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Clinical guidelines for low back pain: A critical review of consensus and inconsistencies across three major guidelines

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ABSTRACT

Given the scale and cost of the low back pain problem, it is imperative that healthcare professionals involved in the care of people with low back pain have access to up-to-date, evidence-based information to assist them in treatment decision-making. Clinical guidelines exist to promote the consistent best practice, to reduce unwarranted variation and to reduce the use of low-value interventions in patient care. Recent decades have witnessed the publication of a number of such guidelines. In this narrative review, we consider three selected international inter-disciplinary guidelines for the management of low back pain. Guideline development methods, consistent recommendations and inconsistencies between these guidelines are critically discussed.

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Introduction

Low back pain (LBP) is the leading cause of disability worldwide. This is now as apparent in low-income countries as it is in the more affluent and developed countries across the globe. Disappointingly, despite a significant increase in back pain expenditure over the last decade, the levels of disability associated with back pain over the same period have remained virtually unchanged [1]. In addition, the healthcare resource and economic burden that back pain and related disability present remain the same. A recent survey of nearly 200,000 people across 43 countries showed that people with back pain are at least twice as likely to have one of five mental health conditions (depression, anxiety, stress, psychosis and sleep deprivation) when compared to those without back pain [2].

Given the scale of the problem, it is imperative that healthcare professionals involved in the care of people with LBP have access to up-to-date, evidence-based information to assist them in treatment decision-making. Over the last few decades, a myriad of treatment options for back pain and an ever expanding repository of clinical trial data and scientific publications have emerged. The results of this global research effort into the causes and treatment of back pain are often conflicting and of variable quality. This heterogeneity in the data and its sheer scale imply that for an individual clinician in the pursuit of best clinical practice, making sense of the literature can be difficult and bewildering.

To assimilate and formally evaluate this information, an increasing number of clinical practice guidelines (CPGs) have been developed by different countries. Since the publication of the first LBP CPG by the Quebec Task Force in 1987 [3], more than a dozen 'national' multidisciplinary LBP guidelines that were sponsored by professional societies, government agencies and healthcare payers within their parent countries have emerged [4]. Each of the LBP guidelines is created by an expert panel through consensus.

In this chapter, we compare three clinical guidelines for the management of LBP. We outline where they agree on what comprises best practice for LBP. We consider inconsistencies in recommendations between these guidelines and some of the possible reasons for these; we also discuss the challenges faced in implementing the recommendations of guidelines and consider controversies and future directions of clinical guidelines for LBP.

We have selected three major, recent, well-recognised, multidisciplinary back pain guidelines. The three guidelines are as follows:

2016 NICE Guideline on Low Back Pain and Sciatica NG59 — United Kingdom [5]
2015 Evidence-Informed Primary Care Management of Low Back Pain — Canada [6]
2007/2009/2017 Diagnosis and Treatment of Low Back Pain: A Joint Clinical Practice Guideline from the American College of Physicians and the American Pain Society — USA [8—10]

These three guidelines were chosen either because they were judged as high-quality guidelines in a recent systematic review of clinical guidelines for back pain [4] or because at the time of writing they represented the most up-to-date clinical guidelines available. We illustrate the differences and similarities between these clinical guidelines in terms of development and their recommendations as well as the challenges faced in guideline implementation.

What is a clinical practice guideline?

CPGs have been defined as ' … systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances' [11] and 'statements that include recommendations, intended to optimise patient care, that are informed by a systematic review of evidence and an assessment of the benefits and harms of alternative care options' [12]

Clinical guidelines make an important contribution to effective dissemination and implementation science; CPGs provide the recommended information within the knowledge integration process [13]. The overarching goal of dissemination and implementation science is to ensure that advances in health science become standards for care in all populations and in all health care settings. By recommending effective and evidence-based interventions and discouraging interventions lacking in scientific