

National Pain Data Bank- Short Form- Veterans Affairs Version 1.0

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and the American Academy of Pain Management**

Intent

The short form of the National Pain Data Bank (NPDB-SF-VA) is a 16-item instrument designed to assess pain intensity and selected dimensions of pain-related functioning for outcomes monitoring purposes. The VA Short Form version is available to VA users at no cost and will be posted on several pain and VA sites.

In the following pages, we provide a summary of factor analytic, internal consistency and concurrent validity data for this version of the NPDB, as well as some inpatient sample norms. Note that all reported data are based on a sample or subsamples of 248 veterans admitted for treatment in a comprehensive, multidisciplinary, inpatient program. All had chronic, non-cancer pain, and the majority exhibited characteristics consistent with chronic pain syndromes. Norms for a VA outpatient clinical sample should be available by the spring of 2001.

CAUTIONS: UNTIL ADDITIONAL VALIDATION AND RELIABILITY DATA ARE AVAILABLE, RESULTS DERIVED FROM THIS INSTRUMENT SHOULD BE CONSIDERED TENTATIVE, PARTICULARLY IF THE INSTRUMENT IS USED AS A CLINICAL TOOL.

Development of the NPDB-SF-VA

The short form was developed in response to a request from pain practitioners who desired a means of assessing selected aspects of chronic pain patient functioning utilizing a brief self-report measure. The VA version of the NPDB Short Form consists of two demographic questions (age and pain duration), two pain intensity items (current pain and average pain), four pairs of items representing pain-related interference in vitality, mobility, ADLs, and travel, two negative affect items, and two pain-related fear items. Responses to all but the demographic items are based on 11-point (0 to 10) scales. With two exceptions, items for the scale were derived from a factor analysis of the larger pool of items comprising the full version of the NPDB (VA version 2.0), and from internal consistency and concurrent validity data for the full version gathered as part of a research project funded by the VA's Rehabilitation Research and Development Service. Items selected for the short form were those exhibiting a combination of the highest factor loadings, greatest internal consistency, and largest concurrent validity coefficients. The two exceptions are the fear items that were not part of the original NPDB item pool. We expect internal consistency, reliability, concurrent validity, and factor loadings data for these items to be available in the spring of 2001.

NPDB-SF-VA Scoring

A scoring and profiling sheet for the NPDB-SF-VA is provided in this packet. Pain intensity scores (current and average) are marked directly on the profile. Scores for the remaining scales should be transferred to the scoring template and summed according to the instructions provided. Total possible scores for each two-item scale range from 0 to 20 with higher scores representing more pain-related difficulty.

Factor Loadings, Internal Consistency, and Concurrent Validity

The psychometric characteristics of the NPDB-SF-VA are provided in Table 1. A principal axis factoring with Varimax rotation yielded two factors (pain interference and negative affect) that accounted for approximately 50 % of the variance in short-form scale scores. Obtained internal reliability estimates and criterion correlations suggest that the NPDB-SF-VA two-item scales exhibit adequate internal consistency and concurrent validity. Evaluation of the instrument's stability (test-retest reliability) is underway.

Interpretation

Both clinical means and the +/- one standard deviation range (corresponding to approximately the 16th through 84th percentiles) are provided for our clinical sample of 218 male and 30 female veterans with longstanding chronic pain. These individuals were admitted to a comprehensive inpatient chronic pain treatment program at the James A. Haley Veterans Hospital in Tampa, Florida. Oneway ANOVAs failed to reveal any significant differences between men and women on the pain intensity and pain interference scales. As a result, and due to the limited number of women in the sample, we do not provide gender-specific data. However, it should be noted that there was a trend for men to score higher on all but the Travel scale. We expect to have additional data regarding possible gender differences by the summer of 2001. No data for the Fear of Injury scale or for "Current Pain" are included as these items were not part of the original pool of NPDB items.

Coming Enhancements

Outpatient clinical sample norms, test-retest reliability coefficients, and additional validity data will be available in the spring of 2001. A Spanish language version of the NPDB-SF-VA is under construction and will be released when it is completed.

