

Evidence-Based Practical Diagnostic Checklist and Corresponding Clinical Exam for Low Back Pain¹

A diagnostic process incorporating a biopsychosocial approach addresses **3** main questions: **(1)** Are the patient’s symptoms reflective a visceral disorder or a serious or potentially life-threatening condition; **(2)** from where the patient’s pain is arising; **(3)** what has gone wrong with this person that would cause the pain experience to develop and persist? The focus of this study was placed on developing a resource to help clinicians answer the **2nd** question, since this information is needed to inform and contextualize answers to questions **1** and **3**.

Because no definitive diagnostic tests exist to identify specific causes for LBP, clinicians are faced with either using an umbrella diagnosis, such as non-specific LBP, or develop a working diagnosis that recognizes key characteristics and identifies suspected pathophysiology. This study proposes using evidence-based working diagnoses, which offer **(1)** an explanation for symptoms, **(2)** a traceable way to justify management choices, and **(3)** a clearer starting point for patient education and management decisions. Because working diagnoses are not definitive, they need to be continually and critically assessed as symptoms change and response to care is noted.

The authors of this article first conducted a systematic review of studies reporting on the diagnostic utility of office-based exams and other criteria leading to specific diagnosis for neuromusculoskeletal low back pain. Data from the systematic review was then used to update a previously published office-based examination and diagnostic checklist. The article also contains information on conducting the proposed exam and how to interpret findings to recognize strengths and weaknesses of working diagnoses.

This article also provides an updated diagnostic classification system and visual method for organizing common non-pathologic conditions (see Figure 1), consistent with definitions used by the [International Association for the Study of Pain](#).³ Standardized terminology using internationally recognized definitions has the potential to improve communication between providers and with patients.

The article also offers:

- Definitions of common conditions contributing to low back pain
- Strategies to help clinicians differentiate nociceptive and neuropathic pain
- An evidence-based exam structured by diagnostic category or by patient position
- A diagnostic checklist containing evidence-based criteria with embedded and corresponding exam procedures
- Examples of how to interpret the strength of working diagnoses derived from an exam

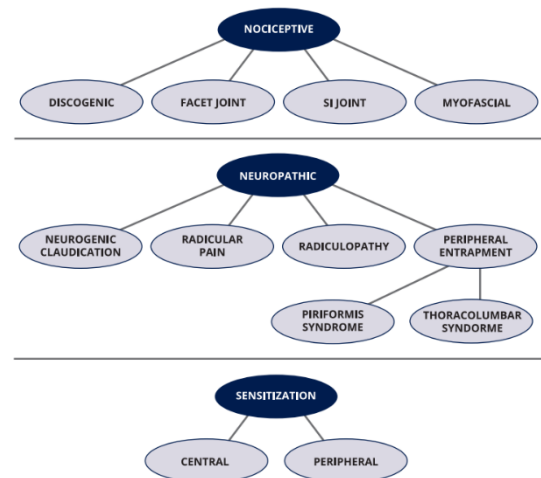


Fig. 1: Model of diagnostic categories for common conditions causing/contributing to low back pain

Take Home Message

Understanding the quality of evidence supporting working diagnoses sheds light on the level of confidence that can be placed in them. This understanding can then be used to support treatment choices and help providers and patients anticipate normal and abnormal responses to care. Most information needed to develop working diagnoses are derived from the clinical interview.

Practical Application

This paper provides an evidence-based resource to help develop working diagnoses for LBP. The included modular diagnostic checklist can be modified and incorporated into paper or electronic health records.

References

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2. Murphy DR, Hurwitz EL, Clearly J, et al. ***A theoretical model for the development of a diagnosis-based clinical decision rule for the management of patients with spinal pain***. BMC Musculoskelet Disord. 2007;8(1):75-75. doi:10.1186/1471-2474-8-75
3. **IASP terminology**: International Association for the Study of Pain
<https://www.iasp-pain.org/terminology?navItemNumber=576>