

The Company, Inc.

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Final Presentation

Team Introduction



Yishi Lu



Leann Li



Vandik Zaveri



Lin Jiang



Yurong Jiang

Agenda

Problem Statement, Issue Tree

Exploratory Data Analysis

Recommendations

Insights, Summary and Feedback

Problem Statement & Issue Tree

Problem Statement

**Which Markets Should
The Company Target in
Los Angeles Counties?**



How should we **perform**
data analysis?

Who are the current
patients?

What **marketing strategies**
should be implemented?

Issue Trees

Data Analysis

What kind of datasets are available to us?

How should we clean and join the datasets?

What tools should we use for this project?

What kinds of visualizations are needed?

Current Patients

Service items vs. customer attributes

Patient visits vs. customer attributes

Office locations vs. customer attributes

Distribution of customers

Marketing Strategies

What's the most effective marketing plan currently?

What's potential customer demographics?

What's the market size?

What strategies should we use?

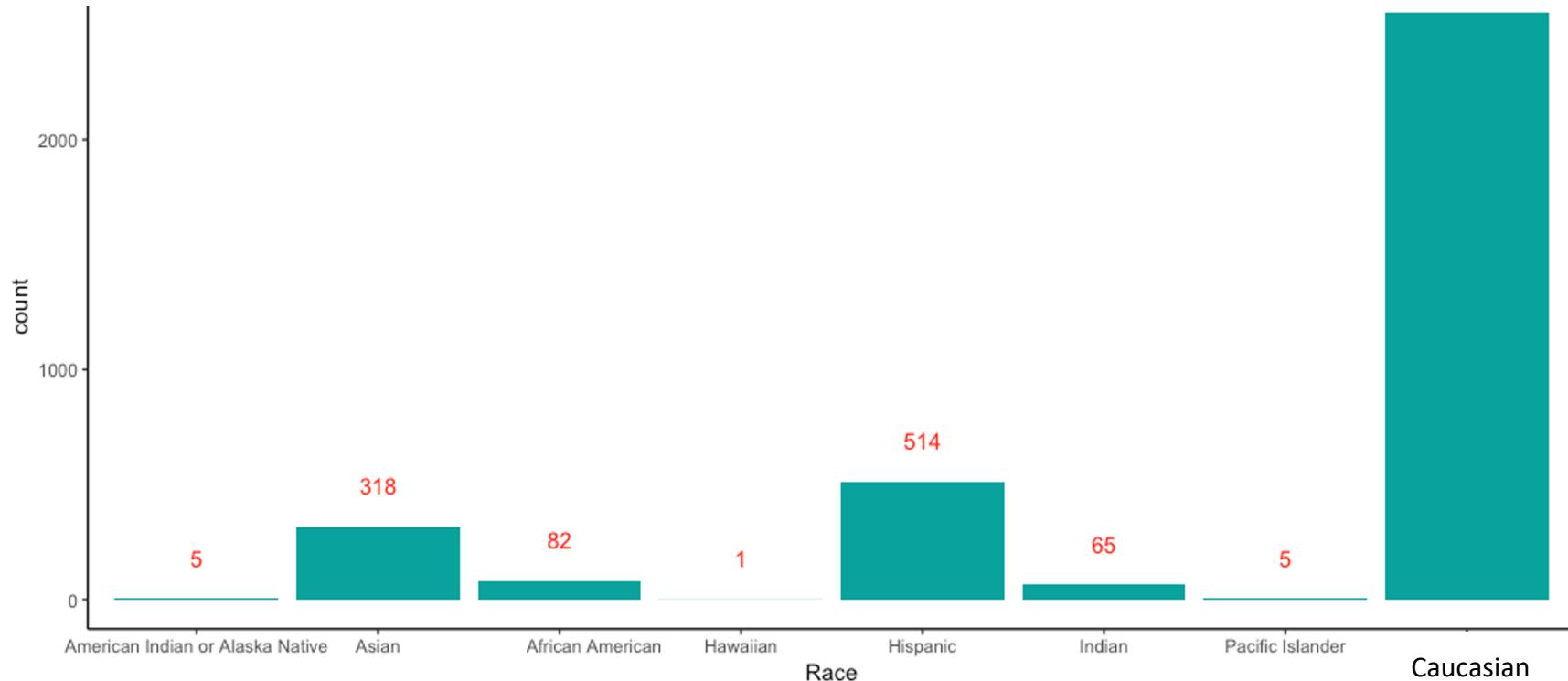
Key Recommendation Overview

Key Recommendation Overview

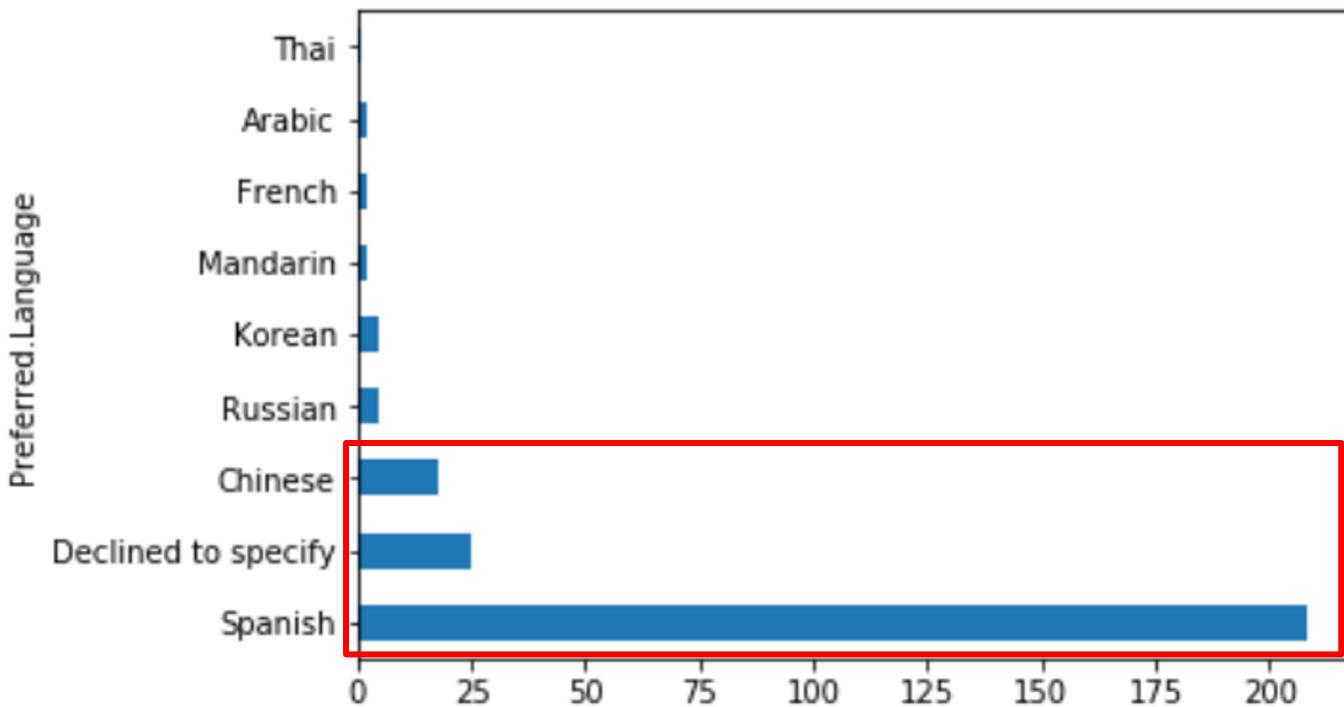
- Capture the demand of young patients in cosmetic surgery market
- Customized service to minority group in certain offices
- Improvement on marketing Channel

