COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED

http://dx.doi.org/10.2106/JBJS.21.01256

The following content was supplied by the authors as supporting material and has not been copy-edited or verified by JBJS.

Appendix

Supplementary Table 1: Summary of Kaplan Meier (KM) and Cumulative Incidence (CIF) of hip replacement in females by joint class and age group

Sex /Age Group	Joint Class	Outcome	1 Yrs	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Females 65-69								
	Total Hip Arthroplasty	KM (Revision)	2.0 (1.2, 3.3)	2.5 (1.6, 4.0)	2.8 (1.7, 4.4)	3.5 (2.2, 5.5)	4.9 (2.9, 8.1)	6.6 (3.5, 12.3)
	Hemiarthroplasty		1.8 (1.3, 2.5)	3.0 (2.3, 4.0)	4.6 (3.7, 5.8)	7.1 (5.9, 8.7)	9.7 (8.0, 11.6)	11.8 (9.8, 14.1)
	Total Hip Arthroplasty	CIF(Revision)	2.0 (1.1, 3.2)	2.5 (1.5, 3.9)	2.7 (1.7, 4.2)	3.4 (2.1, 5.2)	4.6 (2.7, 7.2)	6.0 (3.1, 10.1)
	Hemiarthroplasty		1.7 (1.2, 2.3)	2.7 (2.0, 3.5)	3.9 (3.1, 4.9)	5.6 (4.6, 6.8)	7.1 (5.9, 8.5)	8.2 (6.9, 9.7)
	Total Hip Arthroplasty	KM (Mortality)	3.0 (1.9, 4.6)	4.7 (3.3, 6.7)	6.9 (5.0, 9.4)	9.7 (7.2, 12.8)	14.6 (11.0, 19.2)	23.5 (17.2, 31.7)
	Hemiarthroplasty		15.2 (13.7, 16.8)	21.9 (20.1, 23.9)	27.3 (25.3, 29.4)	36.3 (34.0, 38.7)	45.4 (42.8, 48.0)	52.5 (49.8, 55.4)
	Total Hip Arthroplasty	CIF(Mortality)	2.9 (1.9, 4.4)	4.6 (3.2, 6.5)	6.8 (4.8, 9.1)	9.4 (7.0, 12.4)	14.2 (10.5, 18.4)	22.6 (16.2, 29.8)
	Hemiarthroplasty		15.0 (13.5, 16.6)	21.6 (19.8, 23.5)	26.8 (24.8, 28.8)	35.3 (33.0, 37.5)	43.5 (41.0, 46.0)	49.9 (47.2, 52.6)
Females 70-74								
	Total Hip Arthroplasty	KM (Revision)	0.9 (0.4, 2.2)	2.1 (1.1, 3.9)	2.1 (1.1, 3.9)	2.7 (1.4, 5.0)	3.3 (1.8, 6.3)	3.3 (1.8, 6.3)
	Hemiarthroplasty		1.7 (1.3, 2.3)	3.2 (2.6, 4.1)	3.9 (3.1, 4.8)	5.6 (4.6, 6.8)	7.1 (5.9, 8.5)	8.7 (7.2, 10.5)
	Total Hip Arthroplasty	CIF(Revision)	0.9 (0.3, 2.0)	2.1 (1.1, 3.7)	2.1 (1.1, 3.7)	2.5 (1.3, 4.5)	3.1 (1.6, 5.5)	3.1 (1.6, 5.5)
	Hemiarthroplasty		1.6 (1.2, 2.1)	2.9 (2.3, 3.6)	3.4 (2.7, 4.1)	4.5 (3.7, 5.4)	5.4 (4.5, 6.4)	6.2 (5.2, 7.3)
	Total Hip Arthroplasty	KM (Mortality)	3.0 (1.8, 4.8)	4.8 (3.2, 7.1)	9.3 (6.8, 12.7)	14.1 (10.7, 18.5)	19.6 (15.0, 25.4)	36.9 (28.1, 47.4)
	Hemiarthroplasty		14.0 (12.7, 15.4)	20.1 (18.6, 21.7)	26.4 (24.6, 28.2)	37.0 (35.0, 39.1)	46.4 (44.2, 48.7)	58.5 (56.0, 61.0)
	Total Hip Arthroplasty	CIF(Mortality)	2.9 (1.8, 4.6)	4.8 (3.1, 6.9)	9.2 (6.6, 12.3)	13.9 (10.3, 17.9)	19.2 (14.4, 24.4)	35.9 (26.6, 45.2)
	Hemiarthroplasty		13.9 (12.6, 15.2)	19.8 (18.3, 21.4)	25.9 (24.1, 27.6)	36.0 (34.0, 38.0)	44.8 (42.6, 47.0)	55.9 (53.5, 58.3)
Females 75-79								
	Total Hip Arthroplasty	KM (Revision)	1.1 (0.5, 2.2)	1.9 (1.1, 3.5)	2.2 (1.2, 3.8)	2.2 (1.2, 3.8)	2.9 (1.5, 5.7)	4.0 (2.0, 8.0)
	Hemiarthroplasty		1.4 (1.1, 1.8)	2.3 (1.9, 2.8)	3.1 (2.6, 3.7)	4.3 (3.7, 5.0)	4.9 (4.2, 5.8)	5.6 (4.8, 6.7)
	Total Hip Arthroplasty	CIF(Revision)	1.0 (0.5, 2.1)	1.8 (1.0, 3.2)	2.1 (1.1, 3.5)	2.1 (1.1, 3.5)	2.7 (1.4, 4.7)	3.4 (1.7, 6.1)
	Hemiarthroplasty		1.3 (1.0, 1.6)	2.0 (1.7, 2.4)	2.6 (2.2, 3.1)	3.4 (2.9, 3.9)	3.7 (3.2, 4.3)	4.0 (3.4, 4.6)
	Total Hip Arthroplasty	KM (Mortality)	5.2 (3.7, 7.2)	7.7 (5.8, 10.2)	10.8 (8.4, 13.9)	19.8 (16.1, 24.2)	25.3 (20.7, 30.6)	50.4 (41.2, 60.3)
	Hemiarthroplasty		16.1 (15.1, 17.1)	23.4 (22.2, 24.6)	30.1 (28.8, 31.5)	43.3 (41.8, 44.8)	55.1 (53.5, 56.8)	69.3 (67.6, 71.0)

