

REAL-WORLD GENOMIC PROFILING PATTERNS AMONG PATIENTS WITH METASTATIC PROSTATE CANCER: A RETROSPECTIVE MANAGED CARE CLAIMS ANALYSIS



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Background

- Genomic and molecular biomarker testing can identify alterations that influence treatment selection for patients with metastatic prostate cancer, including eligibility for certain biomarker-directed therapies.[1,5]
- Current ASCO guidelines recommend germline testing for all patients with metastatic prostate cancer and somatic testing for those being considered for biomarker-directed systemic treatment.[1]
- Testing is not consistently observed in real-world care. In one US study, next-generation sequencing was reported for 27.1% of patients diagnosed with metastatic prostate cancer in 2022.[2] A separate study found documented genetic testing in 13% of patients with metastatic castration-resistant disease.[3]
- Published testing rates reflect different populations, types of tests, and observation periods. Claims from a regional health plan can offer an additional view of how often testing is observed and when it occurs in relation to treatment.[2,3]

Objectives

- Primary objective:** Determine the proportion of eligible Commercial and Medicare members with metastatic prostate cancer who had an observed genomic or molecular biomarker testing claim.
- Secondary objective 1:** Describe when the earliest observed biomarker claim occurred relative to the first observed prostate cancer diagnosis (C61) claim and the first associated medication claim.
- Secondary objective 2:** Describe age, line of business, and observed treatment categories among members with and without a biomarker claim.
- Secondary objective 3:** Summarize health plan-paid diagnosis-related medical, medical drug, and pharmacy drug costs by biomarker testing status.

Limitations

This single-plan analysis may miss testing or treatment paid outside the plan. Claims identify billed services, not test results, clinical intent, disease state, or the true date of metastatic diagnosis. The first observed C61 claim may not be a member's first prostate cancer diagnosis. Provider specialty was unavailable. Follow-up length and clinical severity may differ between groups, limiting interpretation of unadjusted treatment and total paid-cost comparisons.

