

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

Appendix 1: Impact of the Brief International Classification of Functioning, Disability and Health Core Set for Hand Conditions (BICF-CS-HS) score on RTW (Yes/No)

BICF-CS-HC categories	Patients who returned to work N=120					Patients who did not return to work N=98					Test
	No	Mild	Moderate	Severe	Complete	No	Mild	Moderate	Severe	Complete	
Emotional functions	65 (54%)	25 (21%)	22 (18%)	8 (7%)	0 (0%)	46 (47%)	16 (16%)	21 (21%)	14 (14%)	1 (1%)	F=1.792E-04/p=0.20
Touch functions	59 (49%)	32 (27%)	19 (16%)	9 (8%)	1 (1%)	51 (52%)	31 (32%)	12 (12%)	4 (4%)	0 (0%)	F=9.081E-04/p=0.61
Sensory functions related to temperature and other stimuli	71 (59%)	32 (27%)	14 (12%)	3 (3%)	0 (0%)	59 (60%)	18 (18%)	16 (16%)	5 (5%)	0 (0%)	F=0.0011/p=0.33
Sensation of pain	9 (8%)	46 (38%)	50 (42%)	15 (13%)	0 (0%)	6 (6%)	35 (36%)	29 (30%)	27 (28%)	1 (1%)	F=2.228E-05/p=0.03
Mobility of joint functions	32 (27%)	38 (32%)	36 (30%)	13 (11%)	1 (1%)	29 (30%)	27 (28%)	26 (27%)	15 (15%)	1 (1%)	F=6.603E-04/p=0.81
Stability of joint functions	70 (58%)	26 (22%)	15 (13%)	8 (7%)	1 (1%)	70 (71%)	16 (16%)	6 (6%)	6 (6%)	0 (0%)	F=3.387E-04/p=0.23
Muscle power functions	20 (17%)	45 (38%)	41 (34%)	13 (11%)	1 (1%)	14 (14%)	44 (45%)	28 (29%)	11 (11%)	1 (1%)	F=8.052E-04/p=0.83
Control of voluntary movement functions	97 (81%)	12 (10%)	6 (5%)	5 (4%)	0 (0%)	76 (78%)	14 (14%)	3 (3%)	5 (5%)	0 (0%)	F=0.0055/p=0.69
Protective functions of the skin	100 (83%)	9 (8%)	7 (6%)	4 (3%)	0 (0%)	83 (85%)	4 (4%)	6 (6%)	4 (4%)	1 (1%)	F=0.0038/p=0.76
Spinal cord and related structures	113 (94%)	3 (3%)	2 (2%)	2 (2%)	0 (0%)	90 (92%)	0 (0%)	2 (2%)	5 (5%)	1 (1%)	F=0.0033/p=0.19
Structure of shoulder region	92 (77%)	4 (3%)	19 (16%)	5 (4%)	0 (0%)	75 (77%)	4 (4%)	10 (10%)	9 (9%)	0 (0%)	F=0.0018/p=0.33
Structure of upper extremity	20 (17%)	45 (38%)	38 (32%)	16 (13%)	1 (1%)	14 (14%)	27 (28%)	39 (40%)	18 (18%)	0 (0%)	F=2.611E-04/p=0.33
Carrying out daily routine	0 (0%)	55 (64%)	25 (29%)	6 (7%)	0 (0%)	0 (0%)	48 (67%)	20 (28%)	4 (6%)	0 (0%)	F=0.004798/p=0.97
Lifting and carrying objects	13 (11%)	22 (18%)	59 (49%)	25 (21%)	1 (1%)	7 (7%)	20 (20%)	53 (54%)	17 (17%)	1 (1%)	F=8.988E-04/p=0.82
Fine hand use	41 (34%)	26 (22%)	30 (25%)	21 (18%)	2 (2%)	39 (40%)	26 (27%)	20 (20%)	12 (12%)	1 (1%)	F=3.471E-04/p=0.63
Hand and arm use	14 (12%)	51 (43%)	40 (33%)	14 (12%)	1 (1%)	12 (12%)	33 (34%)	40 (41%)	13 (13%)	0 (0%)	F=6.817E-04/p=0.60
Self-care	56 (47%)	37 (31%)	24 (20%)	3 (3%)	0 (0%)	43 (44%)	32 (33%)	20 (20%)	3 (3%)	0 (0%)	F=0.0048/p=0.98
Domestic life	11 (9%)	47 (39%)	46 (38%)	16 (13%)	0 (0%)	16 (16%)	38 (39%)	28 (29%)	16 (16%)	0 (0%)	X=4.08/p=0.25

