

together and how we might continue to improve the management of men with prostate cancer.

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AUTHOR REPLY



The ascendance of prostate magnetic resonance imaging (MRI) coincided with a popular reckoning about years of overdiagnosis and overtreatment of low-grade prostate cancer.¹ Prostate MRI has been heralded as a solution to improve accuracy when diagnosing and staging prostate cancer with 2 primary advantages: (1) detecting occult, high-grade cancer in men who would otherwise be missed, allowing timely treatment, and (2) ruling out aggressive disease in men with ostensibly low-risk cancers allowing greater confidence in avoiding treatment. Studies supporting the performance of prostate MRI in identifying clinically significant cancers have been performed under best-case circumstances—largely in high-volume centers of imaging excellence, and by experts using state-of-the-art equipment.² Therefore, it is important to begin to evaluate the assumption that MRI will lead to better clinical outcomes in the “real world.”

In this context we appreciate the thoughtful editorial addressing our study which examined the association of prostate MRI and initial management among Medicare beneficiaries with low-risk prostate cancer in Surveillance, Epidemiology, and End Results. We found that men who received prostate MRI in the period surrounding their diagnosis were more likely to be initially observed for their disease. As well-stated by the author(s), there are several alternative explanations that are important to consider in the study period where prostate MRI was in its infancy. As a methodological point, we first wish to clarify that patients in this study were included on the basis of a new diagnosis of prostate cancer, limiting the possibility that MRI was undertaken in the setting of prior active surveillance. Nonetheless, it is possible that

physicians who used MRI in the early period were more likely to recommend observation as management, particularly in light of known associations of academic institutions and observation for low-risk cancers.³ Further, we agree with the commentary that administrative claims lack clinical granularity, limiting our understanding of how MRI data was used when making decisions. For these reasons, we took care to not assert a causal relationship between prostate MRI and observation.

Notwithstanding the possibility that the use of prostate MRI is explained by provider-level variation in the use of observational management or other confounders, there are several notable findings from our study.⁴ If a causal association is validated in other studies, the utility of MRI in the management of localized prostate cancer will further support its use. In addition, we found regional, racial, and socioeconomic differences in the use of prostate MRI. In light of recent data showing the growing use of MRI in the contemporary period, there is a timely need to determine how new technologies affect entrenched disparities in prostate cancer care and outcome.⁵ Continued expansion of prostate MRI into routine care is likely. Anticipating such changes in the use of MRI and other tools, we fully agree that additional study is needed to understand the benefit of these innovations once put into practice.

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