



## PROMIS ADULT PROFILE INSTRUMENTS

A brief guide to the PROMIS® Profile instruments for adult respondents:

PROMIS-29 Profile v1.0*
PROMIS-29 Profile v2.0*
PROMIS-29 Profile v2.1
PROMIS-43 Profile v1.0*
PROMIS-43 Profile v2.0*
PROMIS-43 Profile v2.1
PROMIS-57 Profile v1.0*
PROMIS-57 Profile v2.0*
PROMIS-57 Profile v2.1
PROMIS 29+2 Profile v2.1 (PROPr)

\* = retired measure

## ABOUT PROMIS PROFILES

PROMIS Profile instruments are a collection of short forms containing a fixed number of items from seven PROMIS domains (Depression, Anxiety, Physical Function, Pain Interference, Fatigue, Sleep Disturbance, and Ability to Participate in Social Roles and Activities). There are three PROMIS Profile Forms: PROMIS-29, PROMIS-43, and PROMIS-57. The PROMIS-29 assesses each of the 7 domains with 4 questions. The PROMIS-43 has 6 questions per domain, and the PROMIS-57 has 8 questions per domain. Each of the PROMIS Profiles includes an additional pain intensity 0-10 numeric rating scale (NRS). As with other PROMIS instruments, the Profiles are universal rather than disease-specific. They assess all domains over the past seven days except for Physical Function which has no timeframe specified.

These PROMIS Profile instruments are intended for adults (ages 18+). Different profile measures exist for pediatric self-report or parent-proxy report.

In selecting between PROMIS Profile Instruments, the difference is instrument length. The reliability and precision of the short forms within a domain is highly similar. The PROMIS-29 Profile short forms are labeled “4a”. The PROMIS-43 Profile short forms are labeled “6a” (6b for Physical Function) and the PROMIS-57 Profile short forms are labeled “8a” (8b for Physical Function).

## DEVELOPMENT OF SHORT FORMS

The 4-, 6-, and 8-item fixed short forms were developed in the following manner:

Step 1: Domain analyst produced a list of the 10 most informative questions in the respective calibrated item bank. Threshold locations and slopes were provided for each of the items.

Step 2: Domain team of content experts selected 8 of the 10 items for the 8-item short form.

Step 3: Domain team of content experts removed 2 items from the 8-item version to create the 6-item form.

Step 4: Domain team of content experts removed 2 items from the 6-item version to create the 4-item form.

In each of Steps 2-4, the domain team had the option of “reaching up” to the other items in the bank if there was not sufficiently representative content in a short form.



**Step 5:**

The combination of 4-item short forms was combined with the 0-10 pain intensity NRS to produce the PROMIS-29.

The combination of 6-item short forms was combined with the 0-10 pain intensity NRS to produce the PROMIS-43.

The combination of 8-item short forms was combined with the 0-10 pain intensity NRS to produce the PROMIS-57.

## **PROFILE ITEM SELECTION**

The short forms that make up the PROMIS Profile Instruments include “high information” items. The selection of items was in part based on item rankings within each domain using two psychometric criteria: (1) maximum interval information, and 2) CAT simulations. Item rankings were similar for both criteria. For the maximum interval criterion, each item information function was integrated (without weighting) for the interval from the mean to 2 SDs worse than the mean. For the CAT simulations, responses to all items in each bank were generated using a random sample of 1,000 simulees drawn separately for each bank (centered on 1.0 SD worse than the general population mean). Items were rank ordered based on their average administration rank over the simulees. Content experts reviewed the items and rankings and made cuts of 8, 6, and 4 items. The items within each instrument are nested/overlap (e.g., the 8-item form is the 6-item form plus two additional items).

## **ADMINISTRATION INSTRUCTIONS**

The PROMIS Profile Instruments are administered as short forms (not adaptive administration). Short forms are ideal when clinical researchers prefer to ask the same question of all respondents or of the same respondent over time to enable a more direct comparability across people or time. Instruct participants to answer all of the items (i.e., questions or statements) presented.

## **INSTRUMENT VERSIONS**

Some PROMIS domains have multiple versions of instruments (i.e. Item Banks/Computerized Adaptive Tests (CATs) and Short Forms). Generally, it is recommended that you use the most recent version available which can be identified as the instruments with the highest version number. Instruments are changed for various reasons.

In most cases, an instrument that has a decimal increase (v1.0 to v1.1 or v1.2) retains the same item-level parameters as well as instrument reliability and validity. In cases where a version number increases by a whole number (e.g., v1.0 to v2.0), the changes to the instrument are more substantial.

All three PROMIS v2.0 profiles replaced the v1.0 Satisfaction with Participation in Social Roles short form with a v2.0 Ability to Participate in Social Roles and Activities short form. Because the social domain differs between v1.0 and v2.0, the social scores between these measures should not be compared to each other. In the PROMIS-43 and PROMIS-57, the Physical Function short form was also updated. However, the final Physical Function T-score from v1.0 and v2.0 can be directly compared to each other. The three PROMIS v2.1 profiles have identical items to v2.0. The physical function item calibrations were updated to match those used in the PROMIS v2.0 Physical Function item bank. T-scores from the Physical Function short forms in v2.1 Profiles can be directly



compared to T-scores from both Physical Function short forms in Profiles v2.0 and v1.0. Also, v2.1 profiles use the same pain intensity item as earlier versions.

PROMIS-29 v1.0	PROMIS-29 v2.0	PROMIS-29 v2.1
PROMIS SF v1.0 – Physical Function 4a	PROMIS SF v1.0 – Physical Function 4a	PROMIS SF v2.0 – Physical Function 4a
PROMIS SF v1.0 – Anxiety 4a	PROMIS SF v1.0 – Anxiety 4a	PROMIS SF v1.0 – Anxiety 4a
PROMIS SF v1.0 – Depression 4a	PROMIS SF v1.0 – Depression 4a	PROMIS SF v1.0 – Depression 4a
PROMIS SF v1.0 – Fatigue 4a	PROMIS SF v1.0 – Fatigue 4a	PROMIS SF v1.0 – Fatigue 4a
PROMIS SF v1.0 – Sleep Disturbance 4a	PROMIS SF v1.0 – Sleep Disturbance 4a	PROMIS SF v1.0 – Sleep Disturbance 4a
PROMIS SF v1.0 – Satisfaction with Participation in Social Roles 4a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 4a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 4a
PROMIS SF v1.0 – Pain Interference 4a	PROMIS SF v1.0 – Pain Interference 4a	PROMIS SF v1.0 – Pain Interference 4a
PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)

PROMIS-43 v1.0	PROMIS-43 v2.0	PROMIS-43 v2.1
PROMIS SF v1.0 – Physical Function 6a	PROMIS SF v1.2 – Physical Function 6b	PROMIS SF v2.0 – Physical Function 6b
PROMIS SF v1.0 – Anxiety 6a	PROMIS SF v1.0 – Anxiety 6a	PROMIS SF v1.0 – Anxiety 6a
PROMIS SF v1.0 – Depression 6a	PROMIS SF v1.0 – Depression 6a	PROMIS SF v1.0 – Depression 6a
PROMIS SF v1.0 – Fatigue 6a	PROMIS SF v1.0 – Fatigue 6a	PROMIS SF v1.0 – Fatigue 6a
PROMIS SF v1.0 – Sleep Disturbance 6a	PROMIS SF v1.0 – Sleep Disturbance 6a	PROMIS SF v1.0 – Sleep Disturbance 6a
PROMIS SF v1.0 – Satisfaction with Participation in Social Roles 6a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 6a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 6a
PROMIS SF v1.0 – Pain Interference 6a	PROMIS SF v1.0 – Pain Interference 6a	PROMIS SF v1.0 – Pain Interference 6a
PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)