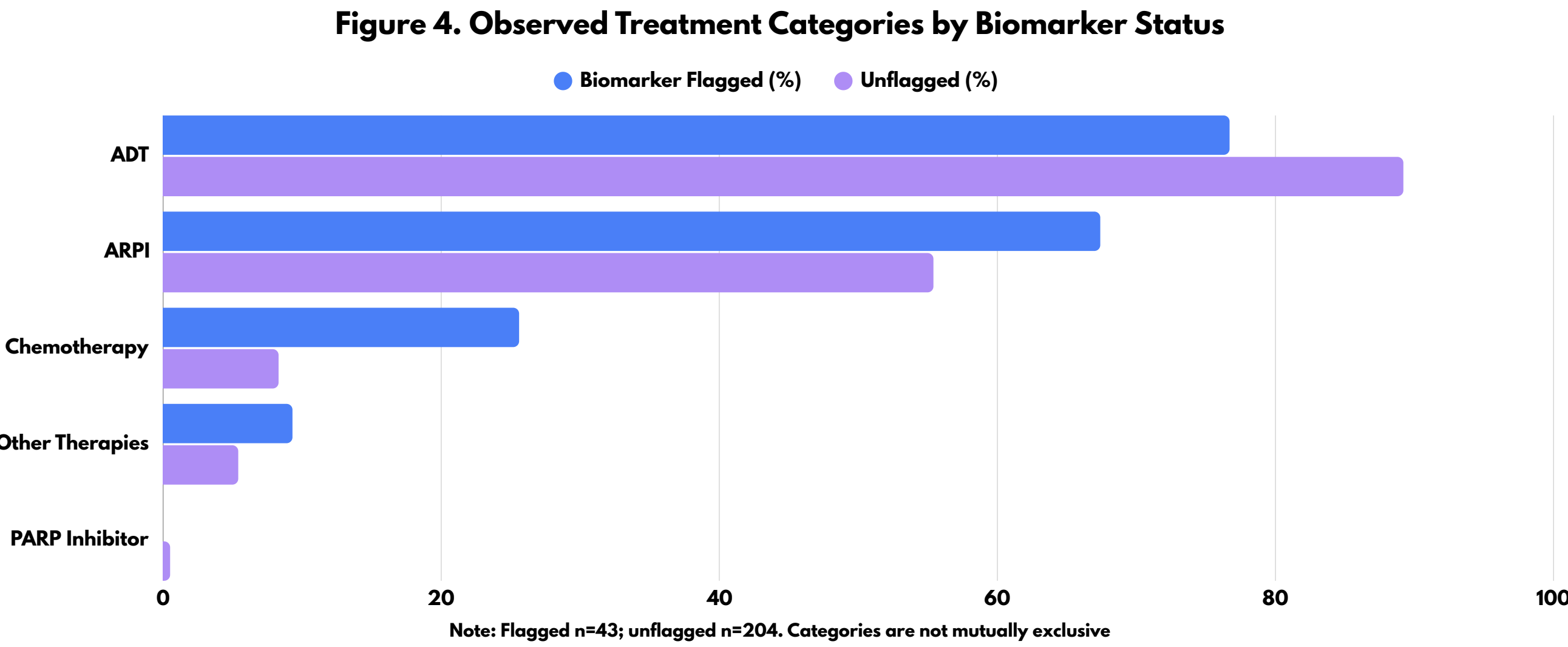
