Part D LDS data allows researchers to conduct utilization and cost studies using all of use and cost by demographics differed by condition compared to the overall selected chronic conditions had higher PMPM fills and costs: diabetes (6.0, $303), vary with race. Compared to the overall Medicare cohort, beneficiaries with the Medicaid beneficiaries had approximately 1.5 times higher PMPM fills and costs month (4.9 for was 4.3 and the cost was $212, beneficiaries took 8.9 distinct medications, and was 0.01) was found in 0.098). The probability model showed the intervention was associated with a 4.4%, 6.5%, and 12.9% significantly greater probability of a three to five, six to eight, and a greater than eight, respectively, claim count reduction (p < 0.001). The intervention was also associated with a significantly greater probability of drug count reduction (p < 0.001). CONCLUSIONS: The intervention was associated with a statistically significant marginal reduction in claim count, drug count, and medication costs compared to a control Medicare Part D cohort.

PODIUM SESSION II: EXAMINING THE QALY

QA1 COST-EFFECTIVENESS OF DUTASTERIDE AS A CHEMOPREVENTION IN PROSTATE CANCER: REDUCE WITHIN-TRIAL ANALYSIS

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OBJECTIVES: To evaluate the relationship between dutasteride and prostate cancer mortality. The development and validation of a model that predicts prostate cancer incidence and mortality using clinical characteristics. The validated model was applied to real-world populations and the cost-effectiveness of dutasteride was assessed.

METHODS: The model was developed using a nested case-control design with data from the Prostate, Lung, Colorectal, and Ovarian Cancer Screening Trial (PLCO). The model was validated using data from the Digital Imaging and Screening for Prostate Cancer (DISC) trial. The cost-effectiveness of dutasteride was assessed using a Markov model that simulates men's life expectancy and the consequences of prostate cancer.

RESULTS: The model accurately predicted prostate cancer incidence and mortality with an area under the curve of 0.85 (95% CI: 0.82-0.88). The cost of dutasteride was $2,120 per year and the cost of prostate cancer was $10,620 per year. The incremental cost-effectiveness ratio was $26,516 per quality-adjusted life-year (QALY) gained.

CONCLUSIONS: Dutasteride is cost-effective as a chemoprevention for prostate cancer and can be recommended for men at high risk of prostate cancer. The model can be used to assess the cost-effectiveness of other chemoprevention strategies for prostate cancer.