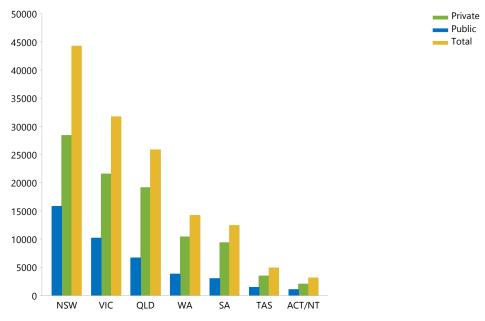


Table G11 Percentage Change from Previous Year for Hip Replacement by Public and Private Sector

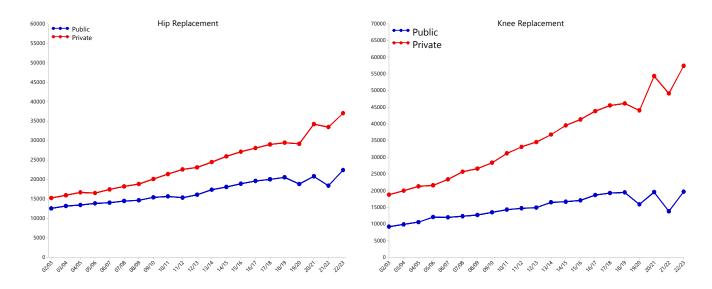
V	Publi	ic	Priva	te	Tota	Total		
Year	N	%	N	%	N	%		
1999/00	11,493	N/A	11,224	N/A	22,717	N/A		
2000/01	11,543	0.4	12,738	13.5	24,281	6.9		
2001/02	12,179	5.5	14,510	13.9	26,689	9.9		
2002/03	12,577	3.3	15,256	5.1	27,833	4.3		
2003/04	13,193	4.9	15,972	4.7	29,165	4.8		
2004/05	13,451	2.0	16,715	4.7	30,166	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		
2021/22	18,452	-11.5	33,496	-2.2	51,948	-5.7		
2022/23	22,459	21.7	37,051	10.6	59,510	14.6		

Note: As private hospital data is unavailable, an estimate has been applied based on AOANJRR data in ACT from 2016-2023and WA from 2020-21

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

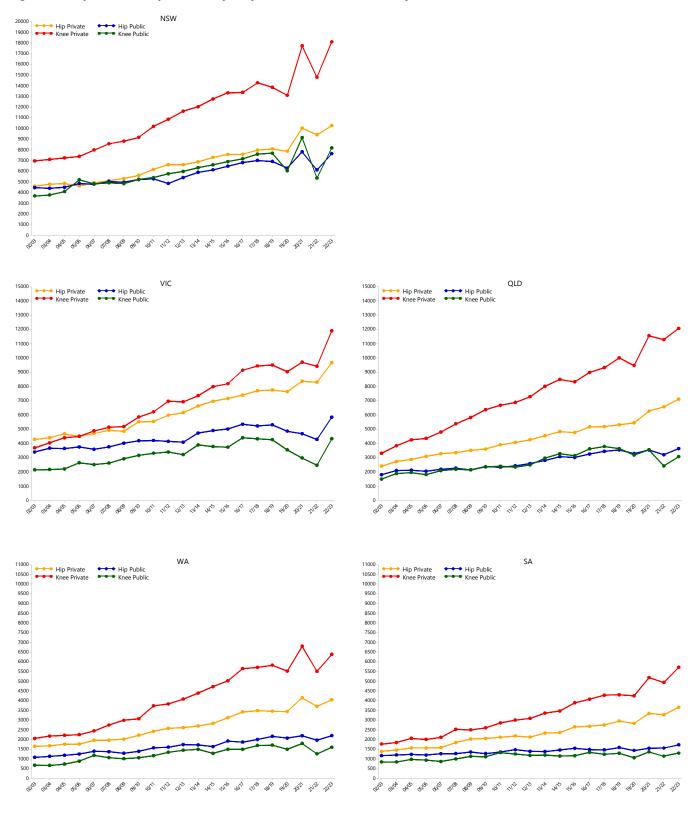
Year	Pub	lic	Priva	ate	Total		
rear	N	%	N	%	N	%	
1999/00	7,700	N/A	12,236	N/A	19,936	N/A	
2000/01	7,713	0.2	14,517	18.6	22,230	11.5	
2001/02	8,673	12.4	17,416	20.0	26,089	17.4	
2002/03	9,220	6.3	18,783	7.8	28,003	7.3	
2003/04	9,877	7.1	20,022	6.6	29,899	6.8	
2004/05	10,571	7.0	21,299	6.4	31,870	6.6	
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	
2021/22	13,854	-29.2	49,143	-9.6	62,997	-14.8	
2022/23	19,682	42.1	57,417	16.8	77,099	22.4	

