

Australian Orthopaedic Association National Joint Replacement Registry

2012 Annual Report

ERRATUM

Updated 15 February 2013

Note: The version of the 2012 Annual Report currently available on the NJRR website has been corrected.

PRIMARY TOTAL KNEE REPLACEMENT

Page 136

ERROR– SEE BELOW	CORRECTION – SEE BELOW	DATE AMENDED
Tables KT16 , KT17 and Figure KT13	Tables KT16 , KT17 and Figure KT13	11 December 2012

Page 137

ERROR– SEE BELOW	CORRECTION – SEE BELOW	DATE AMENDED
Tables KT18 , KT19 and Figure KT14	Tables KT18 , KT19 and Figure KT14	11 December 2012

PROSTHESES WITH HIGHER THAN ANTICIPATED RATES OF REVISION

Page 169 – Paragraph 3

ERROR	CORRECTION	DATE AMENDED
There are 12 primary total hip prostheses and prostheses combinations being identified for the first time.	There are nine primary total hip prostheses and prostheses combinations being identified for the first time.	11 December 2012

Page 184 – Paragraph 1

ERROR	CORRECTION	DATE AMENDED
There are five total knee prostheses that are being identified for the first time.	There are four total knee prostheses that are being identified for the first time.	11 December 2012

PRIMARY TOTAL HIP REPLACEMENT

Page 69 – Ceramic and Metal Bearing

The AOANJRR has recently re-reviewed the classification of bearing surfaces. As a consequence, the AOANJRR has identified four femoral heads and two acetabular inserts that were incorrectly classified in the 2012 Annual Report. Three femoral heads were incorrectly classified as Metal and have been updated to Ceramic. This change means that 171 Metal/Ceramic procedures have now been reclassified to Ceramic/Ceramic. The third femoral head was incorrectly classified as Ceramic and has been updated to Metal. This change means that two Ceramic/Metal procedures have now been reclassified to Metal/Metal.

Two acetabular inserts were incorrectly classified as Ceramic and have been updated to Polyethylene (Modified and Non-Modified). This change means that 172 Metal/Ceramic procedures have now been reclassified to Metal/Polyethylene.

These changes affect the outcome of the Metal/Ceramic bearing surface, as shown in Tables HT53 and HT54. The number of Metal/Ceramic bearings has decreased from 391 to 48, and the number of revisions has decreased from 24 to 5. Consequently, the revision rate per 100 observed years has changed from 2.57 (1.65, 3.82) to 1.42 (0.46, 3.31).

ERROR	CORRECTION	DATE AMENDED
<p><i>Ceramic and Metal Bearing</i> The Registry reports data on these relatively new bearing surface combinations. There are two types of ceramic and metal bearing. The Registry has information on 300 ceramic head/metal bearings and 391 metal head/ceramic bearings. Despite the small number of procedures and short follow up period, the early indication is that a metal head/ceramic bearing has a higher rate of revision compared to most other bearings. The rate of revision of ceramic head/metal bearing is not different from most other bearings. The cumulative percent revision for metal head/ceramic bearing at five years is 7.1 (4.6, 10.8) and ceramic head/metal bearing at three years is 4.0 (1.9, 8.2).</p>	<p><i>Ceramic and Metal Bearing</i> The Registry reports data on these relatively new bearing surface combinations. There are two types of ceramic and metal bearing. The Registry has information on 298 ceramic head/metal bearings and 48 metal head/ceramic bearings.</p> <p>The rate of revision of ceramic head/metal bearing is not different from most other bearings. The cumulative percent revision at three years is 4.1 (2.0, 8.3).</p> <p>The use of a metal head/ceramic bearing is not an industry recommended combination. Only a small number of procedures have been undertaken using this bearing surface. The cumulative percent revision at five years is 6.3 (2.1, 18.1). Metal head/ceramic bearing has a significantly higher rate of revision when compared to the bearing surface combination of modified polyethylene with metal, ceramic or ceramicised metal femoral heads.</p>	<p>15 February 2013</p>

PRIMARY TOTAL HIP REPLACEMENT

Page 86

ERROR– SEE BELOW	CORRECTION – SEE BELOW	DATE AMENDED
Tables HT53 and HT54	Tables HT53 and HT54	15 February 2013