Analysis on Various Attributes

Count of Cosmetic Surgery by Race

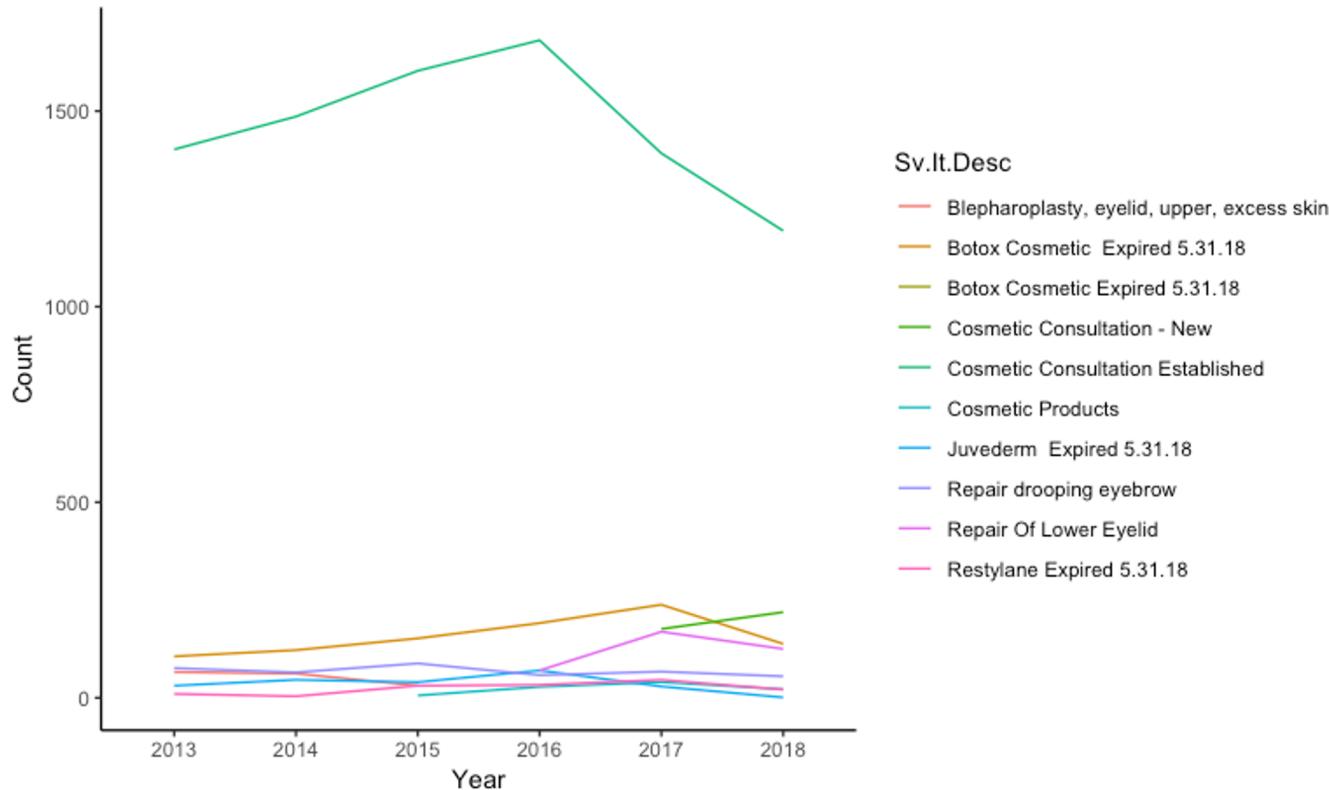


Language Preferences for Cosmetic Patients

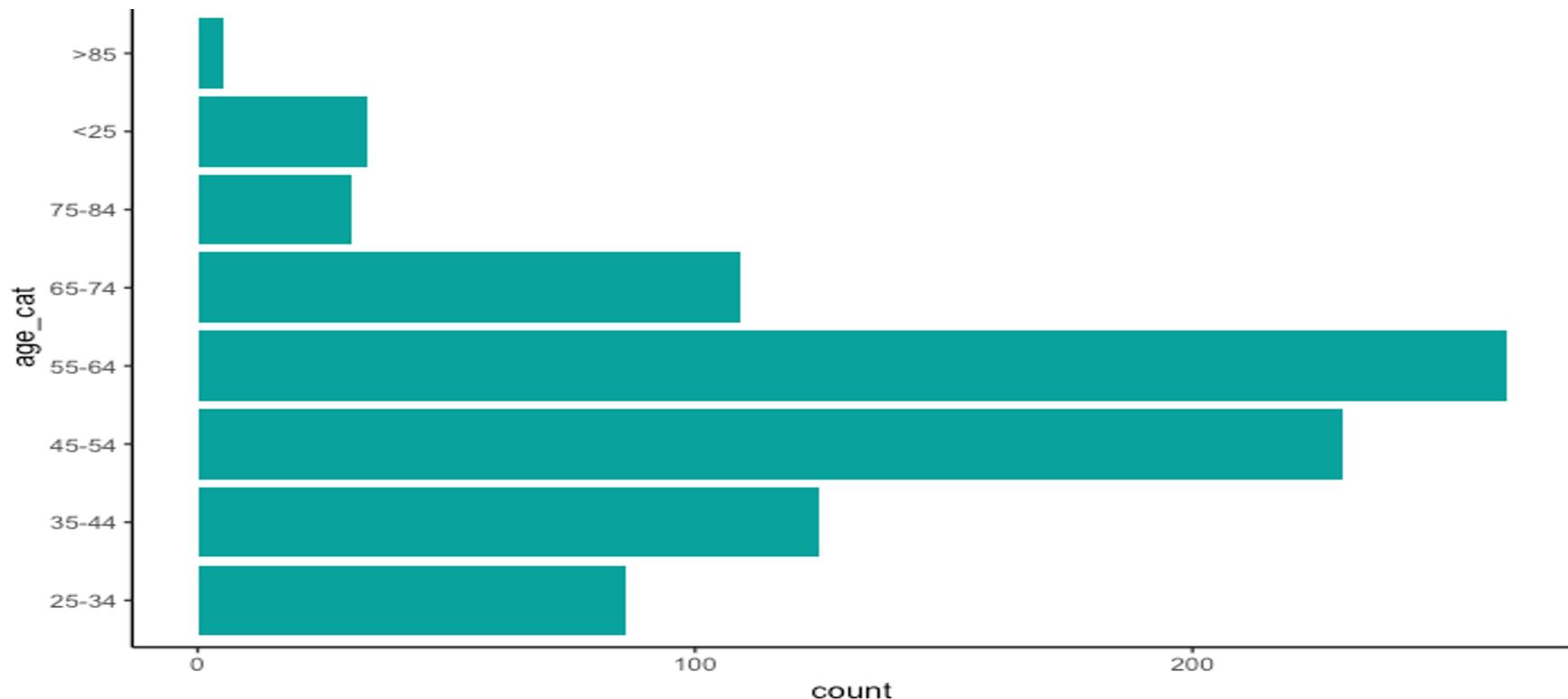


Analysis on Top Cosmetic Service Items

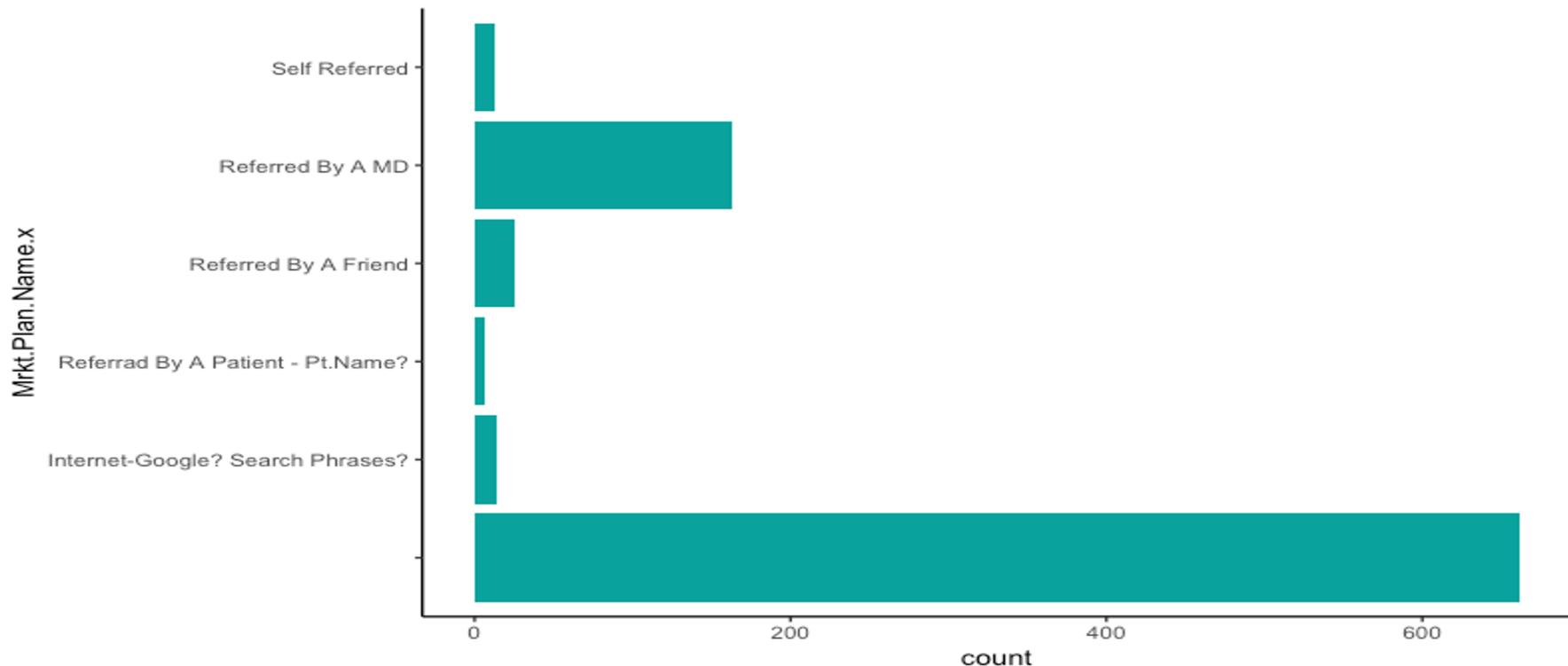
Repair of Lower Eyelid is the Most Popular Surgical Item; Botox Cosmetic is the Most Popular Non-surgical Item



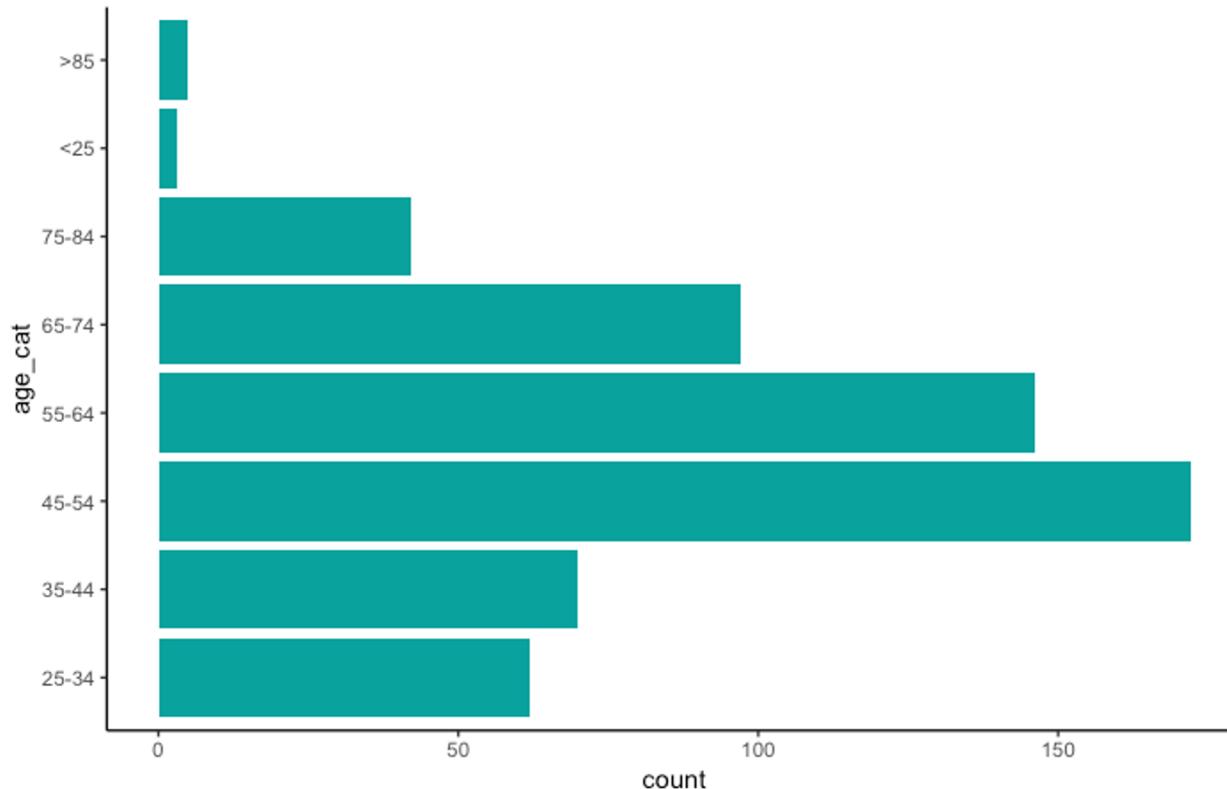
Age Distribution for Cosmetic Consultation Established



