

ADVANCED EXCEL PROJECT

SEIZURE CARE ANALYSIS

An In-Depth Analysis of Seizure Treatment
Costs Among California State Providers

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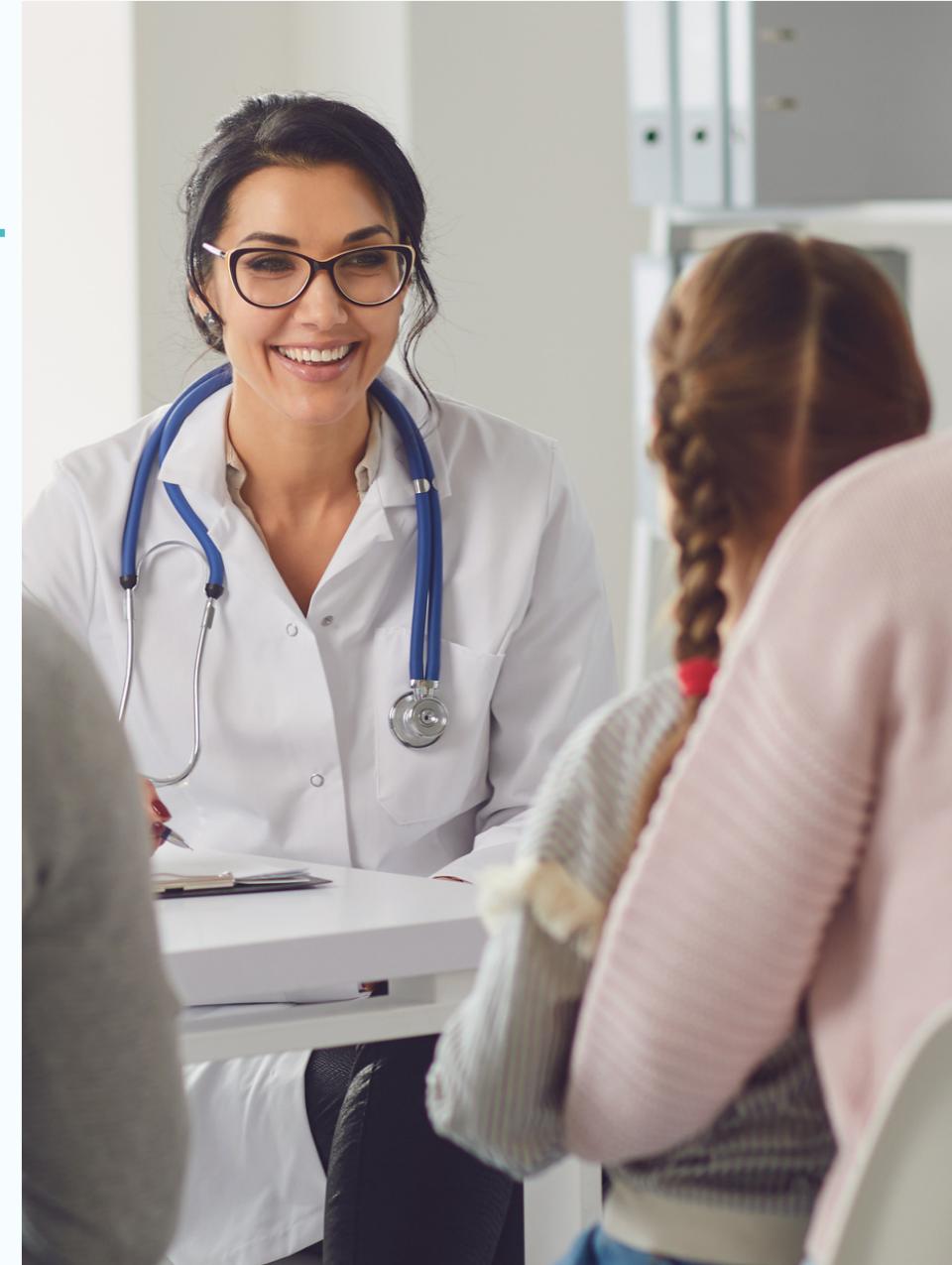
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INTRODUCTION

Welcome to this comprehensive analysis of seizure care providers in California. This report delves into an extensive dataset encompassing over 150,000 records to bring you a focused examination of the healthcare landscape as it pertains to seizure treatment. The goal is to illuminate the variances in treatment costs and provide a clear ranking of providers based on these figures.