Additional Information

The full version of the NPDB (VA version 2.0) also is available for use for practitioners interested in comprehensive pain outcomes assessment. A computer-administered version of the long form is available through the American Academy of Pain Management. For additional information, contact:

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NATIONAL PAIN DATA BANK SHORT FORM SCORING SHEET

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Patient Name: _____

Patient ID #: _____

Test Date: _____

Patient Age: _____

Duration of Pain: _____

SCORING

Vitality	= 20 - (_____ + _____)	_____	_____	_____	_____
	item 6 item 7		Total		
Mobility	= (_____ + _____)	_____	_____	_____	_____
	item 8 item 9		Total		
ADLs	= (_____ + _____)	_____	_____	_____	_____
	item 10 item 11		Total		
Travel	= (_____ + _____)	_____	_____	_____	_____
	item 12 item 13		Total		
Affect	= _____ + (10- _____)	_____	_____	_____	_____
	item 14 item 15		Total		
Fear	= _____ + (10- _____)	_____	_____	_____	_____
	item 16 item 17		Total		

10	-	-	20	-	-	-	-	-	-
			19	-	-	-	-	-	-
9	-	-	18	-	-	-	-	-	-
			17	-	-	-	-	-	-
8	-	-	16	-	-	-	-	-	-
			15	-	-	-	-	-	-
7	-	-	14	-	-	-	-	-	-
			13	-	-	-	-	-	-
6	-	-	12	-	-	-	-	-	-
			11	-	-	-	-	-	-
5	-	-	10	-	-	-	-	-	-
			9	-	-	-	-	-	-
4	-	-	8	-	-	-	-	-	-
			7	-	-	-	-	-	-
3	-	-	6	-	-	-	-	-	-
			5	-	-	-	-	-	-
2	-	-	4	-	-	-	-	-	-
			3	-	-	-	-	-	-
1	-	-	2	-	-	-	-	-	-
			1	-	-	-	-	-	-
0	-	-	0	-	-	-	-	-	-
	Current Pain	Average Pain		Vitality	Mobility	ADLs	Travel	Negative Affect	Fear of Injury

National Pain Data Bank- Short Form Psychometric Properties (N=124)

Internal reliability

NPDB-SF Scale	Cronbach's Alpha	
	Intake	Discharge
<i>Vitality</i>	.57	.58
<i>Mobility</i>	.77	.63
<i>ADLs</i>	.95	.96
<i>Travel</i>	.83	.84
<i>Affect</i>	.56	.61
<i>Fear</i>	data available Spring '01	

Factor Analysis with Marker Variables

Variable	Factor	
	1	2
<i>Mobility</i>	.717	.119
<i>ADLs</i>	.645	.205
<i>SIP-Physical</i>	.582	.289
<i>Travel</i>	.544	.233
<i>Vitality</i>	.451	.186
<i>PCE</i>	-.444	-.166
<i>MMPI-2 Depression</i>	.182	.853
<i>Affect</i>	.376	.698

Note. MMPI-2 = Minnesota Multiphasic Personality Inventory; PCE= Physical Capacities Exam; SIP = Sickness Impact Profile.

Correlations with criterion measures

NPDB-SF Scale	Criterion Measure	
	Intake <i>r</i>	Discharge <i>r</i>
<i>Vitality</i>	<u>SIP-Physical</u>	
	.21	.50
<i>Mobility</i>	<u>PCE</u>	
	-.30	-.36
<i>Mobility</i>	<u>SIP-Ambulation</u>	
	.47	.59
<i>Mobility</i>	<u>PCE</u>	
	-.30	-.30
<i>ADLs</i>	<u>SIP-Body Control</u>	
	.47	.58
<i>ADLs</i>	<u>PCE</u>	
	-.31	-.35
<i>Travel</i>	<u>SIP-Physical</u>	
	.43	.37
<i>Affect</i>	<u>MMPI-2 Depression</u>	
	.66	na
<i>Affect</i>	<u>BDI</u>	
	.59	.60
<i>Fear</i>	<u>Tampa Scale</u>	
	data available Spring '01	

Note. BDI = Beck Depression Inventory; MMPI-2 = Minnesota Multiphasic Personality Inventory; PCE= Physical Capacities Exam; SIP =Sickness Impact Profile.

