Department of Epidemiology and Biostatistics, Memorial Sloan Kettering Cancer Center
New York, New York

Genitourinary Oncology Service, Department of Medicine, Memorial Sloan Kettering Cancer Center
New York, New York
email: Nathan.wong@medportal.ca

1. Dason S, Wong NC, Donahue TF et al: Utility of routine preoperative ^{18}F-fluorodeoxyglucose positron emission tomography/computerized tomography in identifying pathological lymph node metastases at radical cystectomy. J Urol 2020; **204:** 254.

2. Apolo AB, Riches J, Schöder H et al: Clinical value of fluorine-18 2-fluoro-2-deoxy-D-glucose positron emission tomography/computed tomography in bladder cancer. J Clin Oncol 2010; **28:** 3973.

3. Pichler R, De Zordo T, Fritz J et al: Pelvic lymph node staging by combined ^{18}F-FDG-PET/CT imaging in bladder cancer prior to radical cystectomy. Clin Genitourin Cancer 2017; **15:** e387.

4. Kibel AS, Dehdashti F, Katz MD et al: Prospective study of [^{18}F]fluorodeoxyglucose positron emission tomography/computed tomography for staging of muscle-invasive bladder carcinoma. J Clin Oncol 2009; **27:** 4314.

5. Marandino L, Capozza A, Bandini M et al: [^{18}F]Fluoro-deoxy-glucose positron emission tomography to evaluate lymph node involvement in patients with muscle-invasive bladder cancer receiving neoadjuvant pembrolizumab. Urol Oncol 2021; **39:** 235.e15.

Defining Quality Metrics for Active Surveillance: The Michigan Urological Surgery Improvement Collaborative Experience. Letter.

J Urol 2020; **204:** 1119.

To the Editor: Ginsburg et al, representing the Michigan Urological Surgery Improvement Collaborative (MUSIC), have advanced efforts by proposing a "roadmap" to improve the adoption and quality of active surveillance (AS) for favorable-risk prostate cancer (PCa).[1] Their proposal advances the development of value-based payment models based upon process and outcome quality measures.

The authors from the MUSIC acknowledge that PCa care metrics for "high-quality active surveillance remain unexplored" and propose 6 quality measures as part of a roadmap to guide physicians and patients considering AS for "favorable-risk PCa." A similar research consortium of academic and community urologists, the Prostate Cancer Active Surveillance Project (PCASP), is collaborating with UnitedHealthcare, Inc. and Precision Point Specialty, Inc. to develop a "pay-for-performance (P4P)" payment model to be piloted at Genesis Healthcare Partners (San Diego, California). The goal is to promote the appropriate adoption of AS or watchful waiting (WW) and the quality performance of AS specifically for low-risk PCa based on 4 proposed assessable measures.

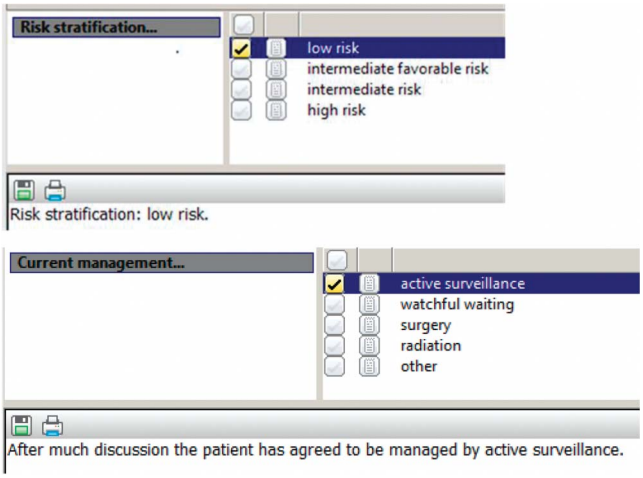
The PCASP consortium considered current guidelines, including those of the National Comprehensive Cancer Center Network® and the American Urological Association, and developed 4 quality measures to promote the accurate acquisition of relevant data and appropriate conservative management (ie AS or WW) of patients with low-risk PCa. Although similar to the MUSIC measures, the PCASP measures differ in that PCASP has taken into account that:

1) adoption of favorable intermediate-risk PCa should not be part of a quality measure for an incentive payment program because of its potentially greater inherent biological aggressiveness;
2) confirmatory testing should be based exclusively on a confirmatory biopsy (performed within 18 months of the diagnostic biopsy), since data do not yet exist to validate either a genomic classifier or a magnetic resonance imaging scan as an adequate substitute for at least 1 confirmatory biopsy;
3) leveraging information technology using electronic medical record (EMR)-embedded templates to extract structured data to avoid the need for manual chart review (our pilot study has confirmed the feasibility of extracting the data) is likely less labor intensive and costly, and more accurate;
4) there should be specific thresholds that physicians must meet to qualify for the payment incentive;
5) including WW with AS as a quality measure for adoption of conservative management for low-risk PCa avoids incentivizing clinicians to perform unnecessary testing and biopsies to qualify for the incentive payment;
6) conversion to active treatment should be excluded as a quality measure, but it should be tracked to assess the appropriateness of the individual physician's selection of patients for conservative management.