Tables and Figure as printed

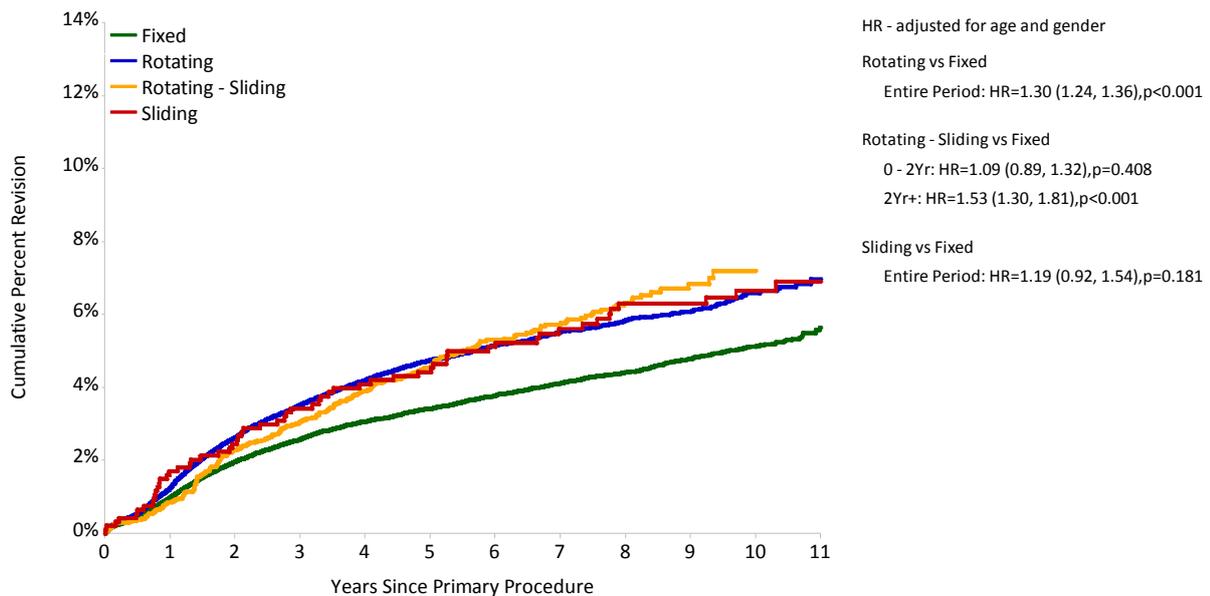
Table KT16: Revision Rates of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)

Bearing Mobility	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
Fixed	6127	216366	909943	0.67 (0.66, 0.69)
Rotating	3160	79271	348875	0.91 (0.87, 0.94)
Rotating - Sliding	247	4576	28711	0.86 (0.76, 0.97)
Sliding	59	948	8337	0.71 (0.54, 0.91)
Unknown	4	115	673	0.59 (0.16, 1.52)
TOTAL	9597	301276	1296538	0.74 (0.73, 0.76)

Table KT17: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Fixed	1.0 (0.9, 1.0)	2.6 (2.5, 2.7)	3.4 (3.3, 3.5)	5.1 (4.9, 5.3)	5.6 (5.3, 5.9)
Rotating	1.2 (1.2, 1.3)	3.5 (3.4, 3.7)	4.7 (4.6, 4.9)	6.6 (6.3, 6.9)	7.0 (6.5, 7.4)
Rotating - Sliding	0.8 (0.6, 1.2)	3.1 (2.6, 3.6)	4.5 (4.0, 5.2)	7.2 (6.2, 8.3)	
Sliding	1.7 (1.0, 2.8)	3.4 (2.4, 4.8)	4.4 (3.3, 6.0)	6.7 (5.2, 8.5)	6.9 (5.4, 8.9)

Figure KT13: Cumulative Percent Revision of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)



Number at Risk	0 Yr	1 Yrs	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Fixed	216366	182017	124368	80354	8052	1976
Rotating	79271	69534	49590	31194	2733	573
Rotating - Sliding	4576	4417	4046	3133	170	13
Sliding	948	925	883	840	442	213