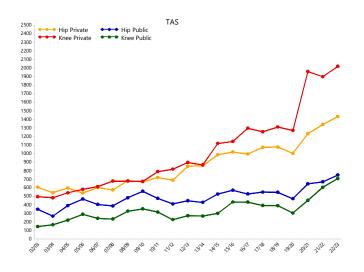
Figure G8 Number of Hip and Knee Replacements by Public and Private Sector and Year

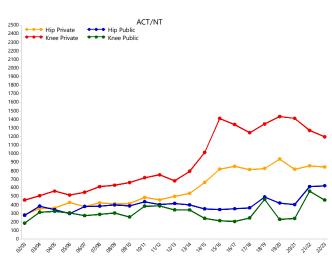


#### **PUBLIC AND PRIVATE SECTOR BY STATE/TERRITORY**

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







# **Shoulder Replacement 2022/23**

Table G13 Number and Percentage of Shoulder Replacements in 2022/23 by State/Territory

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Shoulder Replacement								
Primary Partial	78	25	63	5	9	4	5	189
	2.5%	1.1%	2.8%	0.4%	1.1%	1.4%	2.3%	1.9%
Primary Total	2,729	1,971	1,948	1,107	708	277	192	8,932
	89.0%	90.0%	87.9%	90.7%	88.6%	94.9%	87.3%	89.3%
Revision	259	193	205	108	82	11	23	881
	8.4%	8.8%	9.3%	8.9%	10.3%	3.8%	10.5%	8.8%
Total Shoulder	3,066	2,189	2,216	1,220	799	292	220	10,002
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G14 Incidence of Shoulder Replacement in 2022/23 by State/Territory per 100,000

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Shoulder Replacement								
Primary Partial	0.9	0.4	1.1	0.2	0.5	0.7	0.7	0.7
Primary Total	32.4	28.5	35.2	37.8	37.9	48.2	26.5	33.1
Revision	3.1	2.8	3.7	3.7	4.4	1.9	3.2	3.3
Total Shoulder	36.3	31.7	40.1	41.7	42.8	50.8	30.4	37.1

Table G15 Shoulder Replacement in 2022/23 by Public and Private Sector and State/Territory

Shoulder Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private		•	•					
Primary Partial	46	13	42	3	2	0	5	111
Primary Total	1,897	1,472	1,547	842	573	201	129	6,661
Revision	132	125	114	67	54	4	6	502
Total Private	2,075	1,610	1,703	912	629	205	140	7,274
Public								
Primary Partial	32	12	21	2	7	4	0	78
Primary Total	832	499	401	265	135	76	63	2,271
Revision	127	68	91	41	28	7	17	379
Total Public	991	579	513	308	170	87	80	2,728

Table G16 Number of Shoulder Replacements and Percentage Change between 2021/22 and 2022/23

Shoulder Replacement	2021/22	2022/23	% Change
Shoulder Replacement			
Primary Partial	203	189	-6.9
Primary Total	7,544	8,932	18.4
Revision	759	881	16.1
Total Shoulder	8,506	10,002	17.6

### **Elbow Replacement 2022/23**

Table G17 Number and Percentage of Elbow Replacements in 2022/23 by State/Territory

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Elbow Replacement								
Primary Partial	92	90	75	22	20	6	8	313
	50.8%	62.5%	54.7%	64.7%	48.8%	50.0%	44.4%	55.2%
Primary Total	58	25	38	9	5	4	6	145
	32.0%	17.4%	27.7%	26.5%	12.2%	33.3%	33.3%	25.6%
Revision	31	29	24	3	16	2	4	109
	17.1%	20.1%	17.5%	8.8%	39.0%	16.7%	22.2%	19.2%
Total Elbow	181	144	137	34	41	12	18	567
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: As primary partial elbow data is unavailable, an estimate has been applied based on AOANJRR data in all states from 2022-2023

