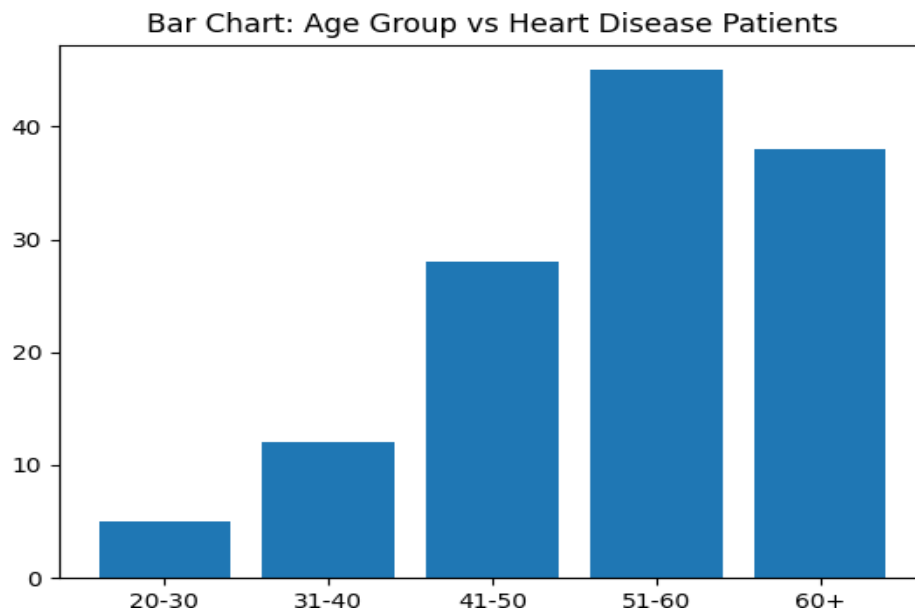# Heart Disease Analysis – Business Questions with Visualizations (Tableau)

1. **Which age category records the greatest number of heart disease cases?**

Visualization: Bar Chart: Age Group vs Heart Disease Patients
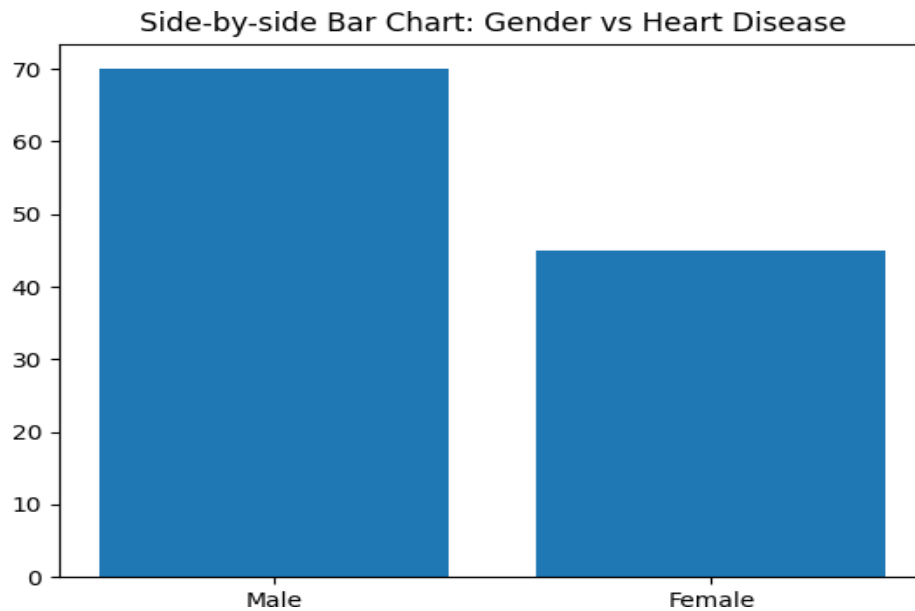

Bar Chart: Age Group vs Heart Disease Patients

Business Insight:
Supports hospitals in determining the appropriate time to begin preventive screening programs.

