Capsule Commentary on Nevedal et al. “Factors Influencing Primary Care Providers’ Unneeded Lumbar Spine MRI Orders for Acute, Uncomplicated Low-Back Pain: a Qualitative Study Use of Patient Decision”

Amir Mohammad Mohammad, MD, MPH, FACPM, FACOEM

Department of Veterans Affairs, Yale University School of Medicine, New Haven, CT, USA.

J Gen Intern Med 35(4):1356
DOI: 10.1007/s11606-020-05656-x
© Society of General Internal Medicine 2020

In this qualitative study focusing on VA Primary Care Providers (PCPs), the authors highlight an expensive, recurring, and potentially harmful clinical practice. They interviewed PCPs and analyzed factors linked with increased ordering of lumbosacral (LS) MRI when evaluating low back pain among Veterans. They interviewed 55 high and low concordant back pain guideline PCPs, the majority based at satellite clinics, and found that while there were similar patient factors, there were significantly different provider level factors (guideline familiarity and agreement, the extent to which they acquiesced to patients, and belief in the value of LS MRI).¹ This study serves as a reminder that many factors contribute to decision-making and must be considered to avoid unnecessary and expensive imaging.

Medical societies recommend against routine ordering of LS MRI for acute low back pain.² There are a number of important steps that leaders can take to implement best practices, for example, emphasizing evidence-based practices. Chen et al. reported significantly decreased MRI orders by implementing next-generation electronic clinical decision support (CDS) with Choosing Wisely clinical reminders.³ Similarly, another randomized trial of 3511 healthcare providers used best practice alerts with statistically significant imaging order reductions.⁴ This is also important because incidental findings on diagnostic tests are common and often trigger unnecessary testing and treatment.⁵ Another potential solution could be to implement pre-authorization from on-call

radiologists or, in the VA, utilizing available teleradiology services to curb this problem. Finally, more efforts should be focused on disseminating the best practices to providers.

Corresponding Author: Amir Mohammad Mohammad, MD, MPH, FACPM, FACOEM; Department of Veterans Affairs Yale University School of Medicine, New Haven, CT, USA (e-mail: Amir.Mohammad@yale.edu).

Compliance with Ethical Standards:

Conflict of Interest: The author has no conflict with any of the material in this manuscript.

REFERENCES

1. Nevedal et. Factors Influencing Primary Care Providers’ Unneeded Lumbar Spine MRI Orders for Acute, Uncomplicated Low-back Pain: A Qualitative Study Use of patient decision. *J Gen Intern med.* 2019. [SPI 5410]
2. Chou R, Gaseem A, Owens DK, Shekelle P. Diagnostic imaging for low back pain: Advice for high-value health care from the American College of Physicians. *Ann Intern Med* 2011;154(3):181–189
3. Chen D, Bhambhani HP, Hom J, Mahoney M, Wintermark M, Sharp C, Ratliff J, Chen YR. Effect of Electronic Clinical Decision Support on Imaging for the Evaluation of Acute Low Back Pain in the Ambulatory Care Setting. *World Neurosurg.* 2019 . S1878–8750(19)32867–0. doi: <https://doi.org/10.1016/j.wneu.2019.11.031>
4. Doyle J, Abraham S, Feeney, L, Reimer, Finkelstein A. Clinical decision support for high-cost imaging: A randomized clinical trial. *PLoS One.* 2019 14(3):e0213373. doi: <https://doi.org/10.1371/journal.pone.0213373>. eCollection 2019.
5. Ganguli I, Simpkin, A, Lupo C, et al. Cascades of Care After Incidental Findings in a US National Survey of Physicians. *JAMA Netw Open.* 2019 2(10):e1913325.

Publisher’s Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.