PROMIS-57 v1.0	PROMIS-57 v2.0	PROMIS-57 v2.1
PROMIS SF v1.0 – Physical Function 8a	PROMIS SF v1.2 – Physical Function 8b	PROMIS SF v2.0 – Physical Function 8b
PROMIS SF v1.0 – Anxiety 8a	PROMIS SF v1.0 – Anxiety 8a	PROMIS SF v1.0 – Anxiety 8a
PROMIS SF v1.0 – Depression 8a	PROMIS SF v1.0 – Depression 8a	PROMIS SF v1.0 – Depression 8a
PROMIS SF v1.0 – Fatigue 8a	PROMIS SF v1.0 – Fatigue 8a	PROMIS SF v1.0 – Fatigue 8a
PROMIS SF v1.0 – Sleep Disturbance 8a	PROMIS SF v1.0 – Sleep Disturbance 8a	PROMIS SF v1.0 – Sleep Disturbance 8a
PROMIS SF v1.0 – Satisfaction with Participation in Social Roles 8a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 8a	PROMIS SF v1.0 – Ability to Participate in Social Roles and Activities 8a
PROMIS SF v1.0 – Pain Interference 8a	PROMIS SF v1.0 – Pain Interference 8a	PROMIS SF v1.0 – Pain Interference 8a
PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)	PROMIS Pain Intensity item (Global07)

### PROMIS-29+2 Profile v2.1 (PROPr)

The PROMIS-29+2 Profile v2.1 (PROPr) is used to calculate a preference score (PROMIS Preference, PROPr). Preference-based scores provide an overall summary of health-related quality of life on a common metric. Preference-based scores summarize multiple domains on a metric ranging from 0 (as bad as dead) to 1 (perfect or ideal health). Scores can be used in comparisons across groups and for cost-utility analyses. The profile includes all items in the PROMIS-29 Profile v2.1 plus two Cognitive Function Abilities items. T-scores from the measure can be used to calculate a preference-based score.

## SCORING THE INSTRUMENT

**Short Forms:** PROMIS instruments are scored using item-level calibrations. This means that the most accurate way to score a PROMIS instrument is to use the HealthMeasures Scoring Service ([https://www.assessmentcenter.net/ac\\_scoringservice](https://www.assessmentcenter.net/ac_scoringservice)) or a data collection tool that automatically calculates scores (e.g., Assessment Center, REDCap auto-score). This method of scoring uses responses to each item for each participant. We refer to this as “response pattern scoring.” Response pattern scoring is preferred because it is more accurate than the use of raw score/scale score look up tables included in this manual. Response pattern scoring is especially useful when there is missing data (i.e., a respondent skipped an item), different groups of participants responded to different items, or you have created a new questionnaire using a subset of questions from a PROMIS item bank.

Each question usually has five response options ranging in value from one to five. To find the total raw score for a short form with all questions answered, sum the values of the response to each question. For example, for the adult 8-item form, the lowest possible raw score is 8; the highest possible raw score is 40 (see all short form scoring tables in Appendix 1). **All questions must be answered in order to produce a valid score using the scoring tables.** If a participant has skipped a question, use the HealthMeasures Scoring Service ([https://www.assessmentcenter.net/ac\\_scoringservice](https://www.assessmentcenter.net/ac_scoringservice)) to generate a final score.

Locate the applicable score conversion table in Appendix 1 and use this table to translate the total raw score into a T-score for each participant. The T-score rescales the raw score into a standardized T-score with a mean of 50 and a standard deviation (SD) of 10. Therefore, a person with a T-score of 40 is one SD below the mean.



For the PROMIS – 29 Adult Profile 2.1 instrument, an Anxiety raw score of 10 converts to a T-score of 59.5 with a standard error (SE) of 2.6 (see scoring table for the 4a short form v2.1 in Appendix 1). Thus, the 95% confidence interval around the observed score ranges from 54.4 to 64.6 (T-score  $\pm$  (1.96\*SE) or 59.5  $\pm$  (1.96\* 2.6)).

For most PROMIS instruments, a score of 50 is the average for the United States general population with a standard deviation of 10 because calibration testing was performed on a large sample of the general population. You can read more about the calibration and centering samples on HealthMeasures.net (<http://www.healthmeasures.net/score-and-interpret/interpret-scores/promis>). The T-score is provided with an error term (Standard Error or SE). The Standard Error is a statistical measure of variance and represents the “margin of error” for the T-score.

**Important:** A higher PROMIS T-score represents more of the concept being measured. For negatively-worded concepts like Anxiety, a T-score of 60 is one SD worse than average. By comparison, an Anxiety T-score of 40 is one SD better than average. However, for positively-worded concepts like Physical Function-Mobility, a T-score of 60 is one SD better than average while a T-score of 40 is one SD worse than average.

#### Calculating a PROPr Score

The PROMIS-Preference (PROPr) score is a generic, societal, preference-based summary score. It is based on PROMIS scores for Cognitive Function Abilities, Depression, Fatigue, Pain Interference, Physical Function, Sleep Disturbance, and Ability to Participate in Social Roles and Activities. You can calculate a PROPr score with the PROMIS-29+2 Profile v2.1 (PROPr) measure or T-scores from PROMIS CATs for the same domains. The Assessment Center API automatically generates a PROPr score. If you are using any other system including paper, you will need to calculate a PROPr score by following these instructions.

To calculate a PROPr Score, first calculate PROMIS T-scores for all domains. We encourage using the HealthMeasures Scoring Service to calculate T-scores, theta, and standard errors for each domain in the PROMIS-29+2 Profile v2.1 (PROPr). If you are unable to use the HealthMeasures Scoring Service, use the PROMIS-29 v2.1 Profile scoring tables in the appendix plus the PROMIS Short Form v2.0 – Cognitive Function Abilities 2a table.

You will then need to convert T-scores to theta values. Theta = (T – 50)/10. For example, a T=65 has theta=1.5. Finally, apply SAS or R code using theta values to calculate a PROPr score. The code is named “MAUT” (Multi-Attribute Utility Theory) and is available at <https://github.com/janelhanmer/PROPr>. If you are not familiar with SAS or R, we recommend working with a statistician or data manager with this expertise.

Dewitt, B., Feeny, D., Fischhoff, B., Cella, D., Hays, R.D., Hess, R., . . . Hanmer, J. (2018). Estimation of a Preference-Based Summary Score for the Patient-Reported Outcomes Measurement Information System: The PROMIS®-Preference (PROPr) Scoring System. *Medical Decision Making*. <https://www.ncbi.nlm.nih.gov/pubmed/29944456>

#### Calculating an HUI-3 Score

Hays and colleagues (2016) published an equation for estimating a Health Utility Index Mark 3 from the PROMIS-29 v2.0 Profile measure.

Hays RD, Revicki DA, Feeny D et al. *PharmacoEconomics* (2016) 34: 1015. <https://doi.org/10.1007/s40273-016-0408-x>



## STATISTICAL CHARACTERISTICS

There are four key features of the score for PROMIS Profile instruments:

- **Reliability:** The degree to which a measure is free of error. It can be estimated by the internal consistency of the responses to the measure, or by correlating total scores on the measure from two time points when there has been no true change in what is being measured (for z-scores, reliability =  $1 - SE^2$ ).
- **Precision:** The consistency of the estimated score (reciprocal of error variance).
- **Information:** The precision of an item or multiple items at different levels of the underlying continuum (for z-scores, information =  $1/SE^2$ ).
- **Standard Error (SE):** The possible range of the actual final score based upon the scaled T-score. For example, with a T-score of 52 and a SE of 2, the 95% confidence interval around the actual final score ranges from 48.1 to 55.9 ( $T\text{-score} \pm (1.96 * SE) = 52 \pm 3.9 = 48.1$  to 55.9).