Tables and Figure corrected

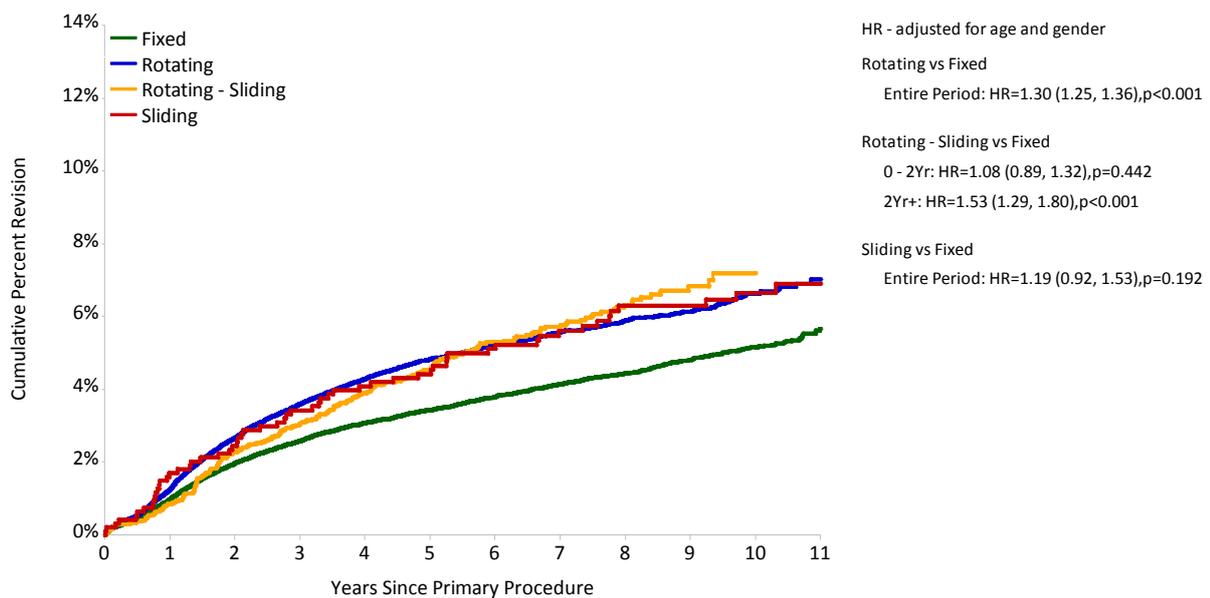
Table KT16: Revision Rates of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)

Bearing Mobility	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
Fixed	6367	224401	938176	0.68 (0.66, 0.70)
Rotating	2920	71236	320642	0.91 (0.88, 0.94)
Rotating - Sliding	247	4576	28711	0.86 (0.76, 0.97)
Sliding	59	948	8337	0.71 (0.54, 0.91)
Unknown	4	115	673	0.59 (0.16, 1.52)
TOTAL	9597	301276	1296538	0.74 (0.73, 0.76)

Table KT17: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Fixed	1.0 (0.9, 1.0)	2.6 (2.5, 2.7)	3.4 (3.3, 3.5)	5.1 (5.0, 5.3)	5.7 (5.4, 6.0)
Rotating	1.3 (1.2, 1.3)	3.6 (3.4, 3.7)	4.8 (4.6, 5.0)	6.6 (6.3, 7.0)	7.0 (6.6, 7.5)
Rotating - Sliding	0.8 (0.6, 1.2)	3.1 (2.6, 3.6)	4.5 (4.0, 5.2)	7.2 (6.2, 8.3)	
Sliding	1.7 (1.0, 2.8)	3.4 (2.4, 4.8)	4.4 (3.3, 6.0)	6.7 (5.2, 8.5)	6.9 (5.4, 8.9)

Figure KT13: Cumulative Percent Revision of Primary Total Knee Replacement by Bearing Mobility (Primary Diagnosis OA)



Number at Risk	0 Yr	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Fixed	224401	188879	128789	82705	8052	1976
Rotating	71236	62672	45169	28843	2733	573
Rotating - Sliding	4576	4417	4046	3133	170	13
Sliding	948	925	883	840	442	213

