

Fig. E-1

Volume for each of the 366 centers undertaking procedures during the study period.

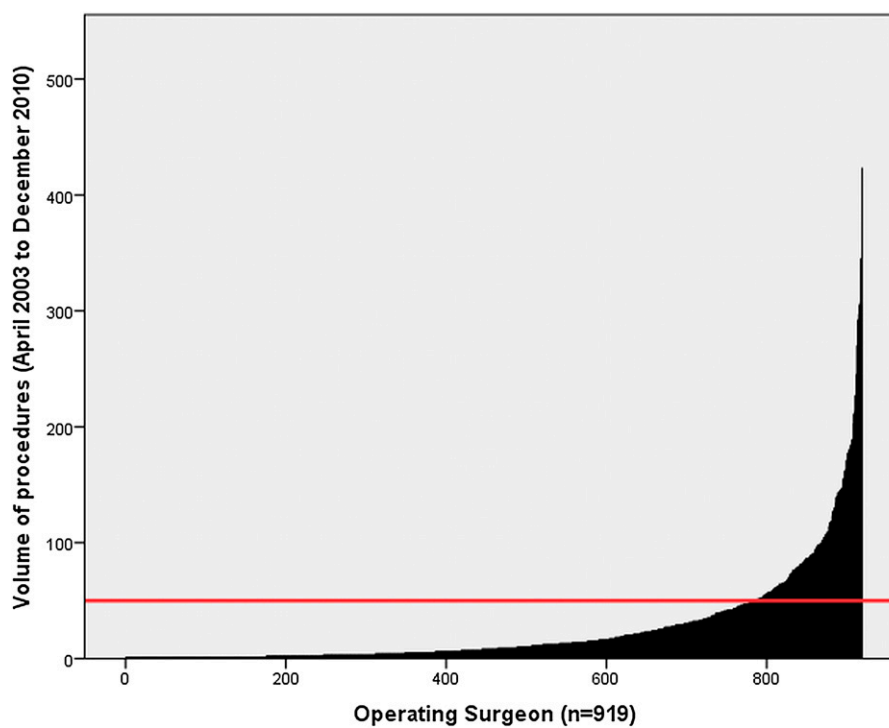


Fig. E-2

Volume for each of the 919 surgeons undertaking procedures during the study period.

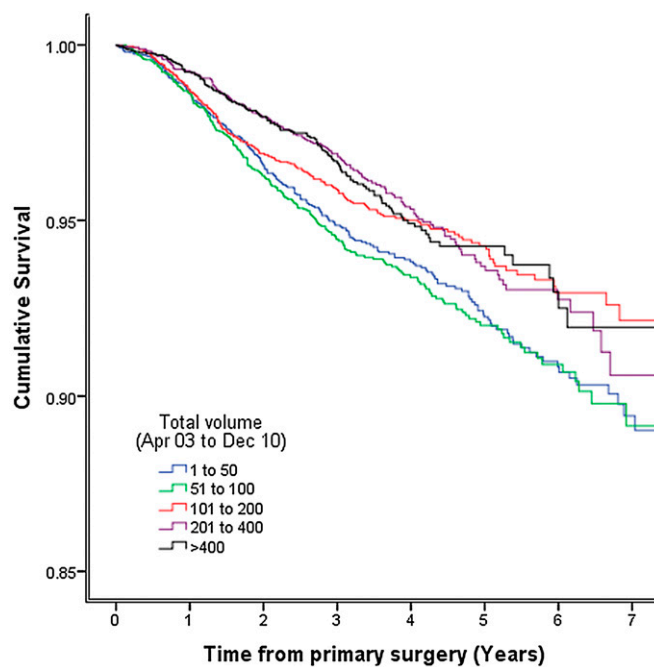


Fig. E-3

Kaplan-Meier survival according to center volume category.

