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<tr>
<th>TEST</th>
<th>TEST CHARACTERISTICS</th>
<th>STRENGTHS AND WEAKNESSES</th>
<th>LENGTH, SCORING OPTIONS &amp; TEST TAKING TIME</th>
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<tr>
<td><strong>Comprehensive Inventories For Medical Patients</strong></td>
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<tr>
<td>BHI™ 2 (Battery for Health Improvement – 2nd edition)</td>
<td><strong>What it Measures:</strong> Depression, anxiety and hostility; violent and suicidal ideation; borderline, emotional dependency, chronic maladjustment, substance abuse, history of abuse, perseverance, conflicts with employer, family and physician, pain preoccupation, somatization, disability perceptions and others. <strong>Uses:</strong> Useful for identifying affective, characterological, psychophysiological and social factors affecting pain and disability reports. Also useful for assessing patients referred for intensive treatment programs such as chronic pain, functional restoration, or work conditioning, for presurgical or pre-treatment risk assessment, for impairment determinations, or when there are indications that psychological factors are delaying the recovery process. Computerized progress tracking using serial administrations. <strong>Benefits:</strong> When part of a comprehensive evaluation, can contribute substantially to the understanding of psychosocial factors underlying pain reports, perceived disability, somatic preoccupation, and help to design interventions. Serial administrations can track changes in a broad range of variables during the course of treatment, and assess outcome.</td>
<td><strong>Strengths:</strong> Well-developed theoretical basis tied to a paradigm of delayed recovery in medical patients, and to assessing primary (“red flag”) and secondary (“yellow flag”) risk factors. Has nationally normed 0-10 pain profiling. Two norms groups are available, based on national rehabilitation patient and community samples, both of which are stratified to match US census data. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration and progress tracking. Computerized reports also refer to a chronic pain subsample, five diagnostic reference groups (head, neck, upper extremity, back and lower extremity pain groups), and to groups of patients asked to fake good and fake bad. <strong>Weaknesses:</strong> Assessment of psychosis is is via critical items only, no assessment of elevated mood. Somewhat less able to assess coping styles of relatively normal individuals with medical conditions. Does not assess health habits.</td>
<td>217 items, 18 scales including 3 validity measures, 40 content-based subscales, 25 critical items, 25-35 minutes, computerized scoring and report.</td>
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<tr>
<td>MBMD™ (Millon Behavioral Medical Diagnostic)</td>
<td><strong>What it Measures:</strong> Provides information on coping styles (introversive, inhibited, dejected, cooperative, sociable, etc.), health habits (smoking, drinking, eating, etc.), psychiatric indications (anxiety, depression, etc.), stress moderators (Illness Apprehension vs. Illness Tolerance, etc.), treatment</td>
<td><strong>Strengths:</strong> Assesses a number of factors relevant to medical patients, with a well-developed theoretical basis pertaining to coping strategies. Designed to assess how a patient who is more or less psychologically normal may react to or cope with a serious medical condition.</td>
<td>165 items, 38 scales, 3 validity measures, 20-30 minutes, computerized scoring</td>
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<td>om</td>
<td>prognostics (Interventional Fragility vs. Interventional Resilience, Medication Abuse vs. Medication Competence, etc.) and more. Uses: Useful for assessment of basic personality types and how they cope with illness. Also useful for patients being referred for intensive treatment programs such as chronic pain, functional restoration, or work conditioning, for presurgical risk assessment, for impairment determinations, or when there are strong indications that psychological factors are delaying the recovery process. Benefits: When used as a part of a comprehensive evaluation, can contribute substantially to the understanding of psychosocial factors affecting medical patients. Understanding risk factors and patient personality type can help to optimize treatment protocols for a particular patient.</td>
<td>condition. Normed on three different groups of medical patients, including a group of patients with chronic pain. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration. Weaknesses: Test focus is assessing coping in psychologically normal patients, and is less able to identify psychopathology. No community norms. Has pain norms, but the chronic pain report uses general medical patient norms instead. High level of item overlap on scales, uses base rate scores which is an unfamiliar metric to most. No published research on patients with chronic pain.</td>
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**Comprehensive Psychological Testing**