Sex /Age Group	Joint Class	Outcome	1 Yrs	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
	Total Hip Arthroplasty	CIF(Mortality)	5.1 (3.6, 7.0)	7.7 (5.7, 10.0)	10.7 (8.2, 13.5)	19.5 (15.6, 23.6)	24.8 (20.1, 29.7)	49.0 (39.4, 57.9)
	Hemiarthroplasty		15.9 (15.0, 17.0)	23.1 (21.9, 24.3)	29.7 (28.4, 31.0)	42.3 (40.8, 43.8)	53.7 (52.0, 55.2)	67.1 (65.3, 68.7)
Females 80-85								
	Total Hip Arthroplasty	KM (Revision)	1.3 (0.7, 2.4)	2.4 (1.4, 3.9)	3.3 (2.1, 5.3)	3.9 (2.4, 6.2)	4.6 (2.8, 7.5)	4.6 (2.8, 7.5)
	Hemiarthroplasty		1.1 (0.9, 1.4)	1.4 (1.2, 1.7)	1.7 (1.4, 2.0)	2.0 (1.7, 2.4)	2.5 (2.1, 3.0)	3.2 (2.6, 4.1)
	Total Hip Arthroplasty	CIF(Revision)	1.2 (0.6, 2.3)	2.2 (1.3, 3.6)	3.1 (1.9, 4.7)	3.4 (2.1, 5.2)	3.8 (2.4, 5.9)	3.8 (2.4, 5.9)
	Hemiarthroplasty		1.0 (0.9, 1.3)	1.3 (1.1, 1.5)	1.4 (1.2, 1.7)	1.6 (1.4, 1.9)	1.8 (1.6, 2.1)	2.0 (1.7, 2.3)
	Total Hip Arthroplasty	KM (Mortality)	7.3 (5.6, 9.5)	10.8 (8.6, 13.4)	17.0 (14.1, 20.4)	34.3 (29.9, 39.3)	46.6 (41.1, 52.4)	69.8 (62.1, 77.2)
	Hemiarthroplasty		18.2 (17.5, 19.0)	27.4 (26.6, 28.3)	36.7 (35.7, 37.7)	53.1 (52.0, 54.2)	67.6 (66.5, 68.7)	82.6 (81.5, 83.7)
	Total Hip Arthroplasty	CIF(Mortality)	7.3 (5.5, 9.3)	10.6 (8.4, 13.2)	16.7 (13.7, 19.9)	33.5 (28.9, 38.0)	45.2 (39.6, 50.6)	67.3 (59.3, 74.1)
	Hemiarthroplasty		18.1 (17.4, 18.9)	27.2 (26.3, 28.1)	36.3 (35.4, 37.3)	52.5 (51.4, 53.5)	66.6 (65.5, 67.7)	81.2 (80.1, 82.3)