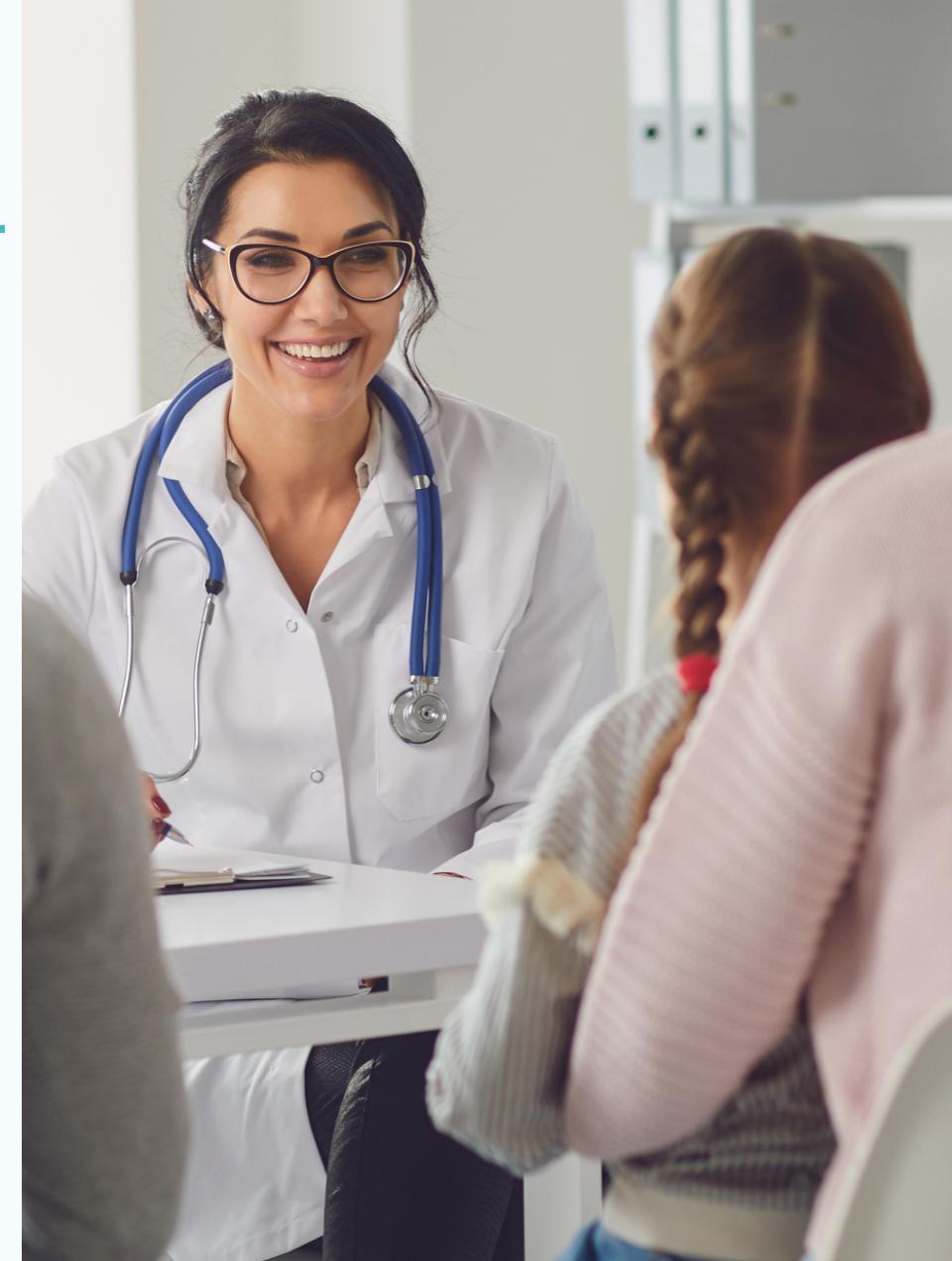
California, a state known for its vast and diverse healthcare system, presents a unique opportunity to assess the economic aspects of seizure care.