**Psychological Tests Commonly Used in the Assessment of Chronic Pain**

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<tr>
<td><strong>Comprehensive Psychological Inventories</strong></td>
<td>These tests are designed for detecting various psychiatric syndromes, but in general are more prone to false positive findings when administered to medical patients.</td>
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<tr>
<td>MCMI-III™ (Millon Clinical Multiaxial Inventory, 3rd edition)</td>
<td><strong>What it Measures:</strong> Has scales based on DSM-IV diagnostic criteria for affective disorders, personality disorders, psychotic disorders, somatization and others.</td>
<td><strong>Strengths:</strong> Strong research and theoretical base, scales are keyed to DSM-IV diagnostic criteria. Strength is the differential diagnosis of personality disorders. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration.</td>
<td>175 items, 25 scales, 3 validity measures, critical items, 25-30 minutes, computerized scoring</td>
</tr>
<tr>
<td>Pearson Assessments <a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a></td>
<td><strong>Uses:</strong> Useful for patients undergoing a more comprehensive psychological assessment. Especially useful for the differential diagnosis of personality disorders. Designed for the assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using.</td>
<td><strong>Weaknesses:</strong> Designed for and normed on psychiatric patients, not pain patients. May over-pathologize medical patients. Unusually high item overlap results in highly interrelated scales, uses base rate scores which cannot generate percentile ranks. Scales will be less relevant when DSM-5 is published in 2013.</td>
<td>8th grade reading level</td>
</tr>
<tr>
<td>Standardization: S Scientific Review: JBG</td>
<td><strong>Benefits:</strong> When used as a part of a part of a comprehensive evaluation, can screen for a broad range of DSM-IV diagnoses.</td>
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<td>Intended for: P Research: 48-56 Restrictions: Psy, MD</td>
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<tr>
<td>MMPI-2™ (Minnesota Multiphasic Personality Inventory- 2nd edition ™)</td>
<td><strong>What it Measures:</strong> Original scale constructs, such as hysteria and psychasthenia are archaic but continue to be useful. Newer content scales include depression, anxiety, health concerns, bizarre mentation, social discomfort, low self-esteem and about 100 others.</td>
<td><strong>Strengths:</strong> Extremely strong research basis, with both strengths and weaknesses in pain assessment being well documented. Strength is the assessment of faking or biased responding. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration.</td>
<td>567 items, 100+ scales and indices, critical items, 60-90 Minutes, computerized scoring and report, hand scoring.</td>
</tr>
<tr>
<td>Pearson Assessments <a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a></td>
<td><strong>Uses:</strong> Useful for patients undergoing a more comprehensive psychological assessment. Designed for assessment of psychiatric patients, not pain patients, but commonly used in chronic pain and presurgical assessment. Especially useful for the assessment of exaggerating or minimizing</td>
<td><strong>Weaknesses:</strong> Originally designed for assessing psychiatric patients, not medical patients. Scales may over-pathologize pain or rehabilitation patients. Normed on community sample but</td>
<td>6th grade reading level</td>
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<tr>
<td>Standardization: S Scientific Review: JBG</td>
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<tr>
<td>Intended for: P Research: 57-112 Restrictions: Psy, MD</td>
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<tr>
<td>MMPI-2-RF™ (Minnesota Multiphasic Personality Inventory- 2nd edition-Restructured Form™) Pearson Assessments <a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a> Standardization: S Scientific Review: JBG Intended for: P Research: 113-132 Restrictions: Psy, MD</td>
<td>What it Measures: The MMPI-2-RF has been revised so extensively that it is virtually a new test. While this radical revision addresses many of the psychometric weaknesses of its predecessor, some studies concluded that it is less capable of assessing chronic pain or somatoform disorders, 72,73 while another study found the two tests to be roughly equivalent in this regard. 49 Patients with chronic pain may be substantially less likely to appear to have psychopathology on the MMPI-2-RF as opposed to the MMPI-2. Uses: Useful for patients undergoing a more comprehensive psychological assessment. Designed for assessment of psychiatric patients, not pain patients. Useful for the assessment of exaggerating or minimizing symptoms. Benefits: When used as a part of a part of a comprehensive evaluation, can identify a wide variety of problematic psychiatric conditions and personality types. Strengths: Relatively new test, which is the subject of many research studies. Psychometrically more sound than the original MMPI-2. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration. Weaknesses: One study found that the profile types of the MMPI-2-RF and the original MMPI-2 agree only 14.6% of the time. 74 Due to the substantial differences between these two tests, research on the original MMPI-2 scales does not directly apply to this test. Designed for psychiatric patients, as opposed to medical patients, and is normed on a community sample.</td>
<td>contains some chronic pain data in the interpretive report. Length can be prohibitive, full computerized report is complicated, yet many pain patients receive similar profiles. It takes considerable experience to interpret correctly.</td>
<td>338 items, 50 scales including 8 validity scales, critical items, 5th grade reading level 45-50 minutes.</td>
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# Comprehensive Psychological Testing