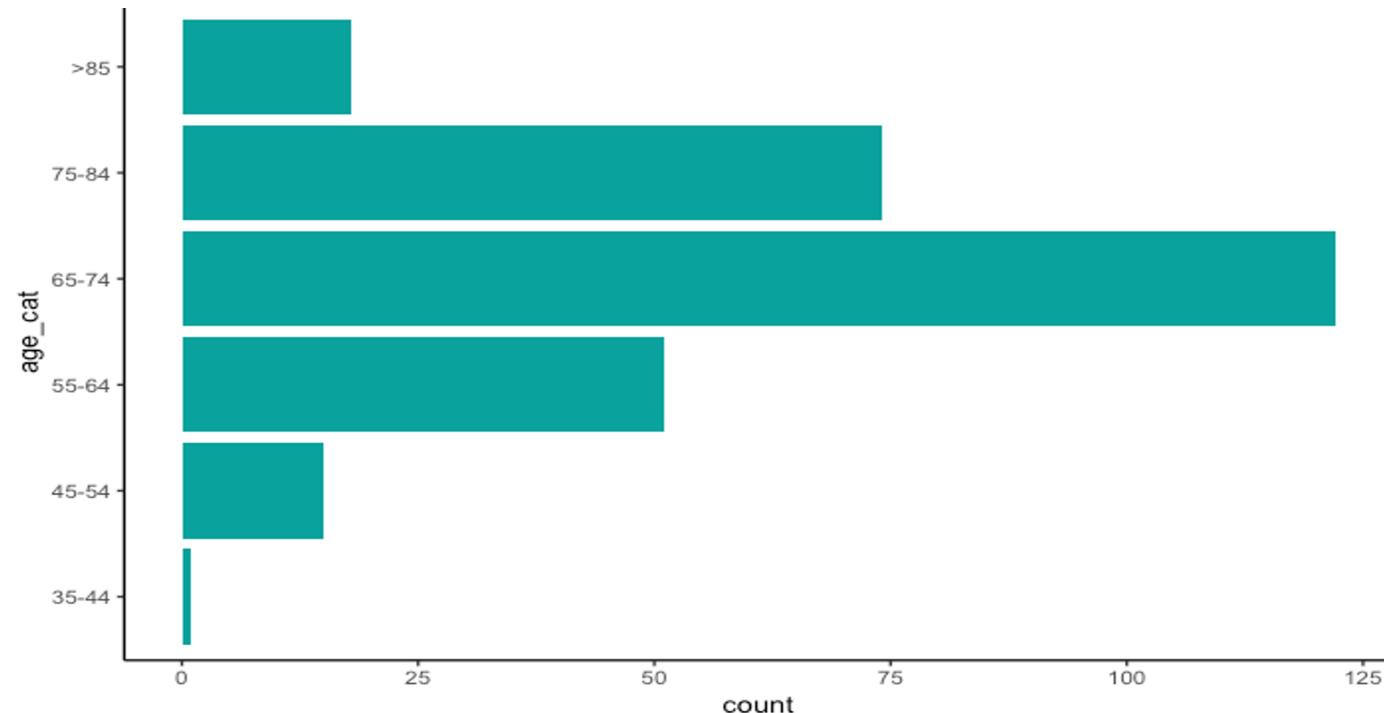
Market Plan Distribution for Cosmetic Consultation