The final score is represented by the T-score, a standardized score with a mean of 50 and a standard deviation (SD) of 10.

## PREVIEW OF SAMPLE ITEM

Figure 1 is an excerpt from the paper version of the PROMIS-29 v1.2 Profile instrument. This is the paper version format used for all Profile instruments. Note that there are Participant and Investigator versions of the Profile PDFs. The Investigator version is shown in Figure 2. The Participant version does not have the item IDs and response scores. This minimizes the visual clutter a participant sees when completing a PROMIS Profile on paper. The Investigator version helps the clinical researcher identify how to identify and score items.

<b>Anxiety</b>						
<b>In the past 7 days...</b>		<b>Never</b>	<b>Rarely</b>	<b>Sometimes</b>	<b>Often</b>	<b>Always</b>
EDANX01	I felt fearful .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
	I found it hard to focus on anything other than my anxiety .....	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Figure 1



## FREQUENTLY ASKED QUESTIONS (FAQs)

Q: I am interested in learning more. Where can I do that?

Review the HealthMeasures website at [www.healthmeasures.net](http://www.healthmeasures.net).

Q: Do I need to register with PROMIS to use these instruments?

No.

Q: Are these instruments available in other languages?

Yes! Look at the HealthMeasures website ([www.healthmeasures.net](http://www.healthmeasures.net)) for current information on PROMIS translations.

Q: Can I make my own short form?

Yes, custom short forms can be made by selecting any items from an item bank. This can be scored using the Scoring Service ([https://www.assessmentcenter.net/ac\\_scoringservice](https://www.assessmentcenter.net/ac_scoringservice)).

Q: How do I handle multiple responses when administering a short form on paper?

Guidelines on how to deal with multiple responses have been established. Resolution depends on the responses noted by the research participant.

- If two or more responses are marked by the respondent, and they are next to one another, then a data entry specialist will be responsible for randomly selecting one of them to be entered and will write down on the form which answer was selected. Note: To randomly select one of two responses, the data entry specialist will flip a coin (heads - higher number will be entered; tails – lower number will be entered). To randomly select one of three (or more) responses, a table of random numbers should be used with a statistician's assistance.
- If two or more responses are marked, and they are NOT all next to one another, the response will be considered missing.

Q: What is the minimum change on a PROMIS instrument that represents a clinically meaningful difference?

To learn more about research on the meaning of a change in scores, we suggest conducting a literature review to identify the most current information. The HealthMeasures website (<http://www.healthmeasures.net/score-and-interpret/interpret-scores/promis>) has additional information on interpreting scores.



## APPENDIX-SCORING TABLES - PROMIS 29 – PROFILE v1.0

<b>Adult v1.0 - Physical Function 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	22.9	3.9
5	26.9	2.7
6	29.1	2.4
7	30.7	2.2
8	32.1	2.2
9	33.3	2.1
10	34.4	2.1
11	35.6	2.1
12	36.7	2.1
13	37.9	2.2
14	39.1	2.2
15	40.4	2.2
16	41.8	2.3
17	43.4	2.4
18	45.3	2.6
19	48.0	3.1
20	56.9	6.7

\*SE = Standard Error on T-score metric

<b>Adult v1.0 - Anxiety 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	40.3	6.1
5	48.0	3.6
6	51.2	3.1
7	53.7	2.8
8	55.8	2.7
9	57.7	2.6
10	59.5	2.6
11	61.4	2.6
12	63.4	2.6
13	65.3	2.7
14	67.3	2.7
15	69.3	2.7
16	71.2	2.7
17	73.3	2.7
18	75.4	2.7
19	77.9	2.9
20	81.6	3.7

\*SE = Standard Error on T-score metric

<b>Adult v1.0 - Depression 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	41.0	6.2
5	49.0	3.2
6	51.8	2.7
7	53.9	2.4
8	55.7	2.3
9	57.3	2.3
10	58.9	2.3
11	60.5	2.3
12	62.2	2.3
13	63.9	2.3
14	65.7	2.3
15	67.5	2.3
16	69.4	2.3
17	71.2	2.4
18	73.3	2.4
19	75.7	2.6
20	79.4	3.6

\*SE = Standard Error on T-score metric

<b>Adult v1.0 - Fatigue 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	33.7	4.9
5	39.7	3.1
6	43.1	2.7
7	46.0	2.6
8	48.6	2.5
9	51.0	2.5
10	53.1	2.4
11	55.1	2.4
12	57.0	2.3
13	58.8	2.3
14	60.7	2.3
15	62.7	2.4
16	64.6	2.4
17	66.7	2.4
18	69.0	2.5
19	71.6	2.7
20	75.8	3.9

\*SE = Standard Error on T-score metric

<b>Adult v1.0 - Sleep Disturbance 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	32.0	5.2
5	37.5	4.0
6	41.1	3.7
7	43.8	3.5
8	46.2	3.5
9	48.4	3.4
10	50.5	3.4
11	52.4	3.4
12	54.3	3.4
13	56.1	3.4
14	57.9	3.3
15	59.8	3.3
16	61.7	3.3
17	63.8	3.4
18	66.0	3.4
19	68.8	3.7
20	73.3	4.6

\*SE = Standard Error on T-score metric

<b>Adult v1.0 – Satisfaction with Participation in Social Roles 4a</b>		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	29.0	4.2
5	33.6	2.5
6	35.7	2.2
7	37.3	2.1
8	38.8	2.1
9	40.3	2.1
10	41.7	2.1
11	43.2	2.1
12	44.8	2.1
13	46.4	2.1
14	48.1	2.1
15	49.8	2.2
16	51.6	2.2
17	53.5	2.2
18	55.6	2.3
19	58.1	2.7
20	64.1	5.1

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	41.6	6.1
5	49.6	2.5
6	52.0	2.0
7	53.9	1.9
8	55.6	1.9
9	57.1	1.9
10	58.5	1.8
11	59.9	1.8
12	61.2	1.8
13	62.5	1.8
14	63.8	1.8
15	65.2	1.8
16	66.6	1.8
17	68.0	1.8
18	69.7	1.9
19	71.6	2.1
20	75.6	3.7

\*SE = Standard Error on T-score metric



## PROMIS 43 – PROFILE v1.0

Adult v1.0 - Physical Function 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	20.8	3.6
7	24.4	2.4
8	26.5	2.2
9	28.0	2.0
10	29.4	1.9
11	30.5	1.9
12	31.6	1.8
13	32.5	1.8
14	33.5	1.8
15	34.3	1.8
16	35.2	1.8
17	36.0	1.8
18	36.9	1.8
19	37.7	1.8
20	38.6	1.8
21	39.4	1.8
22	40.3	1.8
23	41.3	1.8
24	42.2	1.8
25	43.3	1.9
26	44.4	2.0
27	45.7	2.1
28	47.4	2.4
29	49.7	2.9
30	57.8	6.4

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	39.1	5.9
7	45.9	3.4
8	48.8	2.9
9	50.9	2.6
10	52.7	2.4
11	54.2	2.3
12	55.6	2.2
13	56.9	2.2
14	58.2	2.2
15	59.4	2.2
16	60.7	2.2
17	62.0	2.2
18	63.3	2.2
19	64.6	2.2
20	66.0	2.2
21	67.3	2.2
22	68.6	2.2
23	70.0	2.2
24	71.3	2.2
25	72.7	2.2
26	74.1	2.2
27	75.6	2.3
28	77.4	2.4
29	79.4	2.7
30	82.7	3.5

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	38.4	5.8
7	45.2	3.4
8	48.3	2.8
9	50.4	2.4
10	52.0	2.2
11	53.4	2.1
12	54.7	2.0
13	55.9	2.0
14	57.0	1.9
15	58.2	1.9
16	59.3	2.0
17	60.5	2.0
18	61.7	2.0
19	62.9	2.0
20	64.2	2.0
21	65.5	2.0
22	66.7	2.0
23	68.0	2.0
24	69.3	2.0
25	70.6	2.0
26	72.0	2.0
27	73.4	2.0
28	75.0	2.1
29	76.9	2.4
30	80.3	3.5