## Psychological Tests Commonly Used in the Assessment of Chronic Pain

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<td><strong>PAI™ (Personality Assessment Inventory)</strong>&lt;br&gt;www.parinc.com</td>
<td><strong>What it Measures:</strong> A good measure of general psychopathology. Measures depression, anxiety; somatic complaints, stress, alcohol and drug use reports, mania, paranoia, schizophrenia, borderline, antisocial and suicidal ideation and more than 30 others.&lt;br&gt;&lt;br&gt;<strong>Uses:</strong> Useful for patients undergoing a more comprehensive psychological assessment. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using.&lt;br&gt;&lt;br&gt;<strong>Benefits:</strong> When used as a part of a part of a comprehensive evaluation, can contribute substantially to the identification of a wide variety of risk factors that could potentially affect the medical patient.</td>
<td><strong>Strengths:</strong> Brief 5-minute screen can be administered first to see if the remainder of the test should be administered. English and Spanish versions available. Standardized audio tape administration for persons with literacy or reading problems, computerized administration available. Three norm groups available (community, psychiatric and college student).&lt;br&gt;&lt;br&gt;<strong>Weaknesses:</strong> Designed for psychiatric patients, not pain or rehab patients. Does not assess factors specific to pain treatment.</td>
<td>340 items, 22 scales including 4 validity scales, critical items, 50 minutes&lt;br&gt;4&lt;sup&gt;th&lt;/sup&gt; grade reading level</td>
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# Comprehensive Psychological Testing

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<tr>
<td><strong>Brief Multidimensional Measures for Medical Patients</strong>&lt;br&gt;BBHI™ 2 (Brief Battery for Health Improvement – 2nd edition)</td>
<td>What it Measures: Pain, functioning, somatization, depression, anxiety, and defensiveness. Uses: Brief measure of risk factors for delayed recovery, useful as a screen or as one test in a more comprehensive evaluation. Designed for computerized progress tracking and outcomes research using serial administrations. Benefits: Can identify patients complaining of depression and anxiety, and identify patients prone to somatization, pain magnification and self-perception of disability. Can compare the level of factors above to other pain patients and community members. Serial administrations can track changes in measured variables during the course of treatment, and assess outcome. Options include administration by handheld electronic device, with internet-based outcome-tracking system.</td>
<td>Strengths: Has a nationally normed 0-10 pain scale. Two norms groups are available, based on national rehabilitation patient and community samples, both of which are stratified to match US census data. English and Spanish versions. Standardized audio tape administration for persons with literacy or reading problems, computerized progress tracking, on line administration by computer or handheld electronic device. Computerized report compares patient to a community and patient samples, and to a chronic pain subsample, fake good and fake bad groups, and five diagnostic reference groups (head, neck, upper extremity, back and lower extremity pain groups). Can be used as a brief outcome by itself or in conjunction with the BHI-2.</td>
<td>63 items, 6 scales, 15 critical items, 1 validity measure, 5-8 minutes computerized scoring and report, hand scoring. 5th grade reading level</td>
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<tr>
<td>MPI (Multidimensional Pain Inventory)</td>
<td>What it Measures: Interference, support, pain severity, life-control, affective distress, response of significant other to pain, and self-perception of disability at home, work, social situations and other ADLs. Uses: Moderate length instrument that is especially useful in assessing the spouse/ significant other’s reaction to the patient’s condition, as well as a broad range of disability perceptions. Could be used with serial administrations to track progress in treatment</td>
<td>Strengths: Provides an assessment of subjective pain, assesses individual differences among pain patients, 12 scales designed to measure the impact on a patient’s activities of daily living. Well-researched instrument. Weaknesses: Partially standardized test with no test manual available, and software is not certified for accuracy. Less comprehensive than major measures of chronic pain, with no measures of faking. Some scales are extremely</td>
<td>61 Items, 13 scales, 20 minutes, no validity measures, Computerized scoring available</td>
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### COMPREHENSIVE PSYCHOLOGICAL TESTING