Our quality measures are:

Measure 1: Use of an EMR-embedded template requiring physician assessment of risk for disease progression and selection of the management strategy (see figure). This template prompts the physician to document the risk level and management plan, mitigating the otherwise labor-intensive chart review that is often fraught with challenges in interpreting the physician's documentation. The adherence to the template intervention measures is captured via the cloud-based platform. The proposed threshold for meeting this requirement is 90%.

Measure 2: The adoption of AS or WW for low-risk PCa. This measure is based upon the appropriate estimation of risk and selection of a



EMR template capturing risk stratification and selected management.

management strategy within the template (see figure). The proposed threshold for meeting this requirement is 75%, acknowledging that in some cases the patient may opt for active treatment despite low-risk features and appropriate counseling. The goal of including WW is to promote the appropriate use of conservative management and reduce unnecessarily intensive surveillance or overtreatment for low-risk prostate cancer.

Measure 3: Quality of surveillance with prostate specific antigen testing: prostate specific antigen testing at least twice per year for AS patients. As a pragmatic consideration, a 14-month time window will be allowed. WW patients are excluded from this measure. The proposed threshold for meeting this requirement is 75%.

Measure 4: Quality of surveillance with biopsy procedures: confirmatory biopsy within 18 months for AS patients. The proposed threshold for meeting this requirement is 75%. WW patients are excluded from this measure.

To qualify for the P4P incentive payment, physicians would have to meet the thresholds for all 4 measures. They would be given audited feedback of their performance in keeping with the current group practice.[2] The 4 measures will be calculated from claims and structured data obtained from the EMR by the cloud-based platform, thus yielding cost-effective data acquisition.

Whether the performance incentive payment would be given to individual physicians or the group practice is currently under consideration, pending the evaluation of the pilot project.[1]

As the U.S. health care system transitions to a value-based payment model, physician input is crucial for developing payment models based on optimal evidence-based care.

Respectfully submitted,
The PCASP consortium:

Franklin D. Gaylis, Matthew R. Cooperberg, Ronald C. Chen, Jennifer Malin, Stacy Loeb, John S. Witte, Peter R. Carroll, Edward S. Cohen, Paul E. Dato, Daniel W. Lin, Yingye Zheng, Tyler M. Seibert, Christopher Setzler, Wanda Wilt, Scarlett L. Gomez, June M. L. Chan and William J. Catalona
University of California San Diego
La Mesa, California
email: fgaylis@genhp.com

1. Ginsburg KB, Cher ML and Montie JE: Defining quality metrics for active surveillance: the Michigan Urological Surgery Improvement Collaborative Experience. J Urol 2020; **204:** 1119.

2. Gaylis FD, Naserri R, Salmasi A et al: Implementing continuous quality improvement in an integrated community urology practice: lessons learned. Urology 2021; doi: 10.1016/j.urology.2020.11.068.

Defining Quality Metrics for Active Surveillance: The Michigan Urological Surgery Improvement Collaborative Experience. Reply.

Reply by Authors: We thank Dr. Gaylis and the Prostate Cancer Active Surveillance Project (PCASP) for sharing their perspective and furthering the discussion on exploring quality metrics for active surveillance.[1] As highlighted, there is considerable overlap, as well as some differences, between the 2 groups' quality metrics. Notably, both groups agree that some degree of 1) interval prostate specific antigen (PSA) assessments and 2) confirmatory testing are needed to judge the quality of active surveillance. The interval of PSA testing differs between the 2 groups; MUSIC suggests that PSA should be checked at least once per year while PCASP advocates for PSA testing every 6 months. Regarding confirmatory testing, MUSIC advocates for an early confirmatory test (repeat biopsy, magnetic resonance imaging [MRI], or genomics test) within 6 months of the diagnostic biopsy with the intention that this additional data point will help more men choose appropriately between active surveillance and treatment. Alternatively, the PCASP confirmatory test metrics states that this test must be a prostate biopsy and should be performed within 18 months of diagnosis. As pointed out by Gaylis et al, the data supporting the use of confirmatory biopsy are indeed more rigorous compared with the data supporting MRI or genomics, as these are relatively newer technologies. Nonetheless, multiple groups, including MUSIC, have shared their emerging experiences with MRI and genomics as confirmatory tests and these results are generally favorable.[2] Given the low incidence of metastasis and death associated with active surveillance, we have taken a more lenient approach, allowing the use of MRI and genomics as confirmatory tests.