\*SE = Standard Error on T-score metric



**Patient-Reported Outcomes Measurement Information System**  
*Dynamic Tools to Measure Health Outcomes From the Patient Perspective*

Adult v1.0 - Fatigue 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	33.4	4.9
7	39.1	2.9
8	42.0	2.4
9	44.2	2.2
10	46.1	2.1
11	47.8	2.1
12	49.4	2.1
13	50.9	2.0
14	52.4	2.0
15	53.7	2.0
16	55.1	2.0
17	56.3	1.9
18	57.5	1.9
19	58.8	1.9
20	60.0	1.9
21	61.2	1.9
22	62.4	1.9
23	63.7	2.0
24	65.0	2.0
25	66.4	2.0
26	67.8	2.0
27	69.3	2.0
28	71.0	2.1
29	73.0	2.5
30	76.8	3.8

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	31.7	5.1
7	36.9	3.9
8	40.1	3.5
9	42.5	3.3
10	44.6	3.2
11	46.4	3.1
12	48.0	3.0
13	49.5	3.0
14	50.9	3.0
15	52.3	2.9
16	53.6	2.9
17	54.8	2.9
18	56.1	2.9
19	57.3	2.9
20	58.5	2.9
21	59.7	2.9
22	61.0	2.9
23	62.3	2.9
24	63.6	2.9
25	65.0	2.9
26	66.5	3.0
27	68.1	3.1
28	70.0	3.3
29	72.4	3.6
30	76.1	4.4

\*SE = Standard Error on T-score metric

Adult v1.0 – Satisfaction with Participation in Social Roles 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	26.9	4.1
7	31.0	2.6
8	32.9	2.3
9	34.4	2.1
10	35.7	2.0
11	36.8	1.9
12	37.9	1.9
13	39.0	1.9
14	40.1	1.9
15	41.2	1.9
16	42.3	1.9
17	43.4	2.0
18	44.6	2.0
19	45.8	1.9
20	47.0	1.9
21	48.2	1.9
22	49.4	1.9
23	50.5	1.9
24	51.7	1.9
25	53.0	1.9
26	54.3	2.0
27	55.7	2.1
28	57.4	2.3
29	59.6	2.8
30	65.1	5.0

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	41.1	6.0
7	48.6	2.4
8	50.7	1.8
9	52.2	1.6
10	53.4	1.6
11	54.5	1.6
12	55.6	1.5
13	56.6	1.5
14	57.6	1.5
15	58.6	1.5
16	59.5	1.5
17	60.4	1.4
18	61.2	1.4
19	62.1	1.4
20	63.0	1.5
21	63.8	1.5
22	64.8	1.5
23	65.7	1.5
24	66.7	1.5
25	67.6	1.5
26	68.7	1.5
27	69.8	1.5
28	71.0	1.6
29	72.6	2.0
30	76.3	3.6

\*SE = Standard Error on T-score metric



## PROMIS 57 – PROFILE v1.0

Adult v1.0 - Physical Function 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	20.2	3.5
9	23.7	2.4
10	25.6	2.1
11	27.0	1.9
12	28.2	1.8
13	29.3	1.8
14	30.3	1.7
15	31.2	1.7
16	32.0	1.6
17	32.7	1.6
18	33.5	1.6
19	34.2	1.6
20	34.9	1.6
21	35.5	1.5
22	36.2	1.5
23	36.9	1.5
24	37.5	1.5
25	38.2	1.5
26	38.9	1.5
27	39.5	1.5
28	40.2	1.6
29	40.9	1.6
30	41.6	1.6
31	42.4	1.6
32	43.1	1.6
33	43.9	1.6
34	44.8	1.7
35	45.7	1.8
36	46.8	1.9
37	48.0	2.1
38	49.6	2.5
39	51.8	2.9
40	59.2	6.1

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	37.1	5.5
9	42.2	3.3
10	45.9	2.8
11	47.8	2.5
12	49.4	2.3
13	50.8	2.2
14	52.1	2.1
15	53.2	2.0
16	54.3	2.0
17	55.4	2.0
18	56.4	2.0
19	57.4	2.0
20	58.4	2.0
21	59.4	2.0
22	60.4	2.0
23	61.4	2.0
24	62.5	2.0
25	63.5	2.0
26	64.5	2.0
27	65.6	2.0
28	66.6	2.0
29	67.7	2.0
30	68.7	2.0
31	69.8	2.0
32	70.8	2.0
33	71.9	2.0
34	73.0	2.0
35	74.1	2.0
36	75.4	2.0
37	76.7	2.1
38	76.2	2.3
39	80.0	2.6
40	83.1	3.4

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	38.2	5.7
9	44.7	3.3
10	47.5	2.7
11	49.4	2.3
12	50.9	2.0
13	52.1	1.9
14	53.2	1.8
15	54.1	1.8
16	55.1	1.7
17	55.9	1.7
18	56.8	1.7
19	57.7	1.7
20	58.5	1.7
21	59.4	1.7
22	60.3	1.7
23	61.2	1.7
24	62.1	1.8
25	63.0	1.8
26	63.9	1.8
27	64.9	1.8
28	65.8	1.8
29	66.8	1.8
30	67.7	1.8
31	68.7	1.8
32	69.7	1.8
33	70.7	1.8
34	71.7	1.8
35	72.8	1.8
36	73.9	1.8
37	75.0	1.9
38	76.4	2.0
39	78.2	2.4
40	81.3	3.4

\*SE = Standard Error on T-score metric



Adult v1.0 - Fatigue 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	33.1	4.8
9	38.5	2.7
10	41.0	2.2
11	42.8	2.0
12	44.3	1.9
13	45.6	1.8
14	46.9	1.8
15	48.1	1.8
16	49.2	1.8
17	50.4	1.8
18	51.5	1.7
19	52.5	1.7
20	53.6	1.7
21	54.6	1.7
22	55.6	1.7
23	56.6	1.7
24	57.5	1.7
25	58.5	1.7
26	59.4	1.7
27	60.4	1.7
28	61.3	1.7
29	62.3	1.7
30	63.3	1.7
31	64.3	1.7
32	65.3	1.7
33	66.4	1.7
34	67.5	1.7
35	68.6	1.7
36	69.8	1.8
37	71.0	1.8
38	72.4	2.0
39	74.2	2.4
40	77.8	3.7

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	30.5	4.9
9	35.3	3.7
10	38.1	3.3
11	40.4	3.1
12	42.2	3.0
13	43.9	2.9
14	45.3	2.8
15	46.7	2.7
16	47.9	2.7
17	49.1	2.6
18	50.2	2.6
19	51.3	2.6
20	52.4	2.6
21	53.4	2.6
22	54.3	2.5
23	55.3	2.5
24	56.2	2.5
25	57.2	2.5
26	58.1	2.5
27	59.1	2.5
28	60.0	2.5
29	61.0	2.5
30	62.0	2.6
31	63.0	2.6
32	64.0	2.6
33	65.1	2.6
34	66.2	2.7
35	67.4	2.8
36	68.7	2.9
37	70.2	3.0
38	72.0	3.2
39	74.1	3.5
40	77.6	4.3