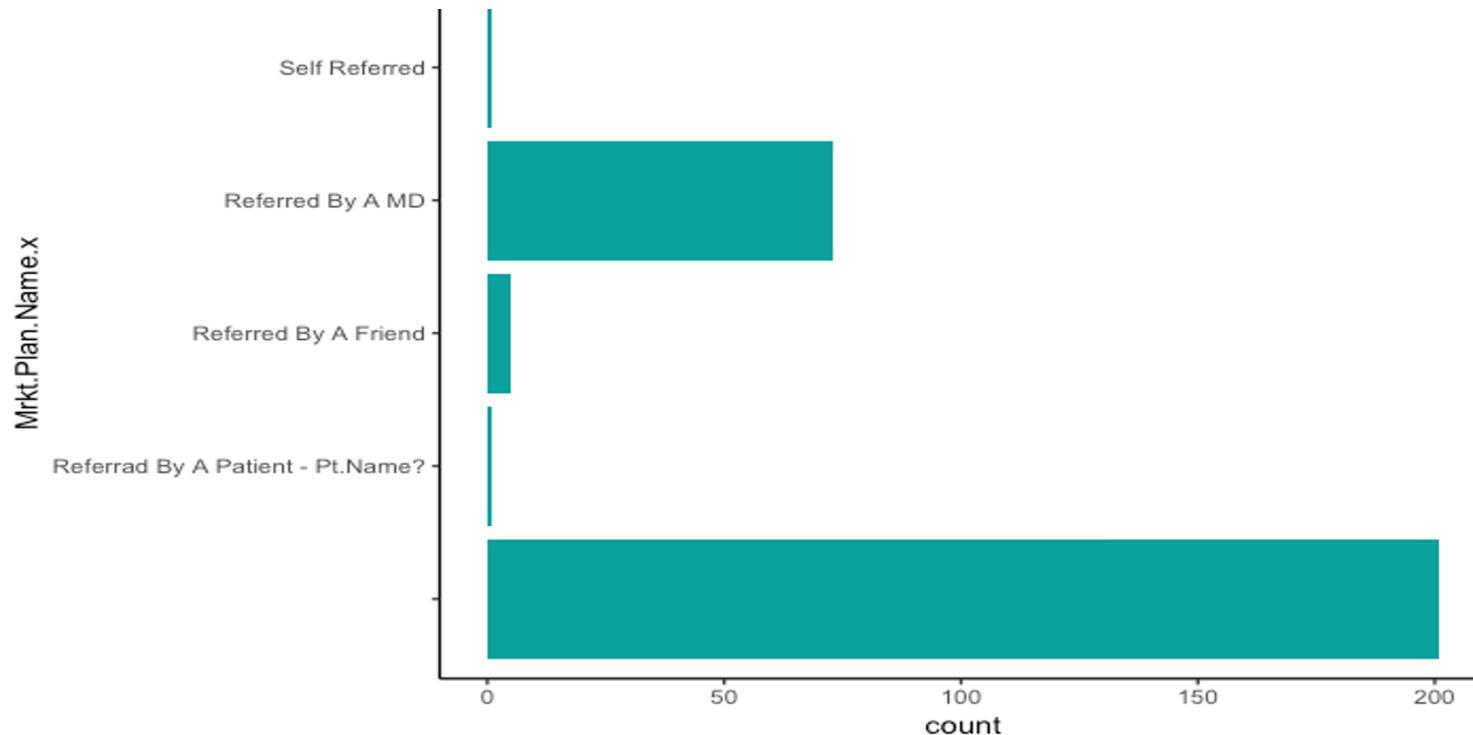
Age Distribution for Botox Cosmetic



Age Distribution for Repair Drooping Eyebrow

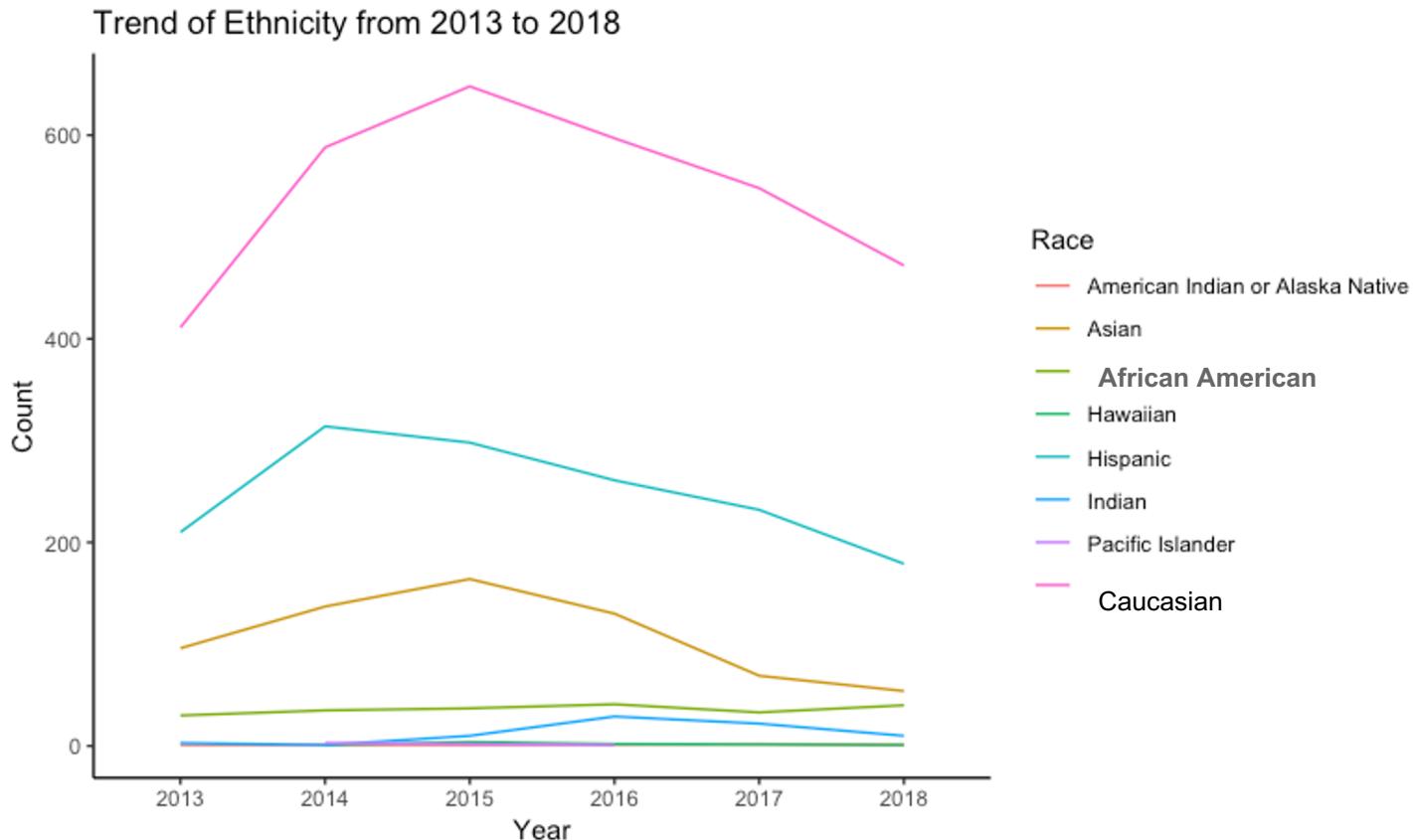


Market Plan Distribution for Repair Drooping Eyebrow

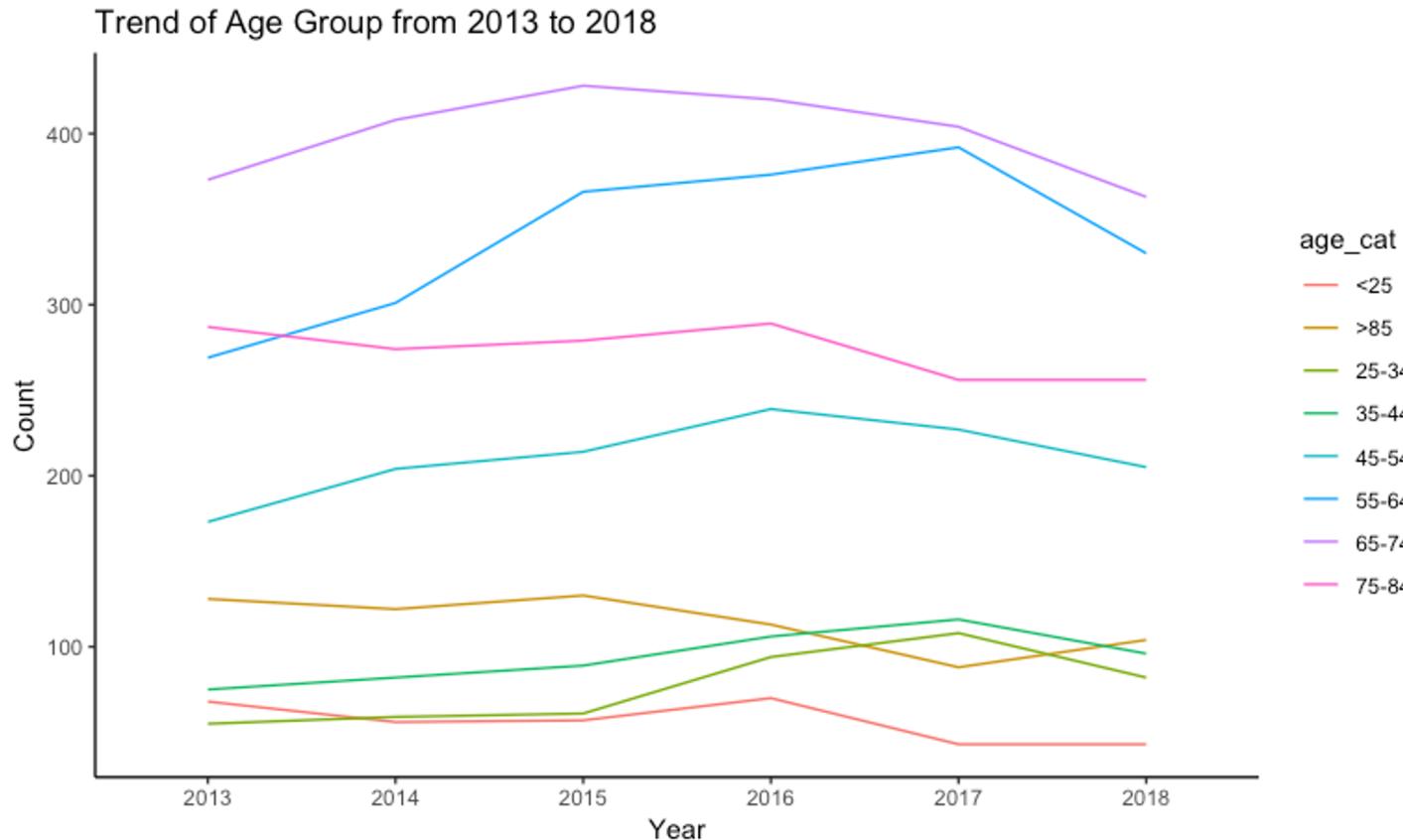


Trend Analysis on Patient Visits

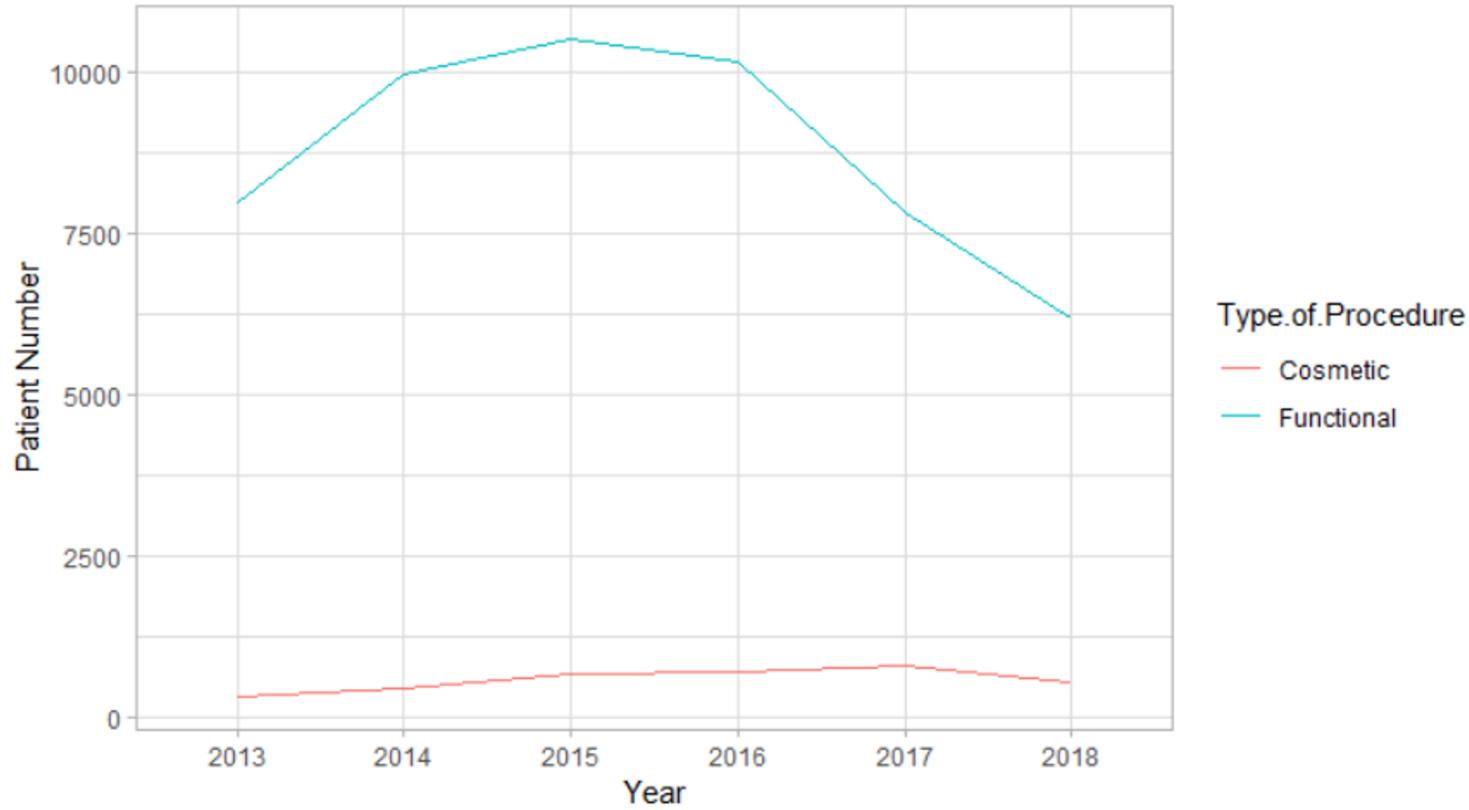
Visit Frequency for Different Ethnicities over the Years



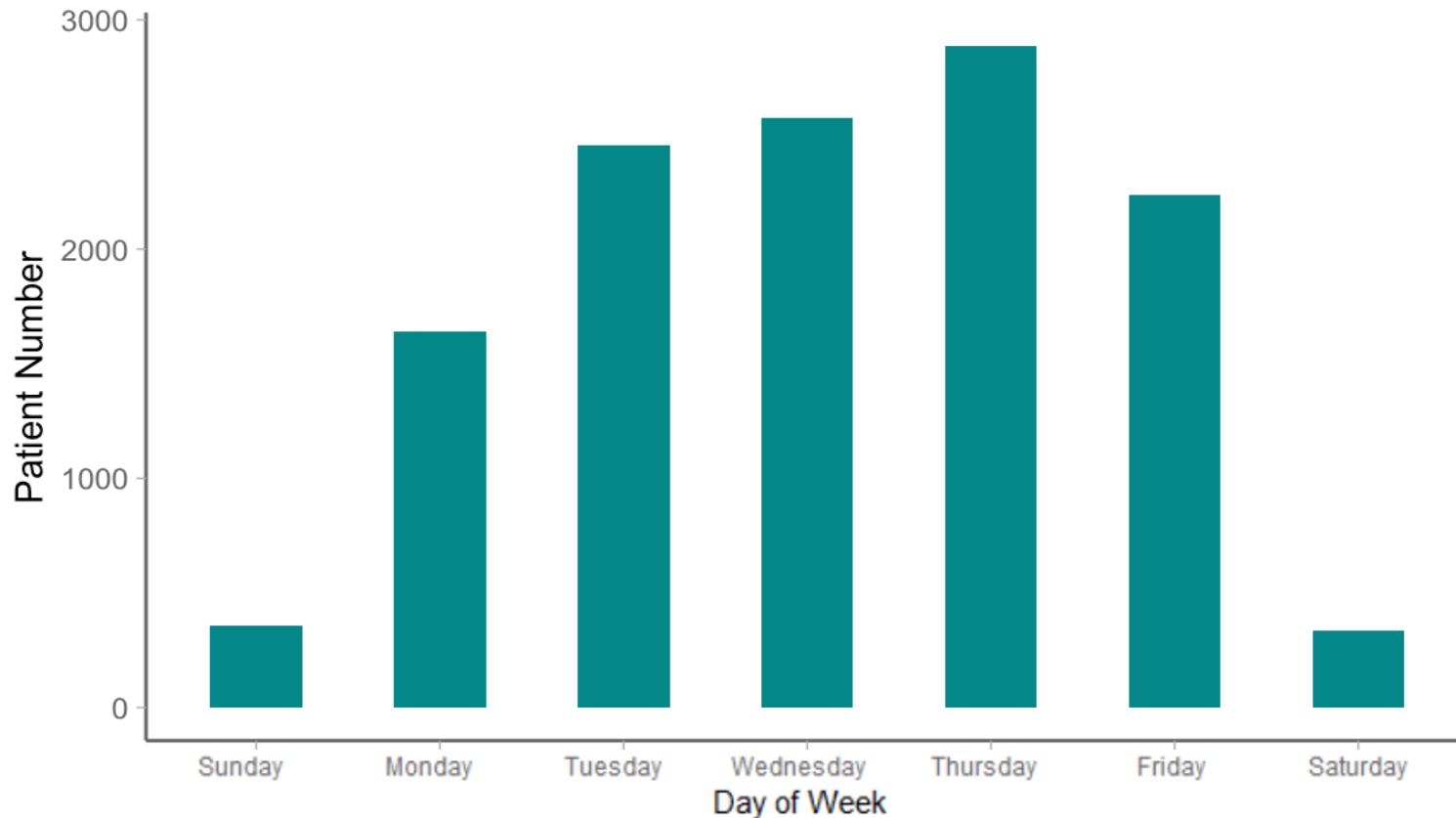
Visit Frequency for Different Age Categories over the Years



