

**Task Force on Defining Outcomes for Pediatric Psychology Interventions**  
Report for SPP Board Meeting at APA, 2008

Task Force Members

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The task force was charged with the goal of defining relevant outcome measures for conditions pediatric psychologists treat in clinical settings, with an emphasis on outcomes that can realistically be changed based upon the empirically supported interventions we have developed and that can be routinely measured in the context of clinical care.

We have developed recommendations for outcome measures for one clinical problem: chronic and recurrent pain. The report below summarizes the process for identifying and selecting outcome measures, recommendations on specific measures, and recommendations for clinical implementation. The next steps identified by the Task Force are to 1) select another clinical problem and attempt to repeat this process, and 2) find an appropriate forum for making this information accessible to our membership.

Part 1: Process Used to Identify Relevant Outcome Domains/Measures and Recommendations for Clinical Implementation

**Problem:** Chronic and Recurrent Pain

- a) Review recent literature reviews on condition-specific assessment and outcome measures
  - i) McGrath PJ, Walco G, Turk DC, Dworkin RH, Brown MT, Davidson K, Eccleston C, Finley AG, Goldschneider K, Haverkos L, Hertz SH, Ljungman G, Palermo T, Rappaport BA, Rhodes T, Schechter N, Scott J, Sethna N, Svensson OK, Stinson J, von Baeyer C, Walker L, Weisman S, White RE, Zajicek A, Zeltzer L. Core outcome domains and measures for pediatric acute and chronic/recurrent pain clinical trials: PedIMMPACT recommendations. Journal of Pain, in press.
  - ii) Palermo TM, Long A, Lewandowski A, Drotar D, Quittner A, Walker L. Evidence based assessment of health related quality of life and functional impairment. Journal of Pediatric Psychology, in press.
- b) Identify most clinically relevant outcome domains for condition of interest based on reviews
  - i) Pain intensity
  - ii) Functional interference
- c) Identify and examine valid and reliable assessment tools for each domain by reviewing published articles, reviews and meta-analyses, authors' websites, with attn to:

- i) Ease of administration and scoring
  - ii) Response burden (length of time for completion)
  - iii) Use in published treatment research
  - iv) Cost
  - v) Age range and language availability
- d) Develop Results document concerning measures under consideration: See Part 2 Results document
- e) Formulate recommendations on implementing outcome measures in clinical practice (on the basis of published articles, reviews and meta-analyses, authors' websites; contact with authors; and task force discussion)
- i) How and when to administer outcome measures
    - (1) Our task force recommends routine assessment of pain intensity and functional interference at the beginning of each treatment session. Routine assessment of these domains helps the clinician to systematically monitor treatment response and provides increased precision in documenting outcome irrespective of treatment length. When appropriate, clinician administration (vs. patient self-completion) of instruments is recommended because it is more time-efficient and helps the clinician elicit information to follow up later in the session.
  - ii) Interpretation of change scores
    - (1) Depending upon the assessment tools, several options may be present to evaluate and interpret change in scores over time. Some measures have established cut-off scores for clinical vs. normative range or healthy vs. unhealthy range. In addition, other measures have normative reference points that allow the clinician to establish whether patients' scores have moved from clinical to normative or healthy range. For the measures identified for chronic and recurrent pain, there is not a specific recommendation on interpretation of change scores.
  - iii) Interface with electronic medical record
    - (1) For hospitals and clinics that use an electronic medical record, effective interface with the electronic record will facilitate timely documentation and improve the clinical utility of outcomes assessment. Our task force recommends scanning of completed instruments into the record and/or the development of templates that facilitate direct entry of clinician or patient responses. Some systems, like EPIC, provide options to graphically present questionnaire responses and summarize session-to-session progress.

## Part 2: Results

### Domains:

- (a) Pain intensity
- (b) Functional interference

### Measures:

#### **f) Pain Intensity Measures**

- i) Faces Pain Scale Revised [<sup>1</sup>]
  - (1) Ease of administration and scoring
    - (a) Easy to administer and score
    - (b) Can be used in telephone follow-up if respondent has copy of scale
  - (2) Response burden (length of time for completion)
    - (a) Minimal – single item
  - (3) Use in published treatment research: Yes
    - (a) Population(s): recurrent abdominal pain [<sup>2</sup>]
    - (b) Treatment(s): imagery, relaxation methods
    - (c) Evidence of change: yes, improvements over time
  - (4) Cost
    - (a) No cost (available online)
  - (5) Age range and cultural/language adaptations
    - (a) Validated on 4-12 year old children
    - (b) Instructions have been translated into multiple languages, see [www.painsourcebook.ca](http://www.painsourcebook.ca)
- ii) Visual Analogue Scale (VAS); for example, see [<sup>3</sup>]
  - (1) Ease of administration and scoring
    - (a) Easy to administer and score
    - (b) Needs to be administered in person (cannot be used in telephone follow-up)
  - (2) Response burden (length of time for completion)
    - (a) Minimal
  - (3) Use in published treatment research: Yes

