

Tableau Visualization

Goal

The goal of this dashboard:

1. Visualization of Key Data Points: To clearly display the distribution and impact of various health-related factors on insurance premiums.
2. Strategic Insight Generation: To enable insurance companies to derive strategic insights that can influence policy adjustments, risk assessments, and customer segmentation.

Dashboard Insights: -

Summary Statistics Dashboard:

- Average Insurance Premiums is Rs 24,337 having an average of 42 years.
- Overall, there are 42% person with diabetic in the dataset, 18% person having chronic disease.
- Majority of proportion i.e. 48% are having 0 surgeries.
- Comparable BP and Non-BP person are present in the dataset.

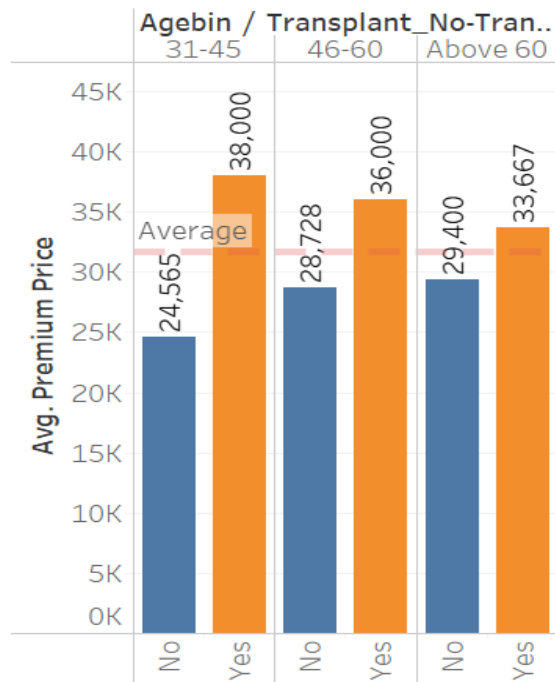


Premium Pricing Analysis Dashboard:

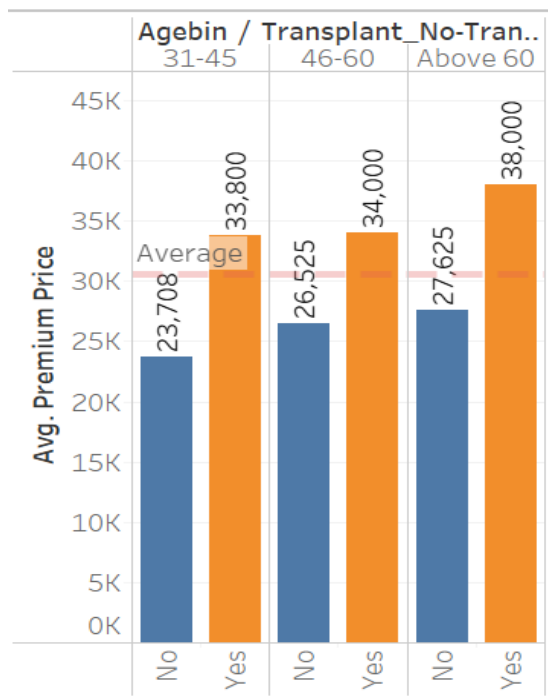
Risk Profile or Customer Segmentation:

High Risk

- a. Average premiums are high among people with age bin of 31-45, 46-60, above 60, BMI of obese and overweight and having transplant.

