

Measure 0211 Pediatric Oral Health-Related Well-Being and Distress

Technical Specifications

The POHR-WB and POHR-D development approach used the following framework developed by Forrest et al. in 2012. Translatability review has not been conducted to date.

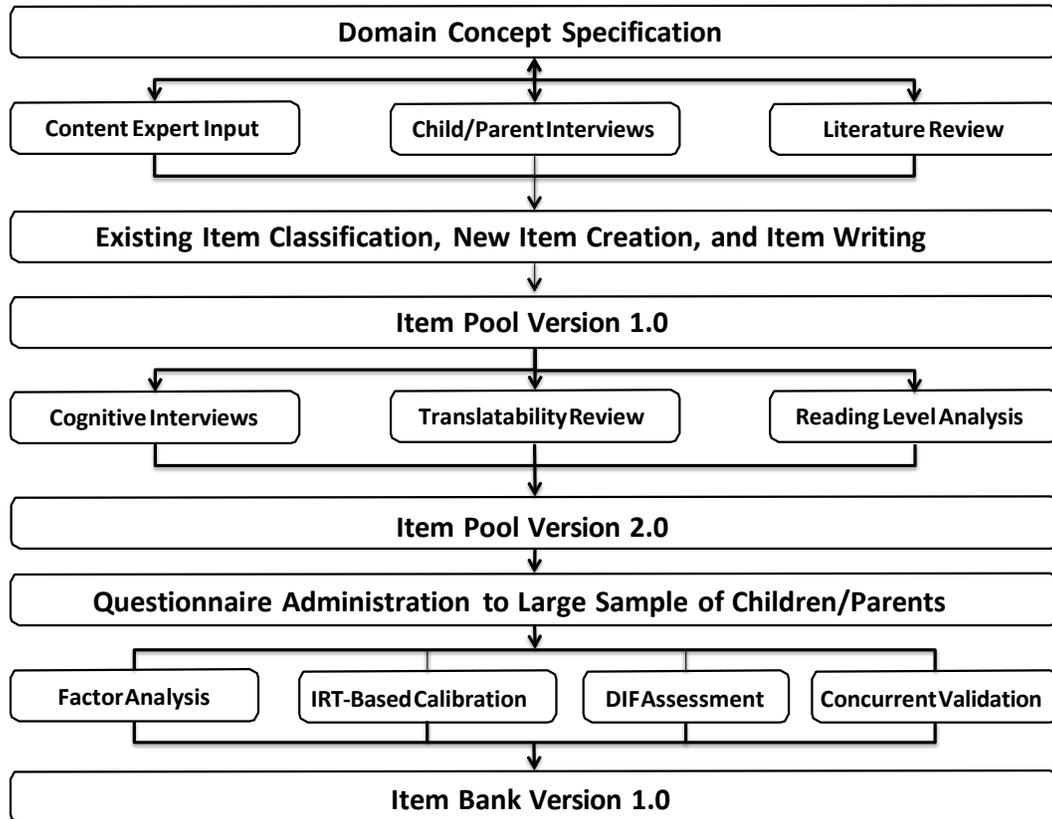


Figure 2. Methodological Approach for Developing the POHR-WB and POHR-D

The goal was to create an item bank that represented a child’s oral health related well being. A systematic, reproducible literature review of existing oral health PRO measures informed an initial conceptualization of oral health. Concepts reflected in the source instrument items and response categories were catalogued. By grouping item concepts into sub-domain and facet categories, an initial version of an oral health conceptual framework was developed. The oral health conceptual framework was iteratively revised based on interviews conducted with pediatric dentists/researchers and parents and children.

The POHR-WG and POHR-D item banks (14 and 11 items) are listed in Tables 2 and 3.

Table 2. Child and Parent Report Pediatric Oral Health Related Well Being Item Banks

	Child Report		Parent Report	
1	OH_A_001	I was happy with how my teeth looked.	OH_A_001_PX	My child was happy with how his/her teeth looked.
2	OH_A_002	I was happy with my teeth.	OH_A_002_PX	My child was happy with his/her teeth.
3	OH_A_003	I was happy with my mouth.	OH_A_003_PX	My child was happy with his/her mouth.
4	OH_A_004	I was happy with how my mouth looked.	OH_A_004_PX	My child was happy with how his/her mouth looked.
5	OH_A_007	I was happy with the color of my teeth.	OH_A_007_PX	My child was happy with the color of
6	OH_A_008	I was happy with the size of my teeth.	OH_A_008_PX	My child was happy with the size of his/her teeth.
7	OH_A_009	I was happy with the amount of space between my teeth.	OH_A_009_PX	My child was happy with the amount of space between his/her teeth.
8	OH_A_012	I felt handsome or pretty because of how my teeth looked.	OH_A_012_PX	My child felt handsome or pretty because of how his/her teeth looked.
9	OH_A_015	I looked good because of my teeth.	OH_A_015_PX	My child looked good because of his/her teeth.
10	OH_A_017	I liked to smile because of how my teeth looked.	OH_A_017_PX	My child liked to smile because of how his/her teeth looked.
11	OH_A_023	I liked how my teeth looked in pictures.	OH_A_023_PX	My child liked how his/her teeth looked in pictures.
12	OH_A_024	I liked how my teeth looked in the mirror.	OH_A_024_PX	My child liked how his/her teeth looked in the mirror.
13	OH_A_035	I felt happy because of my teeth.	OH_A_035_PX	My child felt happy because of his/her teeth.
14	OH_A_042	My mouth looked good.	OH_A_042_PX	My child's mouth looked good.

