

**Clinical Practice Guidelines** (CPGs) recommend that clinicians identify the presence of risk factors associated with the delayed recovery from pain and suggest the following be explored: emotional issues like anxiety and depression, fear avoidance behaviors, inappropriate beliefs about pain, job satisfaction, family issues, prior pain experiences, presence of neurological factors, severity of pain, unrealistic treatment outcomes and compensation factors (3rd party financial incentives). The following are just a few of the tools that a clinician can choose from.

### Questionnaires For Assessing Pain Related Psychological Distress

Questionnaire	Description	Interpretation	Reliability and Validity
<p><b>STarT Back Screening Tool</b></p> <p><u>Purpose:</u> Assess risk of poor outcomes</p>	<ul style="list-style-type: none"> <li>9 question form asking patients about pain radiation, widespread pain, function, fear, anxiety, catastrophizing, depression and bothersomeness.</li> <li>Divides patients into three categories of poor outcome risk (persistent disabling symptoms) - low, medium, and high-risk.</li> </ul>	<ul style="list-style-type: none"> <li>By categorizing patients into these 3 groups, clinicians are then able to target interventions to each sub-group of patients to help outcome.</li> <li>Subscale scores range from 0 to 5 with patients scoring 4 or 5 being classified into the high-risk subgroup.</li> </ul>	<p>Test-retest reliability 0.79 and 0.76, respectively, indicating substantial reliability. The SBT has also been reported to demonstrate a high level of concurrent validity</p>
<p><b>Orebro Musculoskeletal Pain Questionnaire (OMPQ)</b></p> <p><u>Purpose:</u> Predicts long-term disability and failure to return to work when completed four to 12 weeks following a soft tissue injury</p>	<p>10 question form asking patients about pain, work functioning, sleep, anxiety, depression, pain and function beliefs</p>	<ul style="list-style-type: none"> <li>Questionnaire items are assessed on a scale of 0 to 10, with 0 indicating no impairment and 10 indicating severe impairment. The scoring technique is embedded into the questionnaire, and there are scoring boxes to the right of each item</li> <li>For the short version of the Örebro, the total score will range between 1 and 100, with a score &gt;50 indicating higher estimated risk for future work disability.</li> </ul>	<p>A cut-off score of 105 has been found to predict those who will recover (with 95 per cent accuracy), those who will have no further sick leave in the next six months (with 81 per cent accuracy), and those who will have long-term sick leave (with 67 per cent accuracy)</p>
<p><b>OSPRO Yellow Flag Tool</b></p> <p><u>Purpose:</u> assess psychosocial factors in individuals with musculoskeletal pain</p>	<p>3 Forms: 7Q, 10 Q, and 17Q. Concise yellow flag assessment tool that allows for accurate estimates of individual, full-length psychological questionnaire scores for depressive symptoms, anxiety, anger, fear-avoidance beliefs, kinesiophobia, catastrophizing, self-efficacy, and pain acceptance. Scores from the patient are transferred to a scoring portal <a href="https://www.orthopt.org/yf/">https://www.orthopt.org/yf/</a> and calculated incorporating aspects of many psychosocial questionnaires including the following:</p> <ul style="list-style-type: none"> <li>CPAQ, Chronic Pain Acceptance Questionnaire</li> <li>FABQ-PA, Fear-Avoidance Beliefs Questionnaire physical activity subscale</li> <li>FABQ-W, Fear-Avoidance Beliefs Questionnaire work subscale</li> <li>PASS-20, Pain Anxiety Symptoms Scale</li> </ul>	<p>The OSPRO-YF informs treatment decision-making and facilitates treatment monitoring for patients determined to be at high risk for poor outcomes by existing risk-assessment tools.</p>	<p>The OSPRO-YF comes in 3 forms: 17-items, 10-items, and 7-items with a minimum 85%, 81%, and 75% accuracy, respectively, for identifying yellow flags.</p>