\*SE = Standard Error on T-score metric

Adult v1.0 – Satisfaction with Participation in Social Roles 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	26.2	4.0
9	30.0	2.6
10	31.7	2.3
11	33.1	2.0
12	34.2	1.9
13	35.2	1.8
14	36.1	1.7
15	36.9	1.7
16	37.7	1.7
17	38.5	1.7
18	39.4	1.7
19	40.2	1.7
20	41.0	1.7
21	41.8	1.7
22	42.7	1.7
23	43.5	1.8
24	44.4	1.8
25	45.3	1.7
26	46.2	1.7
27	47.1	1.7
28	47.9	1.7
29	48.8	1.7
30	49.7	1.7
31	50.6	1.7
32	51.6	1.7
33	52.5	1.7
34	53.4	1.7
35	54.4	1.8
36	55.5	1.8
37	56.8	2.0
38	58.3	2.2
39	60.4	2.8
40	65.6	4.9

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	40.7	5.9
9	47.9	2.4
10	49.9	1.8
11	51.2	1.5
12	52.3	1.4
13	53.2	1.4
14	54.1	1.4
15	55.0	1.4
16	55.8	1.4
17	56.6	1.4
18	57.4	1.3
19	58.1	1.3
20	58.8	1.3
21	59.5	1.3
22	60.2	1.3
23	60.8	1.3
24	61.5	1.3
25	62.1	1.3
26	62.8	1.3
27	63.5	1.3
28	64.1	1.3
29	64.8	1.3
30	65.5	1.3
31	66.2	1.3
32	66.9	1.3
33	67.7	1.3
34	68.4	1.3
35	69.2	1.3
36	70.1	1.4
37	71.0	1.4
38	72.1	1.6
39	73.5	2.0
40	77.0	3.5

\*SE = Standard Error on T-score metric



## PROMIS 29 – PROFILE v2.0

Adult v1.0 - Physical Function 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	22.9	3.9
5	26.9	2.7
6	29.1	2.4
7	30.7	2.2
8	32.1	2.2
9	33.3	2.1
10	34.4	2.1
11	35.6	2.1
12	36.7	2.1
13	37.9	2.2
14	39.1	2.2
15	40.4	2.2
16	41.8	2.3
17	43.4	2.4
18	45.3	2.6
19	48.0	3.1
20	56.9	6.7

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	40.3	6.1
5	48.0	3.6
6	51.2	3.1
7	53.7	2.8
8	55.8	2.7
9	57.7	2.6
10	59.5	2.6
11	61.4	2.6
12	63.4	2.6
13	65.3	2.7
14	67.3	2.7
15	69.3	2.7
16	71.2	2.7
17	73.3	2.7
18	75.4	2.7
19	77.9	2.9
20	81.6	3.7

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	41.0	6.2
5	49.0	3.2
6	51.8	2.7
7	53.9	2.4
8	55.7	2.3
9	57.3	2.3
10	58.9	2.3
11	60.5	2.3
12	62.2	2.3
13	63.9	2.3
14	65.7	2.3
15	67.5	2.3
16	69.4	2.3
17	71.2	2.4
18	73.3	2.4
19	75.7	2.6
20	79.4	3.6

\*SE = Standard Error on T-score metric

Adult v1.0 - Fatigue 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	33.7	4.9
5	39.7	3.1
6	43.1	2.7
7	46.0	2.6
8	48.6	2.5
9	51.0	2.5
10	53.1	2.4
11	55.1	2.4
12	57.0	2.3
13	58.8	2.3
14	60.7	2.3
15	62.7	2.4
16	64.6	2.4
17	66.7	2.4
18	69.0	2.5
19	71.6	2.7
20	75.8	3.9

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	32.0	5.2
5	37.5	4.0
6	41.1	3.7
7	43.8	3.5
8	46.2	3.5
9	48.4	3.4
10	50.5	3.4
11	52.4	3.4
12	54.3	3.4
13	56.1	3.4
14	57.9	3.3
15	59.8	3.3
16	61.7	3.3
17	63.8	3.4
18	66.0	3.4
19	68.8	3.7
20	73.3	4.6

\*SE = Standard Error on T-score metric

Adult v1.0 – Ability to Participate in Social Roles and Activities 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	27.5	4.1
5	31.8	2.5
6	34.0	2.3
7	35.7	2.2
8	37.3	2.1
9	38.8	2.2
10	40.5	2.3
11	42.3	2.3
12	44.2	2.3
13	46.2	2.3
14	48.1	2.2
15	50.0	2.2
16	51.9	2.2
17	53.7	2.3
18	55.8	2.3
19	58.3	2.7
20	64.2	5.1

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	41.6	6.1
5	49.6	2.5
6	52.0	2.0
7	53.9	1.9
8	55.6	1.9
9	57.1	1.9
10	58.5	1.8
11	59.9	1.8
12	61.2	1.8
13	62.5	1.8
14	63.8	1.8
15	65.2	1.8
16	66.6	1.8
17	68.0	1.8
18	69.7	1.9
19	71.6	2.1
20	75.6	3.7

\*SE = Standard Error on T-score metric



## PROMIS 43 – PROFILE v2.0

Adult v1.2 - Physical Function 6b		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	21.6	3.6
7	25.4	2.6
8	27.5	2.3
9	29.1	2.1
10	30.4	2.0
11	31.5	1.9
12	32.5	1.9
13	33.4	1.8
14	34.3	1.8
15	35.1	1.8
16	36.0	1.8
17	36.8	1.8
18	37.6	1.8
19	38.5	1.8
20	39.3	1.8
21	40.2	1.8
22	41.1	1.8
23	42.1	1.8
24	43.1	1.9
25	44.2	1.9
26	45.4	2.0
27	46.8	2.2
28	48.7	2.6
29	50.9	2.9
30	58.7	6.2

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	39.1	5.9
7	45.9	3.4
8	48.8	2.9
9	50.9	2.6
10	52.7	2.4
11	54.2	2.3
12	55.6	2.2
13	56.9	2.2
14	58.2	2.2
15	59.4	2.2
16	60.7	2.2
17	62.0	2.2
18	63.3	2.2
19	64.6	2.2
20	66.0	2.2
21	67.3	2.2
22	68.6	2.2
23	70.0	2.2
24	71.3	2.2
25	72.7	2.2
26	74.1	2.2
27	75.6	2.3
28	77.4	2.4
29	79.4	2.7
30	82.7	3.5

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	38.4	5.8
7	45.2	3.4
8	48.3	2.8
9	50.4	2.4
10	52.0	2.2
11	53.4	2.1
12	54.7	2.0
13	55.9	2.0
14	57.0	1.9
15	58.2	1.9
16	59.3	2.0
17	60.5	2.0
18	61.7	2.0
19	62.9	2.0
20	64.2	2.0
21	65.5	2.0
22	66.7	2.0
23	68.0	2.0
24	69.3	2.0
25	70.6	2.0
26	72.0	2.0
27	73.4	2.0
28	75.0	2.1
29	76.9	2.4
30	80.3	3.5

\*SE = Standard Error on T-score metric



<b>Adult v1.0 - Fatigue 6a</b>		
<i>Short Form Conversion Table</i>		
Raw Summed Score	T-score	SE*
6	33.4	4.9
7	39.1	2.9
8	42.0	2.4
9	44.2	2.2
10	46.1	2.1
11	47.8	2.1
12	49.4	2.1
13	50.9	2.0
14	52.4	2.0
15	53.7	2.0
16	55.1	2.0
17	56.3	1.9
18	57.5	1.9
19	58.8	1.9
20	60.0	1.9
21	61.2	1.9
22	62.4	1.9
23	63.7	2.0
24	65.0	2.0
25	66.4	2.0
26	67.8	2.0
27	69.3	2.0
28	71.0	2.1
29	73.0	2.5
30	76.8	3.8

