



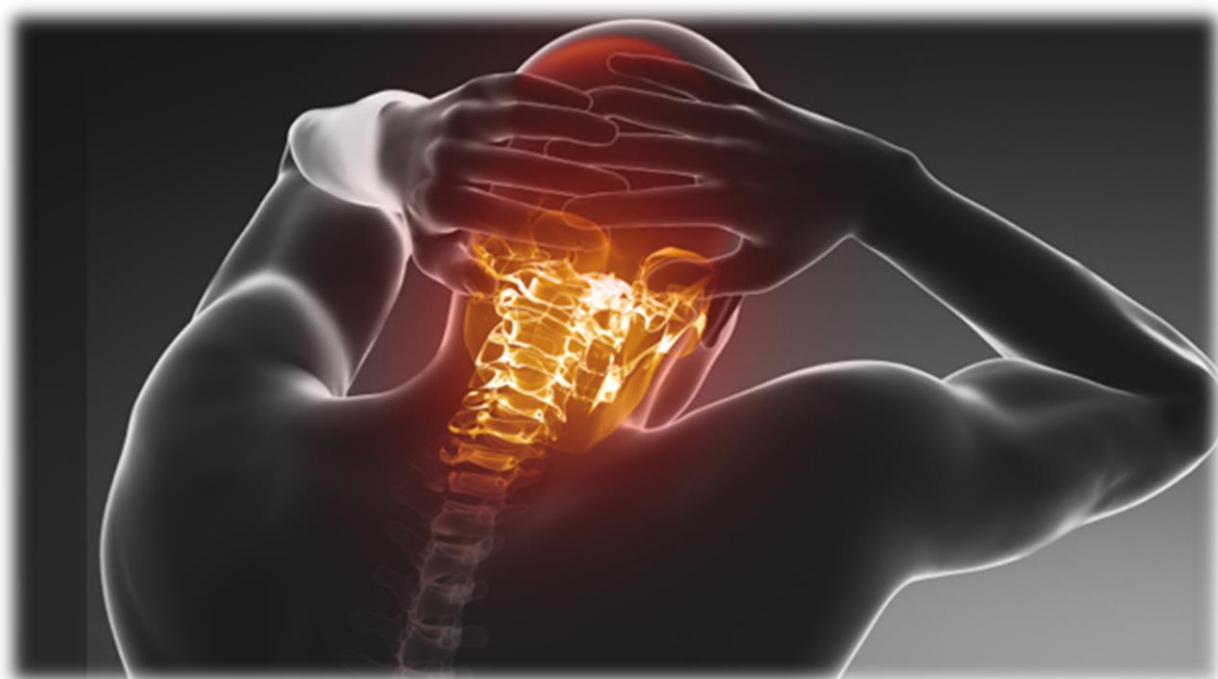
Review of Methods Used by Chiropractors to Determine the Site for Applying Manipulation¹

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Introduction

Evidence influenced care is an important recent trend in the health care marketplace. In theory, the quality of evidence should help determine what diagnostic and therapeutic procedures are done to patients and whether it is even appropriate to pay for these. As such, all professions have a stake in regularly evaluating the evidence regarding the procedures they use in clinical practice.

In terms of treatments, chiropractors most commonly use manual therapies (MT) and especially spinal manipulation (SM).² In 2010, “The Effectiveness of Manual Therapies: The UK Evidence Report” was published which documented the solid evidence in favor of SM and MT for conditions such as acute and chronic low back and neck pain, and various shoulder, elbow, hip, knee and foot conditions.³