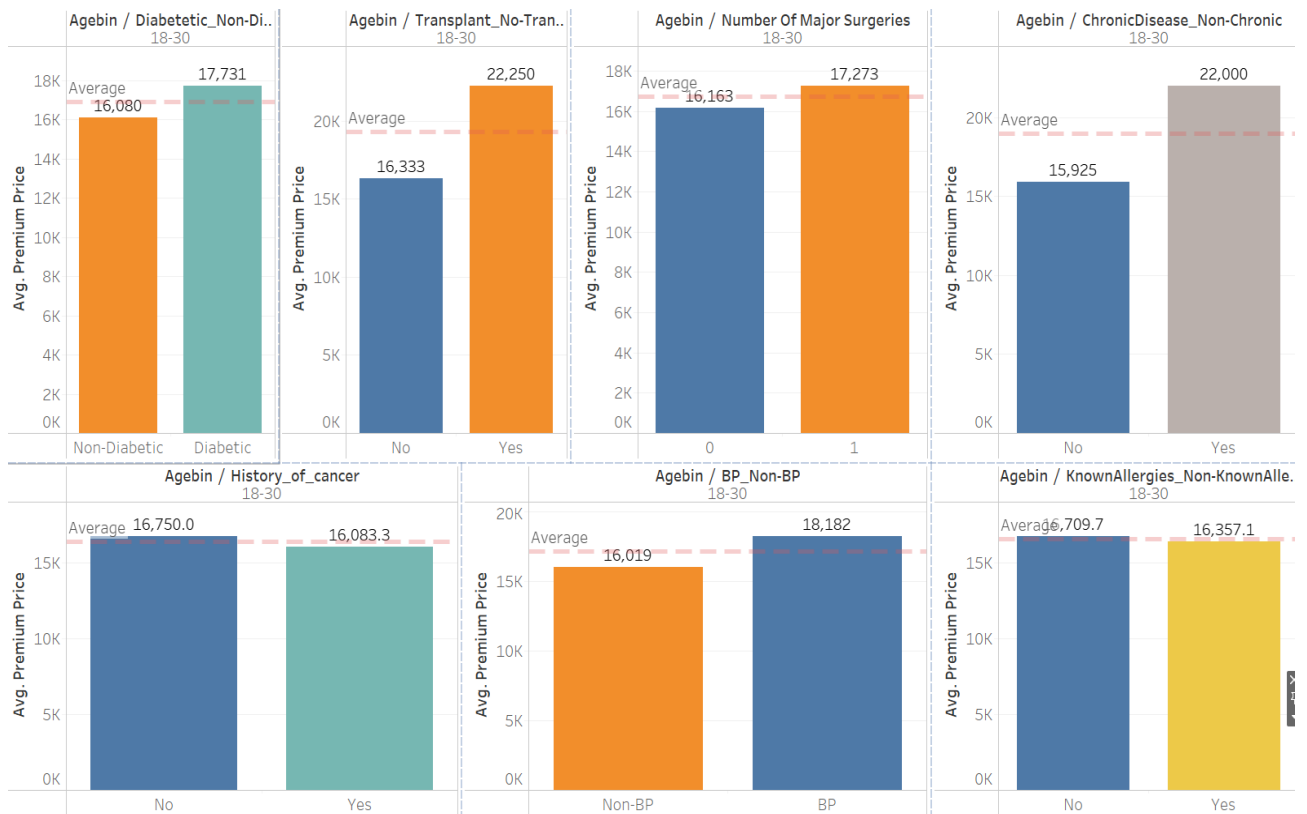


- b. Average premiums are also high among people with age bin of 31-45, 46-60, above 60, BMI of normal weight and having transplant.



Low Risk

- Average premiums are lowest among people with age bin of 18-30 and having a BMI of normal.
- Average premiums are lowest for non-diabetic, Non-Transplant, No Cancer in the history and No Surgeries in the history.



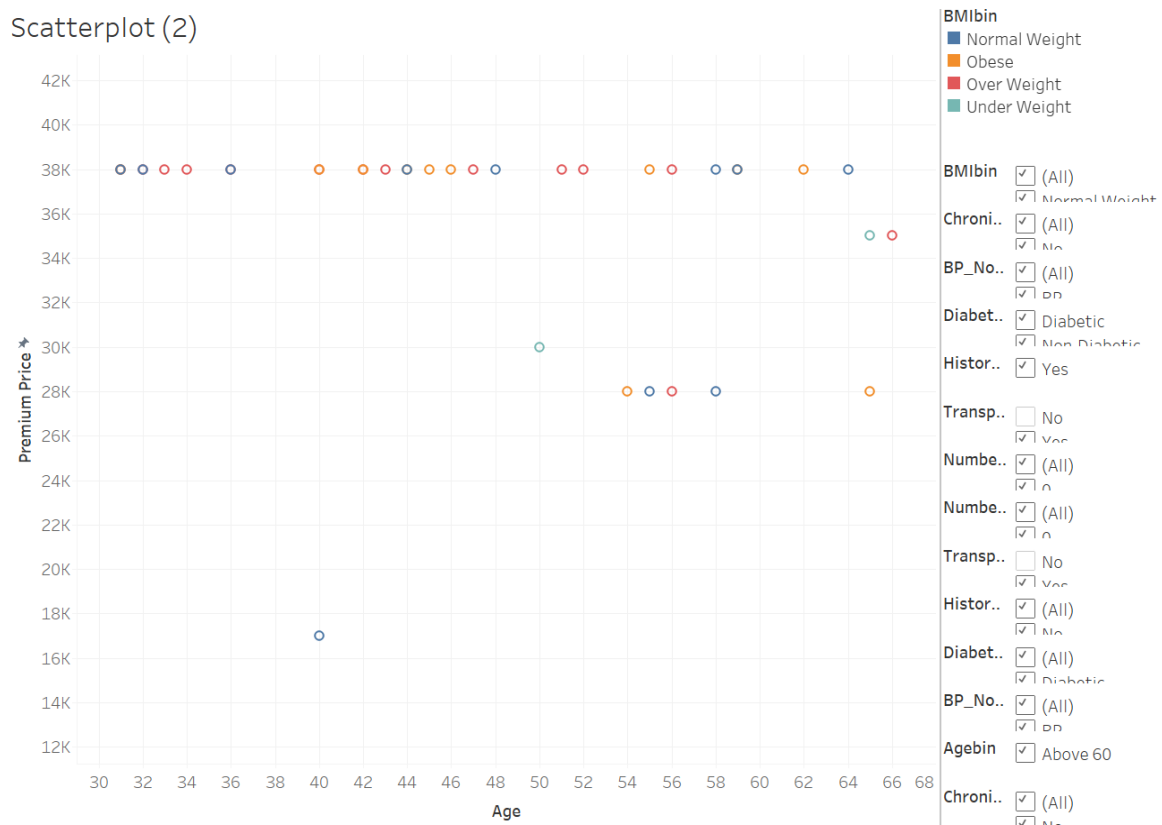
Demographic Insights Dashboard:

