



AOANJRR

Australian
Orthopaedic
Association
National
Joint
Replacement
Registry

AD HOC REPORT (FORM A)

REQUEST ID	PRINCIPAL REQUESTER	POSITION	ORGANISATION	CONTACT
3032	Adrian Bauze	Surgeon	Sportsmed	Adrian Bauze

DATE REQUEST RECEIVED:	26/Feb/2020
DATE APPROVED FOR RELEASE:	1/Apr/2020

DETAILS OF ANALYSIS PROVIDED

Specific Data Period:	Procedures from 1 September 1999 - 27 February 2020
Comments:	

Approved:	 Professor Stephen Graves AOANJRR Director	DATE 1/Apr/2020
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Request 3032 - A Bauze

Table 1: Revision Rates of Primary Total Conventional Hip Replacement by Surgeon (All Diagnoses, Excluding Large Head (>32mm) Metal/Metal)

Surgeon	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
A Bauze SMSA	12	402	1842	0.65 (0.34, 1.14)
Other Surgeons	19802	484224	3147434	0.63 (0.62, 0.64)
TOTAL	19814	484626	3149276	0.63 (0.62, 0.64)

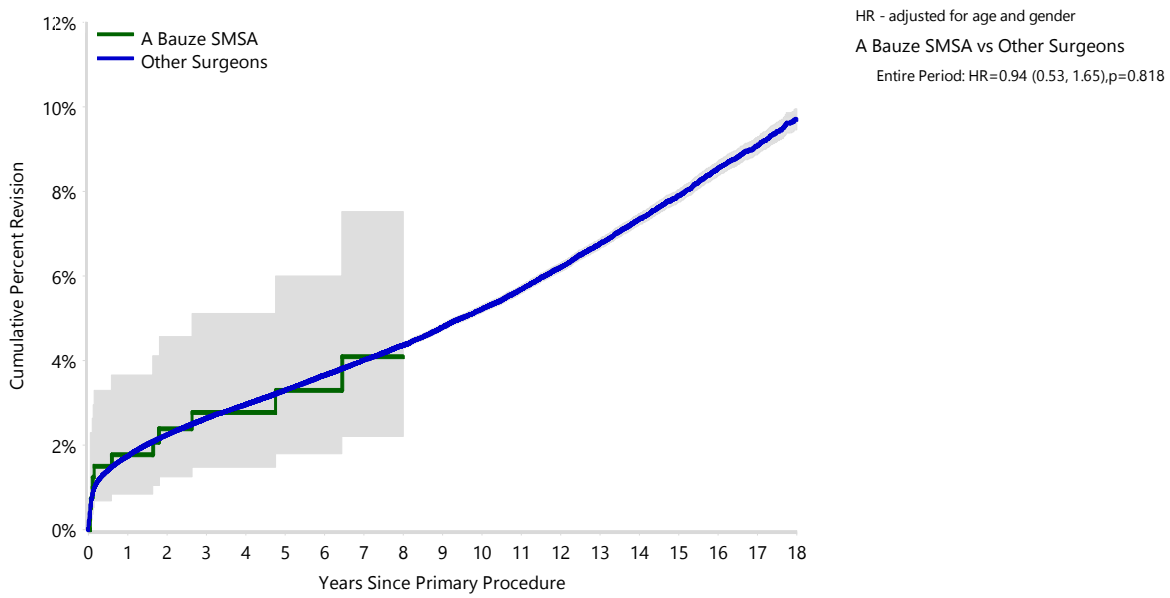
Table 2: Yearly Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Surgeon (All Diagnoses, Excluding Large Head (>32mm) Metal/Metal)

CPR	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs
A Bauze SMSA	1.8 (0.8, 3.7)	2.4 (1.2, 4.6)	2.8 (1.5, 5.1)	2.8 (1.5, 5.1)	3.3 (1.8, 6.0)	3.3 (1.8, 6.0)
Other Surgeons	1.7 (1.7, 1.8)	2.2 (2.2, 2.3)	2.6 (2.6, 2.7)	3.0 (2.9, 3.0)	3.3 (3.2, 3.4)	3.7 (3.6, 3.7)

CPR	7 Yrs	8 Yrs	9 Yrs	10 Yrs	11 Yrs	12 Yrs
A Bauze SMSA	4.1 (2.2, 7.5)	4.1 (2.2, 7.5)				
Other Surgeons	4.0 (3.9, 4.1)	4.4 (4.3, 4.4)	4.8 (4.7, 4.9)	5.2 (5.1, 5.3)	5.7 (5.6, 5.8)	6.2 (6.1, 6.3)

CPR	13 Yrs	14 Yrs	15 Yrs	16 Yrs	17 Yrs	18 Yrs
A Bauze SMSA						
Other Surgeons	6.8 (6.6, 6.9)	7.3 (7.2, 7.5)	7.9 (7.8, 8.1)	8.5 (8.4, 8.7)	9.1 (8.9, 9.3)	9.7 (9.5, 9.9)

