

Linking ASCQ-MeSM and PROMIS[®] Pain Scores

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Questions on PROMIS & ASCQ-Me Pain Short Forms (SFs)

PROMIS Pain Interference SF	ASCQ-Me Pain Impact SF
In the past 7 days, how much did pain interfere with your...	In the past 7 days, how often did you have pain so bad that...
...enjoyment in life?	...you could not do anything for a whole day?
...ability to concentrate?	...you could not get out of bed?
...day-to-day activities?	...you had to stop what you were doing?
...enjoyment of recreational activities?	...it was hard to finish what you were doing?
...tasks away from home (e.g. getting groceries, running errands)	In the past 7 days, how often did you have very severe pain?
How often did pain keep you from socializing with others?	



Methods

- Evaluation of Unidimensionality
 - Relationship between raw scores,
 - Internal consistency of the 11 items (5 ASCQ-Me and 6 PROMIS) items
 - Bi-factor model fit using IRT graded response model

Statistic	N=476
Pearson Product Moment Correlation	0.79
Cronbach's Alpha Coefficient	0.96
Explained Common Variance single factor	0.84

- Fixed, item-parameter calibration used to link ASCQ-Me to PROMIS scores
 - ASCQ-Me item parameters calibrated using graded response model
 - PROMIS item parameters fixed to PROMIS bank values

PROMIS Pain Interference Score Equivalents for ASCQ-Me Pain Interference Scores

SF Sum Score	ASCQ-Me Pain Impact T-Score		PROMIS Pain Interference T-Score Equivalent	
5	63.8	Better*	45.5	Better
6	58.0		50.3	
7	55.8		52.4	
8	54.0		54.1	
...	
22	33.0		73.4	
23	31.0		75.5	
24	28.8	77.8		
25	24.8	Worse	81.2	Worse

*For ASCQ-Me higher means better health (less pain) for PROMIS higher means more pain.