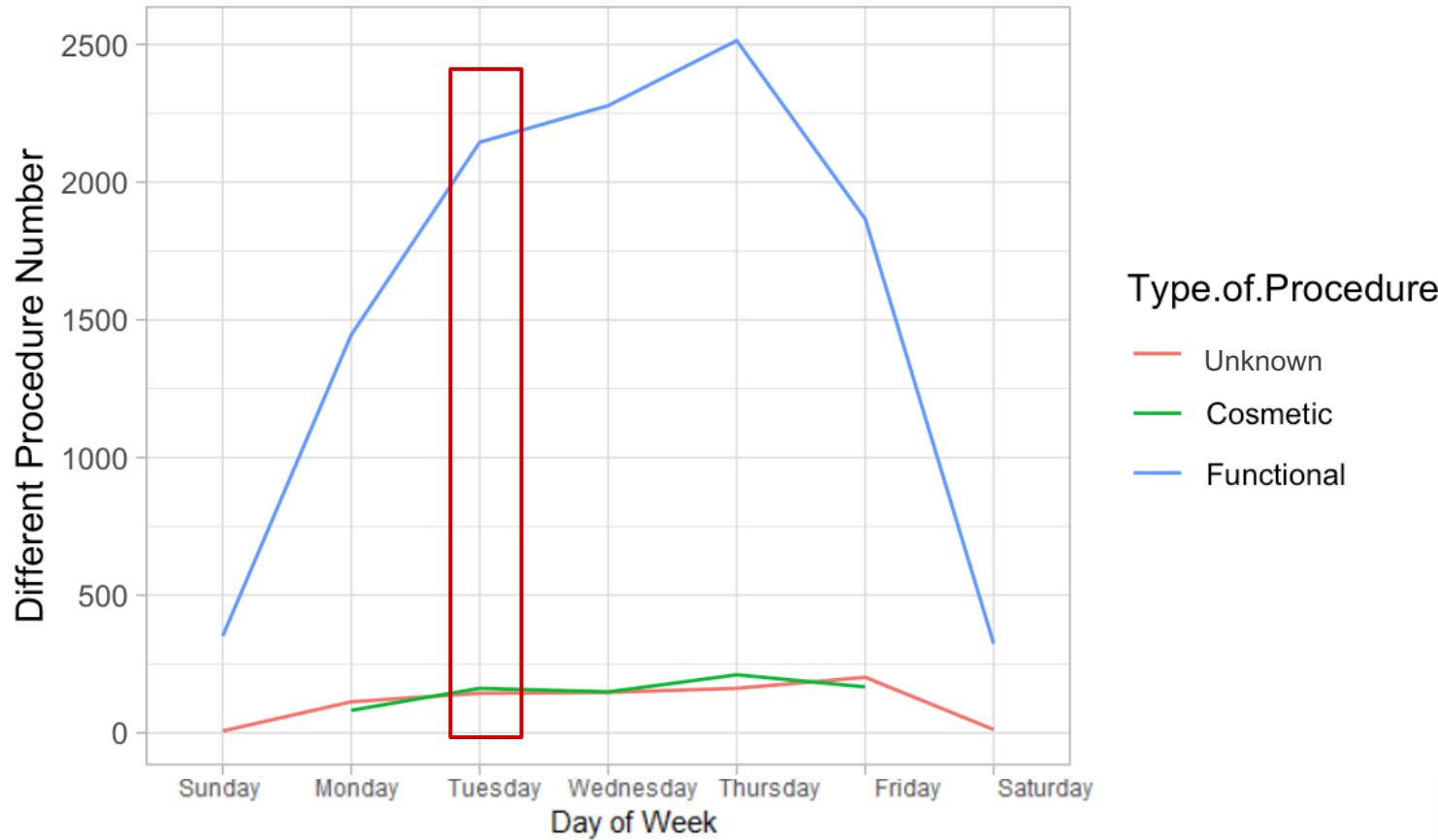
Trend of Surgery Types over the Years



Visit Frequency in Each Day of Week

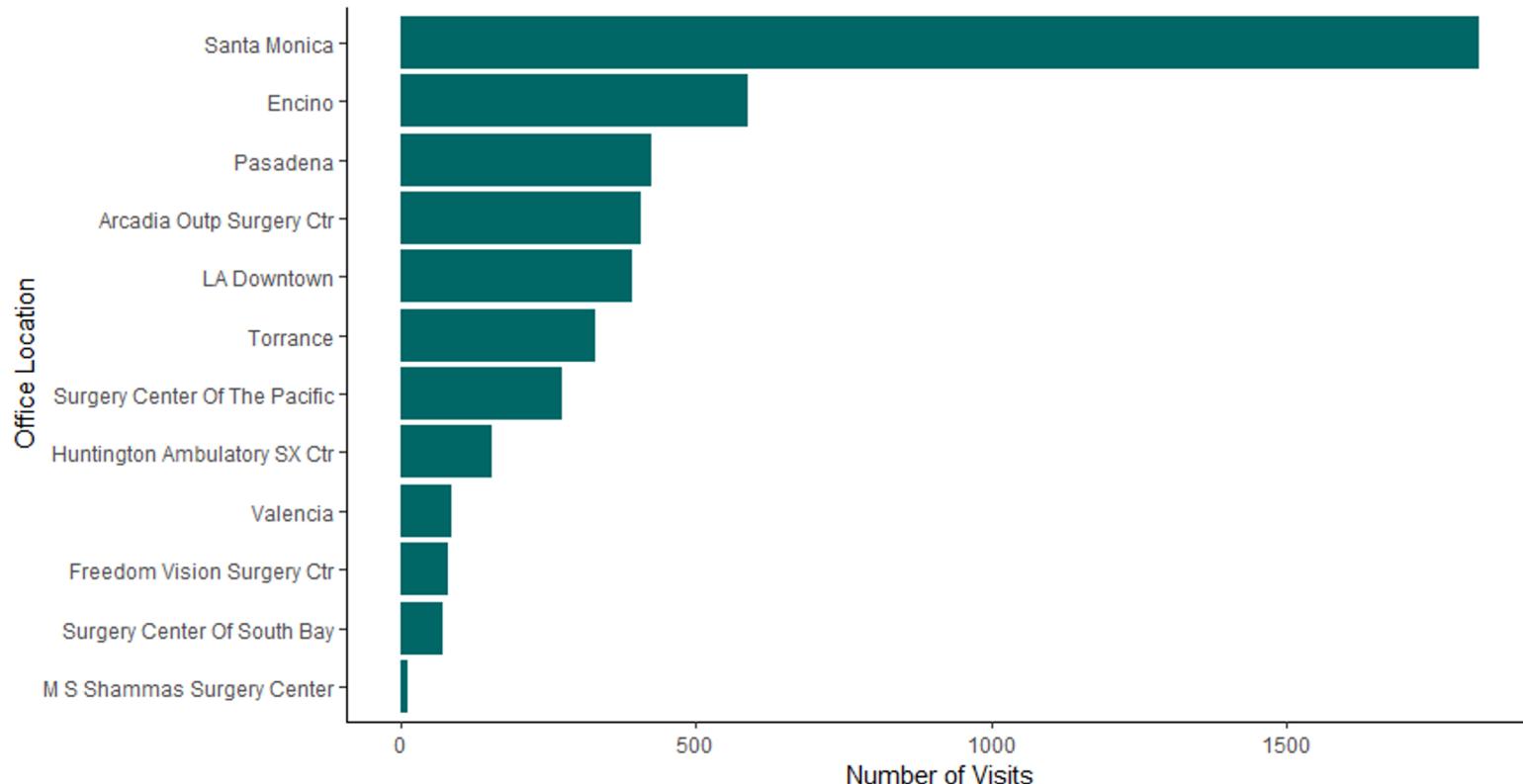


Different Procedure Numbers in Each Day of Week

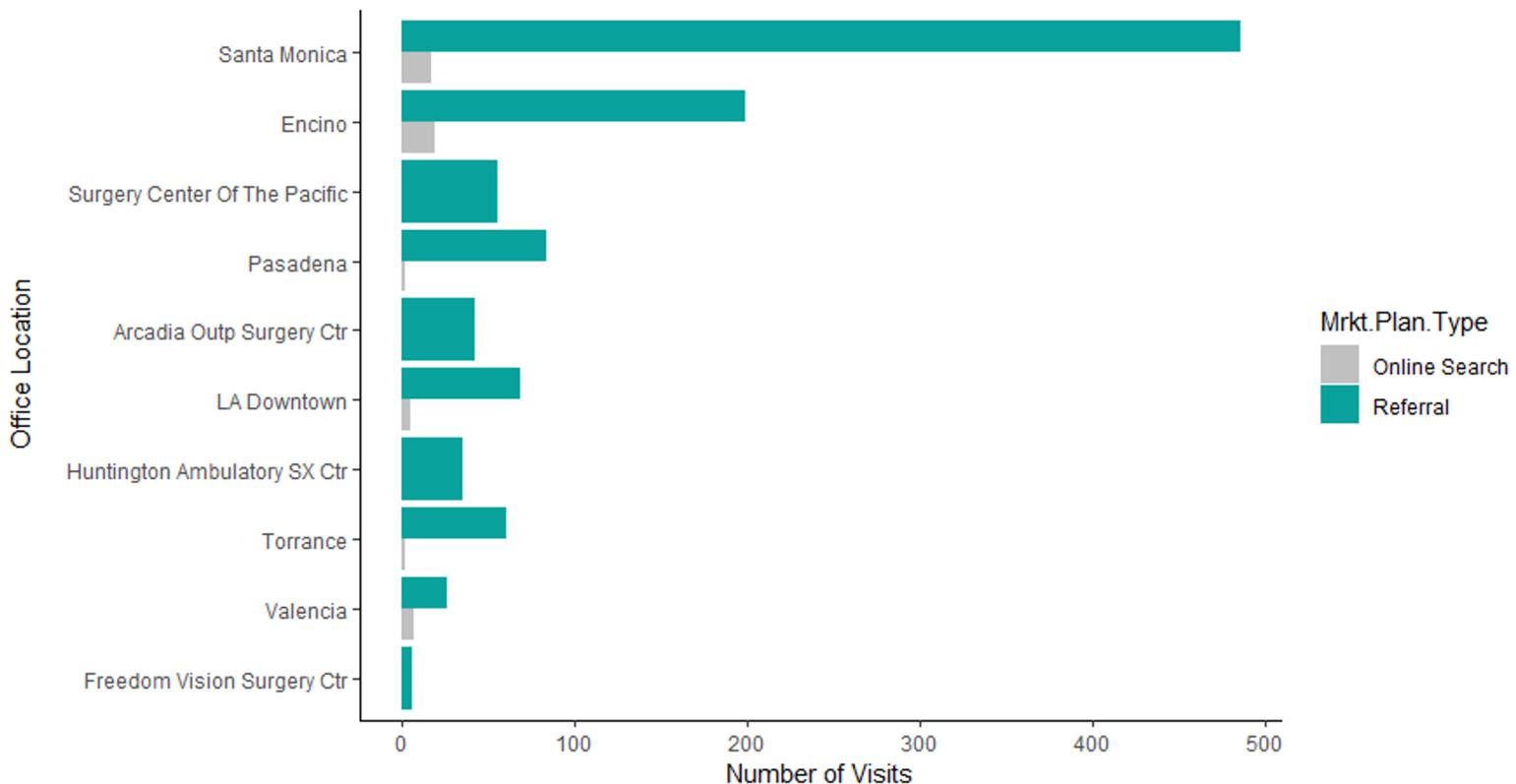


Analysis on Office Locations