Figure 1: Cumulative Percent Revision of Primary Total Conventional Hip Replacement by Surgeon (All Diagnoses, Excluding Large Head (>32mm) Metal/Metal)



Number at Risk	0 Yr	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs	8 Yrs
A Bauze SMSA	402	350	296	246	212	179	144	104	66
Other Surgeons	484224	434085	388106	344063	302267	263116	226510	193122	162734

Number at Risk	9 Yrs	10 Yrs	11 Yrs	12 Yrs	13 Yrs	14 Yrs	15 Yrs	16 Yrs	17 Yrs	18 Yrs
A Bauze SMSA	37	10	1	0	0	0	0	0	0	0
Other Surgeons	135304	111043	90062	72765	58100	45241	33587	23165	14322	6852

TABLE 3

Reasons for Revision

This is reported in two ways: a percentage of primary procedures revised and as a percentage of all revision procedures.

% Primaries Revised: This shows the proportional contribution of each revision diagnosis as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of being revised for that diagnosis. Differing percentages between groups, with the same distribution of follow up time, may identify problems of concern.

% Revisions: The number of revisions for each diagnosis is expressed as a percentage of the total number of revisions. This shows the distribution of reasons for revision within a group but cannot be used as a comparison between groups.

Table 3: Revision Diagnosis of Primary Total Conventional Hip Replacement by Surgeon (All Diagnoses, Excluding Large Head (>32mm) Metal/Metal) (Follow-up Limited to 11.4 Years)

Revision Diagnosis	A Bauze SMSA			Other Surgeons		
	Number	% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Loosening	3	0.7	25.0	4196	0.9	23.1
Prosthesis Dislocation	2	0.5	16.7	4088	0.8	22.5
Fracture	2	0.5	16.7	3670	0.8	20.2
Infection	5	1.2	41.7	3518	0.7	19.4
Pain				358	0.1	2.0
Leg Length Discrepancy				297	0.1	1.6
Lysis				284	0.1	1.6
Malposition				260	0.1	1.4
Instability				225	0.0	1.2
Implant Breakage Stem				181	0.0	1.0
Metal Related Pathology				178	0.0	1.0
Implant Breakage Acetabular Insert				145	0.0	0.8
Incorrect Sizing				126	0.0	0.7
Implant Breakage Acetabular				124	0.0	0.7
Wear Acetabular Insert				100	0.0	0.6
Wear Head				58	0.0	0.3
Implant Breakage Head				49	0.0	0.3
Tumour				32	0.0	0.2
Heterotopic Bone				30	0.0	0.2
Wear Acetabulum				12	0.0	0.1
Synovitis				3	0.0	0.0
Osteonecrosis				1	0.0	0.0
Progression Of Disease				1	0.0	0.0
Other				238	0.0	1.3
N Revision	12	3.0	100.0	18174	3.8	100.0
N Primary	402			484224		

Note: This table is restricted to revisions within 11.4 years for all groups to allow a time-matched comparison of revisions.

TABLE 4

Type of Revision

This is reported in two ways: a percentage of primary procedures revised and as a percentage of all revision procedures.

% Primaries Revised: This shows the proportional contribution of each type of revision as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of having that type of revision. Differing percentages between groups, with the same distribution of follow up time, may identify problems of concern.

% Revisions: The number of revisions for each type of revision is expressed as a percentage of the total number of revisions. This shows the distribution of types of revision within a group but cannot be used as a comparison between groups.

Table 4: Type of Revision of Primary Total Conventional Hip Replacement by Surgeon (All Diagnoses, Excluding Large Head (>32mm) Metal/Metal) (Follow-up Limited to 11.4 Years)

Type of Revision	A Bauze SMSA			Other Surgeons		
	Number	% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Femoral Component	5	1.2	41.7	5991	1.2	33.0
Head/Insert	5	1.2	41.7	3806	0.8	20.9
Acetabular Component	1	0.2	8.3	3792	0.8	20.9
THR (Femoral/Acetabular)	1	0.2	8.3	2090	0.4	11.5
Head Only				907	0.2	5.0
Cement Spacer				758	0.2	4.2
Minor Components				321	0.1	1.8
Insert Only				205	0.0	1.1
Removal of Prostheses				122	0.0	0.7
Head/Neck/Insert				81	0.0	0.4
Head/Neck				57	0.0	0.3
Reinsertion of Components				23	0.0	0.1
Neck Only				6	0.0	0.0
Total Femoral				6	0.0	0.0
Bipolar Only				4	0.0	0.0
Bipolar Head and Femoral				2	0.0	0.0
Cement Only				1	0.0	0.0
Neck/Insert				1	0.0	0.0
Saddle				1	0.0	0.0
N Revision	12	3.0	100.0	18174	3.8	100.0
N Primary	402			484224		

Note: This table is restricted to revisions within 11.4 years for all groups to allow a time-matched comparison of revisions.