*Psychological Tests Commonly Used in the Assessment of Chronic Pain*

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<tr>
<td><strong>P-3™ (Pain Patient Profile)</strong></td>
<td>for affective distress, pain, and function.</td>
<td>short, which negatively impacts reliability. Patient norms are not representative, no community norms available.</td>
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<tr>
<td>Pearson Assessments</td>
<td>Benefits: Can identify patients with high levels of disability perceptions, affective distress, or those prone to pain magnification. Serial administrations can track changes in measured variables during the course of treatment, and assess outcome.</td>
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<tr>
<td><a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a></td>
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<td>44 items, 3 scales, 12-15 minutes. Computerized scoring and report</td>
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<td><strong>Standardization:</strong> Scientific Review: JBG</td>
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<td><strong>Intended for:</strong> P</td>
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<tr>
<td><strong>Research:</strong> 168, 181-190</td>
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<td><strong>Restrictions:</strong> H</td>
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<td><strong>Uses:</strong> Brief measure useful when assessing risk factors associated with disability, or as one test in a more comprehensive evaluation. Developed as a screen to measure psychological factors related to chronic pain conditions. Designed for computerized progress tracking using serial administrations.</td>
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<td><strong>Benefits:</strong> Can identify patients needing treatment for depression and anxiety, as well as identify patients prone to somatization. Can compare the level of depression, anxiety and somatization to other pain patients and community members. Serial administrations can track changes in measured variables during the course of treatment, and assess outcome.</td>
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<tr>
<td><strong>What it Measures:</strong> Assesses depression, anxiety, and somatization.</td>
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<td><strong>Strengths:</strong> Two norms groups are available, based on pain patient and community samples, computerized progress tracking. Standardized audio tape administration for persons with literacy or reading problems, computerized progress tracking, on line administration by computer or handheld electronic device. Computerized report compares patient to both community and chronic pain patient samples.</td>
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<td><strong>Weaknesses:</strong> Not comprehensive, somewhat lengthy administration time for a screen.</td>
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<tr>
<td><strong>PRIME-MD (Primary Care Evaluation for Mental Disorders)</strong></td>
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<tr>
<td>Pfizer</td>
<td>What it Measures: Two assessment components consist of initial paper and pencil screen for patient, with follow-up structured interview by the physician. Assesses mood, anxiety, somatoform tendencies, alcohol and eating disorders.</td>
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<td><strong>Strengths:</strong> Structured interview has good interjudge reliability. Mood, alcohol and eating disorder modules have good criterion validity. Interview allows for diagnosis of 18 disorders.</td>
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<td><strong>Weaknesses:</strong> Interview is very demanding of 26 items in five clinical modules plus structured interview, no validity measures. Average of 8 minutes or more of physician time for interview (can</td>
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# Psychological Tests Commonly Used in the Assessment of Chronic Pain *

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</table>
| **Standardization: S**  
Scientific Review: J  
Intended for: M  
Research: 191-221  
Restrictions: U | **Uses:** Clinical method useful in assessing mental health conditions commonly seen in primary care.  
**Benefits:** Able to screen primary care patients for commonly seen mental disorders. | physician time. Approach is more of a clinical decision tree method as opposed to a psychometric assessment. Non-standardized scoring procedure does not allow for assessing severity of disorder, or changes in symptom level. No norms for pain patients, no validity measures. Some determinations based on only one or two items. | take up to 20 minutes of MD time) |
| **PHQ (Patient Health Questionnaire)**  
Pfizer  
Scientific Review: J  
Intended for: M  
Research: 192, 198, 199, 201, 203, 206, 208, 222-228  
Restrictions: U | **What it Measures:** A self-administered version of the PRIME-MD. Assesses mood, anxiety, somatoform tendencies, alcohol and eating disorders.  
**Uses:** Clinical method useful in assessing mental health conditions commonly seen in primary care.  
**Benefits:** Able to screen primary care patients for commonly seen mental disorders. | **Strengths:** Has diagnostic validity comparable to the PRIME-MD, although limited to 8 diagnoses. Four variations of this test can be administered, which expands clinical options.  
**Weaknesses:** Approach uses a decision tree method of administration. While this shortens administration, it also precludes many common psychometric methods, such as the development of norms. No norms for pain patients, no assessment of pain, and no validity measures. | 82 items in five clinical modules, no validity measures, administration time unknown  
• Hand scoring only |
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<tr>
<td>SF 36 ™ V2</td>
<td>What it Measures: A survey of general health well being, and functional states.</td>
<td>Strengths: Widely used outcome measure in research and practice, considerable research base. Note that the SF-36 v2 is standardized, whereas the original SF-36 is not.</td>
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<td>Uses: Brief measure useful to assess patient perception of physical and emotional functioning, as an outcome measure, or as one test in a more comprehensive evaluation. Serial administrations could be used to track patient perceived functional changes.</td>
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<td>Benefits: Assesses a broad spectrum of patient disability reports. Serial administrations could be used to track patient perceived functional changes during the course of treatment, and assess outcome.</td>
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<td>Weaknesses: Uses non-standardized scoring procedure, that makes identifying high or low scores much more difficult. No norms for pain patients, no validity measures. Some scales based on only one or two items, and a single inadvertent response can lead to a positive finding.</td>
<td>36 items, 8 scales, mixed scoring format, no validity measures. 15 minutes</td>
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*Colorado Division of Workers’ Compensation
COMPREHENSIVE PSYCHOLOGICAL TESTING*