NATIONAL PAIN DATA BANK SHORT FORM INPATIENT NORMATIVE DATA

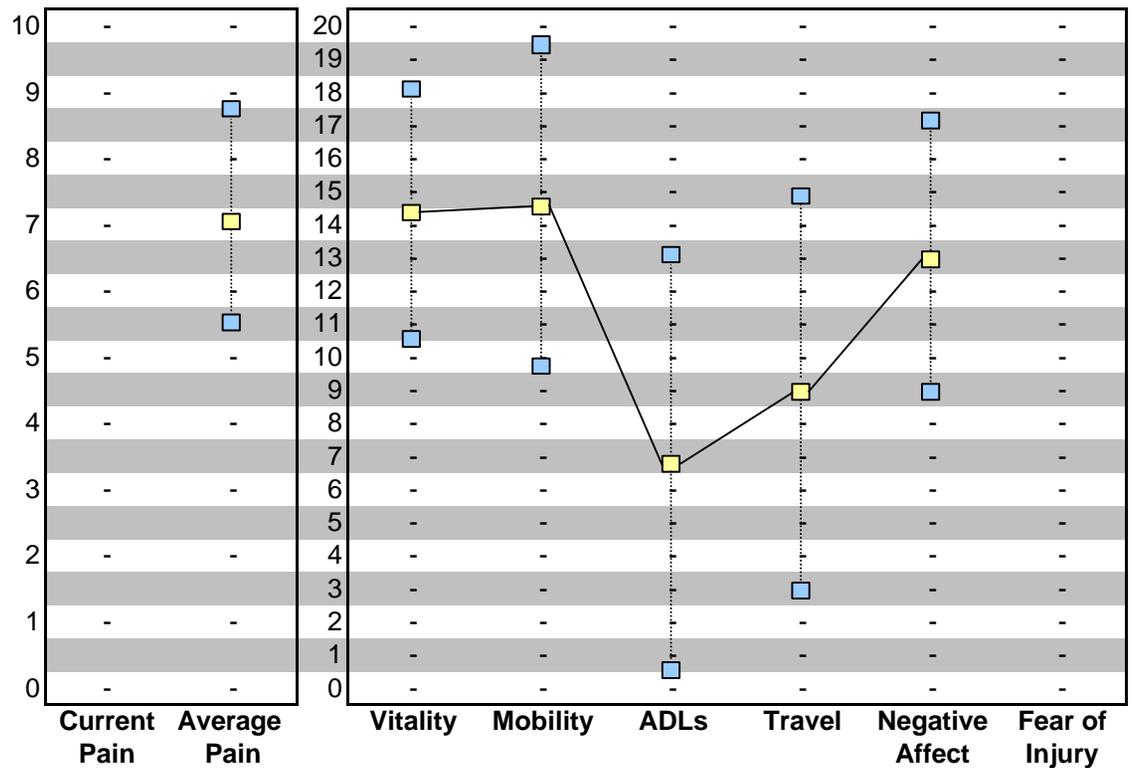
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Clinical Sample Norms for 218 Men and 30 Women Veterans with Chronic Pain Syndromes

SCORING

Vitality	$= 20 - \left(\frac{\text{item 6}}{\quad} + \frac{\text{item 7}}{\quad} \right)$	Total
Mobility	$= \left(\frac{\text{item 8}}{\quad} + \frac{\text{item 9}}{\quad} \right)$	Total
ADLs	$= \left(\frac{\text{item 10}}{\quad} + \frac{\text{item 11}}{\quad} \right)$	Total
Travel	$= \left(\frac{\text{item 12}}{\quad} + \frac{\text{item 13}}{\quad} \right)$	Total
Affect	$= \frac{\text{item 14}}{\quad} + (10 - \frac{\text{item 15}}{\quad})$	Total
Fear	$= \frac{\text{item 16}}{\quad} + (10 - \frac{\text{item 17}}{\quad})$	Total



Mean	7.11	14.34	14.52	6.84	8.93	12.98	n/a
SD	1.60	3.79	4.69	6.24	5.93	4.05	

9.) Does your pain interfere with your ability to carry/handle everyday objects such as a bag of groceries or books?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

10.) Does your pain interfere with your ability to bathe yourself?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

11.) Does your pain interfere with your ability to dress yourself?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

12.) Does your pain interfere with your ability to drive a car?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

13.) Does your pain interfere with your ability to ride in a vehicle as a passenger?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

14.) Does your pain affect your self-esteem or self-worth?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

15.) How would you rate your overall well-being?

0 1 2 3 4 5 6 7 8 9 10
terrible best anyone could feel

16.) How much do you worry about re-injuring yourself if you are more active?

0 1 2 3 4 5 6 7 8 9 10
not at all all the time

17.) How safe do you think it is for you to exercise?

0 1 2 3 4 5 6 7 8 9 10
not safe at all extremely safe