Numerous prostate cancer biomarkers have overlapping indications and are marketed heavily, but to date there is little data regarding their utilization.

We review practice patterns for prostate cancer biomarker utilization in a large statewide quality registry with a focus on the extent of heterogeneity across practices and providers.

**Methods**

- Pennsylvania Urologic Regional Collaborative (PURC) is a voluntary collaborative of urology practices in Pennsylvania/ New Jersey focused on evaluation and improvement of prostate cancer care.
- Established in 2015, 9 participating practices encompassing 88 physicians have accrued over 5,600 patients into the registry.

**Results**

742 (16.3%) men underwent prostate cancer biomarker testing. Biomarker testing was most commonly performed in men with AUA low and intermediate-risk disease (40% and 38%, respectively), and among patients whose primary treatment was active surveillance (38%). There was significant variation in genomic testing by practice and within each practice site (Fig 2). Among high risk patients, the most commonly ordered test was Decipher.

The survey response rate was 39%. 75% of respondents utilize biomarkers in their prostate cancer patients; 11.8% indicated their lack of knowledge about biomarkers are the primary factor why they do not order tests. When posed with a hypothetical clinical scenario, 20.5% of respondents selected a non-indicated biomarker.

**Conclusion**

Within a large prostate cancer quality collaborative, we identified significant variation in prostate cancer biomarker utilization by practice and provider. Understanding practice-level biomarker testing trends may identify targets for quality improvement and enhance appropriate test utilization.