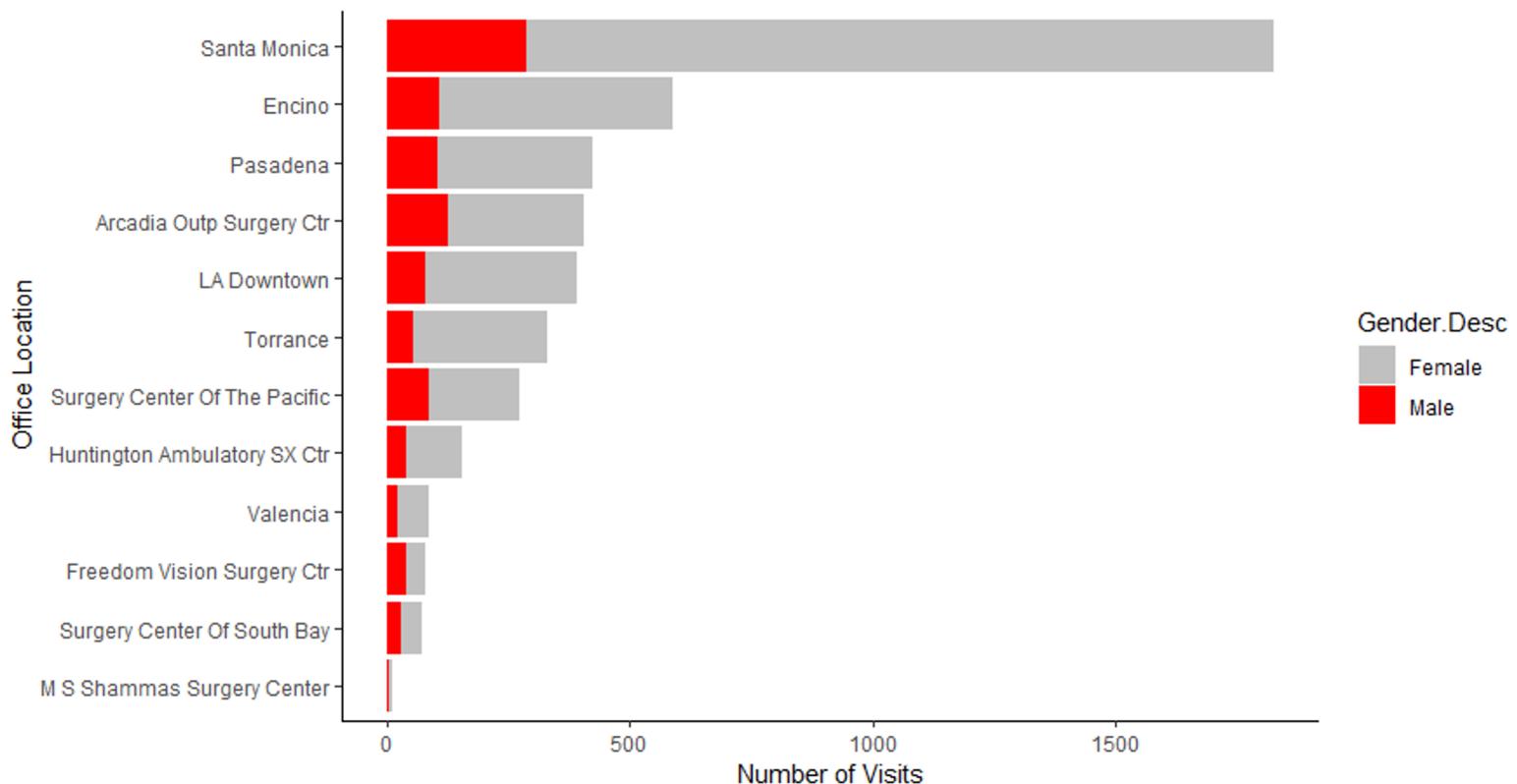
Santa Monica and Encino Has the Most Visits

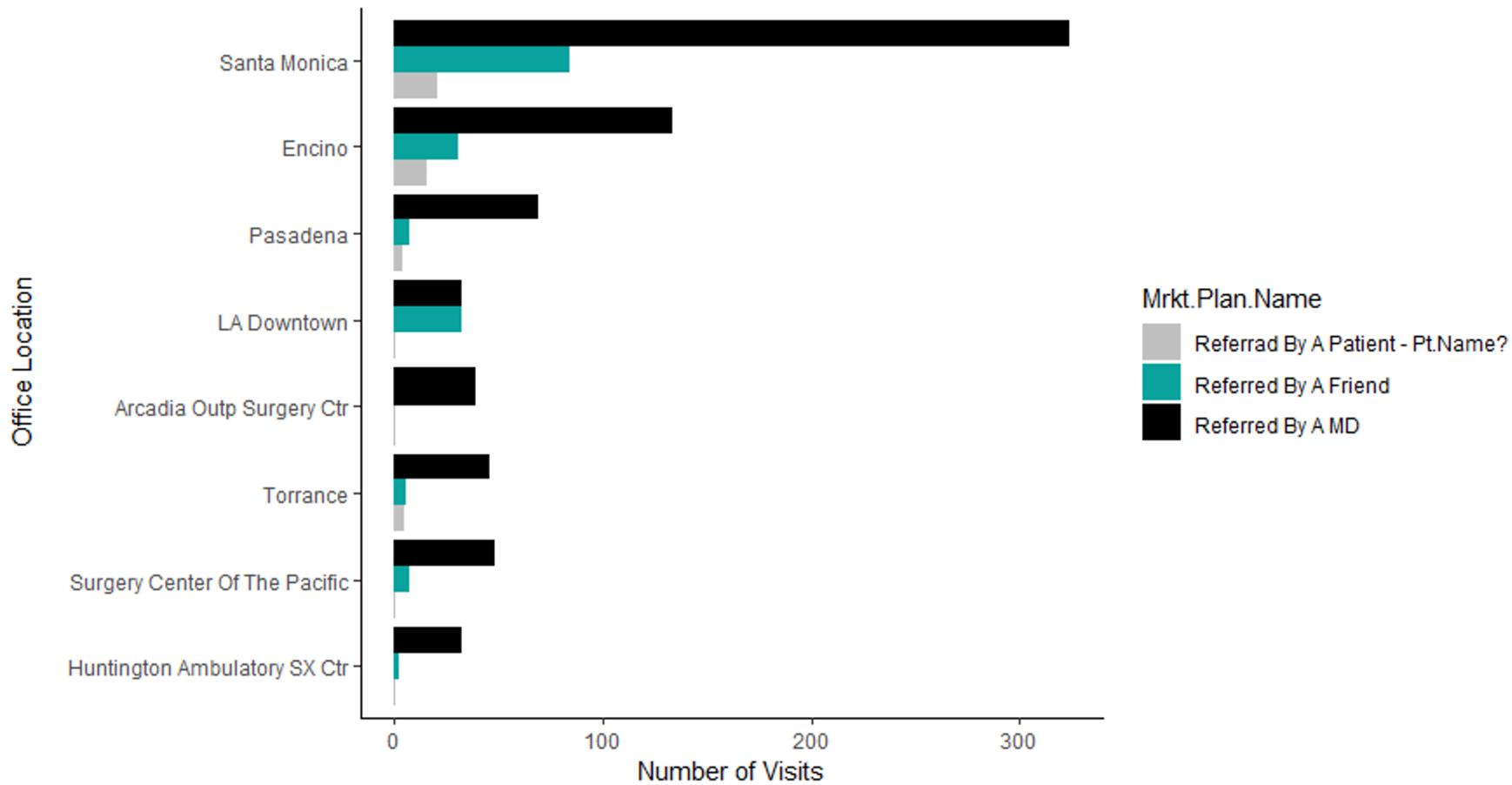


Referral is More Impactful than Online Search



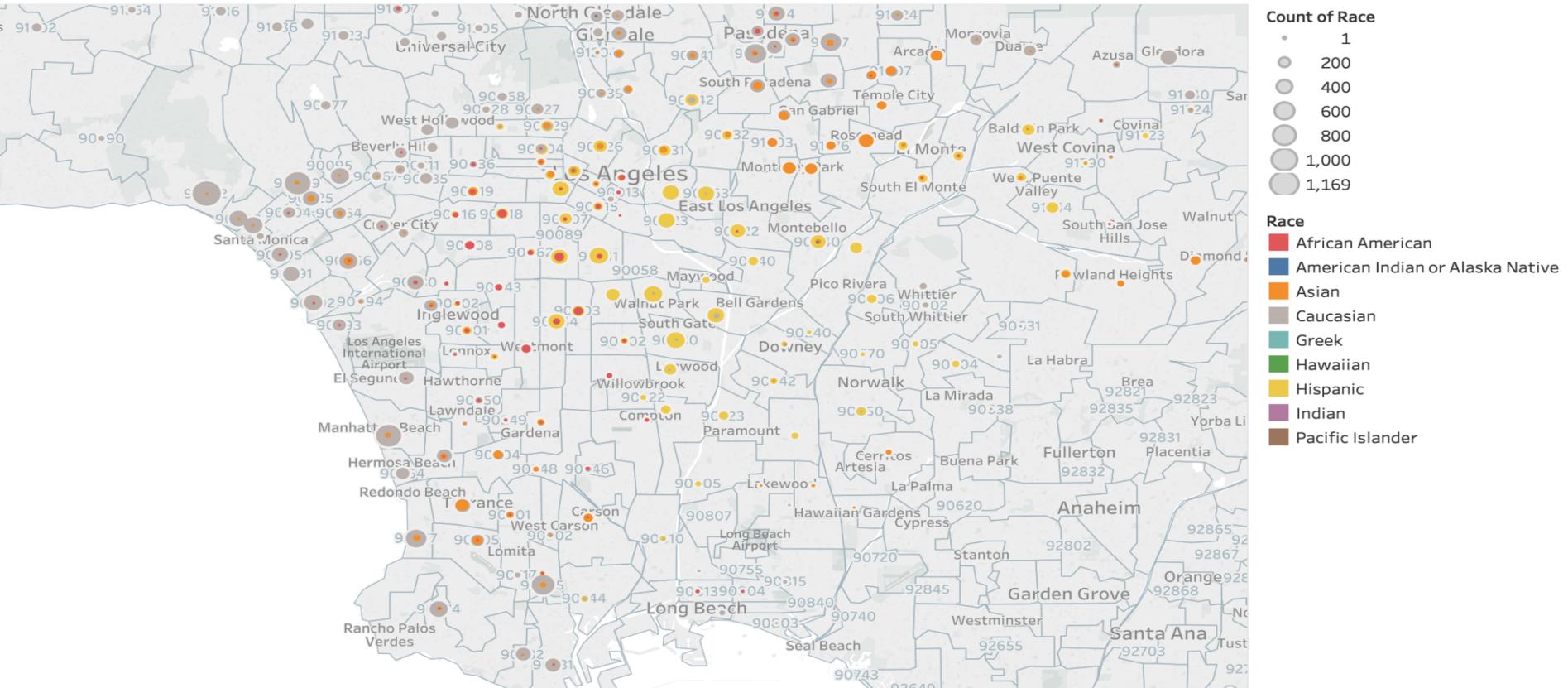
More Females Came for Cosmetic Procedures