TABLE E-1 Patient Demographics

Demographic Variable	Study Cohort, N = 23,400*	NJR Eighth Annual Report, N = 6119†
Sex		
Female	11,207 (48%)	2675 (47%)
Male	12,193 (52%)	3027 (53%)
ASA grade		
1	5797 (25%)	1421 (23%)
2	15,681 (67%)	4221 (69%)
3 or 4	1922 (8%)	477 (8%)
Age in yr		
<55	3379 (14%)	1072 (19%)
55-64.9	8668 (37%)	2051 (36%)
65-74.9	7723 (33%)	1800 (32%)
≥75	3630 (16%)	779 (14%)
Mean age and std. dev. (yr)	65.0 ± 9.3	64.0 ± 9.8
*Medial cemented Oxford UKRs, April 2003 to December 2010. †All UKRs recorded in the National Joint Registry for England and Wales, 2010. Sex and age data were available for 5702.		

TABLE E-2 Revision Outcome According to Center Volume

Primary Procedure Volume*	No. of Centers	No. of Primary Procedures	No. of Revision Procedures	Revision Rate (%)	Observed Component Years
1 to 50	239	4689	245	5.2	15,076.9
51 to 100	64	4648	242	5.2	14,207.4
101 to 200	39	5164	210	4.1	16,213.1
201 to 400	17	4567	164	3.6	13,862.4
>400	7	4332	139	3.2	11,943.1
Total	366	23,400	1000	4.3	71,302.9

*During the study period of April 2003 to December 2010.

TABLE E-2 (continued)

Revisions per 100 Observed Component Years		Survival (95% CI) (%)	
Mean (95% CI)	Range	Five Years	Seven Years
1.62 (1.42 to 1.82)	0.00 to 41.49	92.3 (91.2 to 93.3)	89.5 (87.8 to 91.1)
1.70 (1.49 to 1.92)	0.00 to 6.28	92.0 (90.9 to 93.1)	89.2 (87.3 to 91.1)
1.30 (1.12 to 1.47)	0.00 to 4.25	94.2 (93.4 to 95.1)	92.3 (90.8 to 93.6)
1.18 (1.00 to 1.36)	0.11 to 2.79	93.5 (92.4 to 94.6)	90.8 (88.6 to 93.0)
1.16 (0.97 to 1.36)	0.51 to 1.86	94.1 (93.0 to 95.2)	91.5 (89.0 to 94.0)
1.40 (1.31 to 1.49)	0.00 to 41.49	93.2 (92.8 to 93.7)	90.7 (89.9 to 91.5)

TABLE E-3 Revision Outcome According to Surgeon Volume

Primary Procedure Volume*	No. of Surgeons	No. of Primary Procedures	No. of Revision Procedures	Revision Rate (%)	Observed Component Years
1 to 25	671	4511	287	6.4	13,296.2
26 to 50	116	4269	234	5.5	13,310.0
51 to 100	81	5841	225	3.9	17,469.8
101 to 200	39	5442	177	3.3	17,596.7
>200	12	3337	77	2.3	9630.2
Total	919	23,400	1000	4.3	71,302.9

*During the study period of April 2003 to December 2010.

TABLE E-3 (continued)

Revisions per 100 Observed Component Years		Survival (95% CI) (%)	
Mean (95% CI)	Range	Five Years	Seven Years
2.16 (1.91 to 2.41)	0.00 to 833.33	90.1 (88.8 to 91.3)	87.1 (85.1 to 89.0)
1.75 (1.53 to 1.98)	0.00 to 7.89	91.7 (90.5 to 92.8)	88.5 (86.4 to 90.6)
1.29 (1.12 to 1.46)	0.00 to 6.29	93.4 (92.4 to 94.4)	91.3 (89.8 to 92.9)
1.01 (0.86 to 1.15)	0.00 to 4.58	95.2 (94.4 to 95.9)	92.9 (91.3 to 94.4)
0.80 (0.62 to 0.98)	0.12 to 1.46	96.0 (95.0 to 97.0)	94.3 (92.3 to 96.2)
1.40 (1.31 to 1.49)	0.00 to 833.33	93.2 (92.8 to 93.7)	90.7 (89.9 to 91.5)