Psychological Tests Commonly Used in the Assessment of Chronic Pain
Colorado Division of Workers’ Compensation  
COMPREHENSIVE PSYCHOLOGICAL TESTING  
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<tr>
<td><strong>BSI® (Brief Symptom Inventory)</strong>&lt;br&gt;Pearson Assessments&lt;br&gt;<a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a>&lt;br&gt;Standardization: S&lt;br&gt;Scientific Review: JBG&lt;br&gt;Intended for: P&lt;br&gt;Research: 165,266-271&lt;br&gt;Restrictions: H</td>
<td><strong>What it Measures:</strong> Somatization, obsessive-compulsive disorder, depression, anxiety, phobic anxiety, hostility, paranoia, psychoticism, and interpersonal sensitivity. <strong>Uses:</strong> When a shorter version of the SCL-90 is desired. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration. Designed for computerized progress tracking using serial administrations. <strong>Benefits:</strong> Can identify patients needing treatment for depression and anxiety, as well as identify patients prone to somatization. Can compare the level of depression, anxiety and somatization to community members. Serial administrations could be used to track changes in measured variables during the course of treatment, and assess outcome.</td>
<td><strong>Strengths:</strong> A shorter version of the SCL-90. Strong reputation and research base, brief. English and Spanish versions. Standardized audio tape administration for persons with literacy or reading problems, computerized progress tracking, on line administration by computer or handheld electronic device. <strong>Weaknesses:</strong> Designed for and normed on psychiatric patients, not pain patients, no measures of defensiveness or pain.</td>
<td>53 items, 12 scales, no validity measures, computerized scoring and report, hand scoring. 4–7 minutes</td>
</tr>
<tr>
<td><strong>BSI® 18 (Brief Symptom Inventory-18)</strong>&lt;br&gt;Pearson Assessments&lt;br&gt;<a href="http://www.pearsonassessments.com">www.pearsonassessments.com</a>&lt;br&gt;Standardization: S&lt;br&gt;Scientific Review: JBG&lt;br&gt;Intended for: P&lt;br&gt;Research: 233,268,272&lt;br&gt;Restrictions: H</td>
<td><strong>What it Measures:</strong> Depression, anxiety, somatization. <strong>Uses:</strong> Useful as a screen or as one test in a more comprehensive evaluation. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using. Designed for computerized progress tracking using serial administrations. <strong>Benefits:</strong> Can identify patients needing treatment for depression and anxiety, as well as identify patients prone to somatization. Can compare the level of depression, anxiety and somatization to community members. Serial administrations could be used to track changes in measured variables during the course of treatment, and assess outcome.</td>
<td><strong>Strengths:</strong> A shorter version of the SCL-90. Strong reputation and research base, brief. English and Spanish versions. Standardized audio tape administration for persons with literacy or reading problems, computerized progress tracking, on line administration by computer or personal digital assistant. <strong>Weaknesses:</strong> Designed for and normed on psychiatric patients, not pain patients, no measures of defensiveness or pain.</td>
<td>18 items, 3 scales, no validity measures, computerized scoring and report, hand scoring. 2-3 minutes</td>
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# Comprehensive Psychological Testing

