

OBAMACARE

HEALTH INSURANCE DATA

- A Brief Insight



Capstone Project by Jamila Madda

DDA17 Fulltime DataAnalytics BootCamp

Nashville Software School (Jan 2026)

I AM ALWAYS
DOING THAT WHICH
I CANNOT DO, IN
ORDER THAT I MAY
LEARN HOW TO DO
IT.

Pablo Picasso

Capricorn
Dental Office *Teacher*
Administrator *Simple Happy-Go-Lucky*
Curious **Dentist** Baker
Hard Working
Learner For Life
For Life Free-Spirited

Data Source



Official HealthCare.gov website operated by the federal government through the Centers for Medicare & Medicaid Services (CMS) as part of the Affordable Care Act (ACA).

Additional Datasets



TN counties Per Capita Income



State of Tennessee Downloadable GIS Data

Geospatial Analysis



Annual Average Occupational wages in TN
from 2008-2025



County Health
Rankings & Roadmaps

County Health data for Tennessee (2025)



My Home state 

30-year-old couple with two children



Present year of **2026**

3 Tiers   

To deepen the analysis, the project narrows its focus to



My Data Questions

- Why Silver Plans cost more than Gold
- Percentage of premium increase between Bronze, Silver and Gold tiers.
- Geographical Location Vs Premium
- Factors affecting premium rates
- Relationship between Income and Insurance Premiums across Tennessee counties
- Plan comparison across multiple insurers.
- Year-on-Year Percentage Premium change Analysis
- Wage Increase Vs Premium Increase

Understanding Health Insurance Plans

Tier	Plan Pays	Customer Pays
Bronze	60%	40%
Silver	70%	30%
Gold	80%	20%
Platinum	90%	10%



Silver (no CSR) \approx Gold



Standard Silver (no CSR)

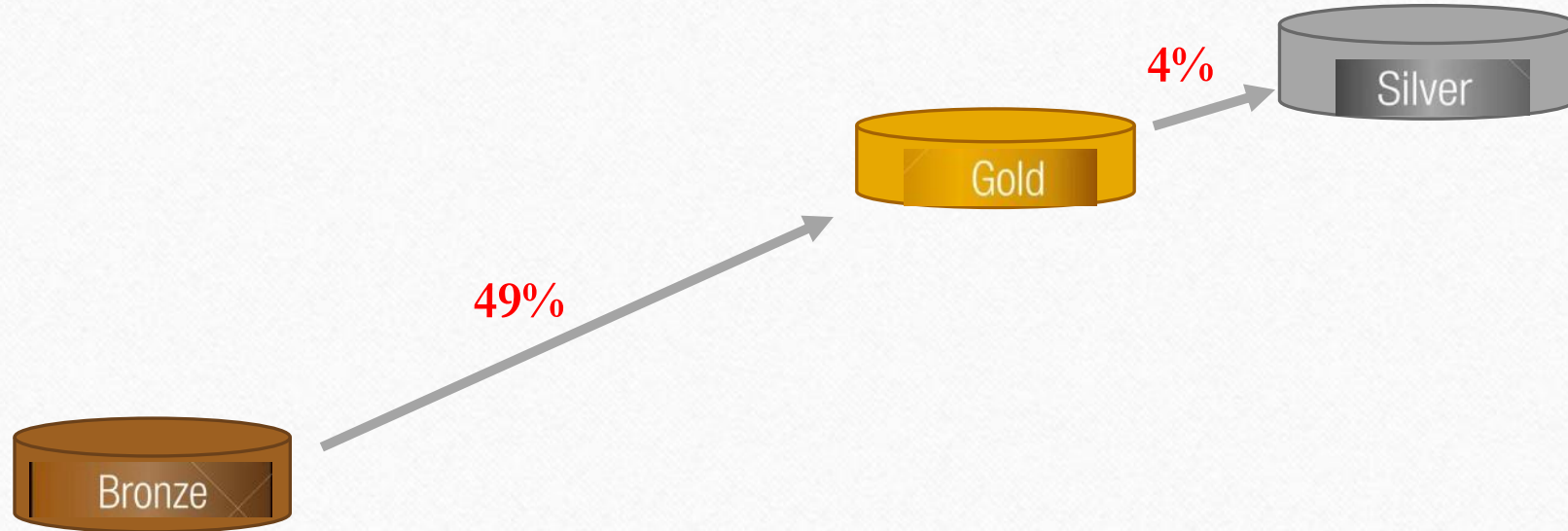
Moderate premium,
similar coverage value