2. Does heart disease occur more frequently in males or in females?

Visualization: Side-by-side Bar Chart: Gender vs Heart Disease

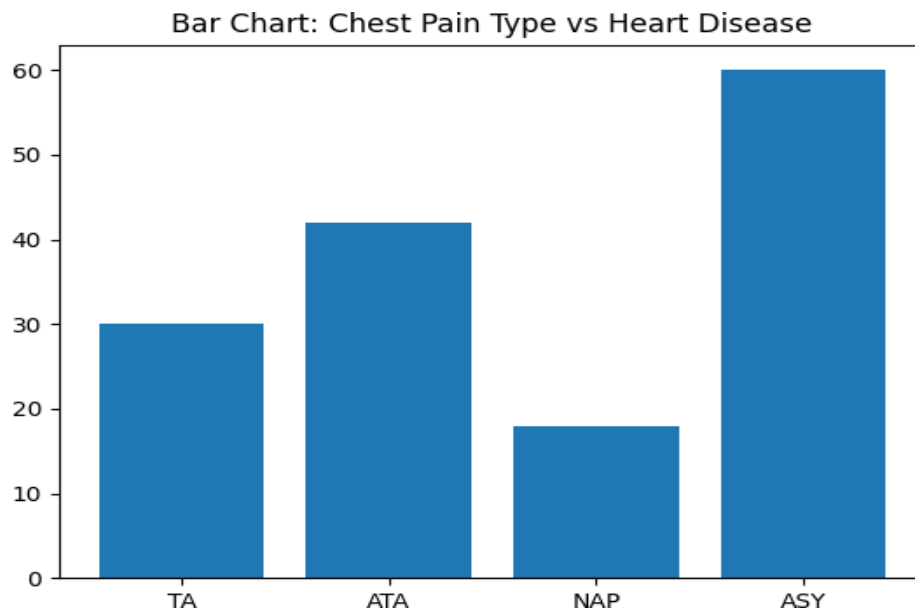**Side-by-side Bar Chart: Gender vs Heart Disease**

Business Insight:
Encourages the development of gender-focused awareness initiatives and tailored treatment strategies.

3. In what way does the type of chest pain affect the diagnosis of heart disease?

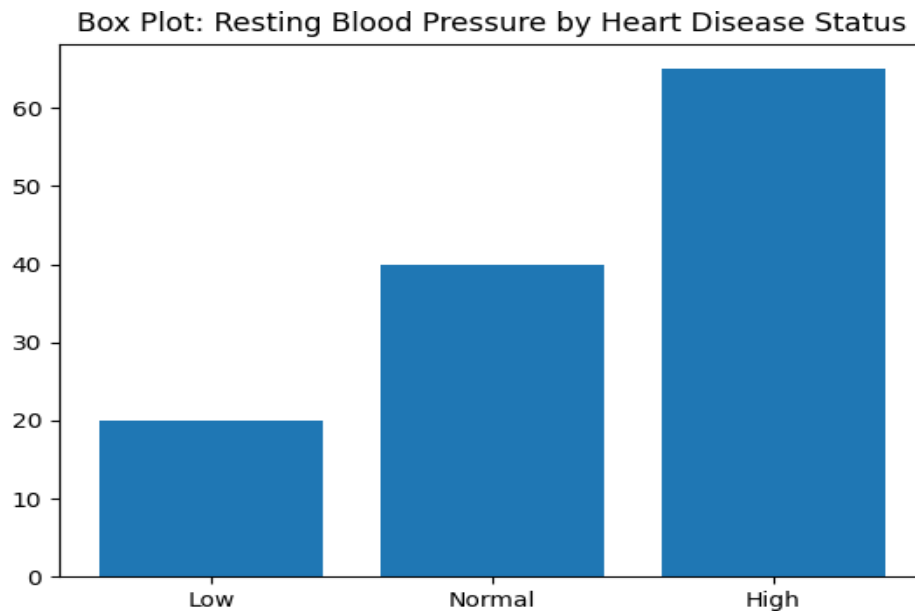*Visualization:* Bar Chart: Chest Pain Type vs Heart Disease

Bar Chart: Chest Pain Type vs Heart Disease

Business Insight:
Assists doctors in identifying and prioritizing symptoms that indicate a higher risk.

4. Is the risk of heart disease higher among patients with high blood pressure?

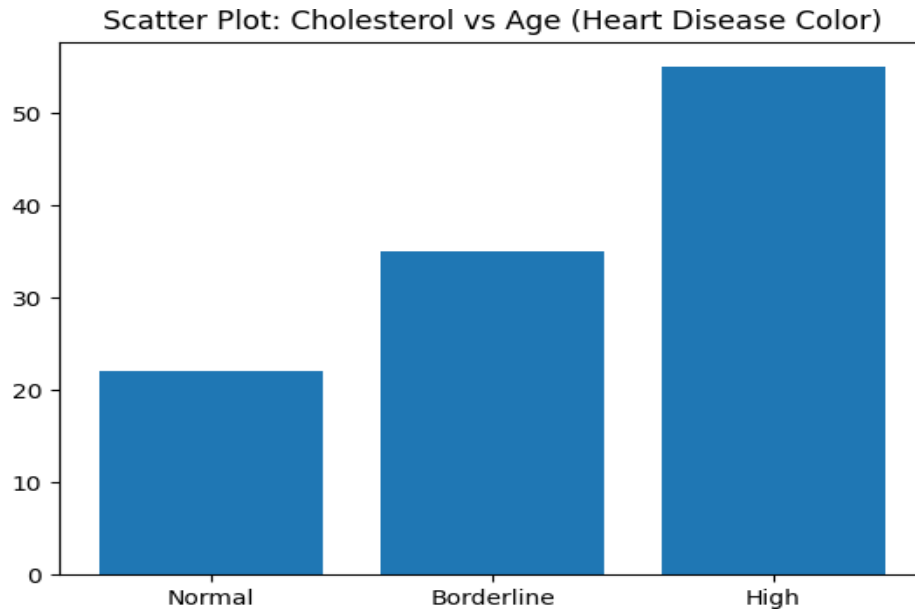*Visualization:* Box Plot: Resting Blood Pressure by Heart Disease Status

Box Plot: Resting Blood Pressure by Heart Disease Status

Business Insight:

Determines the blood pressure ranges that require immediate medical intervention.