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<td><strong>SCL-90-R® (Symptom Checklist –90 Revised)</strong></td>
<td>depression, anxiety and somatization to community members. Serial administrations could be used to track patient perceived functional changes during the course of treatment, and assess outcome.</td>
<td><strong>Strengths:</strong> Strong research base, relatively brief instrument with computerized progress tracking. English and Spanish versions. Standardized audio tape administration for persons with literacy or reading problems, computerized progress tracking, on line administration by computer. Note that the SCL-90-R is standardized, whereas the original SCL-90 is not. <strong>Weaknesses:</strong> Designed for and normed on psychiatric patients, not pain patients. Current norm base not appropriate for medical populations</td>
<td>90 items, 12 scales, no validity measures, computerized scoring and report, hand scoring. 15 minutes 6th grade reading level</td>
</tr>
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</table>

**Pearson Assessments**

[www.pearsonassessments.com](http://www.pearsonassessments.com)

**Standardization:** S

**Scientific Review:** JBG

**Research:** 59,82,101,135,273-285

**Intended for:** P

**Restrictions:** H
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<td>Brief Specialized Psychiatric Measures</td>
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<tr>
<td>These tests are designed for detecting various psychiatric syndromes, but in general are more prone to false positive findings when administered to medical patients.</td>
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<tr>
<td><strong>BDI ®—II (Beck Depression Inventory—2nd edition)</strong></td>
<td>What it Measures: Depression</td>
<td>Strengths: Well-known, well-researched, keyed to DSM-IV criteria, brief, appropriate for ages 13-80. English and Spanish versions.</td>
<td>21 items, 1 scale, no validity measures. 5 minutes, hand scoring, computerized scoring and report.</td>
</tr>
<tr>
<td>The Psychological Corp. <a href="http://www.psychcorp.com">www.psychcorp.com</a></td>
<td>Uses: Intended as a brief measure of depression, useful as a screen or as one test in a more comprehensive evaluation. Serial administration may be used to assess changes in depression, or as an outcome measure. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using.</td>
<td>Weaknesses: Limited to assessment of depression, easily faked. Scale is unable to identify a non-depressed state, and is thus very prone to false positive findings. Should not be used as a stand-alone measure, especially when secondary gain is present.</td>
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<tr>
<td>Standardization: S</td>
<td>Benefits: Can identify patients needing referral for further assessment and treatment for depression. Repeated administrations can track progress in treatment for depression.</td>
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<tr>
<td>Intended for: P</td>
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<tr>
<td>Restrictions: Psy, MD</td>
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<td><strong>CES-D (Center for Epidemiological Studies Depression Scale)</strong></td>
<td>What it Measures: Depression</td>
<td>Strengths: Well-known, well-researched, brief, has been translated into numerous languages.</td>
<td>20 items, 1 scale, no validity measures, 3 minutes, hand scoring,</td>
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<tr>
<td>Unpublished, public domain</td>
<td>Uses: Intended as a brief measure of depression, useful as a screen or as one test in a more comprehensive evaluation. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using.</td>
<td>Weaknesses: Limited to assessment of depression, easily faked. Psychometric characteristics are not well known, but well-established propensity for false positive findings. Should not be used as a stand-alone measure, especially when secondary gain is present. Public domain status has lead to widespread use of many modified or shortened forms of the test, which may not be equivalent.</td>
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<tr>
<td>Standardization: N</td>
<td>Benefits: Can identify patients needing referral for further assessment and treatment for depression. Repeated administrations can track progress in treatment for depression.</td>
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<td>Scientific Review: JBG Research: 286,308-317</td>
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<td>Intended for: P</td>
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<td>Restrictions: U</td>
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<tr>
<td>TEST</td>
<td>TEST CHARACTERISTICS</td>
<td>STRENGTHS AND WEAKNESSES</td>
<td>LENGTH, SCORING OPTIONS &amp; TEST TAKING TIME</td>
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| **PDS™ (Post Traumatic Stress Diagnostic Scale)** Pearson Assessments **www.pearsonassessments.com** | **What it Measures:** PTSD  
**Uses:** When PTSD diagnosis is suspected. Designed for computerized progress tracking using serial administrations.  
**Benefits:** Helps confirm PTSD diagnosis. Repeated administrations can track treatment progress of PTSD patients. | **Strengths:** Highly specific test designed for a single disorder, closely tied to DSM-IV criteria. Normed on a sample of PTSD patients, computerized progress tracking, on line administration by computer.  
**Weaknesses:** Test is not well researched, useful only for this single diagnosis. | 49 items, 6 scales, 10-15 minutes. Computerized scoring and report  
8th grade reading level |
| **Zung Depression Inventory** Glaxowellcome **www.glaxowellcome.com** | **What it Measures:** Depression  
**Uses:** Intended as a brief measure of depression, useful as a screen or as one test in a more comprehensive evaluation. Designed for assessment of psychiatric patients, not pain patients, which can bias results, and this should be a consideration when using.  
**Benefits:** Can identify patients needing referral for further assessment and treatment for depression. Repeated administrations can track progress in treatment for depression. | **Strengths:** Well-known, brief measure.  
**Weaknesses:** Limited to assessment of depression, easily faked. Psychometric characteristics are not well established, and similar scales are prone to false positive findings. Should not be used as a stand-alone measure, especially when secondary gain is present. | 20 items, 1 scale, no validity measures, 5 minutes, hand scoring |
# Comprehensive Psychological Testing