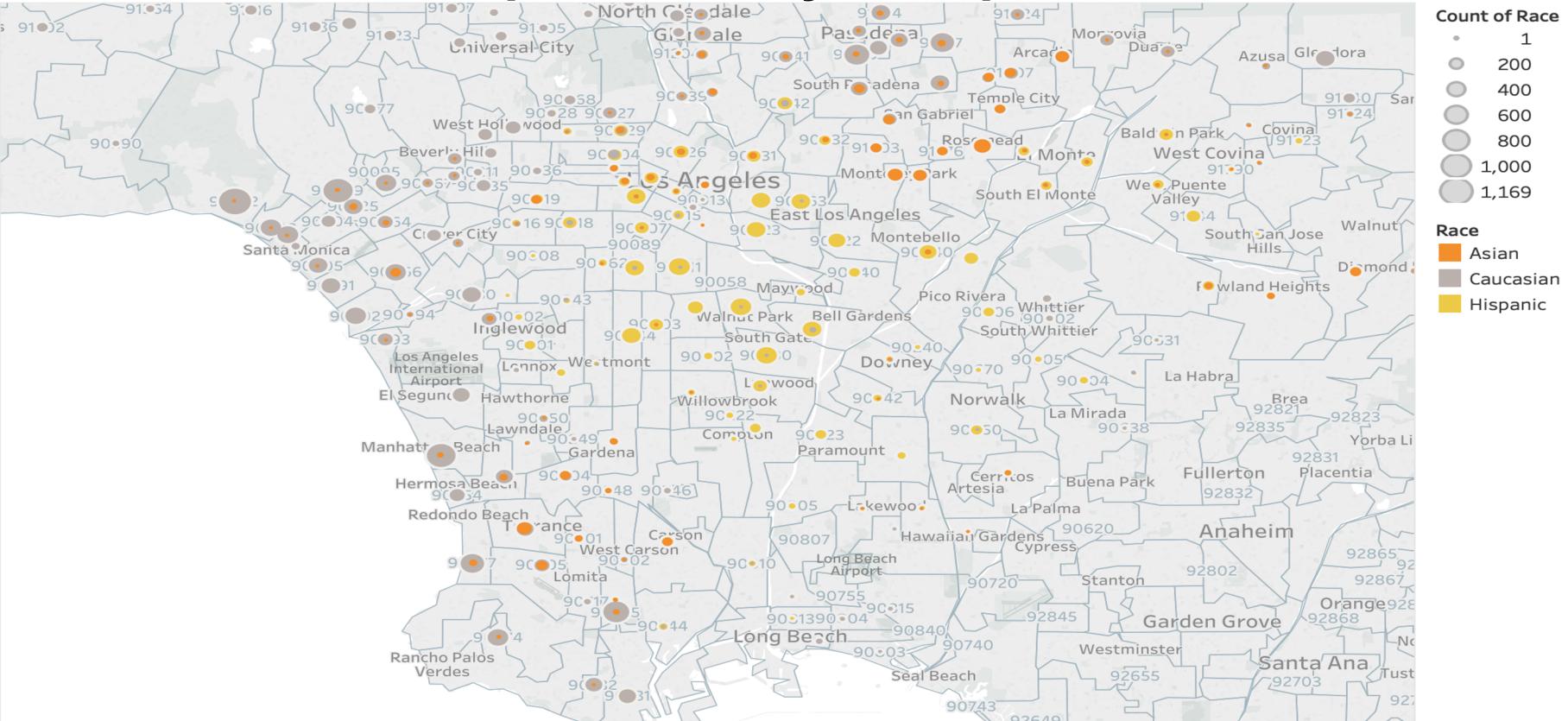
Race Distribution

Distribution of All the Ethnicity



Map based on Longitude (generated) and Latitude (generated). Color shows details about Race. Size shows count of Race. Details are shown for Zip.x. The data is filtered on Agelevel (distributiondata) and Gen. The Agelevel (distributiondata) filter keeps 55-64 and 65-74. The Gen filter keeps F and M. The view is filtered on Race, which keeps 10 of 10 members.

Distribution of Top 3 Ethnicity Groups



Map based on Longitude (generated) and Latitude (generated). Color shows details about Race. Size shows count of Race. Details are shown for Zip.x. The data is filtered on Agelevel (distributiondata) and Gen. The Agelevel (distributiondata) filter keeps 55-64 and 65-74. The Gen filter keeps F and M. The view is filtered on Race, which keeps Asian, Caucasian and Hispanic.

Estimated Market Size

Market Size for Mid-High Income Female of 55-74

Constraints:

Median Household Income > \$52756

Age: 55-74

Gender: Female

Ethnicity: Caucasian, Hispanic, Asian

Population: Starts from 2nd lowest category range (highlighted red box in the legends)

Estimate Market Penetration Rate:

2% to 6% for Consumer Product (Chron)

Population based on Patient Race Distribution:

Caucasian: West Coast Area (18K) Glendale Area (14K) based on 19 zips

Hispanic: Los Angeles (10K) Norwalk (33K) based on 3.5 mile radius and 17 zips

Asian: Torrance (14K) Pasadena (25K) West Covina (18K) based on 5 mile radius and 31 zips

* Zips in Appendix

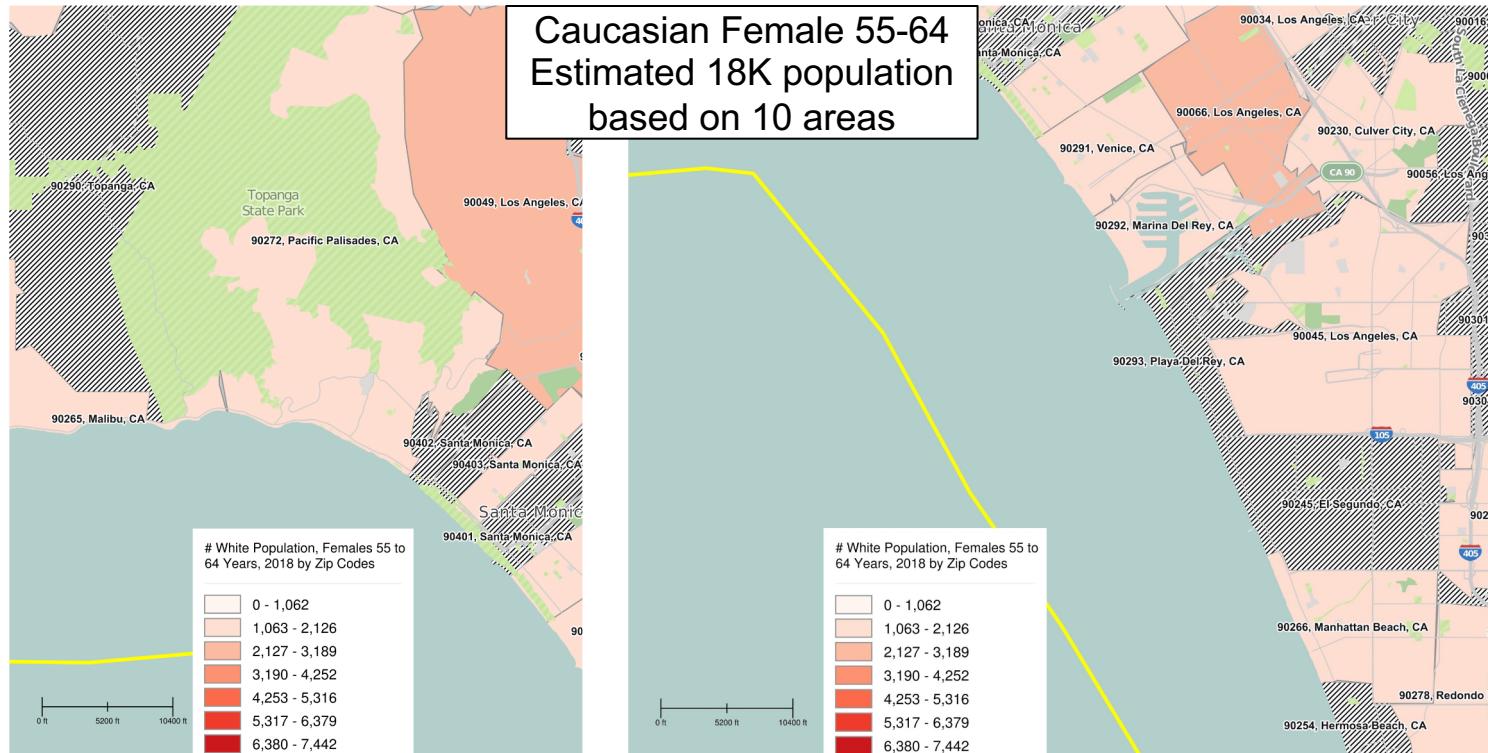
Summary:

Caucasian Market Size: 0.64K-1.92K

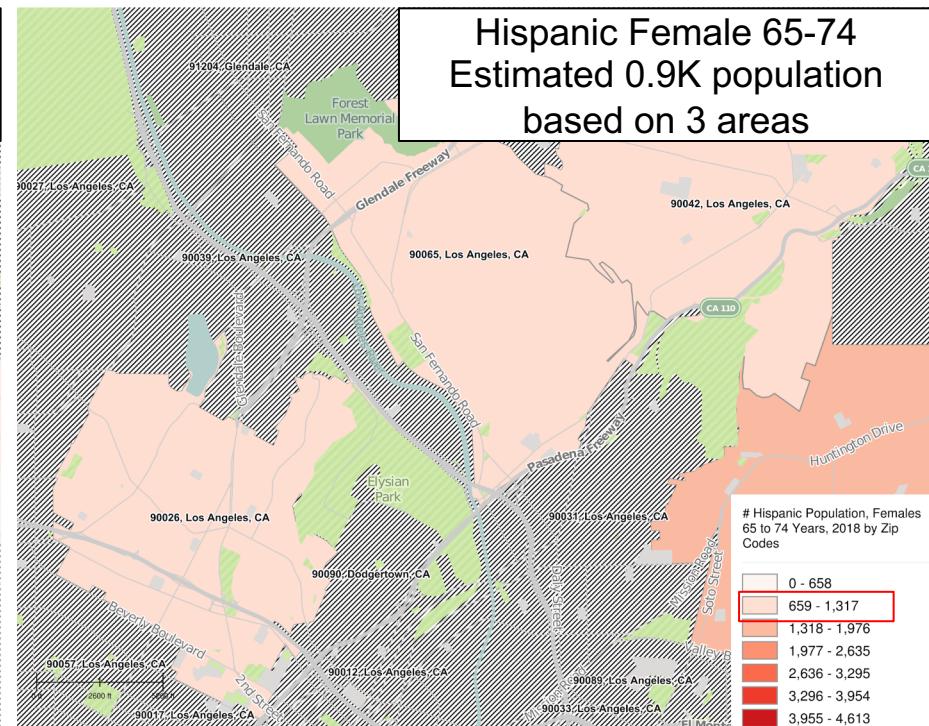
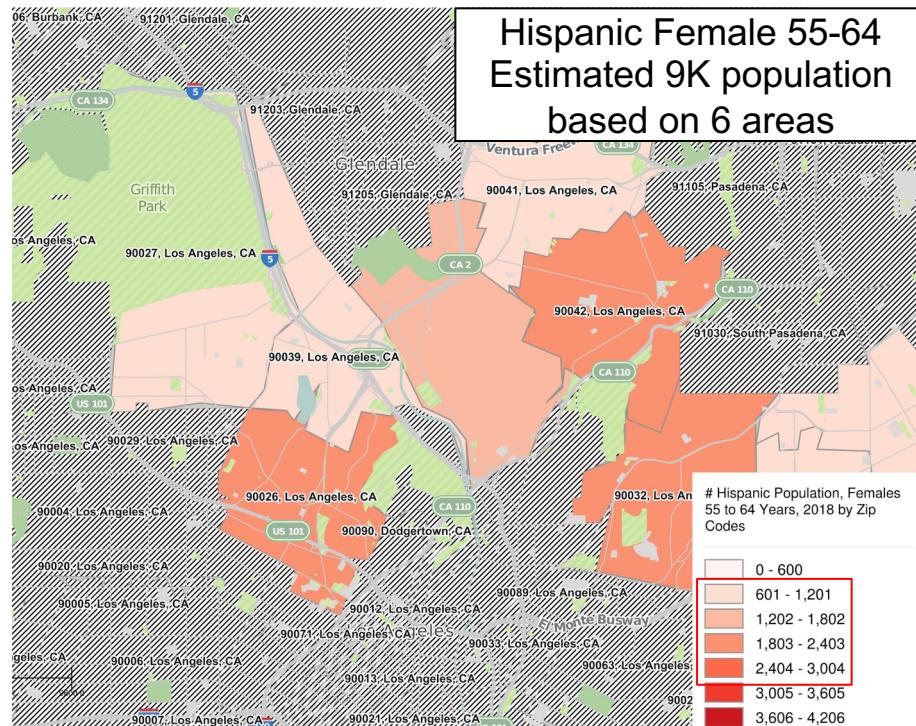
Hispanic Market Size: 0.86K-2.58K