Gold Plan

Higher premium,
comparable coverage

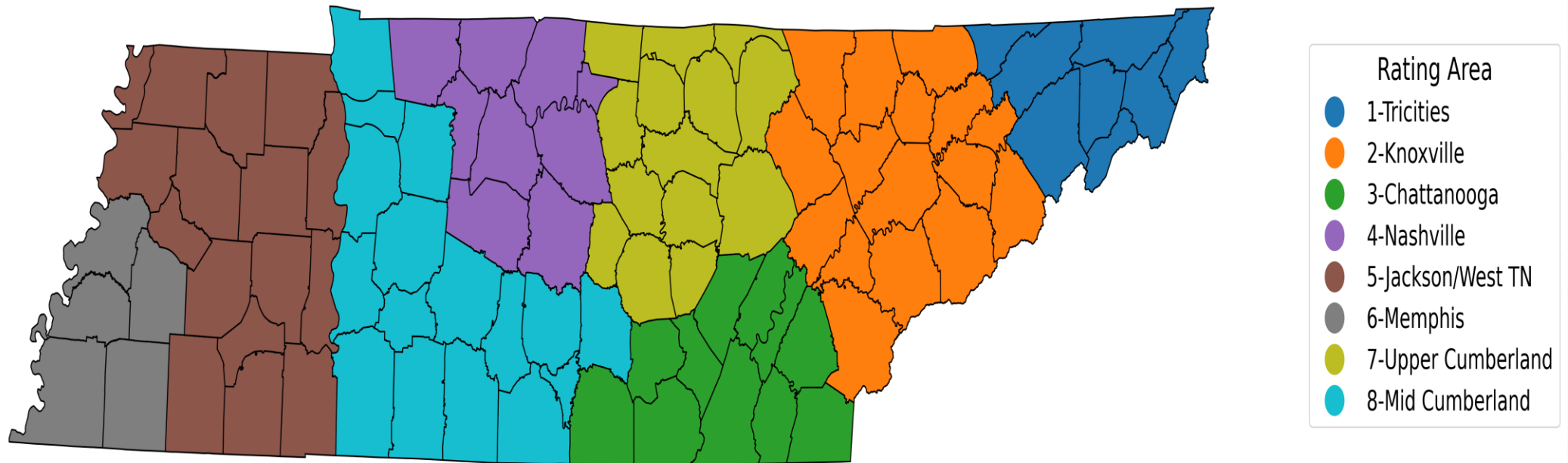
* CSR - Cost Sharing Reductions

Tier Analysis



This pricing structure suggests that Bronze plans are positioned as low-entry options, but the cost of moving to Silver is substantial and may act as a financial barrier.