Risk Profile or Customer Segmentation:

High Risk

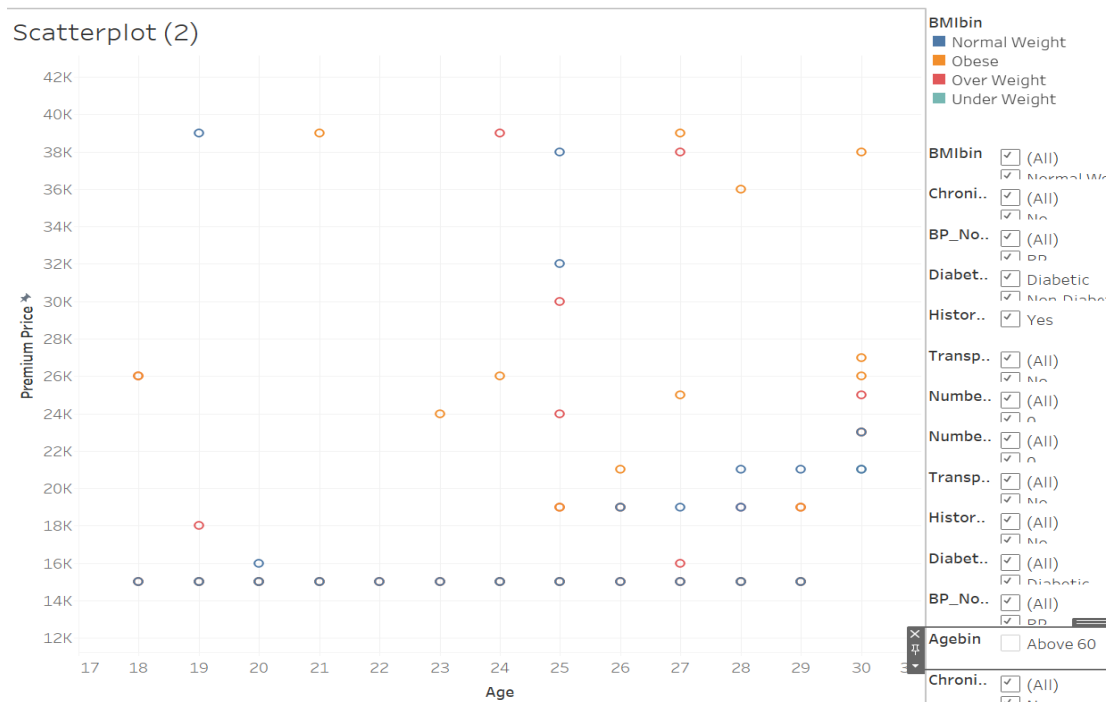
- Premiums are high among people with age bin of 31-45, 46-60, above 60, BMI of obese and overweight and having transplant in the past.

Scatterplot (2)



Low Risk

- Premiums are lowest among people with age bin of 18-30 and having a BMI of normal.
- Premiums are lowest for non-diabetic, Non-Transplant, No Cancer in the history and No Surgeries in the history.



Major Factors contributing to Premiums:

1. AGE
2. BMI
3. Transplant
4. Chronic
5. Surgeries
6. Diabetes

Correlation

| | Age | Height | Numbe.. | Premiu.. | Weight |
|----------|--------|--------|---------|----------|--------|
| Age | 1.000 | 0.040 | 0.429 | 0.698 | -0.019 |
| Height | 0.040 | 1.000 | 0.037 | 0.027 | 0.067 |
| Numbe.. | 0.429 | 0.037 | 1.000 | 0.264 | -0.006 |
| Premiu.. | 0.698 | 0.027 | 0.264 | 1.000 | 0.142 |
| Weight | -0.019 | 0.067 | -0.006 | 0.142 | 1.000 |

Legend: StrongCorrel..

- Weak or ..
- Strong P..

Above Correlation plot shows age and premiums are significantly highly correlated.