on prior evidence that observation is used infrequently in men with low-risk disease, this study establishes that active surveillance use is low. Usage increases as the inclusion criteria for surveillance become more stringent, ie, less likely to miss significant disease. While active surveillance is aptly applied to elderly men, its use is sporadic, confined to academic and regional hospitals, and strongly influenced by nonclinical factors, including the patient’s insurance provider. Patient preference may influence use, especially in certain demographic groups. Despite ongoing adoption, use of active surveillance must increase substantially to effectively reduce the overtreatment of screening-detected prostate cancer.6

This study has several limitations. Selection bias related to the National Cancer Data Base’s hospital-based data set may cause potential underrepresentation of active surveillance use in the outpatient setting. Because the data set is somewhat dated, it may not accurately reflect recent urological patterns. Nonetheless, this study represents, to our knowledge, the most up-to-date analysis of active surveillance trends, and its predictors, in a large nationally diverse cohort. Uniquely, our study is generalizable to men of all ages, including younger men who may benefit more in the long term with active surveillance. Last, the treatment-specific identifier that we used minimizes misclassification bias.

Matthew J. Maurice, MD
Robert Abouassaly, MD, MS
Simon P. Kim, MD, MPH
Hui Zhu, MD, ScD

Author Affiliations: Urology Institute, University Hospitals Case Medical Center, Cleveland, Ohio (Maurice, Abouassaly, Kim); Division of Urology, Department of Surgery, Louis Stokes Cleveland Veterans Affairs Medical Center, Cleveland, Ohio (Maurice, Zhu); Glickman Urological and Kidney Institute, Cleveland Clinic, Cleveland, Ohio (Zhu).

Corresponding Author: Hui Zhu, MD, ScD, Louis Stokes Cleveland Veterans Affairs Medical Center, 10701 E Blvd, Cleveland, OH 44106 (hui.zhu@va.gov).

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Reporting of limitations of observational research published in 7 major internal medicine journals (New England Journal of Medicine [NEJM], Lancet, JAMA, BMJ, PLoS Med, Annals of Internal Medicine, and JAMA Internal Medicine) from January 1, 2013, to June 30, 2013. Data are proportions of the indicated journal documents and associated news stories that mention any study limitation (dark blue bars) or contain an explicit statement that causality cannot be inferred (light blue bars). NEJM Journal Watch articles were categorized as press releases for NEJM articles.

* Number of abstracts that report any limitation: Annals of Internal Medicine, 9 of 9; BMJ, 2 of 13; JAMA, 2 of 17; JAMA Internal Medicine, 2 of 21; PLoS Medicine, 1 of 7; NEJM, 0 of 10; and Lancet, 0 of 4. Number of abstracts that report a causality limitation: Annals of Internal Medicine, 1 of 9; BMJ, 1 of 13; JAMA, 1 of 17; JAMA Internal Medicine, 0 of 21; PLoS Medicine, 0 of 7; NEJM, 0 of 10; and Lancet, 0 of 4.

** Number of journal press releases that report any limitation: Annals of Internal Medicine, 0 of 2; BMJ, 0 of 8; JAMA, 3 of 16; JAMA Internal Medicine, 4 of 12; PLoS Medicine, 2 of 6; NEJM, 4 of 7; and Lancet, 0 of 3. Number of journal press releases that report a causality limitation: Annals of Internal Medicine, 0 of 2; BMJ, 0 of 8; JAMA, 1 of 16; JAMA Internal Medicine, 0 of 12; PLoS Medicine, 1 of 6; NEJM, 0 of 7; and Lancet, 0 of 3.

Discussion | Limitations of observational research published in high-impact journals were infrequently mentioned in associated news stories. Inadequate acknowledgment of limitations in the journal sources might contribute to the low proportion of news stories that mentioned limitations of observational research. Limitations were rarely mentioned in the study abstracts or journal press releases, the content of which is associated with that of news stories, but were commonly “buried” in lengthy Discussion sections. A fundamental limitation of observational research—the inability to attribute causation—was rarely mentioned in journal documents or news stories and was often accompanied by a disclaimer. In news stories, disclaimers were frequently attributable to study investigators, consistent with evidence that authors of observational studies often make clinical practice recommendations based on their work and that academic press releases exaggerate research outcomes.

A possible consequence of inadequate reporting of limitations of observational research is that readers consider the reported associations to be causal, promoting health practices based on evidence of modest quality. Up to 50% of such practices prove ineffective when tested in randomized clinical trials. Giving greater prominence to the limitations of observational research, particularly in the publication abstract and journal press releases, might temper this enthusiasm and reduce the need for subsequent reversals of practice.