Table 3. Child and Parent Report Pediatric Oral Health Related Distress Item Bank

Child Report			Parent Report	
1	OH_A_013	I felt ugly because of my teeth.	OH_A_013_PX	My child felt ugly because of his/her teeth.
2	OH_A_020	People stared at me because my teeth looked bad.	OH_A_020B_PX	My child felt that people stared at him/her because his/her teeth looked bad.
3	OH_A_021	I hid my mouth because of my teeth.	OH_A_021_PX	My child hid his/her mouth because of his/her teeth.
4	OH_A_029	I felt sad because of how my teeth looked.	OH_A_029_PX	My child felt sad because of how his/her teeth looked
5	OH_A_030	I worried about how my teeth looked.	OH_A_030_PX	My child worried about how his/her teeth looked.
6	OH_A_031	I was embarrassed because of how my teeth looked.	OH_A_031_PX	My child was embarrassed because of how his/her teeth looked.
7	OH_A_032	I felt shy because of how my teeth looked.	OH_A_032_PX	My child felt shy because of how his/her teeth looked.
8	OH_A_033	I felt stressed because of how my teeth looked.	OH_A_033_PX	My child felt stressed because of how his/her teeth looked.
9	OH_A_036	I had a hard time making friends because of my teeth.	OH_A_036_PX	My child had a hard time making friends because of his/her teeth.
10	OH_A_038	Kids teased me because of my teeth.	OH_A_038B_PX	My felt child thought that kids teased him/her because of his/her teeth.
11	OH_A_040	People made fun of me because of my teeth.	OH_A_040B_PX	My child thought that people made fun of him/her because of his/her teeth.

Instructions for raw score/scale score look-up tables

Each question has between two and five response options ranging in value from one to five. To find the total raw score for a form with all questions answered, sum the values of the response to each question. All questions must be answered in order to produce the most valid summed score.

A score can be approximated if a participant skips a question. If items are missing, first check how many items were answered. Confirm that 50% of items were answered. After confirming that enough responses were provided, sum the response scores from the items that were answered (not including any screening question). Multiply this sum by the total number of items in the form. Finally, divide by the number of items that were answered. For example, if a respondent answered 7 of 14 questions and answered all items with the second lowest response option (2), you would sum all responses (14), multiply by the number of items in the form (14) and divide by the number of items that were answered (7). Here $(14 \times 14) / 7 = 28$. If the result is a fraction, round up to the nearest whole number. This is a pro-rated raw score.

The formula is:

$$\frac{(\text{Raw sum} \times \text{number of items})}{\text{Number of items that were actually answered}}$$

Locate the applicable score conversion table and use this table to translate the total raw score or pro-rated score into a T-score for each participant. The T-score rescales the raw score into a standardized 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 pro-rated scores, this calculation assumes that responses are missing at random. As this is not always true, use caution when interpreting the final pro-rated T-score.

Important: *A higher PROMIS T-score represents more of the concept being measured.* For negatively-worded concepts like Pain, a T-score of 60 is one SD worse than average. By comparison, a Pain T-score of 40 is one SD better than average.

The sum-score to T-score conversion table for child and parent are shown in Tables 4 and 5.

