

Additional File I: IPOS-Dem Item Characteristics

IPOS-Dem for family members item characteristics

Item	Responses rated (n)	M	SD	Med	Min	Max	Interquartile range	Item difficulty*
Able to interact	116	1.94	1.23	2	0	4	2	0.48
Agitation	111	1.31	1.03	1	0	4	2	0.33
Anxious or worried	110	1.49	0.96	2	0	4	1	0.37
Constipation	51	0.55	0.92	0	0	4	1	0.14
Dental problems	96	0.90	1.14	0	0	4	2	0.22
Diarrhoea	46	0.41	0.78	0	0	3	1	0.10
Difficulty communicating	114	2.09	1.41	2	0	4	2	0.52
Drowsiness	109	1.87	1.14	2	0	4	2	0.47
Family anxious or worried	115	1.86	1.24	2	0	4	2	0.47
Felt depressed	109	1.57	1.03	2	0	4	1	0.39
Hallucinations and/or delusions	94	1.14	1.26	1	0	4	2	0.28
Inner peace	106	1.44	0.93	1	0	4	1	0.36
Irritable or aggressive	113	0.93	0.87	1	0	3	2	0.23
Lost interest	110	2.21	1.23	2	0	4	1	0.55
Nausea	86	0.14	0.41	0	0	2	0	0.03
Pain	106	1.15	1.00	1	0	3	2	0.29
Poor appetite	101	0.88	1.19	0	0	4	1	0.22
Poor mobility	110	2.01	1.36	2	0	4	2	0.50
Practical matters	85	1.42	1.26	1	0	4	2	0.36
Shortness of breath	107	0.44	0.73	0	0	3	1	0.11
Skin breakdown	97	0.99	1.03	1	0	4	2	0.25
Sleeping problems	65	0.78	0.89	1	0	3	1	0.20
Sore or dry mouth	85	0.65	0.98	0	0	4	1	0.16
Swallowing problems	101	0.88	1.19	0	0	4	1	0.22
Vomiting	85	0.05	0.21	0	0	1	0	0.01
Wandering	94	0.59	0.96	0	0	3	1	0.15
Weakness	112	2.09	1.11	2	0	4	2	0.52

IPOS-Dem for frontline staff item characteristics

Item	Responses rated (n)	M	SD	Med	Min	Max	Interquartile range	Item difficulty*
Able to interact	252	1.56	1.37	1.5	0	4	3	0.39
Agitation	255	1.50	1.26	1.0	0	4	2	0.38
Anxious or worried	254	1.63	1.14	2.0	0	4	1	0.41
Constipation	243	0.66	0.93	0.0	0	4	1	0.16
Dental problems	247	0.47	0.91	0.0	0	4	1	0.12

Item	Responses rated (n)	M	SD	Med	Min	Max	Interquartile range	Item difficulty*
Diarrhoea	248	0.29	0.68	0.0	0	4	0	0.07
Difficulty communicating	255	1.58	1.43	1.0	0	4	3	0.39
Drowsiness	255	1.44	1.14	1.0	0	4	1	0.36
Family anxious or worried	207	1.50	1.37	1.0	0	4	2	0.38
Felt depressed	231	1.36	1.08	1.0	0	4	2	0.34
Hallucinations and/or delusions	239	0.65	1.00	0.0	0	4	1	0.16
Inner peace	217	1.44	1.01	1.0	0	4	1	0.36
Irritable or aggressive	254	1.34	1.04	1.0	0	4	2	0.33
Lost interest	220	1.08	1.19	1.0	0	4	2	0.27
Nausea	241	0.20	0.61	0.0	0	4	0	0.05
Pain	245	1.18	1.07	1.0	0	4	2	0.30
Poor appetite	247	0.79	1.06	0.0	0	4	1	0.20
Poor mobility	256	1.38	1.43	1.0	0	4	3	0.35
Practical matters	238	1.12	1.06	1.0	0	4	2	0.28
Shortness of breath	253	0.24	0.64	0.0	0	4	0	0.06
Skin breakdown	252	0.90	1.03	1.0	0	4	2	0.23
Sleeping problems	246	0.62	0.95	0.0	0	4	1	0.16
Sore or dry mouth	240	0.40	0.82	0.0	0	4	0	0.10
Swallowing problems	251	0.54	1.06	0.0	0	4	1	0.14
Vomiting	248	0.13	0.54	0.0	0	4	0	0.03
Wandering	253	0.88	1.21	0.0	0	4	2	0.22
Weakness	254	1.44	1.20	1.0	0	4	2	0.36

*Item difficulty is defined as the ratio of the total score achieved for an item to its maximum possible score. For more item characteristics regarding the staff version see <https://doi.org/10.1371/journal.pone.0286557.s002>