- (a) Population(s): recurrent abdominal pain<sup>[4]</sup>, complex regional pain syndrome<sup>[5]</sup>
- (b) Treatment(s): CBT, physical therapy
- (c) Evidence of change: yes, improvements over time

(4) Cost

- (a) No cost

(5) Age range and cultural/language adaptations

- (a) Has been used in 2-18 year olds, but considered not valid for under 7 years
- (b) No known language or cultural adaptations

**g) Functional Interference Measures**

i) Pediatric Quality of Life Inventory (Peds QL) <sup>[9]</sup>

(1) Ease of administration and scoring

- (a) Easy to administer and score
- (b) Interview version is available

(2) Response burden (length of time for completion)

- (a) 23 items full length version; 15 item short form

(3) Use in published treatment research: Yes

- (a) Population(s): recurrent abdominal pain, headache <sup>[8]</sup>
- (b) Treatment(s): CBT
- (c) Evidence of change: No, no improvements over time

(4) Cost

- (a) No cost for unfunded academic research or strictly clinical use
- (b) Costly for funded research (eg, \$750 for funded academic research, \$1775 for large noncommercial organization research and evaluation)

(5) Age range and cultural/language adaptations

- (a) Versions available for ages 2-18 years
- (b) Translated into multiple languages, see measure website:  
<http://www.pedsql.org/PedsQL-Translation-Tables.doc>

ii) Bath Adolescent Pain Questionnaire (BAPQ) <sup>[10, 11]</sup>

(1) Ease of administration and scoring

- (a) Easy to administer and score

- (2) Response burden (length of time for completion)
  - (a) Child and parent report: 61 items
- (3) Use in published treatment research: No, ongoing use (not yet published)
- (4) Cost
  - (a) No cost (available online)
- (5) Age range and cultural/language adaptations
  - (a) Developed for ages 11-18 years
  - (b) Available only in English

iii) Child Activity Limitations Interview (CALI) [<sup>12</sup>]

- (1) Ease of administration and scoring
  - (a) Easy to administer and score
  - (b) Interview version available
- (2) Response burden (length of time for completion)
  - (a) Child and parent report: 21 items self report, 8 items interview
- (3) Use in published treatment research: No, ongoing use (not yet published)
- (4) Cost
  - (a) No cost (available in original article)
- (5) Developmental and cultural appropriateness
  - (a) Developed for ages 8-16 years
  - (b) Available only in English

iv) Functional Disability Inventory (FDI) [<sup>13</sup>]

- (1) Ease of administration and scoring
  - (a) Easy to administer and score
- (2) Response burden (length of time for completion)
  - (a) Child and parent report: 15 items
- (3) Use in published treatment research: Yes
  - (a) Population(s): recurrent abdominal pain [<sup>14</sup>], headache [<sup>15</sup>], juvenile fibromyalgia [<sup>16</sup>]
  - (b) Treatment(s): CBT
  - (c) Evidence of change: yes, improvements over time in two studies [<sup>15, 16</sup>]
- (4) Cost
  - (a) No cost (can be obtained in the appendix of the original citation)

- (5) Age range and cultural/language adaptations
  - (a) Developed for ages 8-17 years
  - (b) Available only in English
  
- v) Pediatric Migraine Disability Assessment (PedMidas) [<sup>17</sup>]
  - (1) Ease of administration and scoring
    - (a) Easy to administer and score
  
  - (2) Response burden (length of time for completion)
    - (a) Child and parent version: 6 items
  
  - (3) Use in published treatment research: Yes
    - (a) Population(s): headache [<sup>15</sup>]
    - (b) Treatment(s): psychoeducational treatment, relaxation training
    - (c) Evidence of change: Yes, improvements over time
  
  - (4) Cost
    - (a) No cost (available online)
  
  - (5) Age range and cultural/language adaptations
    - (a) Validated on ages 5-20
    - (b) No known cultural or language adaptations

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