OBJECTIVES

The analysis addressed key business questions for California's seizure care providers, including:

- Disparities between average covered charges and actual payments for seizure care in various cities.
- Identification of providers with the highest patient discharges, suggesting specialized care or greater capacity.
- Analysis of the most and least expensive providers by average total payments, reflecting pricing strategies or care complexity.
- The distribution of providers in major cities, indicating market concentration and potential expansion opportunities.
- Correlation between patient discharge rates and provider numbers by city, impacting resource distribution and strategic healthcare planning.



DATA OVERVIEW



- Over 150,000 records.
- 100 different ailments.
- 3,000+ healthcare providers.
- Coverage of all 50 states and approximately 2,000 cities in the USA.
- Includes average treatment costs for about 7 million patients.

[Click to access Dataset](#)

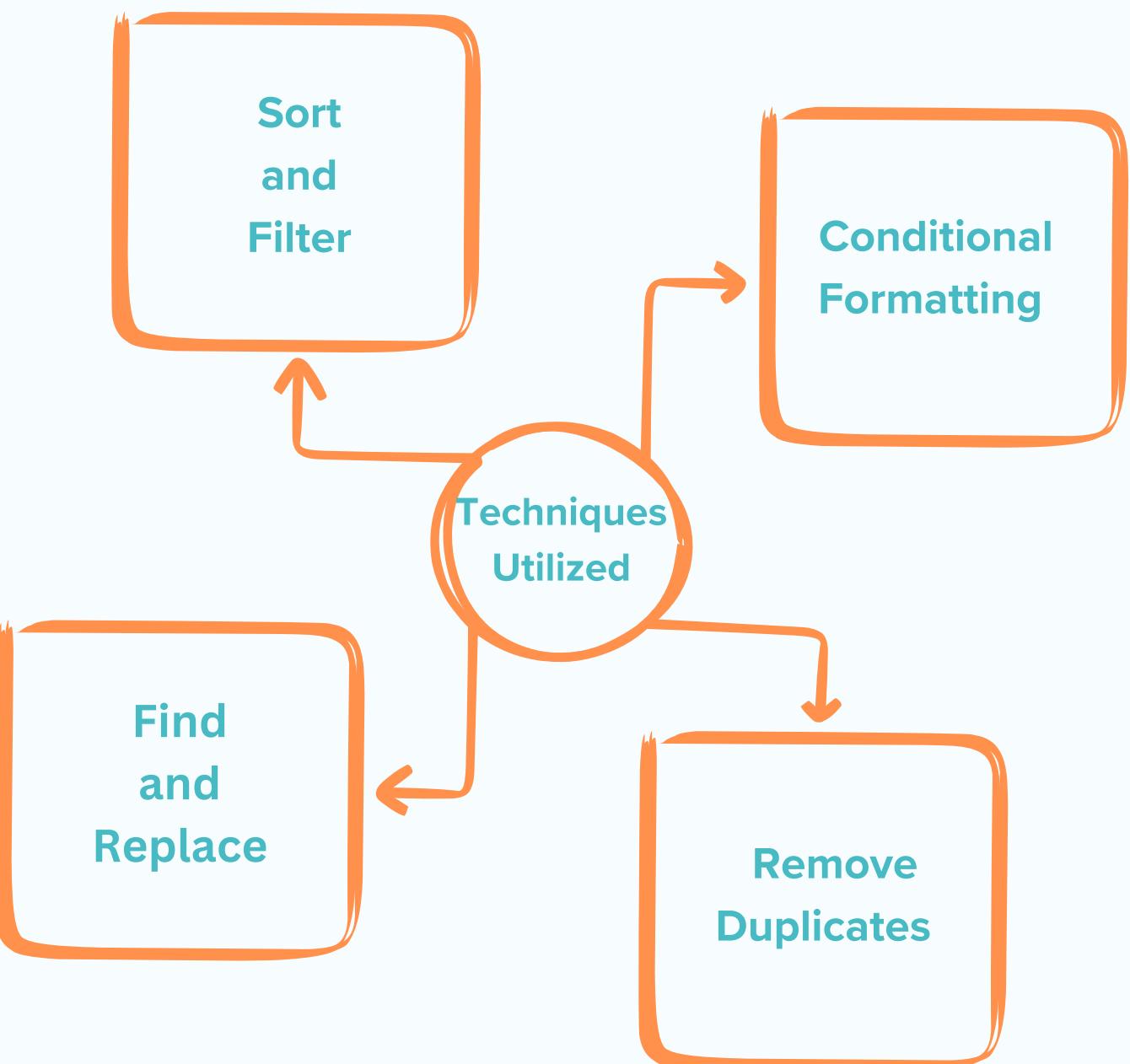
DATA QUALITY ASSESSMENT

Data quality issues found after evaluation are:

- Completeness
- Validity
- Uniqueness
- Consistency

Data Cleaning Tool Utilised:

- Microsoft Excel



SEIZURE CARE PROVIDERS IN CALIFORNIA



TOTAL CARE PROVIDERS

134



TOTAL DISCHARGES

2822



AVERAGE TOTAL COST

\$6,744



AVERAGE MEDICARE COVERAGE

\$5,738

SEIZURE CARE IN CALIFORNIA