To illustrate these subtle differences in the 2 sets of quality metrics, consider a hypothetical 60-year-old gentleman with newly diagnosed Gleason grade group 1 prostate cancer. He has MRI 4 months after diagnosis that demonstrates a PI-RADS® 2 lesion. He has his PSA checked at 6, 12, and 18 months after diagnosis which shows his PSA is stable. According to the MUSIC criteria, his management up to this point fulfills the metrics for high-quality care but according to the PCASP criteria, this care is suboptimal because he did not have a biopsy during this interval. Given the deficiencies in the current state of active surveillance literature, how a urologist performs active surveillance is mostly gestalt and not a data driven process. The paucity of evidence makes it difficult to judge which set of metrics is "right" with regard to the management of this hypothetical patient or more broadly the appropriate interval of PSA testing, confirmatory/surveillance biopsies, and integration of newer biomarkers such as MRI and genomics into the performance of active surveillance.

Although the ideal active surveillance regimen or protocol remains unknown, what has been definitively proven is that active surveillance is safe and should be the default initial management strategy for most men with low risk and favorable risk prostate cancer. It is unlikely that one of these proposed quality metric schemes will prove superior to the other in terms of preventing metastasis or death from prostate cancer. Given the lack of a universal active surveillance protocol, it will be prudent for urologists, and groups such as MUSIC, PCASP, and the American Urological Association, to remain engaged in this discussion in order to advocate for metrics which they believe translate to providing highest quality care to their patients.

Kevin B. Ginsburg, Michael L. Cher and the Michigan Urological Surgery Improvement Collaborative
Wayne State University
Detroit, Michigan
email: keginsbu@med.wayne.edu

James E. Montie
University of Michigan
Ann Arbor, Michigan

1. Ginsburg KB, Cher ML and Montie JE: Defining quality metrics for active surveillance: the Michigan Urological Surgery Improvement Collaborative Experience. J Urol 2020; **204:** 1119.

2. Ginsburg KB, Jacobs JC, Qi J et al: Impact of early confirmatory tests on upgrading and conversion to treatment in prostate cancer patients on active surveillance. Urology 2021; **147:** 213.

The Long-Term Risks of Metastases in Men on Active Surveillance for Early Stage Prostate Cancer. Letter.

J Urol 2020; **204**: 1222.

To the Editor: We read with great interest the article by Maggi et al reporting the long-term risk of metastases in men on active surveillance (AS) for prostate cancer recently published in *The Journal of Urology®*.[1] We would like to commend the authors for completing a very meticulous analysis that is reinforcing the clinical value of AS for selected prostate cancer patients. In our experience at a tertiary academic center, which is similar to the authors' setting, we have found that analyzing the prostatic biopsy slides and multiparametric magnetic resonance imaging by expert genitourinary pathologists and radiologists is the first and most important requisite to discuss the option of AS.[2] At our institution, the rate of patients potentially eligible for AS managed with radical prostatectomy significantly decreased from 13% to 2% based on original biopsy and after revision by dedicated uropathologists, respectively.[3] Likewise, up to 46% of PI-RADS™ scores are changed after a thorough revision of magnetic resonance imaging done by experienced, dedicated uroradiologists at our tertiary referral center. We are afraid that this is a very common issue everywhere, but that being said, this is almost never faced in the contemporary scientific literature.

Francesco Montorsi, Giorgio Gandaglia* and Alberto Briganti
Division of Oncology/Unit of Urology, URI, IRCCS Ospedale San Raffaele, Milan, Italy

Vita-Salute San Raffaele University
Milan, Italy

**Correspondence: e-mail: giorgan10@libero.it*

1. Maggi M, Cowan JE, Fasulo V et al: The long-term risks of metastases in men on active surveillance for early stage prostate cancer. J Urol 2020; **204:** 1222.

2. Bravi CA, Vertosick E, Tin A et al: Relative contribution of sampling and grading to the quality of prostate biopsy: results from a single high-volume institution. Eur Urol Oncol 2020; **3:** 474.

3. Bianchi M, Bravi C, Fossati N et al: Central prostate biopsy revision at referral center is key for correct patient management: results from a prospective, single center series. Eur Urol Suppl 2018; **17:** 350.