Tables and Figure as printed

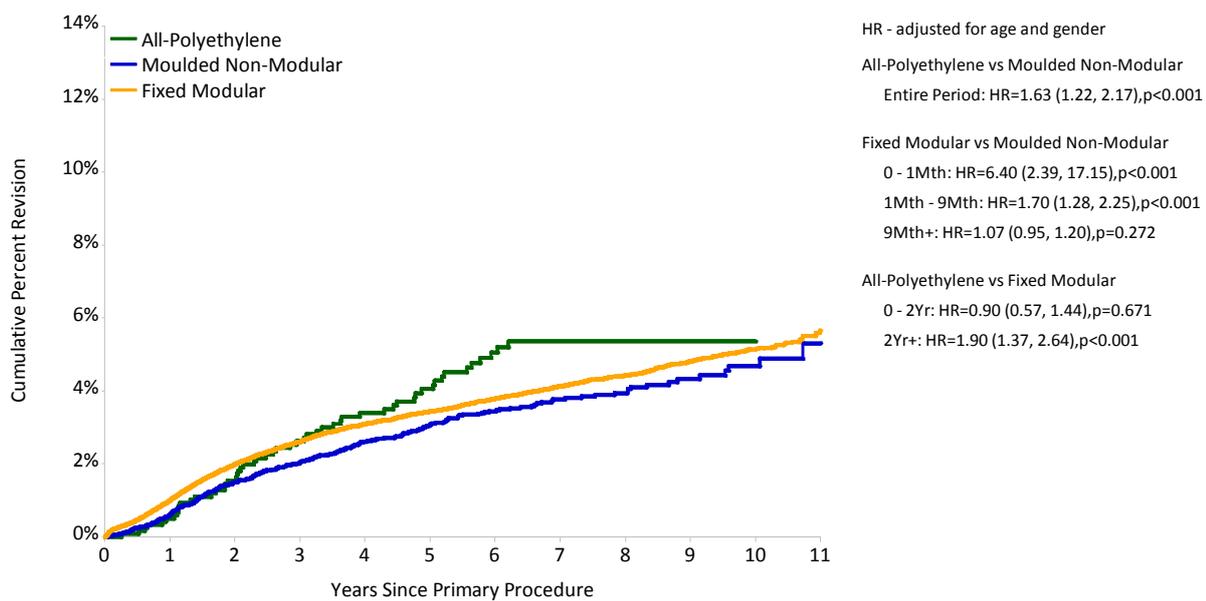
Table KT18: Revision Rates of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)

Fixed Bearing Type	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
All-Polyethylene	54	1208	7301	0.74 (0.56, 0.97)
Moulded Non-Modular	346	14334	59146	0.58 (0.52, 0.65)
Fixed Modular	5727	200824	843495	0.68 (0.66, 0.70)
TOTAL	6127	216366	909943	0.67 (0.66, 0.69)

Table KT19: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
All-Polyethylene	0.5 (0.2, 1.1)	2.6 (1.8, 3.7)	4.0 (3.0, 5.4)	5.4 (4.1, 7.0)	
Moulded Non-Modular	0.6 (0.5, 0.8)	2.0 (1.8, 2.3)	3.1 (2.7, 3.5)	4.7 (4.0, 5.4)	5.3 (4.3, 6.6)
Fixed Modular	1.0 (1.0, 1.1)	2.6 (2.5, 2.7)	3.4 (3.3, 3.5)	5.1 (5.0, 5.3)	5.6 (5.3, 6.0)

Figure KT14: Cumulative Percent Revision of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)



Number at Risk	0 Yr	1 Yrs	3 Yrs	5 Yrs	10 Yrs	11 Yrs
All-Polyethylene	1208	1173	1039	839	42	5
Moulded Non-Modular	14334	12303	8371	5024	506	150
Fixed Modular	200824	168541	114958	74491	7504	1821

Tables and Figure corrected

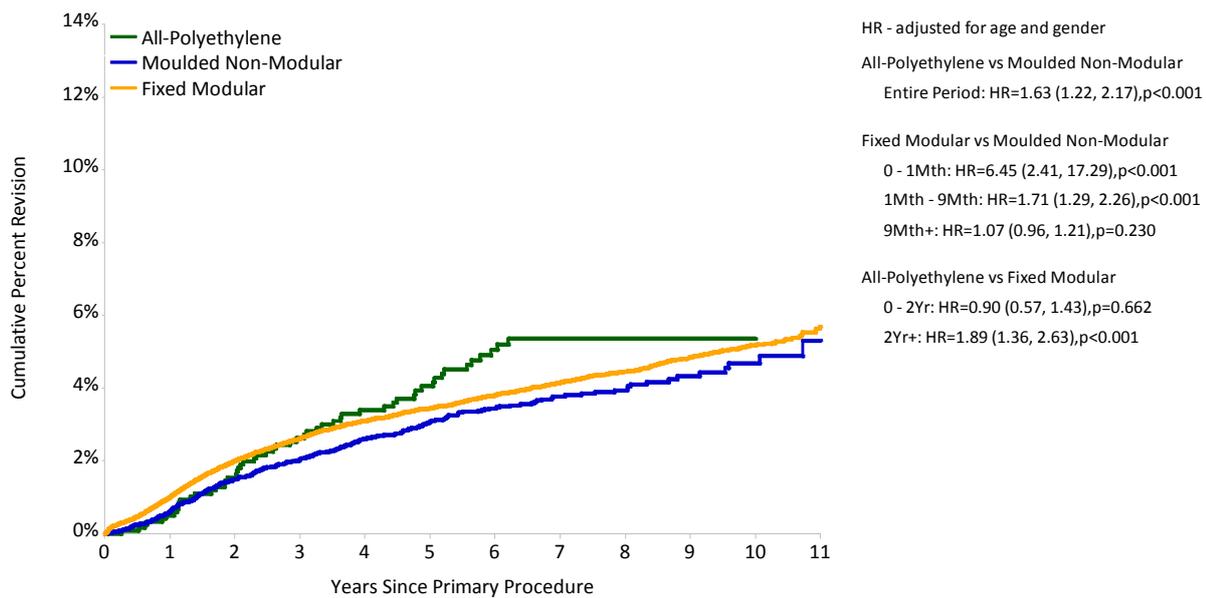
Table KT18: Revision Rates of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)

