

**Table S1 Characteristics of August 2016 - June 2022 IIPPT cohort**

Characteristic	Baseline ( <i>n</i> = 38)	Discharge ( <i>n</i> = 35)	<i>P</i> -Value	Cohen's <i>d</i> or Effect Size
Age, Median (IQR), y	16.50 (15.00-17.00)	16.00 (15.00-17.00)	0.317	0.17
Gender (female), <i>n</i> (%)	28 (73.7)	27 (77.1)	0.930	0.05
Pain Type, <i>n</i> (%)			0.989	0.07
Abdominal	3 (7.9)	3 (8.8)		
Nerve/Neuropathic	11 (28.9)	11 (32.4)		
Headache	11 (28.9)	8 (23.5)		
Musculoskeletal	8 (21.1)	7 (20.6)		
Other	5 (13.2)	5 (14.7)		
Functional Disability, <i>M</i> (SD)	26.28 (11.64)	21.00 (12.44)	<b>0.020*</b>	<b>0.45</b>
Sleep Quality Scores, <i>M</i> (SD)	3.36 (0.98)	3.53 (0.88)	<b>0.005*</b>	<b>0.54</b>
Normalized Clustering Coefficient, <i>M</i> (SD)	1.84 (0.14)	1.82 (0.14)	0.63	0.11
Normalized Characteristic Path Length, Median (IQR)	1.25 (1.23-1.28)	1.25 (1.23-1.30)	0.90	0.14
Small-Worldness, <i>M</i> (SD)	1.47 (0.10)	1.44 (0.10)	0.39	0.19

Missing data at *baseline*: functional disability = 2; sleep quality scores = 2; brain metrics = missing 8.

Missing data at *discharge*: pain type = 1; functional disability = 3; sleep quality scores = 2; brain metrics = 14.