

SUPPLEMENTARY DIGITAL MATERIAL 6

The following pages provide the conversion of the ISYQOL international **from the total score to the logit measure**. The score-to-measure table of the spine health domain and that of the full questionnaire (spine health plus brace domain) are given for each country.

Italy and Spain share the same conversions based on the DIF analysis explained in the main text.

Remember that the questionnaire total score reflects the number and severity of the problems caused to a patient by the disease and its treatments. Thus, the larger the number of issues, the higher the total score and the lower the quality of life. In accordance, the larger the number of problems, **the higher the total score, the more positive the logit measure and the lower the quality of life** (see Figure 1 in the main text).

Italy and Spain

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.12	1.88
1	-4.79	1.09
2	-3.92	0.82
3	-3.35	0.70
4	-2.91	0.63
5	-2.54	0.58
6	-2.22	0.55
7	-1.93	0.52
8	-1.67	0.50
9	-1.43	0.49
10	-1.20	0.48
11	-0.97	0.47
12	-0.76	0.46
13	-0.55	0.45
14	-0.35	0.45
15	-0.15	0.45
16	0.05	0.45
17	0.25	0.45
18	0.45	0.45
19	0.65	0.45
20	0.85	0.45
21	1.06	0.46
22	1.27	0.46
23	1.49	0.47
24	1.71	0.48
25	1.96	0.50
26	2.22	0.52
27	2.50	0.55
28	2.83	0.59
29	3.22	0.66
30	3.73	0.78
31	4.53	1.05
32	5.80	1.85

Italy and Spain

Spine health domain

Score	HRQOL Measure, logit	SE
0	-4.96	1.89
1	-3.60	1.11
2	-2.67	0.85
3	-2.04	0.75
4	-1.53	0.69
5	-1.08	0.65
6	-0.68	0.62
7	-0.31	0.60
8	0.05	0.59
9	0.40	0.58
10	0.73	0.58
11	1.07	0.58
12	1.41	0.59
13	1.77	0.61
14	2.15	0.64
15	2.59	0.69
16	3.14	0.80
17	3.97	1.06
18	5.26	1.86

English Canada

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.14	1.88
1	-4.80	1.09
2	-3.94	0.81
3	-3.38	0.70
4	-2.94	0.63
5	-2.58	0.58
6	-2.27	0.55
7	-1.98	0.52
8	-1.72	0.50
9	-1.48	0.48
10	-1.25	0.47
11	-1.03	0.46
12	-0.82	0.46
13	-0.62	0.45
14	-0.41	0.45
15	-0.21	0.45
16	-0.02	0.45
17	0.18	0.45
18	0.38	0.45
19	0.58	0.45
20	0.78	0.45
21	0.99	0.46
22	1.20	0.46
23	1.42	0.47
24	1.65	0.48
25	1.89	0.50
26	2.15	0.52
27	2.44	0.55
28	2.76	0.60
29	3.16	0.66
30	3.67	0.78
31	4.47	1.05
32	5.75	1.86

English Canada

Spine health domain

Score	HRQOL Measure, logit	SE
0	-5.01	1.88
1	-3.66	1.10
2	-2.75	0.84
3	-2.13	0.74
4	-1.63	0.68
5	-1.19	0.64
6	-0.79	0.62
7	-0.42	0.60
8	-0.06	0.59
9	0.28	0.59
10	0.62	0.58
11	0.96	0.58
12	1.31	0.59
13	1.66	0.61
14	2.05	0.64
15	2.49	0.69
16	3.04	0.80
17	3.87	1.07
18	5.17	1.86

French Canada

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.23	1.87
1	-4.91	1.08
2	-4.06	0.81
3	-3.51	0.69
4	-3.08	0.63
5	-2.71	0.58
6	-2.39	0.55
7	-2.11	0.53
8	-1.84	0.51
9	-1.59	0.49
10	-1.36	0.48
11	-1.13	0.47
12	-0.91	0.46
13	-0.70	0.46
14	-0.49	0.45
15	-0.29	0.45
16	-0.09	0.45
17	0.11	0.45
18	0.32	0.45
19	0.52	0.45
20	0.72	0.45
21	0.93	0.46
22	1.15	0.47
23	1.37	0.47
24	1.60	0.49
25	1.84	0.50
26	2.11	0.53
27	2.40	0.56
28	2.73	0.60
29	3.12	0.66
30	3.64	0.78
31	4.44	1.05
32	5.73	1.86