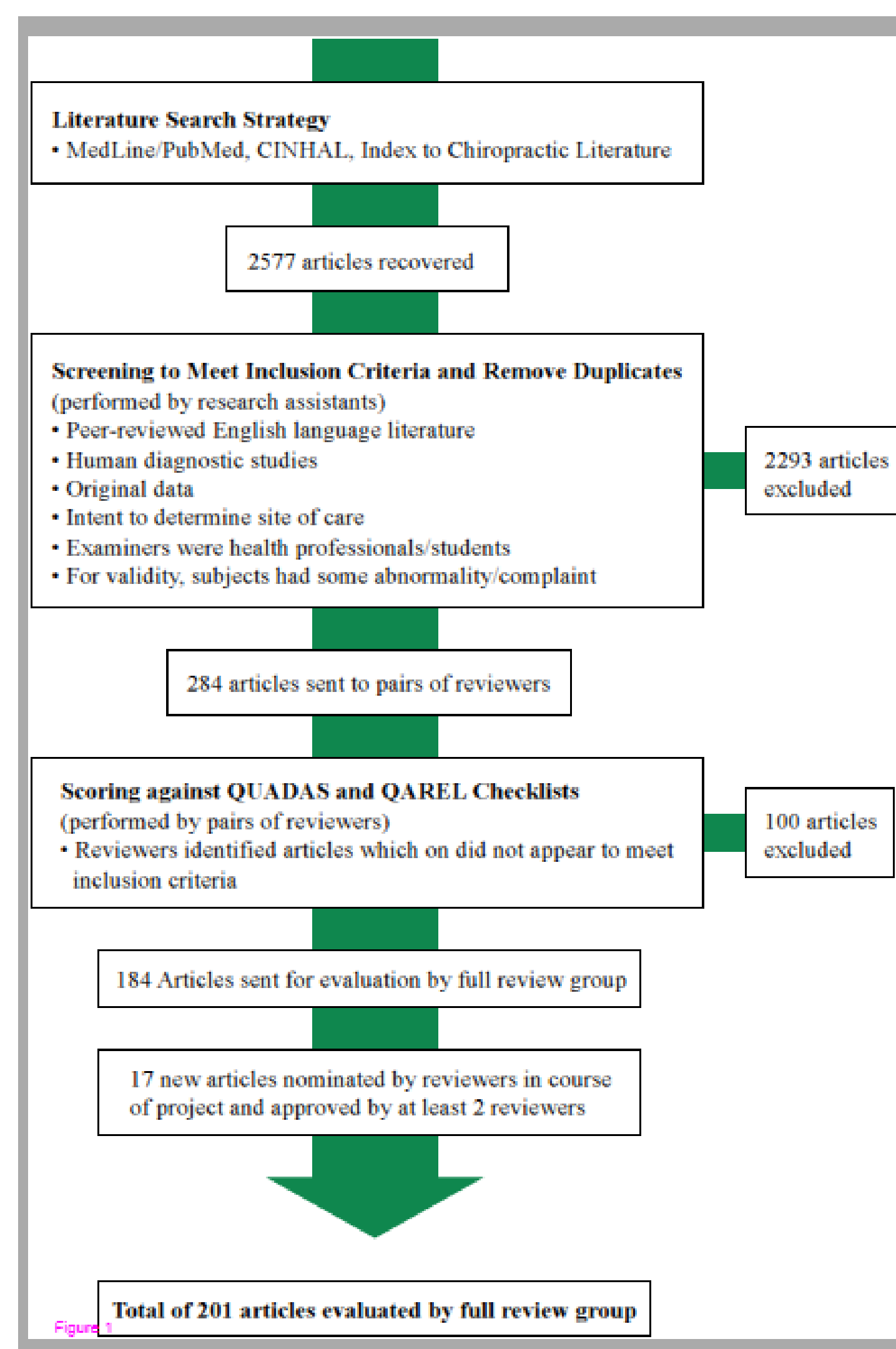
One of the ongoing issues regarding the use of SM however, concerns the lesion that is being treated. There has been widespread debate regarding this lesion (traditionally known as subluxation) and to what degree it contributes to patient signs and symptoms.⁴ In terms of clinical practice, the important question has to do with the quality of the available tests that will identify the area to be treated.

In 2007 the presidents of the Association of Chiropractic Colleges commissioned a task force to investigate these issues. Specifically, the Subluxation Task Force was directed to perform a review of the published evidence regarding the reliability and validity of the most commonly used diagnostic tests chiropractors used to identify the site of care.

Methods

After a number of unsuccessful starts, the final Subluxation Task Force was comprised of 10 faculty, researchers and practitioners who represented five different colleges from the United States and Canada.

Literature searches were conducted in Medline, PubMed, CINAHL and ICL, and hand searches of archives were performed to identify studies of reliability and validity of common methods used to identify the site of treatment application. These studies had to contain original data from investigations using human subjects and had to address the region or location of site of care delivery. Only peer-reviewed English language manuscripts were included. The quality of evidence was ranked using an appropriate checklist (QAREL for reliability and QUADAS for validity). Data were evaluated in terms of strength of evidence and the degree to which the evidence was favorable for clinical use of the method under investigation (Figure 1).



Results

The quality of the published investigations and the degree to which the evidence favored clinical application was very broad. The most favorable evidence was for methods which confirmed or provoked pain at a specific spinal segmental level or region. There was also high quality evidence supporting the use of static and motion palpation and measures of leg length inequality, but these had limitations depending on the actual method employed. Evidence of mixed quality supported the use of postural evaluation, also with limitations. The applicability of measures of stiffness and the use of spinal x-rays had no clear direction of evidence. The evidence was unfavorable for the use of manual muscle testing, skin conductance, surface EMG, and skin temperature measurement, although the evidence was of mixed quality.

The impact of this publication has been impressive. According to Altmetric, a company that tracks article metrics to give measurements of impact, to date it has been accessed 5661 times giving it a rating of “highly accessed.” This article was also in the 99%ile compared to articles of a similar age, and was in the top 25% of all articles ever tracked (1,923,921).⁵



Conclusion

Despite the difficulty of the task, reviews such as this are important in improving the quality of clinical care.

References

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