Tennessee Insurance Rating Areas by County

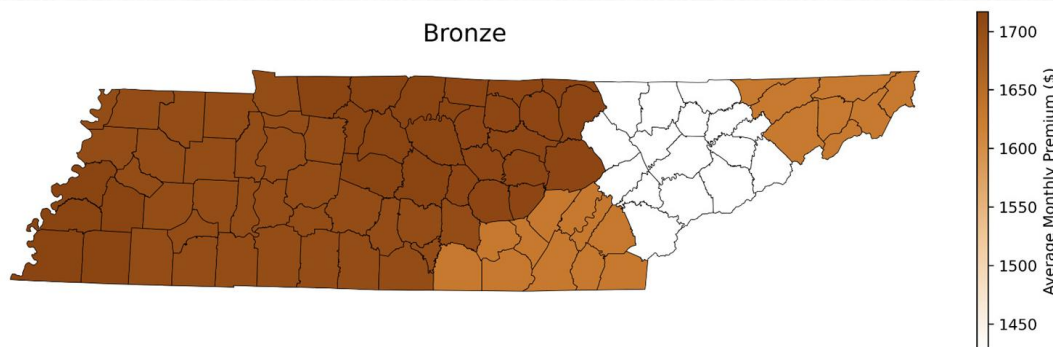


Geographical Location v/s Premium

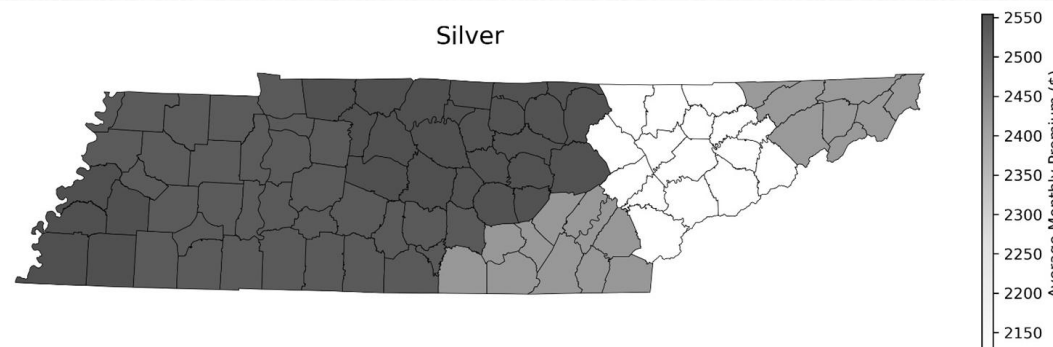
Average Plan cost for a Young Family with Two Children