## Psychological Tests Commonly Used in the Assessment of Chronic Pain

<table>
<thead>
<tr>
<th>TEST</th>
<th>TEST CHARACTERISTICS</th>
<th>STRENGTHS AND WEAKNESSES</th>
<th>LENGTH, SCORING OPTIONS &amp; TEST TAKING TIME</th>
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<tr>
<td><strong>Brief Specialized Medical Measures</strong></td>
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| **MPQ (McGill Pain Questionnaire)** | **What it Measures:** Measures cognitive, emotional and sensory aspects of pain.  
**Uses:** Assesses pain experience, useful as a screen or as one test in a more comprehensive evaluation.  
**Benefits:** Can identify patients prone to pain magnification. Repeated administrations can track progress in treatment for pain. | **Strengths:** Well-known and researched in the pain community. Variations of this test have been translated into 12 languages. Provides a way to describe pain and measure treatment utility including organic and affective components.  
**Weaknesses:** Unpublished test with no test manual. Good reliability, but psychometric problems include a lack of discriminate validity and high intercorrelations between subscales that reduce their usefulness. Four different scoring methods have been proposed in the literature. Overall score may be the only useful score clinically. | 60 Items 3 subscales, 1 scale, no validity measures, 10-20 minutes |
| **MPQ-SF (McGill Pain Questionnaire – Short Form)** | **What it Measures:** Measures emotional and sensory aspects of pain.  
**Uses:** A shorter version of the MPQ, that intercorrelates highly with it, and may make administering the whole test unnecessary.  
**Benefits:** Can identify patients prone to pain magnification. Repeated administrations can track progress in treatment for pain. | **Strengths:** Shorter version of a well known test.  
**Weaknesses:** Unpublished test with no test manual. Good reliability, but psychometric problems include a lack of discriminate validity and high intercorrelations between subscales that reduce their usefulness. Overall score may be the only useful score clinically. | 20 Items 3 subscales, 1 scale, no validity measures, 3-5 minutes |
| **Oswestry Disability Questionnaire** | **What it Measures:** Perceived disability secondary to low back pain.  
**Uses:** Brief measure useful to assess patient perception of disability, as an outcome measure, or as one test in a more comprehensive evaluation. | **Strengths:** Considerable research base, commonly used as an outcome measure, well known.  
**Weaknesses:** Unpublished test with no test manual, and no norms. Limited to use with low back pain patients. Does not assess any | 20 Items, 1 scales, 3-4 minutes, no validity measures |
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<tr>
<th>TEST</th>
<th>TEST CHARACTERISTICS</th>
<th>STRENGTHS AND WEAKNESSES</th>
<th>LENGTH, SCORING OPTIONS &amp; TEST TAKING TIME</th>
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<tr>
<td>Restrictions: U</td>
<td>Benefits: Can measure patients’ self-perceptions of disability. Serial administrations could be used to track changes in self-perceptions of functional ability during the course of treatment, and assess outcome.</td>
<td>psychological variables.</td>
<td>Manual scoring, no validity measures &lt;1 minute</td>
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<tr>
<td>Visual Analogue Pain Scale (VAS)</td>
<td>What it Measures: Graphical measure of patient’s pain report. Uses: Extremely brief measure of pain, useful when relative, as opposed to standardized, assessment of pain is acceptable. Serial administration may be used to assess changes in pain, or as an outcome measure. Benefits: Quantifies patients’ pain reports. Serial administrations could be used to track changes in pain reports during the course of treatment, and assess outcome.</td>
<td>Strengths: Very simple nonpsychometric instrument, extremely quick to administer and score. Widely used in research, and has been shown to correlate with the intensity of physical stimuli. Weaknesses: Unpublished test with no test manual. No standardized visual stimulus, with both vertical and horizontal versions. No standardized instructions (rate pain right now, rate pain recently, etc), and no agreement as to what label to apply to the highest score. This has resulted in a multitude of versions of the VAS scale that are not equivalent. No norms or reliability information is available. Some individuals have difficulty with the spatial aspect of responding required.</td>
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**KEY**