COPYRIGHT © BY THE JOURNAL OF BONE AND JOINT SURGERY, INCORPORATED

http://dx.doi.org/10.2106/JBJS.21.01256

Supplementary Table 2: Summary of Kaplan Meier (KM) and Cumulative Incidence (CIF) of hip replacement in males by joint class and age group

Sex /Age Group	Joint Class	Outcome	1 Yrs	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
Males 65-69								
	Total Hip Arthroplasty	KM (Revision)	1.0 (0.4, 2.5)	2.2 (1.1, 4.3)	2.6 (1.4, 4.8)	4.6 (2.5, 8.4)	6.8 (3.7, 12.3)	9.5 (4.7, 18.5)
	Hemiarthroplasty		1.3 (0.8, 2.2)	2.5 (1.7, 3.8)	4.1 (2.9, 5.7)	5.8 (4.2, 7.9)	6.7 (4.9, 9.2)	9.6 (7.0, 13.1)
	Total Hip Arthroplasty	CIF(Revision)	1.0 (0.4, 2.3)	2.1 (1.0, 3.8)	2.4 (1.2, 4.3)	4.1 (2.2, 7.0)	5.8 (3.1, 9.7)	7.7 (3.7, 13.4)
	Hemiarthroplasty		1.2 (0.7, 1.9)	2.1 (1.4, 3.0)	3.1 (2.2, 4.3)	4.1 (3.0, 5.5)	4.6 (3.4, 6.0)	5.7 (4.2, 7.4)
	Total Hip Arthroplasty	KM (Mortality)	7.6 (5.5, 10.5)	9.9 (7.4, 13.2)	14.1 (10.9, 18.2)	20.4 (16.1, 25.8)	25.6 (20.1, 32.3)	34.8 (26.3, 45.1)
	Hemiarthroplasty		20.6 (18.5, 23.1)	30.7 (28.1, 33.5)	37.7 (34.9, 40.7)	47.4 (44.3, 50.7)	57.4 (54.0, 60.9)	67.3 (63.6, 71.0)
	Total Hip Arthroplasty	CIF(Mortality)	7.6 (5.4, 10.3)	9.8 (7.2, 12.8)	13.9 (10.6, 17.7)	20.0 (15.5, 24.9)	24.9 (19.3, 31.0)	33.3 (24.7, 42.2)
	Hemiarthroplasty		20.5 (18.3, 22.8)	30.3 (27.7, 33.0)	37.1 (34.3, 40.0)	46.4 (43.2, 49.5)	55.7 (52.3, 59.0)	64.7 (61.0, 68.2)
Males 70-74								
	Total Hip Arthroplasty	KM (Revision)	1.9 (0.8, 4.1)	3.2 (1.6, 6.1)	3.2 (1.6, 6.1)	4.5 (2.4, 8.3)	9.2 (4.9, 17.1)	13.0 (6.3, 25.6)
	Hemiarthroplasty		2.4 (1.6, 3.5)	3.0 (2.1, 4.2)	4.1 (3.0, 5.7)	5.9 (4.3, 8.1)	7.3 (5.2, 10.1)	8.5 (6.0, 12.0)
	Total Hip Arthroplasty	CIF(Revision)	1.8 (0.8, 3.7)	3.0 (1.5, 5.4)	3.0 (1.5, 5.4)	4.2 (2.1, 7.2)	7.7 (3.9, 13.0)	10.1 (4.8, 17.7)
	Hemiarthroplasty		2.0 (1.4, 2.9)	2.5 (1.7, 3.4)	3.1 (2.3, 4.2)	4.0 (2.9, 5.2)	4.4 (3.3, 5.8)	4.8 (3.6, 6.2)
	Total Hip Arthroplasty	KM (Mortality)	6.7 (4.5, 10.1)	9.4 (6.6, 13.4)	11.5 (8.2, 15.9)	24.6 (18.6, 32.1)	33.0 (25.1, 42.5)	38.0 (28.4, 49.6)
	Hemiarthroplasty		23.9 (21.7, 26.3)	35.1 (32.5, 37.8)	44.7 (41.9, 47.7)	59.8 (56.8, 63.0)	70.0 (66.8, 73.1)	80.6 (77.3, 83.7)
	Total Hip Arthroplasty	CIF(Mortality)	6.7 (4.3, 9.7)	9.3 (6.4, 12.9)	11.3 (7.9, 15.3)	23.9 (17.7, 30.5)	31.5 (23.5, 39.8)	36.0 (26.3, 45.7)
	Hemiarthroplasty		23.7 (21.4, 26.0)	34.6 (31.9, 37.2)	43.9 (41.0, 46.7)	58.3 (55.1, 61.2)	67.8 (64.6, 70.7)	77.5 (74.2, 80.4)
Males 75-79								
	Total Hip Arthroplasty	KM (Revision)	3.3 (1.9, 5.7)	4.0 (2.4, 6.6)	5.2 (3.1, 8.6)	5.2 (3.1, 8.6)	9.3 (5.3, 16.0)	9.3 (5.3, 16.0)
	Hemiarthroplasty		1.9 (1.4, 2.7)	2.9 (2.2, 3.9)	3.5 (2.7, 4.6)	4.3 (3.3, 5.7)	5.2 (3.9, 6.9)	5.8 (4.1, 8.0)
	Total Hip Arthroplasty	CIF(Revision)	3.2 (1.7, 5.3)	3.8 (2.2, 6.1)	4.8 (2.8, 7.6)	4.8 (2.8, 7.6)	7.4 (4.2, 11.6)	7.4 (4.2, 11.6)
	Hemiarthroplasty		1.7 (1.2, 2.3)	2.3 (1.8, 3.1)	2.7 (2.0, 3.5)	3.0 (2.3, 3.9)	3.3 (2.5, 4.2)	3.4 (2.6, 4.3)
	Total Hip Arthroplasty	KM (Mortality)	7.4 (5.2, 10.7)	14.2 (10.8, 18.6)	20.9 (16.4, 26.3)	31.0 (25.1, 38.0)	46.2 (38.1, 55.2)	67.8 (55.6, 79.4)
	Hemiarthroplasty		7.4 (5.2, 10.7)	14.2 (10.8, 18.6)	20.9 (16.4, 26.3)	31.0 (25.1, 38.0)	46.2 (38.1, 55.2)	67.8 (55.6, 79.4)
	Total Hip Arthroplasty	CIF(Mortality)	7.3 (4.9, 10.2)	13.8 (10.3, 17.8)	20.2 (15.7, 25.1)	29.8 (23.7, 36.1)	43.8 (35.6, 51.7)	63.4 (51.0, 73.5)