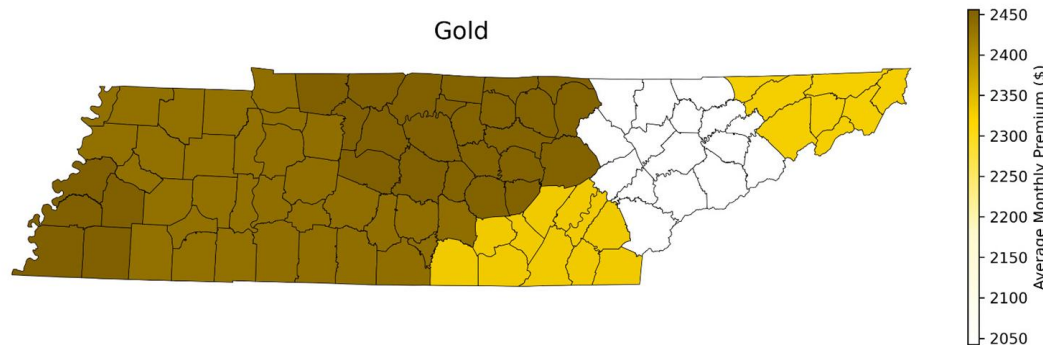
Bronze



Silver



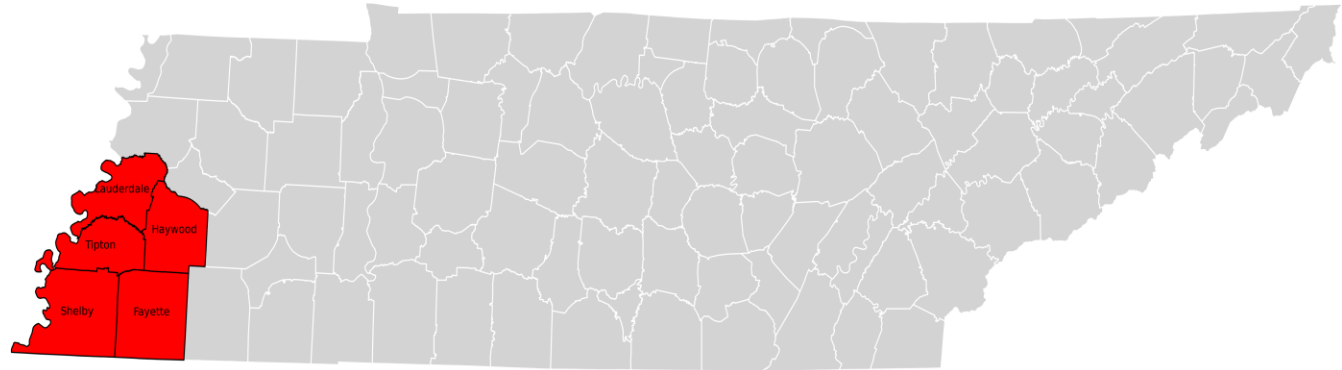
Gold



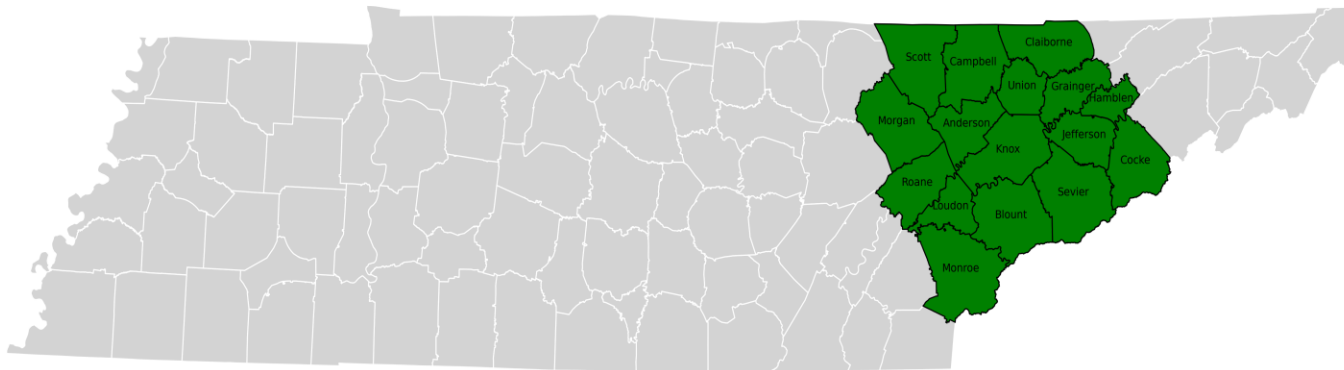
Geography plays a larger role than plan choice.



Top 5 Most Expensive Counties in Tennessee
(Average Plan Cost Across Metal Tiers)



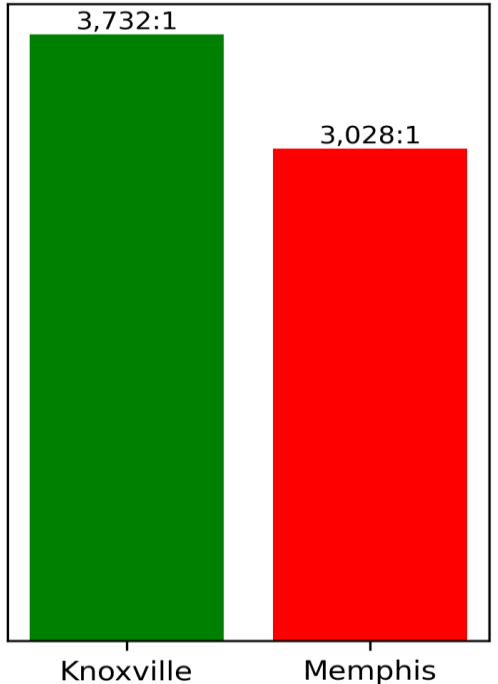
Least Expensive Counties in Tennessee
(Average Plan Cost Across Metal Tiers)



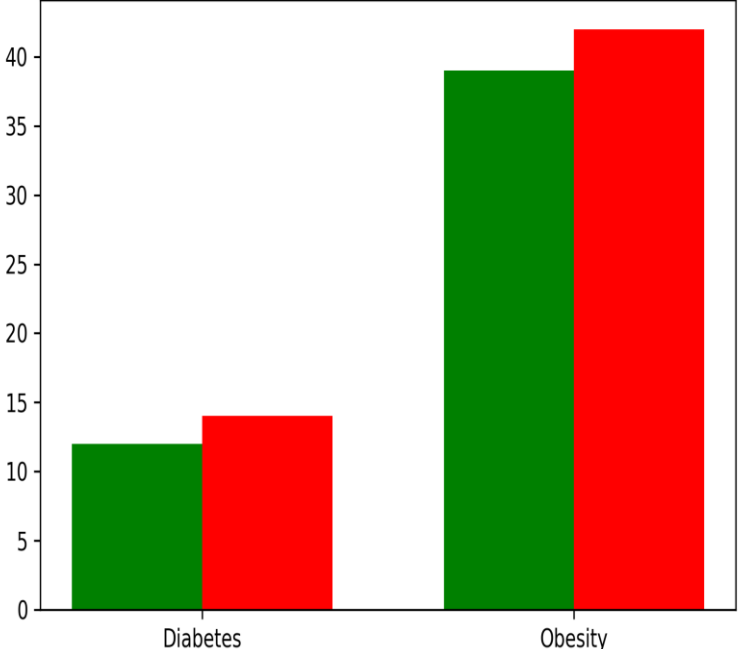
Health Outcome Comparison Table Between Most Expensive & Least Expensive Rating Areas in TN (2025)