Fixed Bearing Type	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
All-Polyethylene	54	1208	7301	0.74 (0.56, 0.97)
Moulded Non-Modular	346	14334	59146	0.58 (0.52, 0.65)
Fixed Modular	5967	208859	871728	0.68 (0.67, 0.70)
TOTAL	6367	224401	938176	0.68 (0.66, 0.70)

Table KT19: Yearly Cumulative Percent Revision of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
All-Polyethylene	0.5 (0.2, 1.1)	2.6 (1.8, 3.7)	4.0 (3.0, 5.4)	5.4 (4.1, 7.0)	
Moulded Non-Modular	0.6 (0.5, 0.8)	2.0 (1.8, 2.3)	3.1 (2.7, 3.5)	4.7 (4.0, 5.4)	5.3 (4.3, 6.6)
Fixed Modular	1.0 (1.0, 1.1)	2.6 (2.5, 2.7)	3.4 (3.4, 3.5)	5.2 (5.0, 5.4)	5.7 (5.4, 6.0)

Figure KT14: Cumulative Percent Revision of Primary Total Knee Replacement by Fixed Bearing Type (Primary Diagnosis OA)



Number at Risk	0 Yr	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
All-Polyethylene	1208	1173	1039	839	42	5
Moulded Non-Modular	14334	12303	8371	5024	506	150
Fixed Modular	208859	175403	119379	76842	7504	1821

Tables as printed

Table HT53: Revision Rates of Primary Total Conventional Hip Replacement using Ceramic and Metal Bearing Surfaces (Primary Diagnosis OA)

Bearing Surface	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
Ceramic/Metal	9	300	678	1.33 (0.61, 2.52)
Metal/Ceramic	24	391	935	2.57 (1.65, 3.82)
TOTAL	33	691	1613	2.05 (1.41, 2.87)

Table HT54: Yearly Cumulative Percent Revision of Primary Total Conventional Hip Replacement using Ceramic and Metal Bearing Surfaces (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Ceramic/Metal	1.7 (0.7, 4.1)	4.0 (1.9, 8.2)			
Metal/Ceramic	5.9 (3.9, 9.1)	7.1 (4.6, 10.8)	7.1 (4.6, 10.8)		

Tables corrected

Table HT53: Revision Rates of Primary Total Conventional Hip Replacement using Ceramic and Metal Bearing Surfaces (Primary Diagnosis OA)

Bearing Surface	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
Ceramic/Metal	9	298	662	1.36 (0.62, 2.58)
Metal/Ceramic	5	48	353	1.42 (0.46, 3.31)
TOTAL	14	346	1015	1.38 (0.75, 2.31)

Table HT54: Yearly Cumulative Percent Revision of Primary Total Conventional Hip Replacement using Ceramic and Metal Bearing Surfaces (Primary Diagnosis OA)

CPR	1 Yr	3 Yrs	5 Yrs	10 Yrs	11 Yrs
Ceramic/Metal	1.8 (0.7, 4.2)	4.1 (2.0, 8.3)			
Metal/Ceramic	6.3 (2.1, 18.1)	6.3 (2.1, 18.1)	6.3 (2.1, 18.1)	12.5 (5.2, 28.2)	