Los Angeles leads with 9 providers, while San Francisco, Sacramento, San Jose, Long Beach, Bakersfield, and San Diego each have 3-4 providers. These 7 cities host 29 out of 134 providers, indicating a higher concentration of care options in these urban areas.

Los Angeles has the highest number of discharges at 246, which is over double that of Sacramento and San Francisco. The top 10 cities account for 968 discharges, showing that a significant portion of seizure care is centralized in these cities.

Stanford has the highest average payment at \$10,473.65, while Monterey Park closes the list with \$8,299. The average total payment across these cities is \$9,040, suggesting that the cost of care in these top cities is above the grand average of \$6,744 for California.

7 Cities with the most number of Seizure Care Providers



figure 1

Top 10 Cities Ranked by Total Number of Seizure Patient Discharges

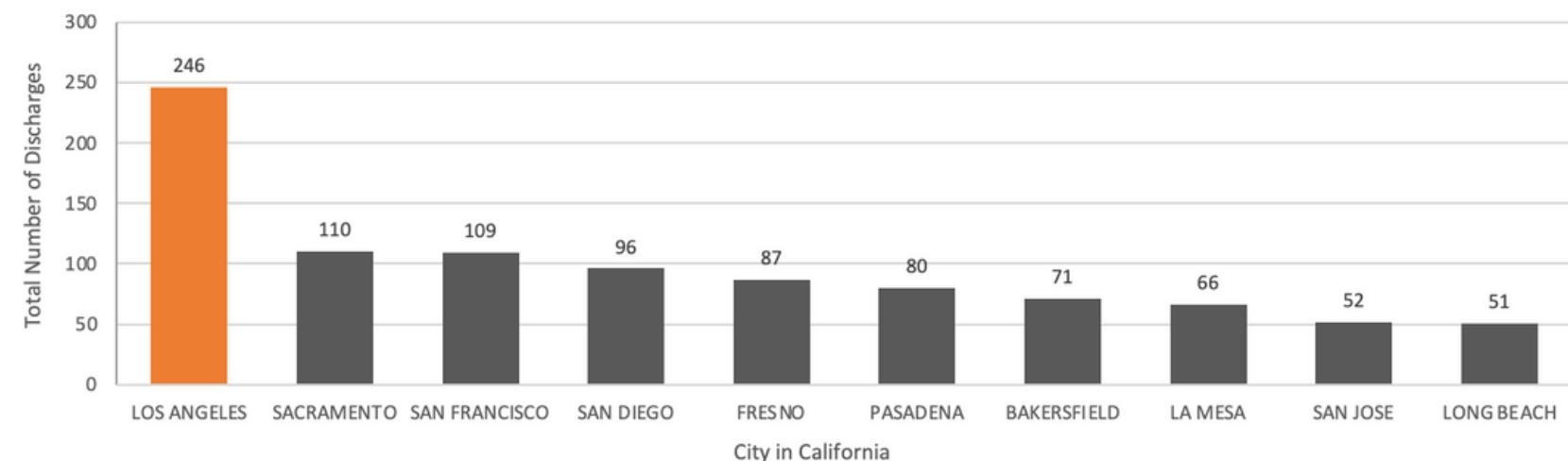


figure 2

10 Most Expensive Cities Ranked by Average Total Payments



figure 3

CARE PROVIDERS ANALYSIS

The top provider HUNTINGTON MEMORIAL HOSPITAL (ID: 50438) leads with 80 discharges, a significant number compared to the tenth MERCY SAN JUAN MEDICAL CENTER (ID: 50516) with 39. The total discharges for the top 10 providers sum to 515, indicating a high concentration of patient discharges in these facilities.

