Editorial

Obtaining lumbar spine magnetic resonance imaging is burdensome: can we fix it?

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I applaud the authors for writing the manuscript "A critical appraisal of Evicore's guidelines for advanced diagnostic imaging of the spine for lower extremity pain with neurological features" (1). The article emphasizes the burden patients and physicians must face in order to obtain prior authorization for a lumbar spine magnetic resonance imaging (MRI). It also highlights how Evicore's guidelines (which most insurance companies adhere to) lack apparent transparency in multiple facets including shareholder input, rigor of development, applicability, and editorial independence.

Many insurance companies require prior authorization before physicians can order spine MRIs for patients with lower extremity radiculopathy with or without back pain. An exhaustive list of criteria must be met by the patient and physician before insurance companies will approve the MRI including an (I) initial evaluation in clinic, (II) a clinical evaluation within 60 days prior to the MRI, (III) a lack of significant improvement in symptoms after a 6-week trial of conservative care, (IV) the patient must be re-evaluated after the lack of improvement, and (V) the non-operative management must occur within 3 months of the MRI. Accomplishing these criteria is not trivial as there is a monetary and potential functional cost to patients.

For example, most patients have a copay or pay out-of-pocket for physical therapy, while they may not experience improvement. Unfortunately, there is little high-quality evidence demonstrating the benefit of therapy in patients with lumbar radiculopathy given that the etiology of the symptoms can vary widely. The mean cost of physical therapy per patient in US dollars is around $1,090 for patients with back pain (2). Along with the associated costs, patients with a lumbar disc herniation who have a three-month delay in clinic presentation may have worse long-term patient reported outcomes based on the randomized, prospective Spine Patient Outcomes Research Trial (SPORT), given that prior authorization guidelines require another three months of conservative care before an MRI is approved (3). Therefore, prior authorization guidelines may put the most vulnerable populations (lower socioeconomic status) at risk of having the worst surgical outcomes (4).

One of the strengths of the author's manuscript is their attempt to objectively evaluate Evicore's guidelines based on the validated AGREE II tool. All five authors used this tool, and they demonstrated good reliability when assessing Evicore's guidelines. Interestingly, of the five domains evaluated, only one (clarity of the guidelines) met the satisfactory threshold suggesting the guideline is of adequate rigor and transparency. The remaining domains

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(scope, shareholder involvement, development rigor, applicability, and editorial independence) were universally found to need modifications in order for the guidelines to meet a satisfactory threshold.

Perhaps the easiest way to accomplish modifying Evicore's guidelines is to include feedback from patients on how these guidelines affect their outcomes and overall patient experience. As patient reported outcomes have come to the forefront of spine outcomes research, insurance companies should be beholden to standards similar to physicians. Of course, physicians often take it upon themselves to advocate for their patients to insurance companies, who instead may prioritize healthcare costs.

Healthcare costs continue to rise given the growing proportion of elderly patients. Prudent use of healthcare resources is thus required from physicians. However, strictly adhering to prior authorization guidelines is likely not the answer for obtaining optimal outcomes. Instead, patients with greater disability or symptom chronicity, irrespective of prior nonoperative treatment, should be considered candidates for lumbar spine MRIs to expedite their care and improve outcomes. Further, prior authorization guidelines should require a neutral, but comprehensive, review of the literature outlining how the guidelines were developed. Guidelines that are devoid of evidence may increase the overall burden and burnout of physicians without improving patient outcomes. Additionally, frequent guideline updates should be provided as new literature becomes available. Finally, disclosure of any potential conflicts of interest and funding sources should be disclosed by companies that provide prior authorization guidelines. For example, are the guidelines for approving lumbar spine MRIs created to leverage optimal patient outcomes or are they implemented to minimize healthcare costs/maximize profit for insurance companies?

In short, understanding guideline limitations allows us to target research towards our knowledge gaps in the literature. In this aspect, the authors succeed by a large margin in shining light on an area of healthcare that is not frequently discussed in the spine community. Targeted research defining which patients are candidates for early lumbar spine MRI versus who would benefit from a trial of conservative care is an integral question. Once a larger aggregate of data examines this question, spine physicians should take it upon themselves to create imaging guidelines that rely on evidence-based research. In this way, spine surgeons instead of third-party companies may better dictate care for their patients.

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