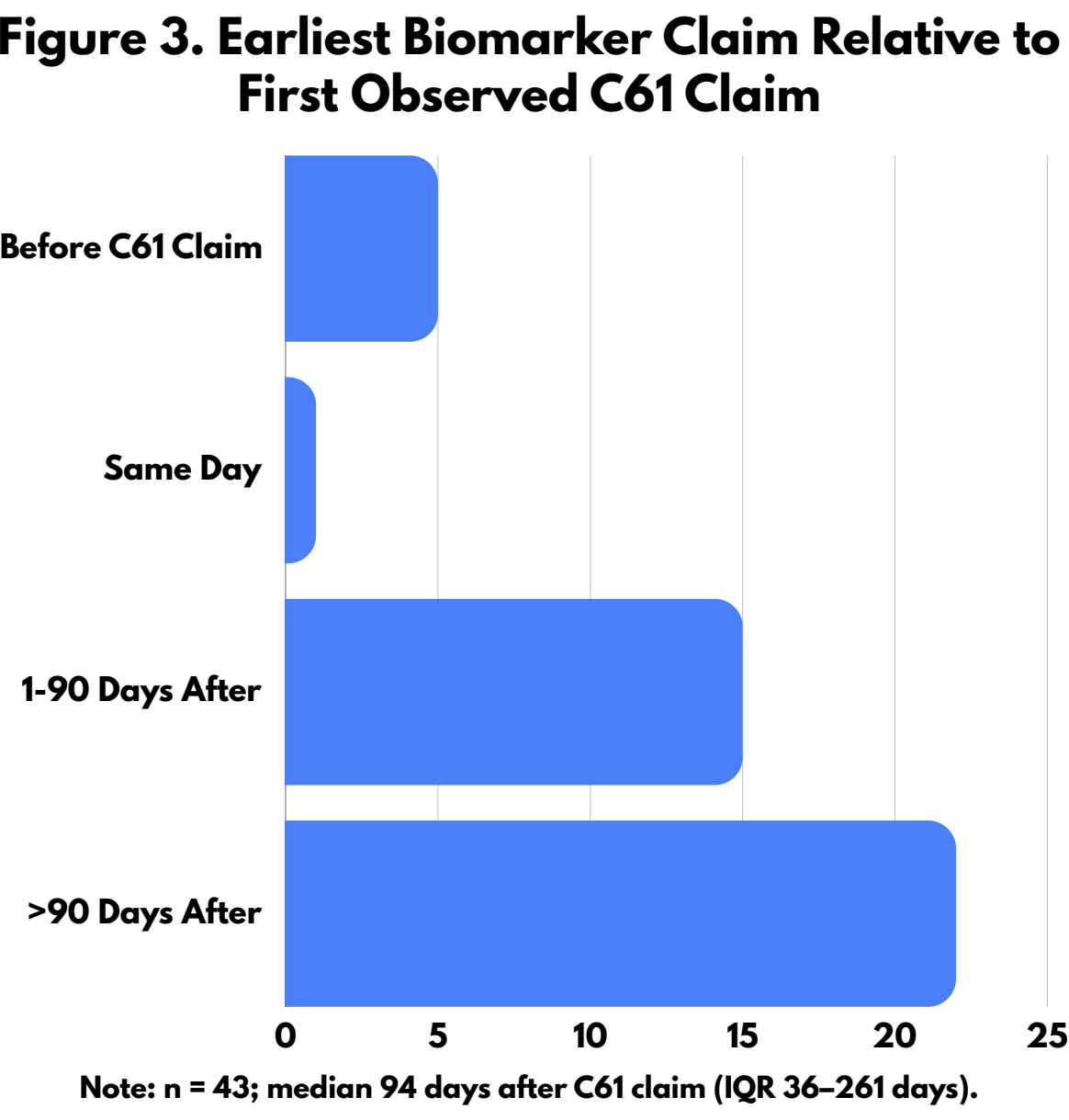
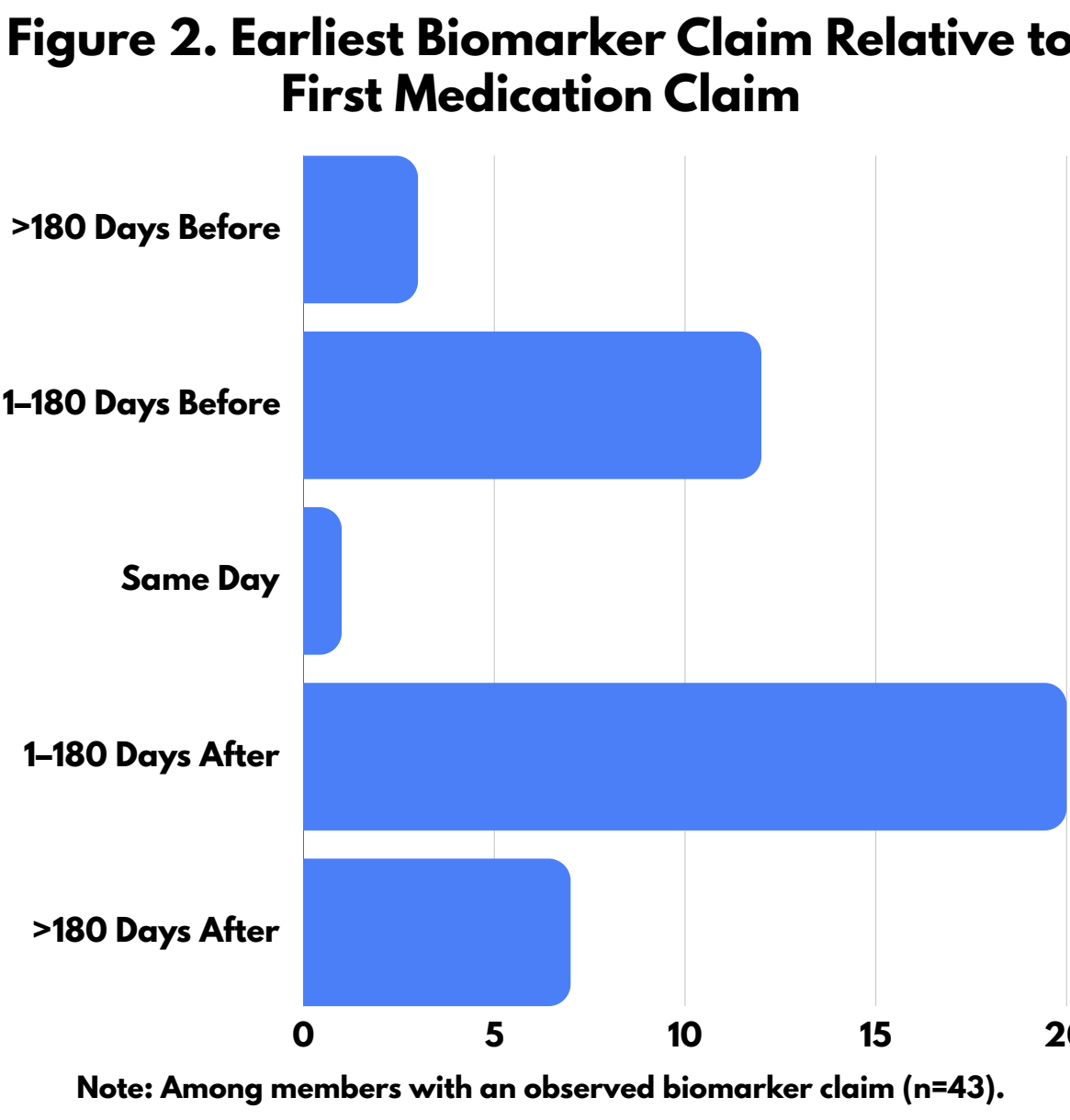