\*SE = Standard Error on T-score metric

<b>Adult v1.0 - Sleep Disturbance 6a</b>		
<i>Short Form Conversion Table</i>		
Raw Summed Score	T-score	SE*
6	31.7	5.1
7	36.9	3.9
8	40.1	3.5
9	42.5	3.3
10	44.6	3.2
11	46.4	3.1
12	48.0	3.0
13	49.5	3.0
14	50.9	3.0
15	52.3	2.9
16	53.6	2.9
17	54.8	2.9
18	56.1	2.9
19	57.3	2.9
20	58.5	2.9
21	59.7	2.9
22	61.0	2.9
23	62.3	2.9
24	63.6	2.9
25	65.0	2.9
26	66.5	3.0
27	68.1	3.1
28	70.0	3.3
29	72.4	3.6
30	76.1	4.4

\*SE = Standard Error on T-score metric

<b>Adult v1.0 – Ability to Participate in Social Roles and Activities 6a</b>		
<i>Short Form Conversion Table</i>		
Raw Summed Score	T-score	SE*
6	26.7	4.0
7	30.7	2.4
8	32.5	2.0
9	33.9	1.9
10	35.1	1.8
11	36.2	1.8
12	37.2	1.8
13	38.2	1.8
14	39.3	1.8
15	40.4	1.8
16	41.6	1.9
17	42.9	1.9
18	44.2	1.9
19	45.6	1.9
20	46.9	1.9
21	48.2	1.8
22	49.5	1.8
23	50.7	1.8
24	51.9	1.8
25	53.2	1.8
26	54.5	1.9
27	55.9	1.9
28	57.5	2.1
29	59.6	2.6
30	65.0	4.9

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	41.1	6.0
7	48.6	2.4
8	50.7	1.8
9	52.2	1.6
10	53.4	1.6
11	54.5	1.6
12	55.6	1.5
13	56.6	1.5
14	57.6	1.5
15	58.6	1.5
16	59.5	1.5
17	60.4	1.4
18	61.2	1.4
19	62.1	1.4
20	63.0	1.5
21	63.8	1.5
22	64.8	1.5
23	65.7	1.5
24	66.7	1.5
25	67.6	1.5
26	68.7	1.5
27	69.8	1.5
28	71.0	1.6
29	72.6	2.0
30	76.3	3.6

\*SE = Standard Error on T-score metric



## PROMIS 57 – PROFILE v2.0

Adult v1.2 - Physical Function 8b		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	20.9	3.5
9	24.4	2.5
10	26.4	2.2
11	27.9	2.0
12	29.1	1.9
13	30.1	1.8
14	31.1	1.7
15	31.9	1.7
16	32.7	1.6
17	33.4	1.6
18	34.1	1.6
19	34.8	1.6
20	35.5	1.6
21	36.2	1.5
22	36.8	1.5
23	37.5	1.5
24	38.1	1.5
25	38.8	1.5
26	39.4	1.5
27	40.1	1.5
28	40.8	1.6
29	41.5	1.6
30	42.2	1.6
31	43.0	1.6
32	44.6	1.6
33	45.5	1.6
34	46.4	1.7
35	47.5	1.8
36	48.8	1.9
37	50.4	2.1
38	50.4	2.5
39	52.5	2.9
40	59.7	6.1

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	37.1	5.5
9	42.2	3.3
10	45.9	2.8
11	47.8	2.5
12	49.4	2.3
13	50.8	2.2
14	52.1	2.1
15	53.2	2.0
16	54.3	2.0
17	55.4	2.0
18	56.4	2.0
19	57.4	2.0
20	58.4	2.0
21	59.4	2.0
22	60.4	2.0
23	61.4	2.0
24	62.5	2.0
25	63.5	2.0
26	64.5	2.0
27	65.6	2.0
28	66.6	2.0
29	67.7	2.0
30	68.7	2.0
31	69.8	2.0
32	70.8	2.0
33	71.9	2.0
34	73.0	2.0
35	74.1	2.0
36	75.4	2.0
37	76.7	2.1
38	76.2	2.3
39	80.0	2.6
40	83.1	3.4

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	38.2	5.7
9	44.7	3.3
10	47.5	2.7
11	49.4	2.3
12	50.9	2.0
13	52.1	1.9
14	53.2	1.8
15	54.1	1.8
16	55.1	1.7
17	55.9	1.7
18	56.8	1.7
19	57.7	1.7
20	58.5	1.7
21	59.4	1.7
22	60.3	1.7
23	61.2	1.7
24	62.1	1.8
25	63.0	1.8
26	63.9	1.8
27	64.9	1.8
28	65.8	1.8
29	66.8	1.8
30	67.7	1.8
31	68.7	1.8
32	69.7	1.8
33	70.7	1.8
34	71.7	1.8
35	72.8	1.8
36	73.9	1.8
37	75.0	1.9
38	76.4	2.0
39	78.2	2.4
40	81.3	3.4

\*SE = Standard Error on T-score metric



Adult v1.0 - Fatigue 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	33.1	4.8
9	38.5	2.7
10	41.0	2.2
11	42.8	2.0
12	44.3	1.9
13	45.6	1.8
14	46.9	1.8
15	48.1	1.8
16	49.2	1.8
17	50.4	1.8
18	51.5	1.7
19	52.5	1.7
20	53.6	1.7
21	54.6	1.7
22	55.6	1.7
23	56.6	1.7
24	57.5	1.7
25	58.5	1.7
26	59.4	1.7
27	60.4	1.7
28	61.3	1.7
29	62.3	1.7
30	63.3	1.7
31	64.3	1.7
32	65.3	1.7
33	66.4	1.7
34	67.5	1.7
35	68.6	1.7
36	69.8	1.8
37	71.0	1.8
38	72.4	2.0
39	74.2	2.4
40	77.8	3.7

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	30.5	4.9
9	35.3	3.7
10	38.1	3.3
11	40.4	3.1
12	42.2	3.0
13	43.9	2.9
14	45.3	2.8
15	46.7	2.7
16	47.9	2.7
17	49.1	2.6
18	50.2	2.6
19	51.3	2.6
20	52.4	2.6
21	53.4	2.6
22	54.3	2.5
23	55.3	2.5
24	56.2	2.5
25	57.2	2.5
26	58.1	2.5
27	59.1	2.5
28	60.0	2.5
29	61.0	2.5
30	62.0	2.6
31	63.0	2.6
32	64.0	2.6
33	65.1	2.6
34	66.2	2.7
35	67.4	2.8
36	68.7	2.9
37	70.2	3.0
38	72.0	3.2
39	74.1	3.5
40	77.6	4.3

\*SE = Standard Error on T-score metric

Adult v1.0 – Ability to Participate in Social Roles and Activities 8a Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	25.9	3.9
9	29.7	2.3
10	31.3	1.9
11	32.6	1.7
12	33.6	1.6
13	34.5	1.6
14	35.3	1.5
15	36.2	1.5
16	36.9	1.5
17	37.7	1.5
18	38.5	1.5
19	39.3	1.6
20	40.2	1.6
21	41.1	1.6
22	42.0	1.7
23	43.0	1.7
24	44.0	1.7
25	45.0	1.7
26	46.0	1.6
27	47.0	1.6
28	48.0	1.6
29	48.9	1.6
30	49.9	1.6
31	50.8	1.6
32	51.7	1.6
33	52.7	1.6
34	53.6	1.6
35	54.6	1.6
36	55.7	1.6
37	56.8	1.7
38	58.2	2.0
39	60.2	2.5
40	65.4	4.9

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	40.7	5.9
9	47.9	2.4
10	49.9	1.8
11	51.2	1.5
12	52.3	1.4
13	53.2	1.4
14	54.1	1.4
15	55.0	1.4
16	55.8	1.4
17	56.6	1.4
18	57.4	1.3
19	58.1	1.3
20	58.8	1.3
21	59.5	1.3
22	60.2	1.3
23	60.8	1.3
24	61.5	1.3
25	62.1	1.3
26	62.8	1.3
27	63.5	1.3
28	64.1	1.3
29	64.8	1.3
30	65.5	1.3
31	66.2	1.3
32	66.9	1.3
33	67.7	1.3
34	68.4	1.3
35	69.2	1.3
36	70.1	1.4
37	71.0	1.4
38	72.1	1.6
39	73.5	2.0
40	77.0	3.5