Sex /Age Group	Joint Class	Outcome	1 Yrs	2 Yrs	3 Yrs	5 Yrs	7 Yrs	10 Yrs
	Hemiarthroplasty		27.0 (25.2, 28.9)	38.1 (36.0, 40.2)	47.9 (45.6, 50.1)	62.5 (60.1, 64.8)	73.7 (71.3, 75.9)	84.7 (82.5, 86.7)
Males 80-85								
	Total Hip Arthroplasty	KM (Revision)	2.7 (1.5, 4.8)	3.0 (1.7, 5.3)	3.8 (2.3, 6.5)	5.3 (3.1, 9.2)	9.5 (4.7, 18.6)	9.5 (4.7, 18.6)
	Hemiarthroplasty		1.5 (1.2, 2.0)	2.6 (2.0, 3.2)	3.0 (2.4, 3.8)	3.9 (3.1, 4.9)	4.1 (3.3, 5.2)	4.5 (3.4, 5.9)
	Total Hip Arthroplasty	CIF(Revision)	2.5 (1.3, 4.2)	2.8 (1.5, 4.6)	3.4 (1.9, 5.5)	4.4 (2.5, 7.0)	6.3 (3.4, 10.4)	6.3 (3.4, 10.4)
	Hemiarthroplasty		1.3 (1.0, 1.7)	1.9 (1.5, 2.4)	2.1 (1.7, 2.6)	2.4 (2.0, 3.0)	2.5 (2.0, 3.0)	2.5 (2.1, 3.1)
	Total Hip Arthroplasty	KM (Mortality)	14.1 (11.1, 17.7)	20.0 (16.4, 24.3)	27.5 (23.1, 32.5)	42.0 (36.1, 48.4)	58.1 (50.4, 66.1)	87.6 (76.8, 95.0)
	Hemiarthroplasty		33.8 (32.3, 35.2)	47.4 (45.8, 49.0)	57.8 (56.2, 59.5)	74.2 (72.6, 75.7)	83.9 (82.4, 85.4)	92.4 (91.1, 93.6)
	Total Hip Arthroplasty	CIF(Mortality)	13.9 (10.9, 17.3)	19.7 (16.0, 23.7)	26.9 (22.4, 31.6)	40.7 (34.7, 46.6)	55.8 (47.9, 62.9)	82.5 (71.4, 89.6)
	Hemiarthroplasty		33.5 (32.0, 34.9)	46.8 (45.2, 48.4)	57.0 (55.4, 58.6)	72.8 (71.2, 74.3)	82.1 (80.6, 83.5)	90.2 (88.8, 91.4)