Table 5: Revision Rates of Primary Total Conventional Knee Replacement by Surgeon (All Diagnoses)

Surgeon	N Revised	N Total	Obs. Years	Revisions/100 Obs. Yrs (95% CI)
A Bauze SMSA	5	434	1901	0.26 (0.09, 0.61)
Other Surgeons	28458	717657	4765389	0.60 (0.59, 0.60)
TOTAL	28463	718091	4767290	0.60 (0.59, 0.60)

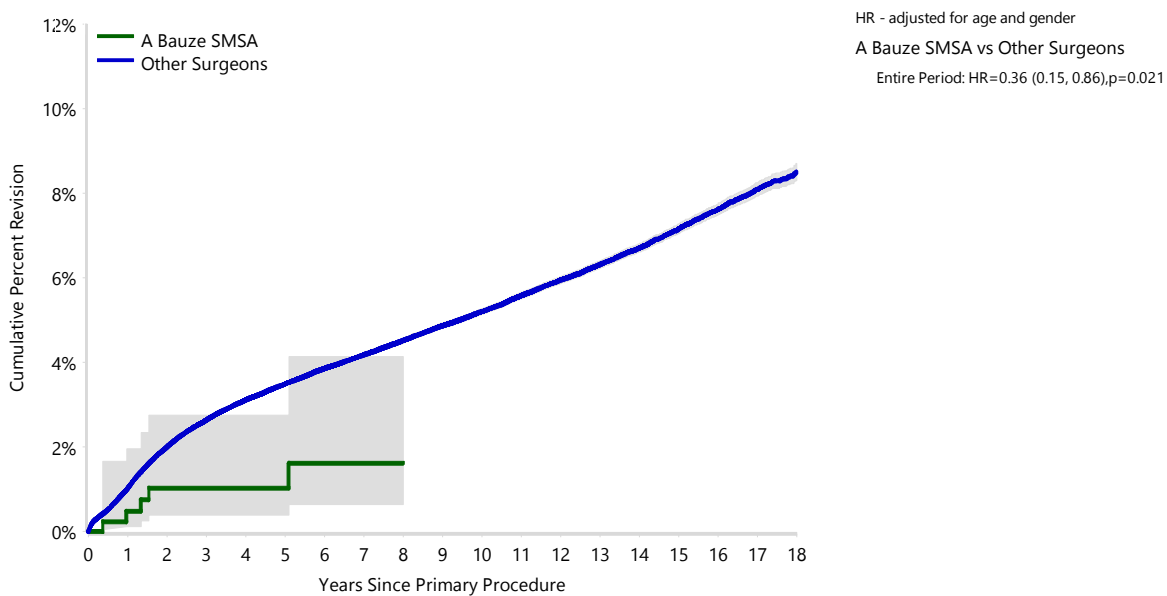
Table 6: Yearly Cumulative Percent Revision of Primary Total Conventional Knee Replacement by Surgeon (All Diagnoses)

CPR	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs
A Bauze SMSA	0.5 (0.1, 1.9)	1.0 (0.4, 2.7)	1.0 (0.4, 2.7)	1.0 (0.4, 2.7)	1.0 (0.4, 2.7)	1.6 (0.6, 4.1)
Other Surgeons	1.0 (1.0, 1.0)	2.0 (2.0, 2.0)	2.6 (2.6, 2.7)	3.1 (3.1, 3.2)	3.5 (3.4, 3.5)	3.9 (3.8, 3.9)

CPR	7 Yrs	8 Yrs	9 Yrs	10 Yrs	11 Yrs	12 Yrs
A Bauze SMSA	1.6 (0.6, 4.1)	1.6 (0.6, 4.1)				
Other Surgeons	4.2 (4.1, 4.2)	4.5 (4.5, 4.6)	4.9 (4.8, 4.9)	5.2 (5.1, 5.3)	5.6 (5.5, 5.7)	6.0 (5.9, 6.0)

CPR	13 Yrs	14 Yrs	15 Yrs	16 Yrs	17 Yrs	18 Yrs
A Bauze SMSA						
Other Surgeons	6.3 (6.2, 6.4)	6.7 (6.6, 6.8)	7.2 (7.0, 7.3)	7.6 (7.5, 7.7)	8.1 (7.9, 8.2)	8.5 (8.3, 8.7)

Figure 2: Cumulative Percent Revision of Primary Total Conventional Knee Replacement by Surgeon (All Diagnoses)