BICF-CS-HC categories	Patients who returned to work N=120					Patients who did not return to work N=98					Test
	No	Mild	Moderate	Severe	Complete	No	Mild	Moderate	Severe	Complete	
Interpersonal interactions and relationships	78 (65%)	25 (21%)	8 (7%)	9 (8%)	0 (0%)	58 (59%)	21 (21%)	12 (12%)	5 (5%)	2 (2%)	F=3.202E-04/p=0.30
Work and employment	9 (8%)	18 (15%)	52 (43%)	35 (29%)	6 (5%)	12 (12%)	15 (15%)	32 (33%)	31 (32%)	8 (8%)	X=3.81/p=0.43

In those categories of the BICF-CS-HC, the qualifiers no, mild, moderate, severe and complete were used. **The BICF-CS-HC instrument was administrated at enrollment. RTW status was collected 6 months after enrollment.** Values are expressed as number (%) of patients unless otherwise specified. F: fisher test, p: p-value, x: Chi square test.

Appendix 2: Impact of the Brief International Classification of Functioning, Disability and Health Core Set for Hand Conditions (BICF-CS-HC) score on RTW (Yes/No)

	Patients who returned to work N=120									Patients who did not return to work N=98									Test
	Complete hurdle	Severe hurdle	Moderate hurdle	Mild hurdle	Not a hurdle nor a driver	Mild driver	Moderate driver	Severe driver	Complete driver	Complete hurdle	Severe hurdle	Moderate hurdle	Mild hurdle	Not a hurdle nor a driver	Mild driver	Moderate driver	Severe driver	Complete driver	
Products and technology	0 (0%)	0 (0%)	1 (1%)	4 (3%)	97 (81%)	17 (14%)	1 (1%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	4 (4%)	1 (1%)	80 (82%)	9 (9%)	3 (3%)	1 (1%)	0 (0%)	F<0.01 p=0.18
Environmental factors	0 (0%)	0 (0%)	3 (3%)	4 (3%)	99 (83%)	10 (8%)	4 (3%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	2 (2%)	10 (10%)	73 (74%)	5 (5%)	6 (6%)	2 (2%)	0 (0%)	F<0.01 p=0.12
Support and relationships	0 (0%)	2 (2%)	8 (7%)	8 (7%)	57 (48%)	20 (17%)	22 (18%)	2 (2%)	1 (1%)	0 (0%)	1 (1%)	5 (5%)	4 (4%)	46 (47%)	15 (15%)	23 (23%)	4 (4%)	0 (0%)	F<0.01 p=0.86

In those categories of the BICF-CS-HC, the qualifiers **Complete hurdle**, **Severe hurdle**, **Moderate hurdle**, **Mild hurdle**, **Not a hurdle nor a driver**, **Mild driver**, **Moderate driver**, **Severe driver**, **Complete driver** were used. The BICF-CS-HC instrument was administrated at enrollment. RTW status was collected 6 months after enrollment. Values are expressed as number (%) of patients unless otherwise specified. F: Fisher test, p: p-value, x: Chi square test.

Appendix 3: Impact of patients' socio-demographic characteristics on RTW (Yes/No)

	Patients who returned to work (n=120)	Patients who did not return to work (n=98)	Test
Sex			
Men	76 (63%)	56 (57%)	X=0.87
Women	44 (37%)	42 (43%)	p=0.35
Age			
Mean (SD)	42 (9.6)	42 (9.6)	T=0 p=0.98
Cause of surgical procedure			
MSD	32 (27%)	30 (31%)	X=0.41
Trauma	88 (73%)	68 (69%)	p=0.52
Type of surgical procedure			
Arm	2 (2%)	2 (2%)	F=0.0015
Elbow	7 (6%)	5 (5%)	p=0.99
Shoulder	19 (16%)	16 (17%)	
Hand	55 (47%)	43 (45%)	
Wrist	34 (29%)	30 (31%)	
Type of contract			
Private (permanent)	105 (87.5%)	87 (89%)	X=0.08
Public (tenure)	15 (12.5%)	11 (11%)	p=0.77
Position			
Manager	10 (8.3%)	9 (9%)	X=0.06
Office worker	70 (58.3%)	56 (57%)	p=0.97
Manual Worker	40 (33.3%)	33 (34%)	
Sector of activity			
A	2 (2%)	1 (1%)	X=8.72
C	0	1 (1%)	p=0.85
D	12 (12%)	13 (17%)	
E	2 (2%)	1 (1%)	
F	25 (26%)	21 (27%)	
G	22 (22%)	10 (13%)	
H	8 (8%)	7 (9%)	
I	7 (7%)	9 (12%)	
J	3 (3%)	2 (3%)	
K	8 (8%)	5 (6%)	
L	5 (5%)	5 (6%)	
M	4 (4%)	3 (4%)	

