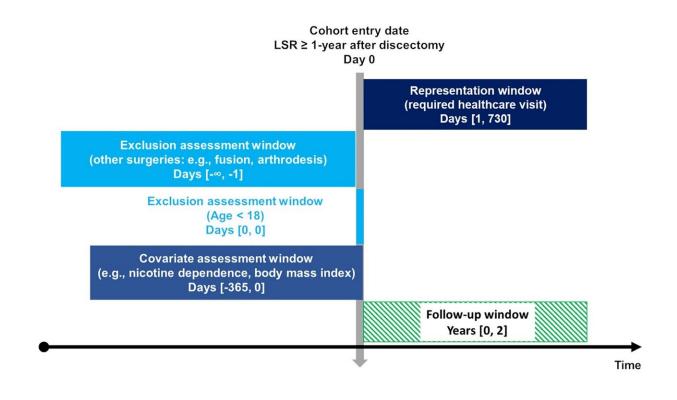


New study reveals significant reduction in lumbar spine reoperation with chiropractic spinal manipulation

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Study design. The vertical arrow represents the index date of enrollment. Windows to the left of this arrow represent preceding time windows over a span of days [#,#], while windows on the right indicate events following the index date of enrollment. The "∞" indicates that the time window reaches as far retrospectively as data are available. Abbreviations: lumbosacral radiculopathy (LSR). Figure adapted by Robert J. Trager using a Creative Commons template from Schneeweiss et al. Credit: *BMC Musculoskeletal Disorders* (2024). DOI: 10.1186/s12891-024-07166-x



A new study conducted by researchers at University Hospitals (UH) Connor Whole Health sheds light on the potential benefits of chiropractic spinal manipulation (CSM) for adults experiencing ongoing sciatica following low back surgery. The study, titled "Association between spinal manipulative therapy and lumbar spine reoperation after discectomy: a retrospective cohort study," was recently <u>published</u> in *BMC Musculoskeletal Disorders*.

The researchers investigated whether adults receiving CSM for sciatica at least one year after lumbar discectomy would be less likely to undergo lumbar spine reoperation compared to matched controls not receiving CSM, over a two-year follow-up period.

Using a <u>retrospective cohort study</u> design, the research team analyzed data from a United States network of health records (TriNetX, Inc.) spanning from 2003 to 2023. The authors used a <u>statistical technique</u> called propensity matching to make the chiropractic and usual medical care cohorts similar according to age and other features. The study included a total of 756 patients, with a mean age of 61 years.

The study revealed that patients who received chiropractic spinal manipulation experienced a substantial 45% reduction in the likelihood of undergoing additional lumbar surgery compared to those who received usual medical care. Specifically, the proportion of patients undergoing lumbar spine reoperation was 7% in the chiropractic spinal manipulation group, significantly lower than the 13% in the usual medical care group.

Lead author Robert J Trager, DC, noted, "This is the largest study of its kind to date and shows promise for chiropractic spinal manipulation in this population. However, we need to be careful about interpreting the



findings, considering it is an observational study."

The researchers called for further research to explore the relevance of their findings, with studies that would include measures of pain, disability, and safety. The study also raises questions about the possibility of a generalized effect of engaging with a non-surgical clinician, prompting comparison of the findings to related contexts such as <u>physical therapy</u> or acupuncture.

More information: Robert J. Trager et al, Association between spinal manipulative therapy and lumbar spine reoperation after discectomy: a retrospective cohort study, *BMC Musculoskeletal Disorders* (2024). <u>DOI:</u> 10.1186/s12891-024-07166-x

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