Number at Risk	0 Yr	1 Yr	2 Yrs	3 Yrs	4 Yrs	5 Yrs	6 Yrs	7 Yrs	8 Yrs
A Bauze SMSA	434	388	324	262	215	175	129	92	50
Other Surgeons	717657	655309	587585	523062	462226	404200	349978	299838	253294

Number at Risk	9 Yrs	10 Yrs	11 Yrs	12 Yrs	13 Yrs	14 Yrs	15 Yrs	16 Yrs	17 Yrs	18 Yrs
A Bauze SMSA	28	11	2	0	0	0	0	0	0	0
Other Surgeons	210185	171508	137661	107902	82503	61086	42690	28104	16344	7347

TABLE 7

Reasons for Revision

This is reported in two ways: a percentage of primary procedures revised and as a percentage of all revision procedures.

% Primaries Revised: This shows the proportional contribution of each revision diagnosis as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of being revised for that diagnosis. Differing percentages between groups, with the same distribution of follow up time, may identify problems of concern.

% Revisions: The number of revisions for each diagnosis is expressed as a percentage of the total number of revisions. This shows the distribution of reasons for revision within a group but cannot be used as a comparison between groups.

**Table 7: Revision Diagnosis of Primary Total Conventional Knee Replacement by Surgeon (All Diagnoses)
(Follow-up Limited to 11.9 Years)**

Revision Diagnosis	A Bauze SMSA			Other Surgeons		
	Number	% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
Infection	4	0.9	80.0	6645	0.9	24.5
Loosening	1	0.2	20.0	6581	0.9	24.3
Patellofemoral Pain				2539	0.4	9.4
Instability				2315	0.3	8.5
Pain				2238	0.3	8.3
Patella Erosion				1561	0.2	5.8
Arthrofibrosis				989	0.1	3.6
Fracture				831	0.1	3.1
Malalignment				605	0.1	2.2
Lysis				443	0.1	1.6
Wear Tibial Insert				401	0.1	1.5
Metal Related Pathology				344	0.0	1.3
Incorrect Sizing				299	0.0	1.1
Patella Maltracking				197	0.0	0.7
Bearing Dislocation				185	0.0	0.7
Implant Breakage Tibial Insert				142	0.0	0.5
Implant Breakage Patella				141	0.0	0.5
Synovitis				81	0.0	0.3
Prosthesis Dislocation				79	0.0	0.3
Osteonecrosis				61	0.0	0.2
Implant Breakage Tibial				57	0.0	0.2
Wear Patella				34	0.0	0.1
Implant Breakage Femoral				33	0.0	0.1
Tumour				27	0.0	0.1
Wear Tibial				12	0.0	0.0
Heterotopic Bone				10	0.0	0.0
Wear Femoral				4	0.0	0.0
Incorrect Side				2	0.0	0.0
Progression Of Disease				2	0.0	0.0
Patella Dislocation				1	0.0	0.0
Post Operative Haematoma				1	0.0	0.0
Other				260	0.0	1.0
N Revision	5	1.2	100.0	27120	3.8	100.0
N Primary	434			717657		

Note: This table is restricted to revisions within 11.9 years for all groups to allow a time-matched comparison of revisions.

TABLE 8

Type of Revision

This is reported in two ways: a percentage of primary procedures revised and as a percentage of all revision procedures.

% Primaries Revised: This shows the proportional contribution of each type of revision as a percentage of the total number of primary procedures. This percentage can be used to approximate the risk of having that type of revision. Differing percentages between groups, with the same distribution of follow up time, may identify problems of concern.

% Revisions: The number of revisions for each type of revision is expressed as a percentage of the total number of revisions. This shows the distribution of types of revision within a group but cannot be used as a comparison between groups.

Table 8: Type of Revision of Primary Total Conventional Knee Replacement by Surgeon (All Diagnoses) (Follow-up Limited to 11.9 Years)

Type of Revision	A Bauze SMSA			Other Surgeons		
	Number	% Primaries Revised	% Revisions	Number	% Primaries Revised	% Revisions
TKR (Tibial/Femoral)				6900	1.0	25.4
Insert Only	1	0.2	20.0	6547	0.9	24.1
Patella Only				5326	0.7	19.6
Insert/Patella				2698	0.4	9.9
Tibial Component	2	0.5	40.0	2385	0.3	8.8
Femoral Component	1	0.2	20.0	1505	0.2	5.5
Cement Spacer	1	0.2	20.0	1488	0.2	5.5
Removal of Prostheses				160	0.0	0.6
Minor Components				68	0.0	0.3
Cement Only				18	0.0	0.1
Total Femoral				14	0.0	0.1
Reinsertion of Components				11	0.0	0.0
N Revision	5	1.2	100.0	27120	3.8	100.0
N Primary	434			717657		

Note: This table is restricted to revisions within 11.9 years for all groups to allow a time-matched comparison of revisions.