Knoxville
Memphis

Primary Care Provider Availability



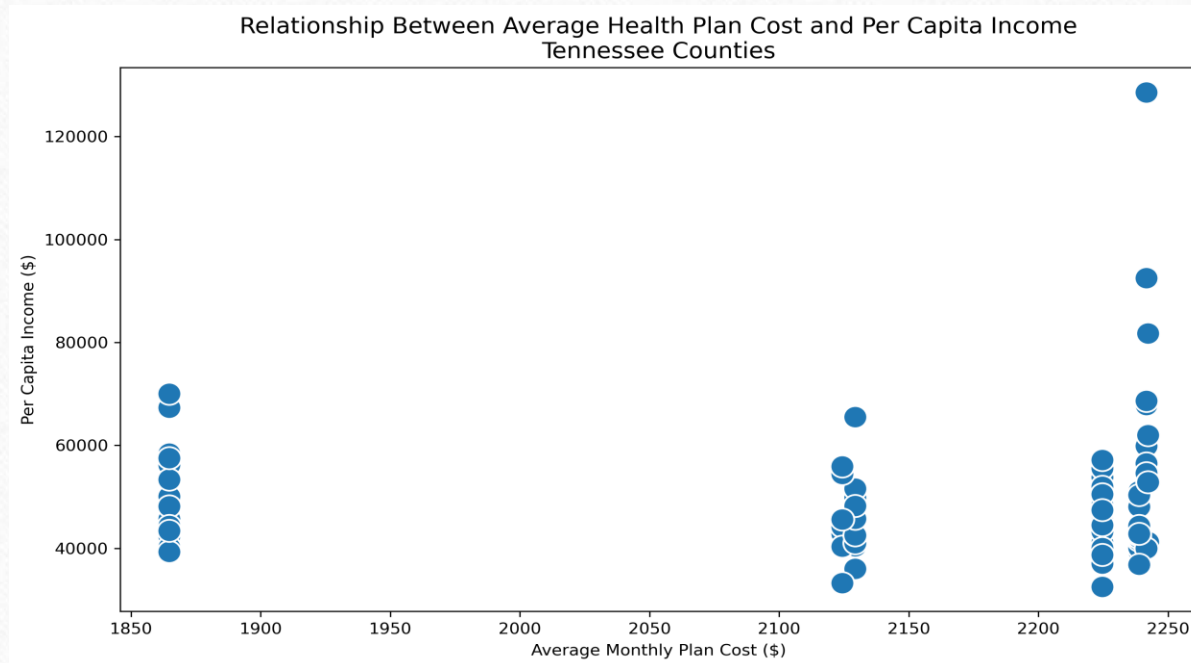
Chronic Conditions (%)



Infectious Disease Burden (Per 100K)