EISENHOWER MEDICAL CENTER (ID: 50573) is the least expensive, with an average payment of \$4,804. The top 10 cheapest providers have average payments ranging narrowly from \$4,804 to \$5,123, suggesting a competitive pricing segment.

The most expensive provider, RONALD REAGAN UCLA MEDICAL CENTER (ID: 50262) has an average payment of \$13,799.84, which is nearly three times more than the cheapest provider. The top 10 expensive providers show a wider range in payments, indicating a more varied pricing strategy or service offering.

10 Most Expensive Providers Ranked by Average Total Payment

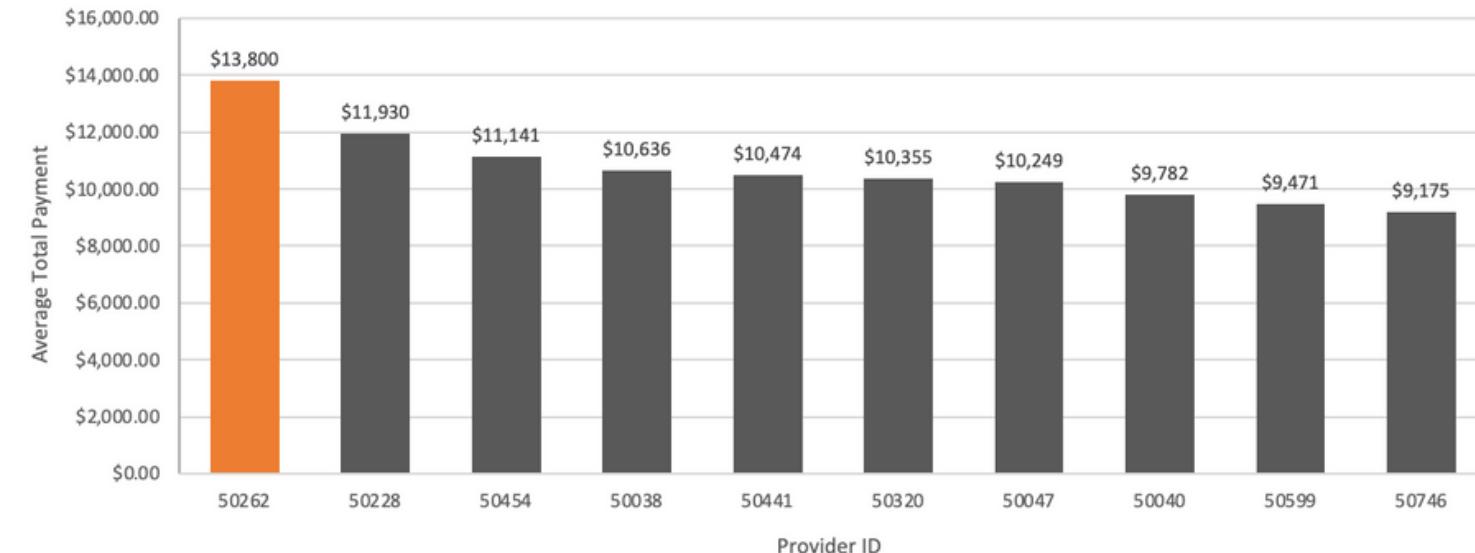


figure 4

10 Cheapest Providers Ranked by Average Total Payment

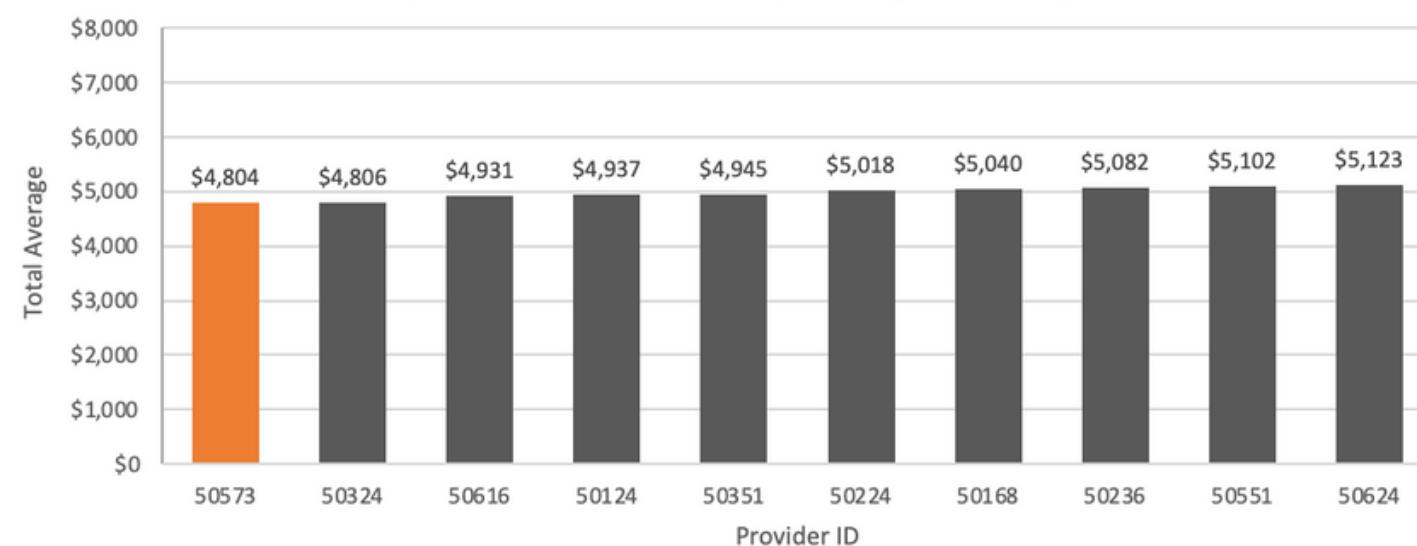


figure 5

Top 10 Providers ranked by seizure Patient Discharges

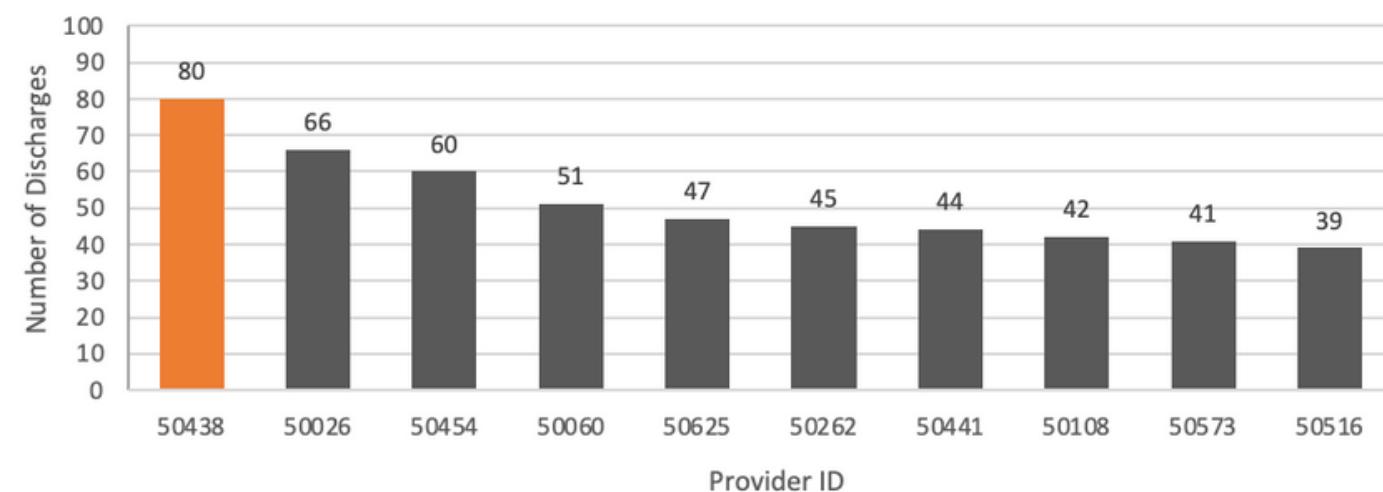


figure 6

PRICE ANALYSIS

There's a notable disparity between the average total payments and the average Medicare payments. On average, providers charge \$6,743.78 for seizure-related treatments, while Medicare's average payment stands at \$5,738.21. This suggests a consistent gap where Medicare payments are approximately 85% of the total billed amounts.

Cities like Stanford show a significant deviation from the norm, with average total payments reaching \$10,473.65, and Medicare payments also topping the chart at \$9,525.38. In contrast, locations such as Camarillo present more economical options, with the lowest average total payment of \$4,931.00 and Medicare payments at \$3,901.33, indicating a potential area for cost savings for patients and insurers alike.

California have a significant gap between the average covered charges (\$37,127) and the average total payments (\$6,744). This indicates that the actual payments are just around 18% of the charged amounts, suggesting either substantial discounts or adjustments are typically applied to the initial charges.

