

# Hormone Replacement Therapy Drug Costs

Executive Summary  
September 7, 2022

Senate Bill 711 (2021) directs the Department of Consumer and Business Services (DCBS) to conduct a study of disparities in the cost of hormone replacement drugs between those for men and those for women.

The Oregon Drug Price Transparency Program within DCBS carried out this study by analyzing the expected patient costs (copay, coinsurance, and deductibles) recorded in retail pharmacy insurance claims for hormone replacement drugs from the Oregon All Payer All Claims Reporting Program (APAC) from the years 2018, 2019, and 2020.

A total of 1,290,452 claims from 159,932 different claimants were included in the study.

## Findings and Recommendations

Claimants who were exclusively identified as “female” in the pharmacy claims data (F claimants) paid an average of \$5 more per claim than claimants who were exclusively identified as “male” (M claimants). On average, F claimants paid \$32.45 per claim and M claimants paid \$27.76 per claim.

Though their average cost per claim was lower, a M claimant made more claims on average, leading to a slightly higher average total cost per claimant over the three-year period from 2018 to 2020. On average, an M claimant had 9.5 claims and paid a total of \$262.43, while an F claimant had 7.8 claims and paid a total of \$252.94.

Some claimants in the data had claims without gender information or had more than one gender identification across multiple claims. We will refer to these claimants as “UV”, for “Unknown or Various.” On average, a UV claimant paid \$16.96 per claim, had 15.8 claims, and paid a total of \$267.15.

F claimants were responsible for paying 31 percent of their claim costs, compared to 20 percent for M claimants and 30 percent for UV claimants. The rest of the cost was paid by insurance.

*Table 2: Average cost per claim and average total cost per claimant by gender group*

Average cost per claim	
F claimants	\$32.45
M claimants	\$27.76
UV claimants	\$16.96
Average total cost to claimant	
F claimants	\$252.94
M claimants	\$262.43
UV claimants	\$267.15

*Table 1: Cost sharing between claimants and insurance*

	Total paid combined	Total paid by insurance	Total paid by claimants	Percent paid by claimants
F claimants	\$111,567,872	\$77,265,830	\$34,302,042	30.7%
M claimants	\$31,116,861	\$24,882,069	\$6,234,792	20.0%
UV claimants	\$502,160	\$351,755	\$150,405	30.0%

Our analysis suggests that the differences between average costs per claim for F claimants and M claimants can be attributed to a small number of high cost claims, among which F claimants were disproportionately represented.

The top 5 percent highest cost claims cost \$134 or more to the claimant. In total there were 64,597 claims in the top 5 percent. Of those claims, 90 percent were made by F claimants, compared to 82 percent by F claimants in the full dataset. Further, for four out of the five most common drugs in the top 5 percent of claims, virtually all of those high-cost claims were made by F claimants.

*Table 3: Most common drugs in the top 5 percent highest cost claims*

	Claims in top 5%	Percent of claims by F claimants in top 5%
Estradiol vaginal	24,392	> 99%
Estrogens, conjugated vaginal	8,389	> 99%
Estradiol	8,292	> 99%
Estrogens, conjugated	7,289	> 99%
Testosterone	5,680	1%

The data collected for this study is insufficient to directly tie this apparent disparity solely to a patient’s gender. These differences could be due to other factors, such as the medical condition being treated, the relative list price of the drug, the delivery mechanism of the drug (such as intravenous versus oral), or the benefit design of the patient’s insurance (for example, formulary placement). Due to this, it is difficult to make specific legislative recommendations to address disparities based solely on the conclusions of this study. Additional research and analysis would be needed to be able to identify the cost drivers that create this apparent disparity, and to make legislative recommendations to address any disparity in the cost of prescription drugs due to gender.

We recommend additional research into the following questions:

- What is driving the disparities in cost sharing? Why do claimants pay a higher share of the cost of claims for estrogens and progestins than for testosterone?
- Why do M claimants make more claims than F claimants? Are there barriers preventing F claimants from getting the drugs they need?
- Why are drugs used by F claimants, such as estradiol and conjugated estrogens, so often the highest-cost claims?
- Why do some claimants have multiple gender flags in their APAC claims data? How should those gender flags be interpreted?

We would also recommend a broader survey of prescription drug claims spanning all therapeutic classes, without limiting our query to claims for hormone replacement drugs. This could help identify whether the apparent disparity is present for non-hormone replacement drugs.

## Drug Price Transparency Program

Oregon’s Drug Price Transparency Program provides accountability for prescription drug pricing through the notice and disclosure of specific drug costs and price information from pharmaceutical manufacturers, health insurers, and consumers.

For more information, visit <https://dfr.oregon.gov/drugtransparency/>. To review the complete report, visit <https://dfr.oregon.gov/drugtransparency/Pages/other-legislative-reports.aspx>.