\*SE = Standard Error on T-score metric



## PROMIS 29 – PROFILE v2.1 PROMIS 29 + 2 PROFILE v2.1 (PROPr)

### **Adult v2.0 - Physical Function 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	22.5	4.0
5	26.6	2.8
6	28.9	2.5
7	30.5	2.4
8	31.9	2.3
9	33.2	2.3
10	34.4	2.3
11	35.6	2.3
12	36.7	2.3
13	37.9	2.3
14	39.2	2.4
15	40.5	2.4
16	41.9	2.5
17	43.5	2.6
18	45.5	2.8
19	48.3	3.3
20	57.0	6.6

\*SE = Standard Error on T-score metric

### **Adult v1.0 - Anxiety 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	40.3	6.1
5	48.0	3.6
6	51.2	3.1
7	53.7	2.8
8	55.8	2.7
9	57.7	2.6
10	59.5	2.6
11	61.4	2.6
12	63.4	2.6
13	65.3	2.7
14	67.3	2.7
15	69.3	2.7
16	71.2	2.7
17	73.3	2.7
18	75.4	2.7
19	77.9	2.9
20	81.6	3.7

\*SE = Standard Error on T-score metric

### **Adult v1.0 - Depression 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	41.0	6.2
5	49.0	3.2
6	51.8	2.7
7	53.9	2.4
8	55.7	2.3
9	57.3	2.3
10	58.9	2.3
11	60.5	2.3
12	62.2	2.3
13	63.9	2.3
14	65.7	2.3
15	67.5	2.3
16	69.4	2.3
17	71.2	2.4
18	73.3	2.4
19	75.7	2.6
20	79.4	3.6

\*SE = Standard Error on T-score metric

### **Adult v1.0 - Fatigue 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	33.7	4.9
5	39.7	3.1
6	43.1	2.7
7	46.0	2.6
8	48.6	2.5
9	51.0	2.5
10	53.1	2.4
11	55.1	2.4
12	57.0	2.3
13	58.8	2.3
14	60.7	2.3
15	62.7	2.4
16	64.6	2.4
17	66.7	2.4
18	69.0	2.5
19	71.6	2.7
20	75.8	3.9

\*SE = Standard Error on T-score metric

### **Adult v1.0 - Sleep Disturbance 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	32.0	5.2
5	37.5	4.0
6	41.1	3.7
7	43.8	3.5
8	46.2	3.5
9	48.4	3.4
10	50.5	3.4
11	52.4	3.4
12	54.3	3.4
13	56.1	3.4
14	57.9	3.3
15	59.8	3.3
16	61.7	3.3
17	63.8	3.4
18	66.0	3.4
19	68.8	3.7
20	73.3	4.6

\*SE = Standard Error on T-score metric

### **Adult v1.0 – Ability to Participate in Social Roles and Activities 4a**

#### *Short Form Conversion Table*

Raw Summed Score	T-score	SE*
4	27.5	4.1
5	31.8	2.5
6	34.0	2.3
7	35.7	2.2
8	37.3	2.1
9	38.8	2.2
10	40.5	2.3
11	42.3	2.3
12	44.2	2.3
13	46.2	2.3
14	48.1	2.2
15	50.0	2.2
16	51.9	2.2
17	53.7	2.3
18	55.8	2.3
19	58.3	2.7
20	64.2	5.1

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 4a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
4	41.6	6.1
5	49.6	2.5
6	52.0	2.0
7	53.9	1.9
8	55.6	1.9
9	57.1	1.9
10	58.5	1.8
11	59.9	1.8
12	61.2	1.8
13	62.5	1.8
14	63.8	1.8
15	65.2	1.8
16	66.6	1.8
17	68.0	1.8
18	69.7	1.9
19	71.6	2.1
20	75.6	3.7

\*SE = Standard Error on T-score metric

Cognitive Function Short Form v2.0 - Abilities 2a (part of PROMIS-29+2 Profile)		
Raw Summed Score	T-score	SE*
2	29.5	6.4
3	34.4	5.9
4	38	5.7
5	41.2	5.7
6	44.3	5.8
7	47.3	5.8
8	50.5	5.7
9	54.7	5.9
10	61.2	6.9

\*Standard Error on T-score metric



## PROMIS 43 – PROFILE v2.1

Adult v2.0 - Physical Function 6b		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	21.0	3.8
7	25.0	2.7
8	27.1	2.4
9	28.8	2.2
10	30.1	2.1
11	31.3	2.0
12	32.3	2.0
13	33.2	1.9
14	34.2	1.9
15	35.0	1.9
16	35.9	1.9
17	36.8	1.9
18	37.6	1.9
19	38.5	1.9
20	39.3	1.9
21	40.2	1.9
22	41.2	1.9
23	42.1	1.9
24	43.2	2.0
25	44.3	2.0
26	45.6	2.2
27	47.1	2.3
28	48.9	2.7
29	51.3	3.0
30	59.0	6.2

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	39.1	5.9
7	45.9	3.4
8	48.8	2.9
9	50.9	2.6
10	52.7	2.4
11	54.2	2.3
12	55.6	2.2
13	56.9	2.2
14	58.2	2.2
15	59.4	2.2
16	60.7	2.2
17	62.0	2.2
18	63.3	2.2
19	64.6	2.2
20	66.0	2.2
21	67.3	2.2
22	68.6	2.2
23	70.0	2.2
24	71.3	2.2
25	72.7	2.2
26	74.1	2.2
27	75.6	2.3
28	77.4	2.4
29	79.4	2.7
30	82.7	3.5

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	38.4	5.8
7	45.2	3.4
8	48.3	2.8
9	50.4	2.4
10	52.0	2.2
11	53.4	2.1
12	54.7	2.0
13	55.9	2.0
14	57.0	1.9
15	58.2	1.9
16	59.3	2.0
17	60.5	2.0
18	61.7	2.0
19	62.9	2.0
20	64.2	2.0
21	65.5	2.0
22	66.7	2.0
23	68.0	2.0
24	69.3	2.0
25	70.6	2.0
26	72.0	2.0
27	73.4	2.0
28	75.0	2.1
29	76.9	2.4
30	80.3	3.5

\*SE = Standard Error on T-score metric



Adult v1.0 - Fatigue 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	33.4	4.9
7	39.1	2.9
8	42.0	2.4
9	44.2	2.2
10	46.1	2.1
11	47.8	2.1
12	49.4	2.1
13	50.9	2.0
14	52.4	2.0
15	53.7	2.0
16	55.1	2.0
17	56.3	1.9
18	57.5	1.9
19	58.8	1.9
20	60.0	1.9
21	61.2	1.9
22	62.4	1.9
23	63.7	2.0
24	65.0	2.0
25	66.4	2.0
26	67.8	2.0
27	69.3	2.0
28	71.0	2.1
29	73.0	2.5
30	76.8	3.8

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	31.7	5.1
7	36.9	3.9
8	40.1	3.5
9	42.5	3.3
10	44.6	3.2
11	46.4	3.1
12	48.0	3.0
13	49.5	3.0
14	50.9	3.0
15	52.3	2.9
16	53.6	2.9
17	54.8	2.9
18	56.1	2.9
19	57.3	2.9
20	58.5	2.9
21	59.7	2.9
22	61.0	2.9
23	62.3	2.9
24	63.6	2.9
25	65.0	2.9
26	66.5	3.0
27	68.1	3.1
28	70.0	3.3
29	72.4	3.6
30	76.1	4.4