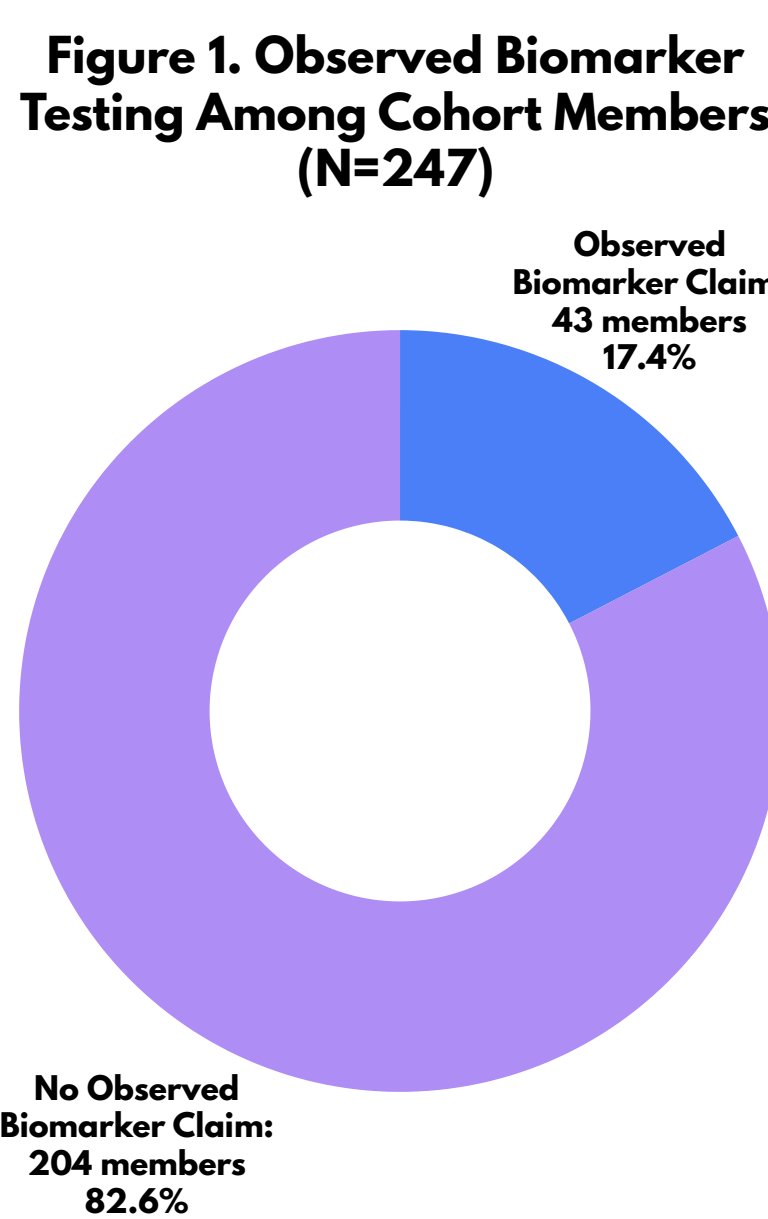