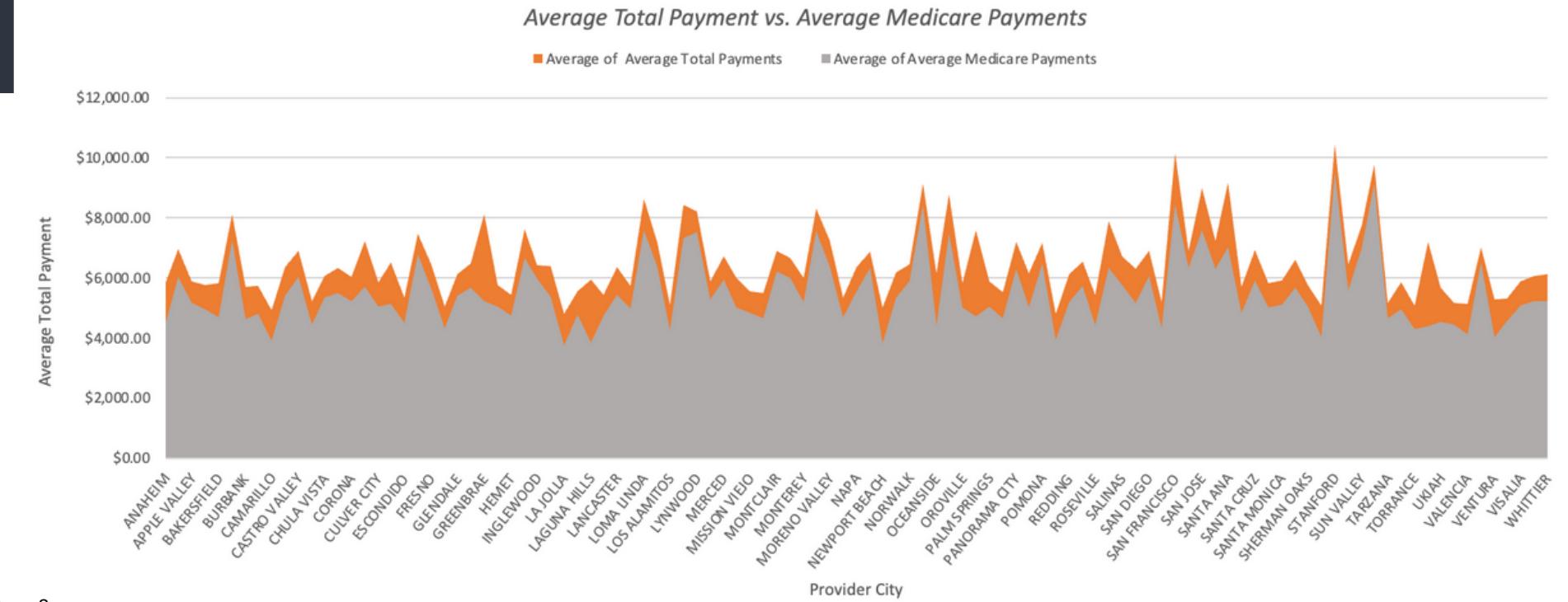


figure 8

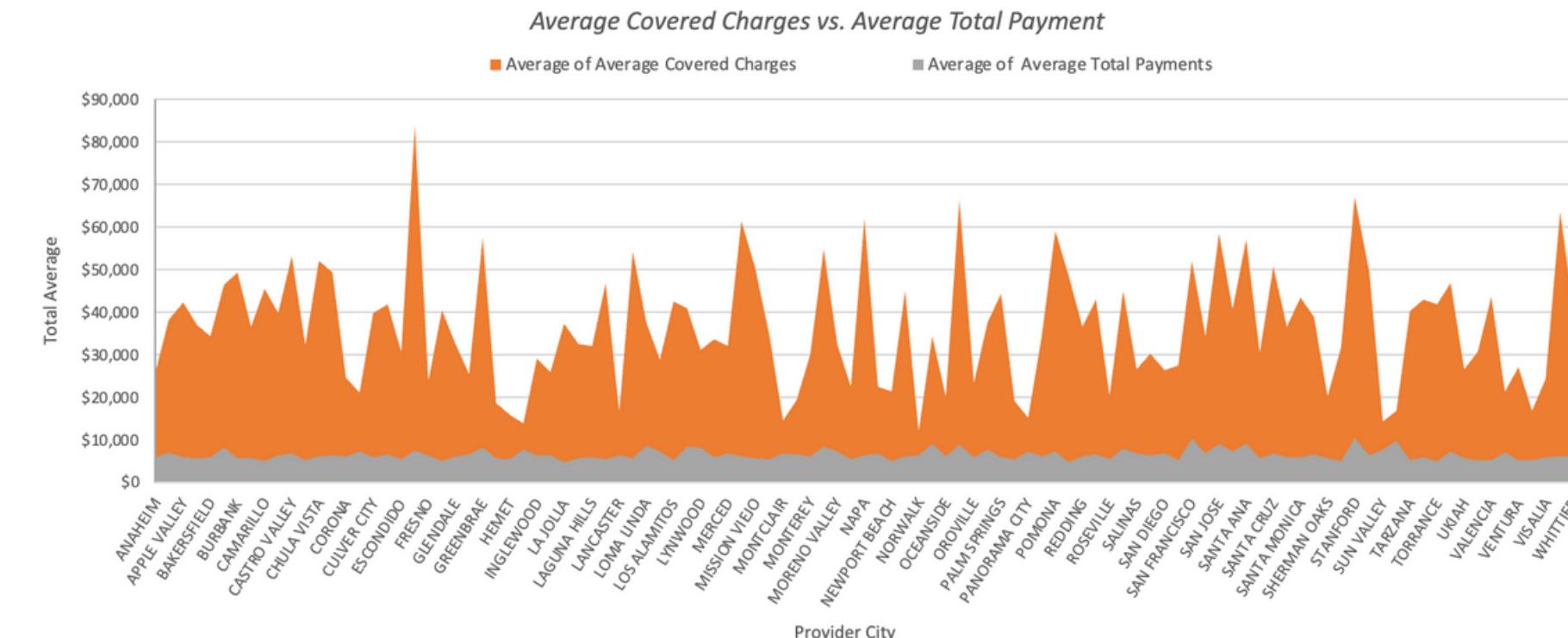


figure 9

SUMMARY

Our analysis reveals a significant urban concentration of seizure care providers in California, with Los Angeles leading in both the number of providers and patient discharges. The data indicates a disparity in care distribution, with 29 of the total 134 providers situated in just seven major cities. This urban focus is further reflected in patient discharges, where the top 10 cities account for 968 out of 2822 total discharges.

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Financial insights show a notable variance in the cost of care. The average total payments in the top 10 cities, led by Stanford and San Francisco, are substantially higher than the state average, suggesting a premium on seizure care in these locations. This could be indicative of either higher care quality or market dynamics affecting pricing in urban centers.

In conclusion, seizure care in California is predominantly urban-centric, with a cost structure that may pose accessibility challenges for patients outside major cities.

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Thank You!
