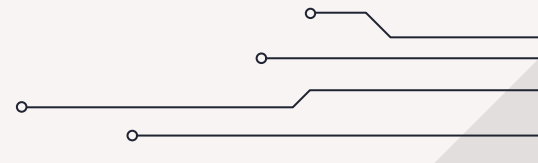




# **Competitive Analysis in Healthcare Exchange Market**

Aidan Taggart

<https://github.com/NordicNyte/sql-project.git>



# Who Am I Helping?

Health Insurance Companies & Shoppers

Shoppers: Shop plans in bulk rather than highly filtered

Companies: Actively manage/predict pricing of plans

Creating a large amount of Data for comparison

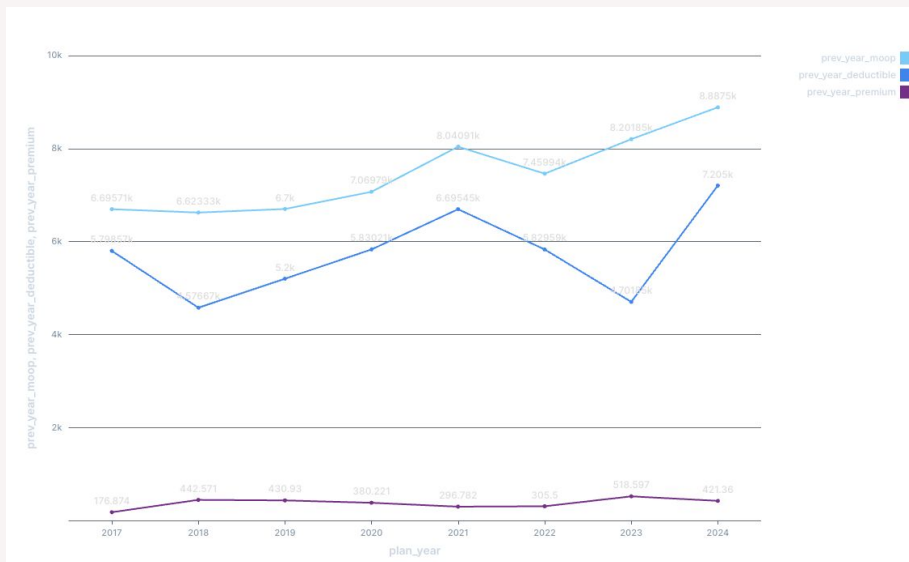
Data for predictive analysis

The background features abstract geometric shapes in blue and grey at the corners. Thin black lines resembling circuit traces with small circles at the ends are positioned in the top right and bottom left corners.

# **API Source:**

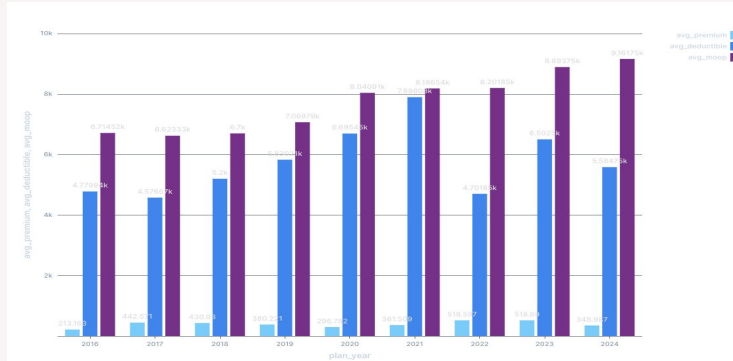
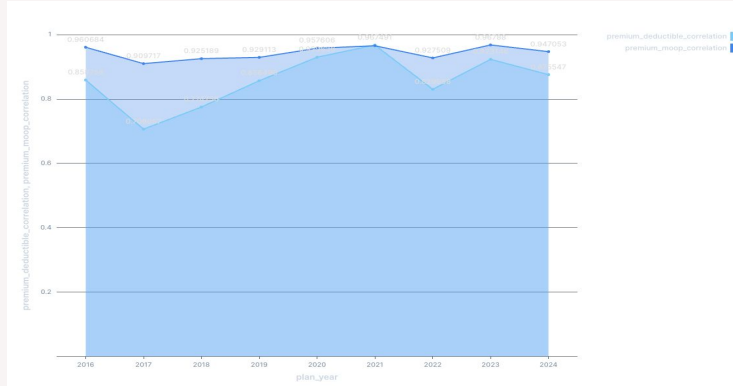
## CMS Marketplace API

# API Descriptive Analytics



- **Business Question:** Analyze changes in insurance costs by year and plan.
- **Insight:** HMO premiums decreased then fluctuated; PPO premiums increased.
- **Recommendation:** Consumers should consider costs; policymakers should adjust benefits.
- **Prediction:** HMO costs may stabilize; PPO costs might continue rising.

# API Diagnostic Analytics



- Business Question: Examine why higher premiums correlate with higher MOOPs.
- Insight: Strong correlation between premiums and MOOPs; variable with deductibles.
- Recommendation: Consumers should weigh premiums against deductibles and MOOPs.
- Prediction: Expect stable premium-MOOP correlation; possible plan adjustments.



# **Web Scrape Source:** `finder.healthcare.gov`

# Web Scraped Descriptive Analytics



## Jupiter

Jupiter is a gas giant and the biggest planet in the Solar System. It's the fourth-brightest object in the night sky and was named after the Roman god of the skies and lightning



## Venus

Venus has a beautiful name and is the second planet from the Sun. It's terribly hot and its atmosphere is poisonous. It's the second-brightest natural object in the night sky



## Saturn

Saturn is a gas giant and has several rings. It's composed mostly of hydrogen and helium. It's the sixth planet from the Sun and was named after the Roman god of wealth and agriculture

# Web Scraped Diagnostic Analytics



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# Conclusion

- Insight from Premium-MOOP Correlation Analysis:
  - Strong Correlation: Higher premiums consistently linked with higher MOOPs across plan types.
  - Variable Correlation with Deductibles: Correlation between premiums and deductibles fluctuates, less predictable than with MOOPs.
- Insight from Yearly Insurance Cost Analysis:
  - HMO Trends: Premiums decreased initially, then showed fluctuations in subsequent years.
  - PPO Trends: Premiums consistently increased over the observed period.