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<th>Standardization:</th>
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<th>Published and standardized</th>
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<tr>
<td>PS</td>
<td>PS</td>
<td>Partially standardized</td>
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<td>NS</td>
<td>NS</td>
<td>Not standardized</td>
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<td>Scientific Review:</td>
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<td>Peer reviewed journal publication(s)</td>
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<td>B</td>
<td>Buros Institute Peer Review</td>
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<td>Intended for:</td>
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<td>Medical patients</td>
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<td>Psychological patients</td>
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<td>Test Security Level/ Purchasing Restrictions:</td>
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<td>Psychologist</td>
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<td>MD</td>
<td>Physician ** **</td>
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<td>BS/BA in health sciences** **</td>
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<td>MS</td>
<td>Masters level mental health ** **</td>
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<td>H</td>
<td>Licensed health professional ** **</td>
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<td>Unpublished, unrestricted</td>
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**With documentation of psychometric training**

Notes:
- Along with the ACOEM\(^{385}\) and ODC\(^{386}\) guidelines, the Colorado Medical Treatment Guidelines (CMTG)\(^{387}\) mandate the use of pretreatment psychological assessments, with the CMTG advocating identifying both primary and secondary biopsychosocial risk factors.\(^{23}\) The CMTG mandate a “best-practice”, evidence-based biopsychosocial approach, have the status of legal regulations\(^{388}\), and have been associated with evidence of reduction in cost while also decreasing disability.\(^{9}\) This desk reference is an auxiliary document developed in conjunction with the CMTG.
- This desk reference document was developed by Daniel Bruns, PsyD, and was accepted April, 2013 after review and revisions by the Chronic Pain Task Force and the Colorado Division of Worker Compensation. Disclosure: Dr. Bruns is the coauthor of the BHI 2 and BBHI 2 tests.
- All listed tests were judged to have acceptable evidence of validity and reliability except as noted.
- Tests published by major publishers are generally better standardized, and have manuals describing their psychometric characteristics and use. Published tests are also generally more difficult to fake, as access to test materials is restricted to qualified professionals. Third party peer review (by scientific journal or Buros Institute) supports the credibility of the test.
- Test norms provide a benchmark to which an individual’s score can be compared. Tests with patient norms detect patients who are having unusual psychological reactions, but may overlook psychological conditions common to patients. Community norms are often more sensitive to detecting psychological conditions common to patients, but are also more prone to false positives. Double normed tests (with both patient and community norms) combine the advantages of both methods.
- Preference should be given to psychological tests designed and normed for the population you wish to assess. Psychological tests designed for medical patients often assess syndromes unique to medical patients, and are constructed to avoid common pitfalls in the psychological assessment of medical patients. Psychological tests designed for psychiatric patients are generally more difficult to interpret when administered to medical patients, as they tend to assume that all physical symptoms present are psychogenic in nature (e.g. numbness and tingling may be assumed to be a sign of somatization). This increases the risk of false positive psychological findings.
- Tests sometimes undergo revision and features may change. When a test is updated, the use of the newer version of the test is strongly encouraged.
Colorado Division of Workers’ Compensation

COMPREHENSIVE PSYCHOLOGICAL TESTING

References


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151. Widerstrom-Noga EG, Craz-Almeida Y, Martinez-Arizala A, Turk DC. Internal consistency, stability,


220. Kessler R. CBT by telephone for depression: improved adherence compared with face-to-face CBT


Pain.


Marin R, Cyhan T, Miklos S. Sleep disturbance in patients with chronic low back pain. American
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COMPREHENSIVE PSYCHOLOGICAL TESTING