Questionnaire	Description	Interpretation	Reliability and Validity
	<ul style="list-style-type: none"> <li>• PCS, Pain Catastrophizing Scale</li> <li>• PHQ-9, Patient Health Questionnaire-9</li> <li>• PSEQ, Pain Self-Efficacy Questionnaire</li> <li>• SER, Self-Efficacy for Rehabilitation</li> <li>• STAI, State-Trait Anxiety Inventory</li> <li>• STAXI, State-Trait Anger Expression Inventory</li> <li>• TSK-11, Tampa Scale of Kinesiophobia.</li> </ul>		
<b>General anxiety disorder (GAD-7)</b>  <u>Purpose:</u> assess for anxiety	Self- administered seven-item instrument participants are asked how often during the last two weeks they have encountered anxiety symptoms like feeling nervous, trouble relaxing etc.	<ul style="list-style-type: none"> <li>• This is calculated by assigning scores of 0, 1, 2, and 3 to the response categories, respectively, of "not at all," "several days," "more than half the days," and "nearly every day."</li> <li>• GAD-7 total score for the seven items ranges from 0 to 21.               <ul style="list-style-type: none"> <li>○ 0-4: minimal anxiety</li> <li>○ 5-9: mild anxiety</li> <li>○ 10-14: moderate anxiety</li> <li>○ 15-21: severe anxiety</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Reliability: 0.90</li> <li>• Validity: 0.75-0.93</li> </ul>
<b>Patient health questionnaire (PHQ-9)</b>  <u>Purpose:</u> screening and evaluation of the severity of depression.	Self- administered, 10 item instrument where participants are asked over the last 2 weeks, how often have you been bothered by any of the following problems (feeling down, poor appetite, trouble concentrating, etc.?)	Total Score/Depression Severity <ul style="list-style-type: none"> <li>• 1-4 Minimal depression</li> <li>• 5-9 Mild depression</li> <li>• 10-14 Moderate depression</li> <li>• 15-19 Moderately severe depression</li> <li>• 20-27 Severe depression</li> </ul>	<ul style="list-style-type: none"> <li>• Reliability: 0.74</li> <li>• Validity: 0.567-0.789</li> </ul>

### Questionnaires For Baseline Outcome Assessment

Questionnaire	Description	Interpretation	Reliability and Validity
<b>Neck Disability Index (NDI)</b>  <u>Purpose:</u> Assess for neck pain specific functioning	Self- administered 10 items including pain, personal care, lifting, reading, headaches, concentration, work, driving, sleeping and recreation.	The NDI can be scored as a raw score or doubled and expressed as a percent  Score: /50 Transform to percentage score x 100 = %points  Some benchmarks can be found in literature: <ul style="list-style-type: none"> <li>• 0-4 points (0-8%) no disability</li> <li>• 5-14 points (10 - 28%) mild disability</li> <li>• 15-24 points (30-48%) moderate disability</li> <li>• 25-34 points (50- 64%) severe disability</li> <li>• 35-50 points (70-100%) complete disability</li> </ul> Minimum Detectable Change (90% confidence): 5 points or 10 %points	<ul style="list-style-type: none"> <li>• Most used self-report measure for neck pain.</li> <li>• Most studies suggest that the NDI has acceptable reliability 0.80, although intraclass correlation coefficients (ICCs) range from 0.50 to 0.98. Longer test intervals and the definition of stable can influence reliability estimates.</li> <li>• Validity 0.60</li> </ul>

Questionnaire	Description	Interpretation	Reliability and Validity
<p><b>Oswestry Disability Index (ODI)</b></p> <p><u>Purpose:</u> Assess function (disability) in activities of daily living in those rehabilitating from low back pain. Most effective for persistent severe disability</p>	<p>Self-administered 10 items examines the level of disability in 10 everyday activities of daily living.</p>	<ul style="list-style-type: none"> <li>• Each item consist of 6 statements which are scored from 0 to 5, with 0 indicating the least disability and 5 the greatest</li> <li>• The total score is calculated as a .percentage, with 0% indicating no disability and 100% indicating the highest level of disability.</li> </ul>	<ul style="list-style-type: none"> <li>• The test is considered the "gold standard" of low back functional outcome tools.</li> <li>• Reliability: 0.8-0.9</li> <li>• Validity: .71 to .87</li> </ul>
<p><b>Roland-Morris Disability Questionnaire (RMDQ)</b></p> <p><u>Purpose:</u> Assess function (disability) in activities of daily living in those rehabilitating from low back pain. Most effective for mild to moderate disability</p>	<p>3 Forms: 11Q, 18Q, 24Q</p>	<p>0 (no disability) to 24 (max. disability) depending on the questionnaire used.</p>	<ul style="list-style-type: none"> <li>• Test-retest reliability 24-item: intraclass correlation (ICC) ranges from 0.42 – 0.91</li> <li>• Test-retest reliability 18-item Stratford: ICC ranges from 0.68 – 0.75</li> <li>• Test-retest reliability 11-item: ICC ranges from 0.89</li> </ul>
<p><b>Patient Specific Functional Scale (PSFS)</b></p> <p><u>Purpose:</u> Assesses patient's opinion of their function</p>	<ul style="list-style-type: none"> <li>• Requires the practitioner to ask the patient to list <b>three activities</b> that are limited by the condition for which they are seeking treatment.</li> <li>• Addresses issues that are often missed in other outcome measures with set content it relies on subjective data without fixed content, which has raised questions regarding the meanings of a mean score or comparisons of scores across different patients.</li> </ul>	<ul style="list-style-type: none"> <li>• PSFS score is an average of all three activities scores.</li> <li>• The MCID has been evaluated and has shown to be around 2 for Lower Back Pain (LBP) and between 2 and 3 for cervical radiculopathy.</li> </ul>	<ul style="list-style-type: none"> <li>• Reliability: 0.82</li> <li>• Validity: Used as a measure to assess change over time, placing more weight on absolute and relative change from baseline</li> </ul>

- Suzanne Lady, DC

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