Table G18 Incidence of Elbow Replacement in 2022/23 by State/Territory per 100,000

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Elbow Replacement								
Primary Partial	1.1	1.3	1.4	0.8	1.1	1.0	1.1	1.2
Primary Total	0.7	0.4	0.7	0.3	0.3	0.7	0.8	0.5
Revision	0.4	0.4	0.4	0.1	0.9	0.3	0.6	0.4
Total Elbow	2.1	2.1	2.5	1.2	2.2	2.1	2.5	2.1

Note: As primary partial elbow data is unavailable, an estimate has been applied based on AOANJRR data in all states from 2022-2023

Table G19 Elbow Replacement in 2022/23 by Public and Private Sector and State/Territory

Elbow Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	30	31	41	12	11	1	2	128
Primary Total	20	12	24	6	2	1	1	66
Revision	13	24	12	3	6	2	3	63
Total Private	63	67	77	21	19	4	6	257
Public								
Primary Partial	62	59	34	10	9	5	6	185
Primary Total	38	13	14	3	3	3	5	79
Revision	18	5	12	0	10	0	1	46
Total Public	118	77	60	13	22	8	12	310

Note: As primary partial elbow data is unavailable, an estimate has been applied based on AOANJRR data in all states from 2022-2023

Table G20 Number of Elbow Replacements and Percentage Change between 2021/22 and 2022/23

Elbow Replacement	2021/22	2022/23	% Change
Elbow Replacement			
Primary Partial	400	313	-21.8
Primary Total	210	145	-31.0
Revision	106	109	2.8
Total Elbow	716	567	-20.8

# **Wrist Replacement 2022/23**

Table G21 Number and Percentage of Wrist Replacement in 2022/23 by State/Territory

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Wrist Replacement								
Primary Partial	2	2	1	2	0	0	2	9
	4.0%	5.1%	3.1%	20.0%	0.0%	0.0%	33.3%	6.0%
Primary Total	39	21	22	6	1	3	2	94
	78.0%	53.8%	68.8%	60.0%	11.1%	75.0%	33.3%	62.7%
Revision	9	16	9	2	8	1	2	47
	18.0%	41.0%	28.1%	20.0%	88.9%	25.0%	33.3%	31.3%
Total Wrist	50	39	32	10	9	4	6	150
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G22 Incidence of Wrist Replacement in 2022/23 by State/Territory per 100,000

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Wrist Replacement								
Primary Partial	0.0	0.0	0.0	0.1	0.0	0.0	0.3	0.0
Primary Total	0.5	0.3	0.4	0.2	0.1	0.5	0.3	0.3
Revision	0.1	0.2	0.2	0.1	0.4	0.2	0.3	0.2
Total Wrist	0.6	0.6	0.6	0.3	0.5	0.7	8.0	0.6

Table G23 Wrist Replacement in 2022/23 by Public and Private Sector and State/Territory

Wrist Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Partial	2	1	1	1	0	0	2	7
Primary Total	29	19	19	4	1	2	1	75
Revision	6	12	7	2	5	1	2	35
Total Private	37	32	27	7	6	3	5	117
Public								
Primary Partial	0	1	0	1	0	0	0	2
Primary Total	10	2	3	2	0	1	1	19
Revision	3	4	2	0	3	0	0	12
Total Public	13	7	5	3	3	1	1	33

Table G24 Number of Wrist Replacements and Percentage Change between 2021/22 and 2022/23

Wrist Replacement	2021/22	2022/23	% Change
Wrist Replacement			
Primary Partial	8	9	12.5
Primary Total	108	94	-13.0
Revision	40	47	17.5
Total Wrist	156	150	-3.8

# **Ankle Replacement 2022/23**

Table G25 Number and Percentage of Ankle Replacements in 2022/23 by State/Territory

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Ankle Replacement								
Primary Total	260	170	53	50	29	48	9	619
	91.5%	79.1%	82.8%	78.1%	90.6%	96.0%	81.8%	86.0%
Revision	24	45	11	14	3	2	2	101
	8.5%	20.9%	17.2%	21.9%	9.4%	4.0%	18.2%	14.0%
Total Ankle	284	215	64	64	32	50	11	720
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Table G26 Incidence of Ankle Replacement in 2022/23 by State/Territory per 100,000