Asian Market Size: 1.14K-3.42K

Caucasian Female Population of Mid-High Income in West Coast Area



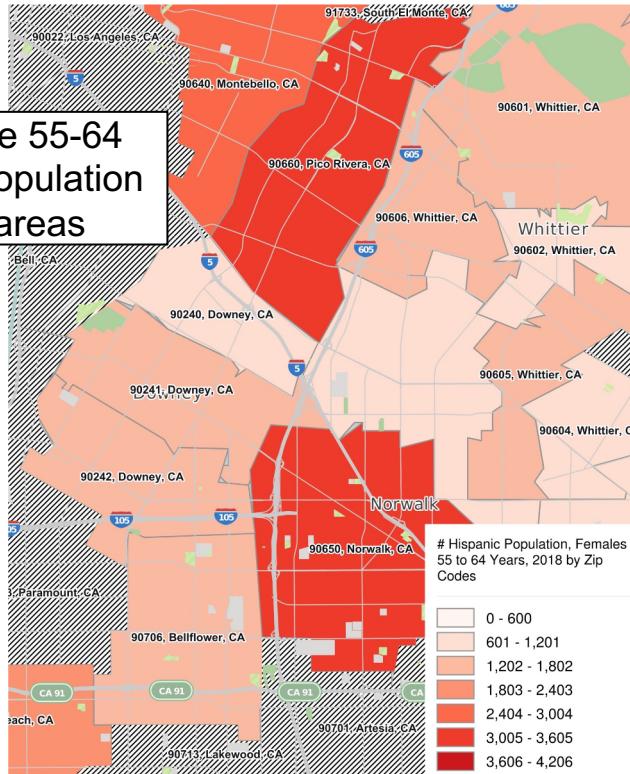
Hispanic Female Population of Mid-High Income in Los Angeles Area



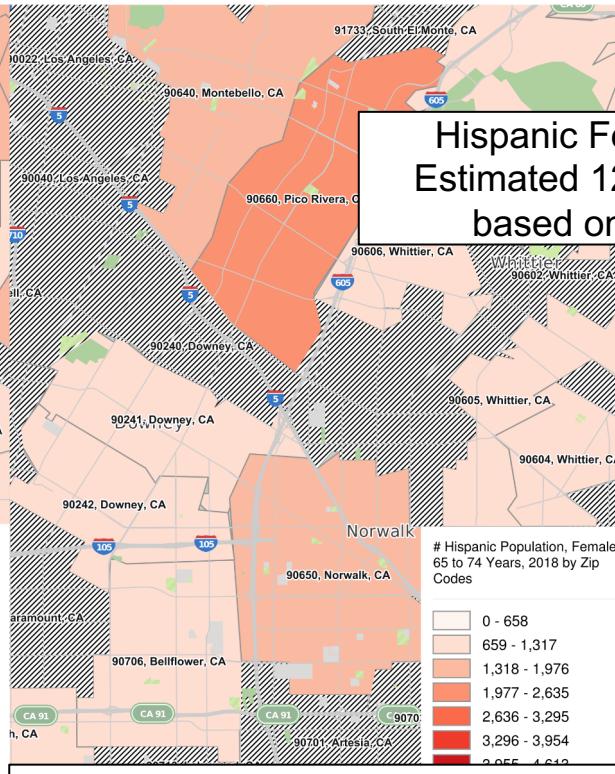
Hispanic Female 55-74 Around Los Angeles
Estimated **10K** population
based on 6 areas

Hispanic Female Population of Mid-High Income in Norwalk Area

Hispanic Female 55-64
Estimated 21K population
based on 11 areas

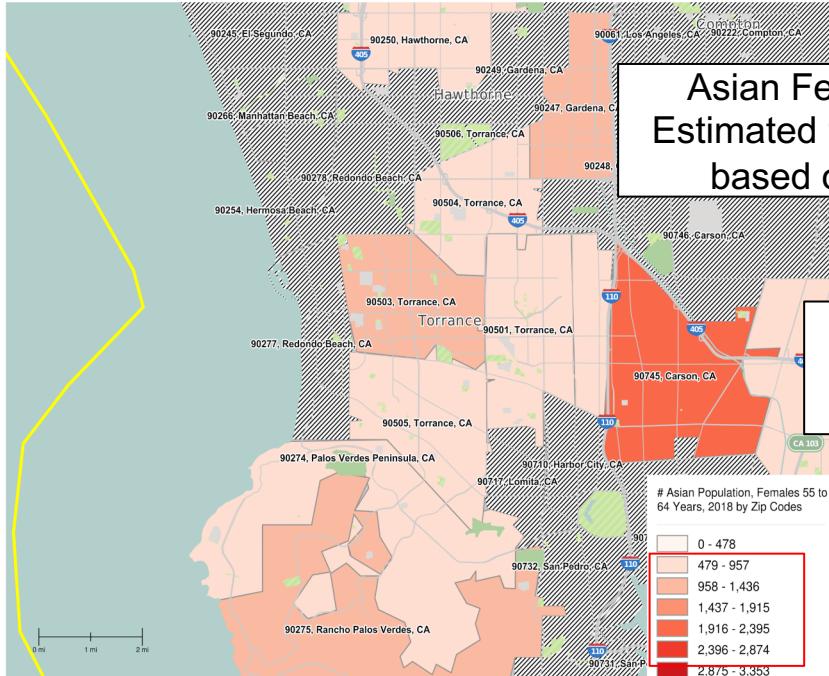


Hispanic Female 65-74
Estimated 12K population
based on 10 areas



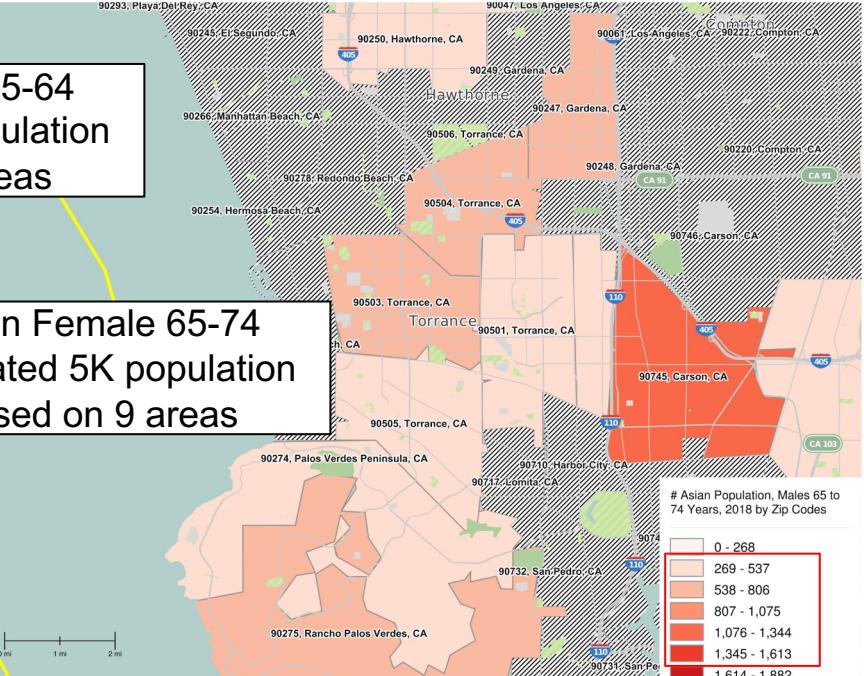
Hispanic Female 55-74 Around Norwalk
Estimated 33K population
based on 11 areas

Asian Female Population of Mid-High Income in Torrance



Asian Female 55-64
Estimated 9K population
based on 9 areas

Asian Female 65-74
Estimated 5K population
based on 9 areas



Asian Female 55-74 Around Torrance
Estimated 14K population
based on 9 areas

Recommendations

Service

Language Assistance Service

Pop-up Events (Pop-up Consultations, collaboration with other healthcare providers, etc)

A large central word "Welcome" is displayed in a variety of international languages, including English, Spanish, French, German, Dutch, Italian, Portuguese, Russian, Chinese, Japanese, Korean, and many others, arranged in a dense, overlapping cloud-like pattern.

Marketing

Ads in other Languages

Referral Incentive Program

Mail Marketing

Reviews on Social Media



Summary

Summary

To summarize, we analyzed the impacts of:

1. Patient Demographics
2. Ethnicity
3. Preferred Languages
4. Office Location
5. Marketing Plans
6. Office Location
7. Time of the year
8. Gender
9. Age
10. Types of Cosmetic Procedures

Insights

Insights

- Online searches could be made more effective. Certain steps for that would be Search Engine Optimization (both, organic and inorganic SEO)
- Santa Monica Office has the highest influx of patients and Valencia has the lowest, and also much lesser in comparison.
- The top 3 ethnic groups of patients are Caucasian, Hispanic and Asian:
 - Caucasians are found to live around the coastlines and Northern Los Angeles.
 - Hispanic patients have a high probability of residing in Central Los Angeles.
 - Asians are found to be more uniformly distributed across Los Angeles from East to West.
- Botox cosmetics is the most frequently performed non-surgical procedure, whereas repair lower eyelid is the most frequent surgical procedure.
- We also noted that there is a strong potential demand for Asian females of age between 55 to 74 in Pasadena, Torrance and West Covina.

Insights:

- For consultation cosmetic: Target Caucasian, Hispanic, Asian with age between 35-64, mostly not from reference
- For Botox Cosmetic: Caucasian is dominant, with age from 45-74, can further target Hispanic to increase the sales
- For Repair Drooping Eyebrow: Target Caucasian, Hispanic, Asian with age between 65-84, mostly not from reference

Feedback

Feedback

Having access to accurate transaction and insurance values would allow us to:

- a. Identify most valuable customers
- b. Identify types of physicians generating most revenue
- c. Identify the type of procedure generating maximum revenue

Appendix