Table 1. Observed Health Plan-Paid Costs by Biomarker Testing Status

Health-plan paid cost per member	Biomarker flagged, n=43: median (mean)	Unflagged, n=204: median (mean)
Diagnosis-related medical	\$52,200.72 (\$95,328.55)	\$31,706.26 (\$56,830.86)
Medical drugs	\$7,414.30 (\$44,140.42)	\$3,613.08 (\$28,106.47)
Pharmacy drugs	\$18,933.79 (\$86,102.04)	\$12,291.26 (\$64,864.55)
Biomarker claims	\$3,210.33 (\$3,370.58)	N/A

Note: Observed paid totals; blanks counted as \$0. Cost fields overlap and were not summed. Observation lengths varied; values are not PMPM.

References

- Yu EY, Rumble RB, Agarwal N, et al. Germline and somatic genomic testing for metastatic prostate cancer: ASCO guideline. J Clin Oncol. 2025;43(6):748-758. doi:[10.1200/JCO-24-02608](https://doi.org/10.1200/JCO-24-02608).
- Hage Chehade C, Jo Y, Gebrael G, et al. Trends and disparities in next-generation sequencing in metastatic prostate and urothelial cancers. JAMA Netw Open. 2024;7(7):e2423186. doi:[10.1001/jamanetworkopen.2024.23186](https://doi.org/10.1001/jamanetworkopen.2024.23186).
- Shore N, Ionescu-Ittu R, Yang L, et al. Real-world genetic testing patterns in metastatic castration-resistant prostate cancer. Future Oncol. 2021;17(22):2907-2921. doi:[10.2217/fon-2021-0153](https://doi.org/10.2217/fon-2021-0153).
- Shevach JW, Candelieri-Surette D, Lynch JA, et al. Racial differences in germline genetic testing completion among males with pancreatic, breast, or metastatic prostate cancers. J Natl Compr Canc Netw. 2024;22(4):237-243. doi:[10.6004/jnccn.2023.7105](https://doi.org/10.6004/jnccn.2023.7105).
- de Bono J, Mateo J, Fizazi K, et al. Olaparib for metastatic castration-resistant prostate cancer. N Engl J Med. 2020;382(22):2091-2102. doi:[10.1056/NEJMoa1911440](https://doi.org/10.1056/NEJMoa1911440).
- National Cancer Institute. SEER Cancer Stat Facts: Prostate Cancer.

Methodology

- Study design:** Retrospective, descriptive analysis of Commercial and Medicare members with metastatic prostate cancer in a New Jersey regional health plan.
- Data source and period:** Medical and pharmacy claims were used to identify eligible members from January 1, 2022, through June 30, 2024.
- Cohort selection:** Members needed ≥ 2 prostate cancer (C61) claims, ≥ 1 metastatic disease claim, ≥ 1 associated medication claim, and six months of continuous enrollment before and after index. Index was the first associated medication claim.
- Biomarker assessment:** Members were classified as tested if any qualifying biomarker claim was observed, regardless of timing. The earliest test claim was used for comparisons with the first observed C61 claim and index.
- Analysis:** Counts, percentages, treatment categories, and health plan-paid costs were summarized by testing status. Cost blanks represented \$0. No statistical tests were performed.

Discussion & Conclusion

- Among 247 eligible members, 43 (17.4%) had an observed qualifying biomarker testing claim.
- Observed testing rates by approximate age at index were 19.0% (19/100) for ages 18-64, 19.3% (16/83) for ages 65-74, and 12.5% (8/64) for ages ≥ 75 .
- Among tested members, 27 of 43 (62.8%) had their earliest observed biomarker claim after the first associated medication claim.
- Chemotherapy claims were observed in 25.6% of tested members versus 8.3% of untested members. This is a descriptive difference; the data does not show that testing caused a change in treatment.
- Median diagnosis-related medical, medical drug, and pharmacy drug payments were higher among tested members. Different follow-up lengths and clinical characteristics limit interpretation of these total-cost comparisons.
- By line of business, testing was observed in 17/109 Commercial fully insured members (15.6%), 12/53 Commercial ASO members (22.6%), and 14/82 Braven Medicare Advantage members (17.1%). No tests were observed among the three Medicare members.

Key Sources & Acknowledgements

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