Socio-demographic characteristics were collected at enrollment. RTW status was collected 6 months after enrollment. Sector of activity was defined according to the 17 categories of the French nomenclature (NAF 1993): A: agriculture, hunting and forestry; C: extractive industries; D: manufacturing industry; E: electricity, gas and water supply; F: construction; G: wholesale and retail trade; repair of motor vehicles, motorcycles and personal and household goods; H: hotels and restaurants; I: transport and communications; J: financial activities; K: real estate, renting and business activities; L: public administration; M: education. Values are expressed as number (%) of patients unless otherwise specified. F: fisher test, p: p-value, SD: standard deviation, X: Chi square test.

Appendix 4: Impact of the Hospital Anxiety and Depression Scale (HADS) and QuickDASH scores on RTW (Yes/No)

	Patients who returned to work (N=120)	Patients who did not return to work (N=98)	Test
HADS Anxiety subscale			
Normal	69 (57.5%)	47 (48%)	X=3.14
Borderline abnormal	18 (15%)	13 (13%)	p=0.21
Abnormal	33 (27.5%)	38 (39%)	
HADS Depression subscale			
Normal	82 (68%)	59 (60%)	X=2.22
Borderline abnormal	14 (12%)	11 (11%)	p=0.33
Abnormal	24 (20%)	28 (29%)	
QuickDASH score			
Mean (SD)	58 (13)	60 (16)	T=1.54
95% CI	[55 ; 60]	[57 ; 63]	p=0.22
Min-Max	[20 ; 98]	[36 ; 98]	

QuickDASH disability/symptom score = $([\text{sum of } n \text{ responses}/n]-1)*25$, where n is the number of completed responses. Each item on the HADS questionnaire is scored from 0 to 3. Scores for each subscale (anxiety and depression) range from 0 to 21 with scores categorized as follows: normal 0-7, borderline abnormal 8-14, and abnormal 15-21. Valid values = 120 for patients who returned to work and 98 for patients who did not return to work. 1 patient was excluded from all analyses because he provided no information. There were no other missing values. **HADS and QuickDASH instruments were administered at enrollment. RTW status was collected 6 months after enrollment.** Values are expressed as number (%) of patients unless otherwise specified. F: Fisher test, p: p-value, SD: standard deviation, T: Student's test, X: Chi square test.

Appendix 5: Predictors associated with time off work in days (Cox regression)

Covariates	DF	Parameter Estimate	Standard Error	Chi-Square	Pr > ChiSq	Hazard Ratio
Type of surgical procedure						
Arm	1	1.22	0.79	2.39	0.12	3.39
Elbow	1	0.48	0.45	1.16	0.28	1.62
Shoulder	1	0.19	0.33	0.35	0.56	1.21
Hand	1	0.37	0.25	2.24	0.13	1.44
Position						
Manager	1	0.20	0.38	0.26	0.61	1.22
Office worker	1	0.04	0.25	0.02	0.88	1.04
BICF-CS-HC Scores						
Body functions	1	-0.01	0.03	0.12	0.73	0.99
Body structures	1	-0.23	0.10	5.64	0.02	0.79
Activities and participation	1	0.00	0.03	0.00	0.97	1.00
QuickDASH score	1	-0.01	0.01	0.66	0.42	0.99
Q-PASREL Patient-surgeon relationship quality						
Low [11;29] vs. High [39;44]	1	-2.02	0.37	30.47	<0.0001	0.13
Medium-low [29;33] vs. High [39;44]	1	-0.64	0.29	4.98	0.03	0.53
Medium-high [33;39] vs. High [39;44]	1	-0.21	0.24	0.80	0.37	0.81

Results from Cox regression model of time off work. **Covariates were collected at enrollment. RTW status was collected 6 months after enrollment.** Censored data were considered for patients who had not returned to work at the time of follow-up. Covariates were global scores of all instruments scales as well as other socio-demographic items that were found to be significant at 10% level at the bivariate **analysis** step (i.e., the type of surgical procedure. Regression model was adjusted for sex, age, and treating center (data not shown). DF: degrees of freedom.