

Diagnostic imaging

The most current evidence-based diagnostic imaging practice guidelines for chiropractors/primary care physicians do not recommend the routine use of imaging for patients seeking an evaluation of their low back pain. A 2015 review was performed to assess the effectiveness of interventions aimed at reducing imaging rates and found:¹

- Clinical decision support that involved a modified referral form allowing only 3 indications from guidelines for appropriate imaging reduced the imaging rate by 36.8%.
- Targeted reminders involving educational messages that promoted appropriate imaging practices were sent with lumbar spine imaging reports to primary care doctors and reduced the rate by 22.5%.

A 2014 clinical study reported:²

- Web-based imaging guideline distribution was associated with an immediate reduction in spine x-ray imaging claims in the U.S.
- Dissemination of the guidelines appears to be cost effective and “resulted in less patient ionizing radiation exposure and possibly reduced inefficient and potentially inappropriate invasive diagnosis and subsequent treatment.”
- This study was not randomized and valuable patient information was not available (red flags, diagnosis, disease severity), therefore “no conclusions about the guideline’s effect on improving the appropriate use of diagnostic imaging among U.S. chiropractors” can be made.

A 2015 diagnostic accuracy study was performed to investigate the intra- and interobserver agreement and validity of lumbosacral spine MRI interpretation by medical radiologists, chiropractic radiologists and chiropractors.³ Results showed that “agreement of the medical radiologists and chiropractic radiologists was higher than that of chiropractors, but overall, the agreement was moderate.” Validity was reasonable, however, a considerable number of MRIs were misclassified. The authors concluded that they support the clinical guidelines to limit use of imaging based on the fact that, along with poor correlation between imaging findings and physical examination, only modest agreement and validity within and between the professions occurred.

References

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3. de ZA, Ostelo R, Knol DL, Algra PR, Wilmink JT, van Tulder MW. Diagnostic Accuracy of Lumbosacral Spine Magnetic Resonance Image Reading by Chiropractors, Chiropractic Radiologists, and Medical Radiologists. *Spine (Phila Pa 1976)*. 2015;40:E653-E660. **FREE FULL TEXT** https://www.researchgate.net/profile/Annemarie_Zoete/publication/274087680_Diagnostic_Accuracy_of_Lumbosacral_Spine_MRI_Scan_Reading_by_Chiropractors_Chiropractic_Radiologists_and_Medical_Radiologists/links/556d5fbf08aec2268305527e.pdf