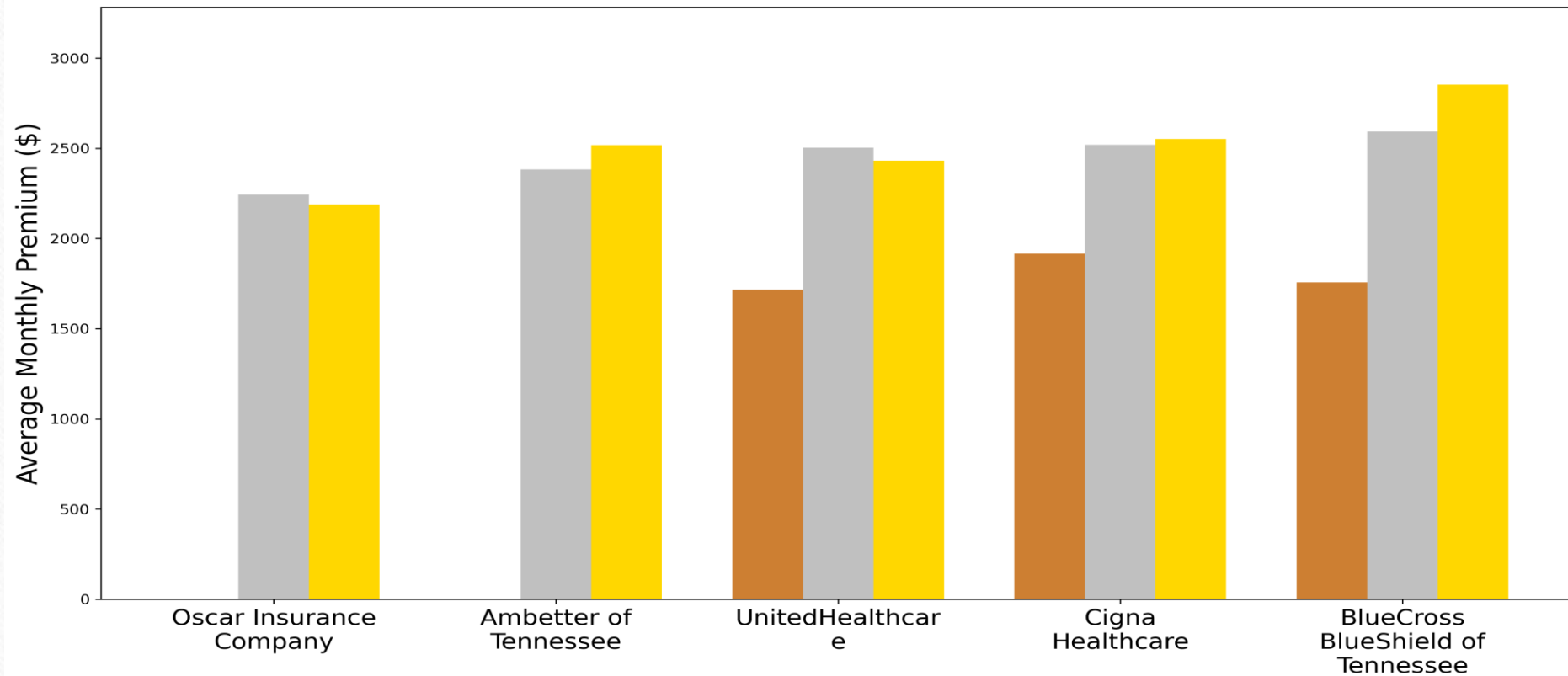
Income v/s Premium






Geography matters more! - A county that is just \$100 more expensive per month adds up to about \$1,200 more per year for the same family and plan tier.

Plan Comparison Across Different Insurance Companies

Williamson County: Average Monthly Premiums by Issuer
Young Family (Couple + 2 Children, Age 30)