French Canada

Spine health domain

Score	HRQOL Measure, logit	SE
0	-5.26	1.88
1	-3.92	1.10
2	-3.01	0.85
3	-2.37	0.75
4	-1.85	0.70
5	-1.39	0.66
6	-0.96	0.64
7	-0.57	0.62
8	-0.20	0.61
9	0.16	0.60
10	0.52	0.59
11	0.87	0.59
12	1.22	0.60
13	1.58	0.61
14	1.98	0.65
15	2.43	0.70
16	2.99	0.81
17	3.83	1.07
18	5.13	1.86

Greece

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.18	1.87
1	-4.85	1.08
2	-3.99	0.81
3	-3.43	0.70
4	-2.99	0.63
5	-2.62	0.59
6	-2.30	0.55
7	-2.01	0.53
8	-1.74	0.51
9	-1.48	0.49
10	-1.25	0.48
11	-1.02	0.47
12	-0.80	0.46
13	-0.59	0.46
14	-0.38	0.45
15	-0.18	0.45
16	0.02	0.45
17	0.22	0.45
18	0.42	0.45
19	0.62	0.45
20	0.82	0.45
21	1.02	0.45
22	1.23	0.46
23	1.45	0.47
24	1.67	0.48
25	1.91	0.50
26	2.17	0.52
27	2.45	0.55
28	2.78	0.59
29	3.17	0.66
30	3.67	0.78
31	4.47	1.05
32	5.75	1.86

Greece

Spine health domain

Score	HRQOL Measure, logit	SE
0	-5.13	1.88
1	-3.77	1.11
2	-2.84	0.86
3	-2.19	0.77
4	-1.65	0.71
5	-1.17	0.67
6	-0.75	0.64
7	-0.36	0.61
8	0.00	0.59
9	0.35	0.58
10	0.68	0.58
11	1.01	0.58
12	1.35	0.58
13	1.70	0.60
14	2.08	0.63
15	2.51	0.69
16	3.06	0.80
17	3.88	1.06
18	5.17	1.86

Poland

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.24	1.88
1	-4.89	1.10
2	-4.00	0.84
3	-3.40	0.72
4	-2.92	0.65
5	-2.53	0.60
6	-2.19	0.57
7	-1.89	0.53
8	-1.62	0.51
9	-1.37	0.49
10	-1.14	0.47
11	-0.93	0.46
12	-0.72	0.45
13	-0.53	0.44
14	-0.34	0.43
15	-0.15	0.43
16	0.04	0.43
17	0.22	0.43
18	0.41	0.44
19	0.60	0.44
20	0.80	0.45
21	1.00	0.45
22	1.21	0.46
23	1.43	0.47
24	1.66	0.49
25	1.90	0.50
26	2.17	0.52
27	2.46	0.55
28	2.79	0.60
29	3.18	0.66
30	3.70	0.78
31	4.50	1.05
32	5.78	1.86

Poland

Spine health domain

Score	HRQOL Measure, logit	SE
0	-5.35	1.92
1	-3.91	1.16
2	-2.90	0.90
3	-2.21	0.77
4	-1.67	0.70
5	-1.22	0.65
6	-0.81	0.62
7	-0.44	0.60
8	-0.08	0.59
9	0.26	0.59
10	0.61	0.59
11	0.95	0.59
12	1.30	0.60
13	1.67	0.62
14	2.07	0.65
15	2.52	0.70
16	3.08	0.81
17	3.92	1.07
18	5.22	1.86

Turkey

Full questionnaire

Score	HRQOL Measure, logit	SE
0	-6.27	1.87
1	-4.95	1.07
2	-4.11	0.80
3	-3.57	0.69
4	-3.14	0.62
5	-2.79	0.58
6	-2.47	0.55
7	-2.19	0.52
8	-1.93	0.50
9	-1.68	0.49
10	-1.44	0.48
11	-1.22	0.47
12	-1.00	0.46
13	-0.78	0.46
14	-0.57	0.46
15	-0.37	0.45
16	-0.16	0.45
17	0.04	0.45
18	0.25	0.45
19	0.45	0.45
20	0.66	0.46
21	0.87	0.46
22	1.09	0.47
23	1.31	0.48
24	1.55	0.49
25	1.79	0.51
26	2.06	0.53
27	2.35	0.56
28	2.68	0.60
29	3.08	0.67
30	3.60	0.78
31	4.40	1.06
32	5.69	1.86

Turkey

Spine health domain

Score	HRQOL Measure, logit	SE
0	-5.12	1.88
1	-3.77	1.10
2	-2.87	0.84
3	-2.25	0.74
4	-1.74	0.69
5	-1.29	0.65
6	-0.88	0.63
7	-0.49	0.61
8	-0.13	0.60
9	0.22	0.59
10	0.56	0.58
11	0.90	0.58
12	1.24	0.59
13	1.60	0.61
14	1.98	0.64
15	2.42	0.69
16	2.97	0.80
17	3.80	1.07
18	5.10	1.86