Raw Sco	T Score	T Score SE
14	25.2	4
15	28.5	2.9
16	30.1	2.6
17	31.4	2.3
18	32.5	2
19	33.4	1.8
20	34.1	1.7
21	34.8	1.6
22	35.4	1.5
23	36	1.5
24	36.5	1.4
25	37.1	1.4
26	37.6	1.4

27	38	1.4
28	38.5	1.3

29	38.9	1.3	-1.11
30	39.4	1.3	-1.06
31	39.8	1.3	-1.02
32	40.3	1.3	-0.97
33	40.7	1.3	-0.93
34	41.1	1.3	-0.89
35	41.6	1.3	-0.84
36	42	1.3	-0.8
37	42.4	1.3	-0.76
38	42.9	1.3	-0.71
39	43.3	1.3	-0.67
40	43.7	1.3	-0.63
41	44.1	1.3	-0.59
42	44.6	1.3	-0.54
43	45	1.3	-0.5
44	45.5	1.3	-0.45
45	45.9	1.3	-0.41
46	46.4	1.3	-0.36
47	46.8	1.3	-0.32
48	47.3	1.3	-0.27
49	47.7	1.4	-0.23
50	48.2	1.4	-0.18
51	48.7	1.4	-0.13
52	49.1	1.4	-0.09
53	49.6	1.4	-0.04
54	50.1	1.4	0.01
55	50.6	1.4	0.06
56	51.1	1.4	0.11
57	51.6	1.4	0.16
58	52.2	1.4	0.22
59	52.7	1.4	0.27
60	53.3	1.4	0.33
61	53.8	1.4	0.38
62	54.5	1.5	0.45
63	55.1	1.5	0.51
64	55.8	1.6	0.58
65	56.6	1.8	0.66
66	57.5	2	0.75
67	58.6	2.3	0.86
68	60.1	2.7	1.01
69	62.1	3.2	1.21
70	66.7	4.9	1.67

Raw Sco	T Score	T Score SE
14	25.4	3.9
15	29	2.7
16	30.7	2.4
17	32	2.1
18	33	1.9
19	33.9	1.7
20	34.7	1.7
21	35.4	1.6
22	36.1	1.6
23	36.8	1.5
24	37.4	1.5
25	38	1.5
26	38.6	1.5
27	39.1	1.5
28	39.7	1.5
29	40.3	1.5
30	40.8	1.5
31	41.3	1.5
32	41.9	1.5
33	42.4	1.5
34	42.9	1.5
35	43.5	1.5
36	44	1.5
37	44.5	1.5
38	45.1	1.5
39	45.6	1.5
40	46.2	1.5
41	46.7	1.6
42	47.3	1.6
43	47.8	1.6
44	48.4	1.6
45	49	1.6
46	49.6	1.6
47	50.2	1.6
48	50.8	1.6
49	51.4	1.6
50	52.1	1.7
51	52.8	1.7
52	53.5	1.8
53	54.3	1.9
54	55.2	2
55	56.2	2.2
56	57.4	2.5
57	58.8	2.9
58	60.5	3.3
59	62.9	3.8
60	67.2	5.2

Table 6. Child POHR-D Look-Up Table

Full Bank			
Raw Score	T Score	T Score SE	Theta Score
11	44.3	7.1	-0.57
12	53.2	3.7	0.32
13	55.5	3.2	0.55
14	57.5	2.3	0.75
15	58.8	2	0.88
16	59.9	1.7	0.99
17	60.7	1.6	1.07
18	61.4	1.5	1.14
19	62.1	1.5	1.21
20	62.7	1.4	1.27
21	63.3	1.4	1.33
22	63.9	1.4	1.39
23	64.4	1.4	1.44
24	64.9	1.3	1.49
25	65.5	1.3	1.55
26	66	1.3	1.6
27	66.5	1.3	1.65
28	67.1	1.4	1.71
29	67.6	1.4	1.76
30	68.2	1.4	1.82
31	68.8	1.5	1.88
32	69.4	1.5	1.94
33	70.1	1.6	2.01
34	70.8	1.7	2.08
35	71.6	1.8	2.16
36	72.6	2	2.26
37	73.8	2.2	2.38
38	75.2	2.5	2.52
39	78.4	3.5	2.84

Table 7. Parent POHR-D Look-Up Table

Full Bank			
Raw Score	T Score	T Score SE	Theta Score
11	46.2	7.7	-0.38
12	56.8	3.8	0.68
13	59.8	2.5	0.98
14	61.4	2	1.14
15	62.6	1.6	1.26
16	63.5	1.5	1.35
17	64.2	1.4	1.42
18	64.9	1.3	1.49
19	65.6	1.3	1.56
20	66.2	1.3	1.62
21	66.8	1.3	1.68

22	67.3	1.3	1.73
23	67.9	1.2	1.79
24	68.5	1.2	1.85
25	69	1.2	1.9
26	69.6	1.2	1.96
27	70.1	1.2	2.01
28	70.7	1.2	2.07
29	71.2	1.2	2.12
30	71.8	1.2	2.18
31	72.4	1.3	2.24
32	73	1.3	2.3
33	73.7	1.3	2.37
34	74.4	1.4	2.44
35	75.3	1.5	2.53
36	76.3	1.7	2.63
37	77.9	2.2	2.79
38	80.7	3.1	3.07