Scenario Analysis

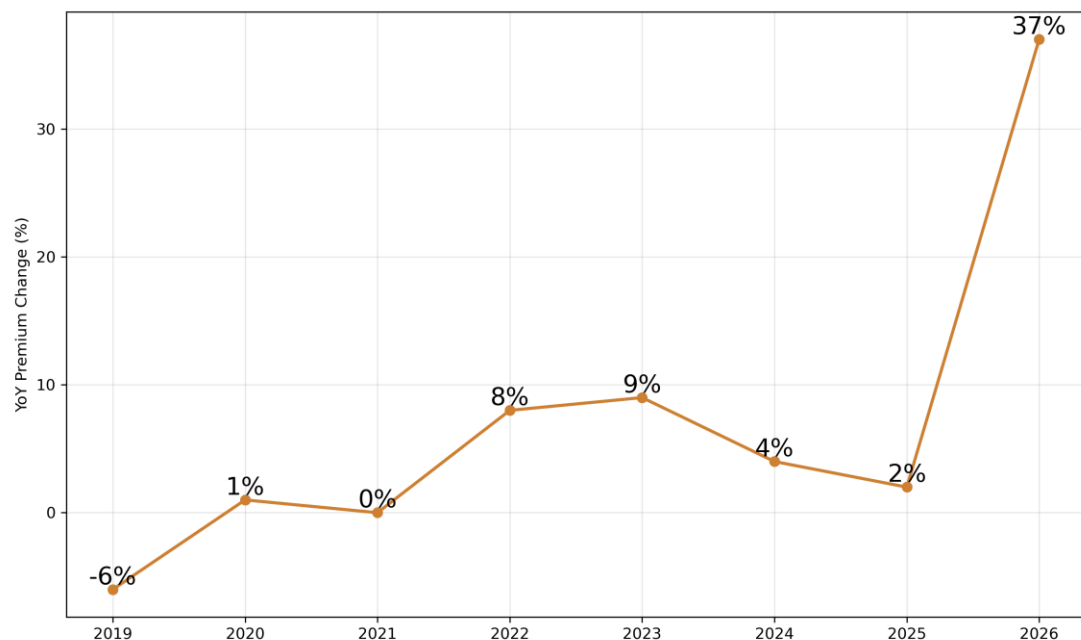
			
Premiums	\$2237	\$2455	\$2597
Added Coverage	None	Adult + Child	Only Child
Deductible - Ind	\$500	\$2000	\$2000
Deductible – Family	\$1000	\$4000	\$4000
OOP – Individual	\$7000	\$8500	\$8200
OOP – Family	\$14000	\$17000	\$16400
Copay – PCP	\$15	\$10	\$30
Copay – Specialist	\$75	\$60	\$60
Inpatient	30%	25%	25%
Emergency	30%	\$500	25%