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Ankle Replacement								
Primary Total	3.1	2.5	1.0	1.7	1.6	8.4	1.2	2.3
Revision	0.3	0.7	0.2	0.5	0.2	0.3	0.3	0.4
Total Ankle	3.4	3.1	1.2	2.2	1.7	8.7	1.5	2.7

Table G27 Ankle Replacement in 2022/23 by Public and Private Sector and State/Territory

Ankle Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Private								
Primary Total	219	154	49	48	25	42	6	543
Revision	18	43	5	13	3	1	1	84
Total Private	237	197	54	61	28	43	7	627
Public								
Primary Total	41	16	4	2	4	6	3	76
Revision	6	2	6	1	0	1	1	17
Total Public	47	18	10	3	4	7	4	93

Table G28 Number of Ankle Replacements and Percentage Change between 2021/22 and 2022/23

Ankle Replacement	2021/22	2022/23	% Change
Ankle Replacement			
Primary Total	473	619	30.9
Revision	74	101	36.5
Total Ankle	547	720	31.6

### **Spinal Disc Replacement 2022/23**

Table G29 Number and Percentage of Spinal Disc Replacement in 2022/23 by State/Territory

Spinal Disc Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
Spinal Disc Replacement								
Insertion of Disc (1 Level)	189	188	293	84	36	28	16	834
	89.6%	91.7%	86.2%	80.0%	75.0%	65.1%	55.2%	85.0%
Insertion of Disc (> 2 Levels)	22	16	26	18	12	12	13	119
	10.4%	7.8%	7.6%	17.1%	25.0%	27.9%	44.8%	12.1%
Revision of Disc (1 Level)	0	1	20	3	0	3	0	27
	0.0%	0.5%	5.9%	2.9%	0.0%	7.0%	0.0%	2.8%
Revision of Disc (> 2 Levels)	0	0	1	0	0	0	0	1
	0.0%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.1%
Total Spinal Disc	211	205	340	105	48	43	29	981
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: As spinal disc replacement data is unavailable, an estimate has been applied based on AOANJRR data for all states except QLD from 2022-2023

Table G30 Incidence of Spinal Disc Replacement in 2022/23 by State/Territory per 100,000

Spinal Disc Replacement	NSW	VIC	QLD	WA	SA	TAS	ACT/NT	AUST
ABS Population June 2023	8434800	6906000	5528300	2927900	1866300	574700	723800	26966800
Spinal Disc Replacement								
Insertion of Disc (1 Level)	2.2	2.7	5.3	2.9	1.9	4.9	2.2	3.1
Insertion of Disc (> 2 Levels)	0.3	0.2	0.5	0.6	0.6	2.1	1.8	0.4
Revision of Disc (1 Level)	0.0	0.0	0.4	0.1	0.0	0.5	0.0	0.1
Revision of Disc (> 2 Levels)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Spinal Disc	2.5	3.0	6.2	3.6	2.6	7.5	4.0	3.6

Table G31 Spinal Disc Replacement in 2022/23 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)	169	187	265	84	36	27	16	784
Insertion of Disc (> 2 Levels)	22	16	22	18	12	12	13	115
Revision of Disc (1 Level)	0	1	18	3	0	3	0	25
Revision of Disc (> 2 Levels)	0	0	1	0	0	0	0	1
Total Private	191	204	306	105	48	42	29	925
					• •			923
				100		. <u>-</u>		323
Public						-		323
Public Insertion of Disc (1 Level)	20	1	28	0	0	1	0	50
	20	1 0			0	·-		
Insertion of Disc (1 Level)		1	28	0		1	0	50

Table G32 Number of Spinal Disc Replacements and Percentage Change between 2021/22 and 2022/23

Spinal Disc Replacement	2021/22	2022/23	% Change
Spinal Disc Replacement			
Insertion of Disc (1 Level)	1,087	834	-23.3
Insertion of Disc (> 2 Levels)	192	119	-38.0
Revision of Disc (1 Level)	78	27	-65.4
Revision of Disc (> 2 Levels)	9	1	-88.9
Total Spinal Disc	1,366	981	-28.2

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