\*SE = Standard Error on T-score metric

Adult v1.0 – Ability to Participate in Social Roles and Activities 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	26.7	4.0
7	30.7	2.4
8	32.5	2.0
9	33.9	1.9
10	35.1	1.8
11	36.2	1.8
12	37.2	1.8
13	38.2	1.8
14	39.3	1.8
15	40.4	1.8
16	41.6	1.9
17	42.9	1.9
18	44.2	1.9
19	45.6	1.9
20	46.9	1.9
21	48.2	1.8
22	49.5	1.8
23	50.7	1.8
24	51.9	1.8
25	53.2	1.8
26	54.5	1.9
27	55.9	1.9
28	57.5	2.1
29	59.6	2.6
30	65.0	4.9

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 6a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
6	41.1	6.0
7	48.6	2.4
8	50.7	1.8
9	52.2	1.6
10	53.4	1.6
11	54.5	1.6
12	55.6	1.5
13	56.6	1.5
14	57.6	1.5
15	58.6	1.5
16	59.5	1.5
17	60.4	1.4
18	61.2	1.4
19	62.1	1.4
20	63.0	1.5
21	63.8	1.5
22	64.8	1.5
23	65.7	1.5
24	66.7	1.5
25	67.6	1.5
26	68.7	1.5
27	69.8	1.5
28	71.0	1.6
29	72.6	2.0
30	76.3	3.6

\*SE = Standard Error on T-score metric



## PROMIS 57 – PROFILE v2.1

Adult v2.0 – Physical Function 8b		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	20.3	3.7
9	23.9	2.5
10	26.0	2.2
11	27.5	2.1
12	28.8	2.0
13	29.8	1.9
14	30.8	1.8
15	31.7	1.8
16	32.5	1.7
17	33.2	1.7
18	34.0	1.7
19	34.7	1.7
20	35.4	1.6
21	36.1	1.6
22	36.7	1.6
23	37.4	1.6
24	38.1	1.6
25	38.8	1.6
26	39.5	1.6
27	40.1	1.6
28	40.8	1.6
29	41.6	1.7
30	42.3	1.7
31	43.1	1.7
32	43.9	1.7
33	44.7	1.8
34	45.7	1.8
35	46.7	1.9
36	47.8	2.1
37	49.2	2.3
38	50.8	2.6
39	53.0	3.0
40	60.1	5.9

\*SE = Standard Error on T-score metric

Adult v1.0 - Anxiety 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	37.1	5.5
9	42.2	3.3
10	45.9	2.8
11	47.8	2.5
12	49.4	2.3
13	50.8	2.2
14	52.1	2.1
15	53.2	2.0
16	54.3	2.0
17	55.4	2.0
18	56.4	2.0
19	57.4	2.0
20	58.4	2.0
21	59.4	2.0
22	60.4	2.0
23	61.4	2.0
24	62.5	2.0
25	63.5	2.0
26	64.5	2.0
27	65.6	2.0
28	66.6	2.0
29	67.7	2.0
30	68.7	2.0
31	69.8	2.0
32	70.8	2.0
33	71.9	2.0
34	73.0	2.0
35	74.1	2.0
36	75.4	2.0
37	76.7	2.1
38	76.2	2.3
39	80.0	2.6
40	83.1	3.4

\*SE = Standard Error on T-score metric

Adult v1.0 - Depression 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	38.2	5.7
9	44.7	3.3
10	47.5	2.7
11	49.4	2.3
12	50.9	2.0
13	52.1	1.9
14	53.2	1.8
15	54.1	1.8
16	55.1	1.7
17	55.9	1.7
18	56.8	1.7
19	57.7	1.7
20	58.5	1.7
21	59.4	1.7
22	60.3	1.7
23	61.2	1.7
24	62.1	1.8
25	63.0	1.8
26	63.9	1.8
27	64.9	1.8
28	65.8	1.8
29	66.8	1.8
30	67.7	1.8
31	68.7	1.8
32	69.7	1.8
33	70.7	1.8
34	71.7	1.8
35	72.8	1.8
36	73.9	1.8
37	75.0	1.9
38	76.4	2.0
39	78.2	2.4
40	81.3	3.4

\*SE = Standard Error on T-score metric



Adult v1.0 - Fatigue 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	33.1	4.8
9	38.5	2.7
10	41.0	2.2
11	42.8	2.0
12	44.3	1.9
13	45.6	1.8
14	46.9	1.8
15	48.1	1.8
16	49.2	1.8
17	50.4	1.8
18	51.5	1.7
19	52.5	1.7
20	53.6	1.7
21	54.6	1.7
22	55.6	1.7
23	56.6	1.7
24	57.5	1.7
25	58.5	1.7
26	59.4	1.7
27	60.4	1.7
28	61.3	1.7
29	62.3	1.7
30	63.3	1.7
31	64.3	1.7
32	65.3	1.7
33	66.4	1.7
34	67.5	1.7
35	68.6	1.7
36	69.8	1.8
37	71.0	1.8
38	72.4	2.0
39	74.2	2.4
40	77.8	3.7

\*SE = Standard Error on T-score metric

Adult v1.0 - Sleep Disturbance 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	30.5	4.9
9	35.3	3.7
10	38.1	3.3
11	40.4	3.1
12	42.2	3.0
13	43.9	2.9
14	45.3	2.8
15	46.7	2.7
16	47.9	2.7
17	49.1	2.6
18	50.2	2.6
19	51.3	2.6
20	52.4	2.6
21	53.4	2.6
22	54.3	2.5
23	55.3	2.5
24	56.2	2.5
25	57.2	2.5
26	58.1	2.5
27	59.1	2.5
28	60.0	2.5
29	61.0	2.5
30	62.0	2.6
31	63.0	2.6
32	64.0	2.6
33	65.1	2.6
34	66.2	2.7
35	67.4	2.8
36	68.7	2.9
37	70.2	3.0
38	72.0	3.2
39	74.1	3.5
40	77.6	4.3

\*SE = Standard Error on T-score metric

Adult v1.0 – Ability to Participate in Social Roles and Activities 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	25.9	3.9
9	29.7	2.3
10	31.3	1.9
11	32.6	1.7
12	33.6	1.6
13	34.5	1.6
14	35.3	1.5
15	36.2	1.5
16	36.9	1.5
17	37.7	1.5
18	38.5	1.5
19	39.3	1.6
20	40.2	1.6
21	41.1	1.6
22	42.0	1.7
23	43.0	1.7
24	44.0	1.7
25	45.0	1.7
26	46.0	1.6
27	47.0	1.6
28	48.0	1.6
29	48.9	1.6
30	49.9	1.6
31	50.8	1.6
32	51.7	1.6
33	52.7	1.6
34	53.6	1.6
35	54.6	1.6
36	55.7	1.6
37	56.8	1.7
38	58.2	2.0
39	60.2	2.5
40	65.4	4.9

\*SE = Standard Error on T-score metric



Adult v1.0 - Pain Interference 8a		
Short Form Conversion Table		
Raw Summed Score	T-score	SE*
8	40.7	5.9
9	47.9	2.4
10	49.9	1.8
11	51.2	1.5
12	52.3	1.4
13	53.2	1.4
14	54.1	1.4
15	55.0	1.4
16	55.8	1.4
17	56.6	1.4
18	57.4	1.3
19	58.1	1.3
20	58.8	1.3
21	59.5	1.3
22	60.2	1.3
23	60.8	1.3
24	61.5	1.3
25	62.1	1.3
26	62.8	1.3
27	63.5	1.3
28	64.1	1.3
29	64.8	1.3
30	65.5	1.3
31	66.2	1.3
32	66.9	1.3
33	67.7	1.3
34	68.4	1.3
35	69.2	1.3
36	70.1	1.4
37	71.0	1.4
38	72.1	1.6
39	73.5	2.0
40	77.0	3.5

\*SE = Standard Error on T-score metric