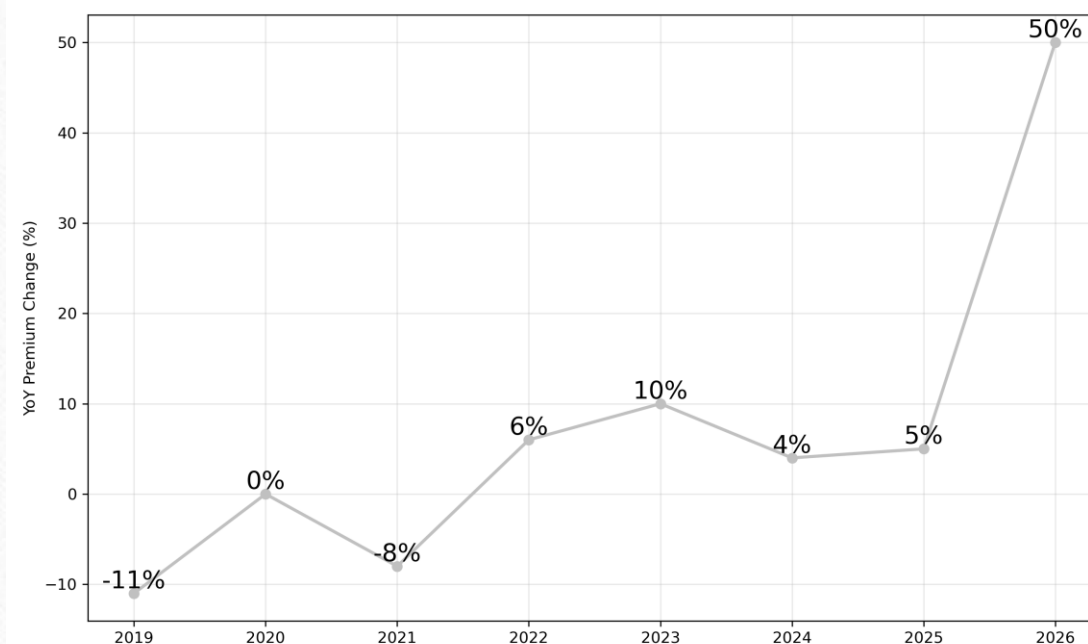


Y-O-Y Percentage Analysis

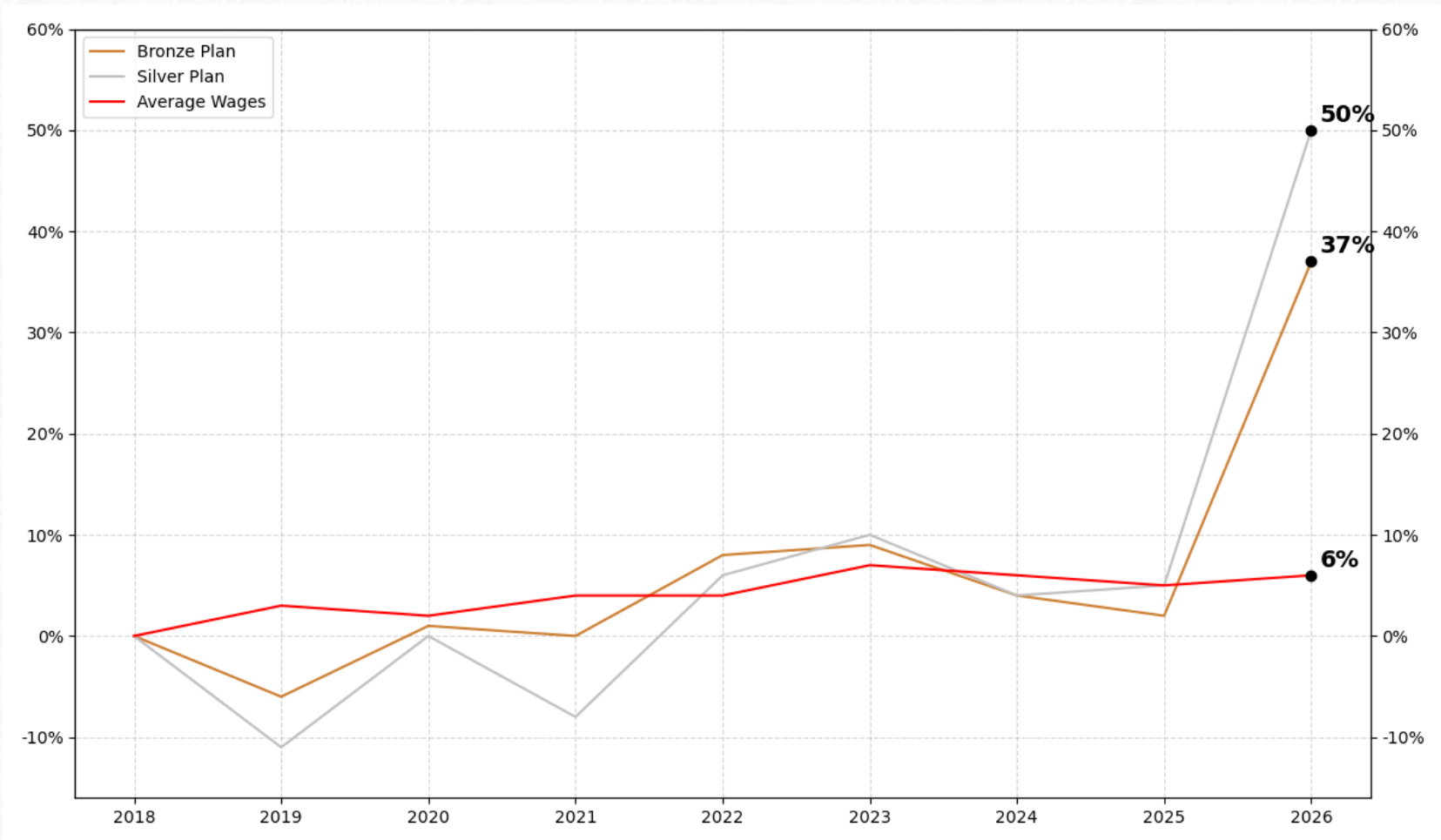
Bronze



Silver



Wage Increase Vs Premium Increase



Affordability Declining in the Affordable Care Act!

- Premiums Rising Faster Than Wages
- Location Strongly Impacts Costs
- Metal Tier Affordability Is Non-Linear
- Silver Helps Some, Bronze Traps Many
- National Cost Pressures Worsen Affordability



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A black speech bubble with a white outline, containing the text "ANY QUESTIONS?" in a bold, white, sans-serif font.

**ANY
QUESTIONS?**