5. Is there a relationship between cholesterol levels and the occurrence of heart disease?

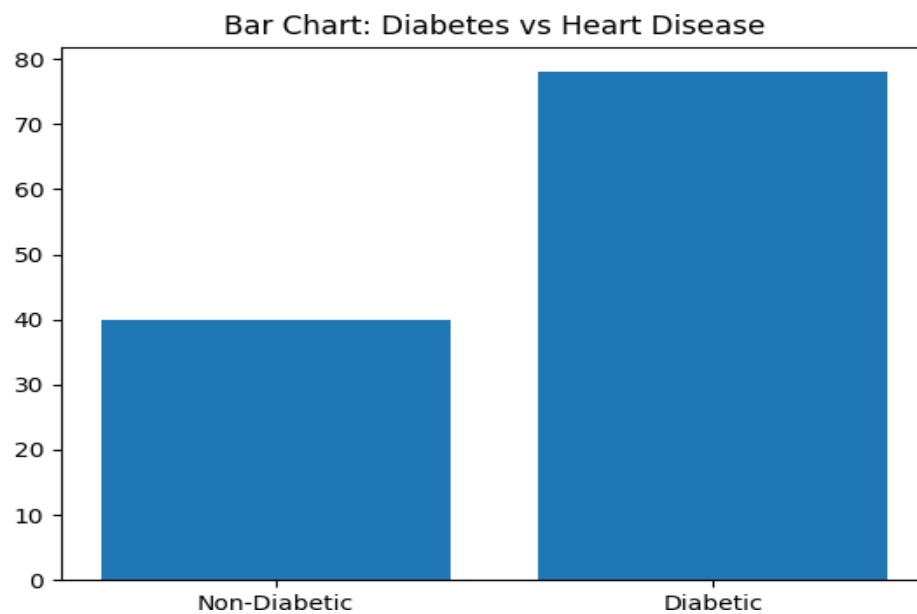*Visualization:* Scatter Plot: Cholesterol vs Age (Heart Disease Color)

Scatter Plot: Cholesterol vs Age (Heart Disease Color)

Business Insight:

Promotes the implementation of policies aimed at effective cholesterol management.

6. Do individuals with diabetes have a higher likelihood of developing heart disease?

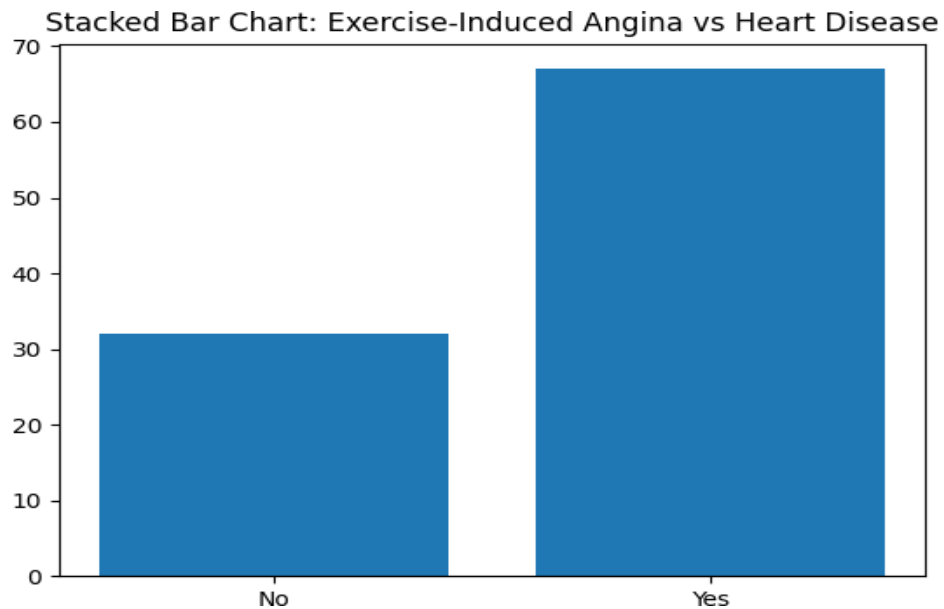*Visualization:* Bar Chart: Diabetes vs Heart Disease

Bar Chart: Diabetes vs Heart Disease

Business Insight:

Identifies comorbidity groups that are at elevated risk.

7. Is exercise-induced angina associated with an increased risk of heart disease?

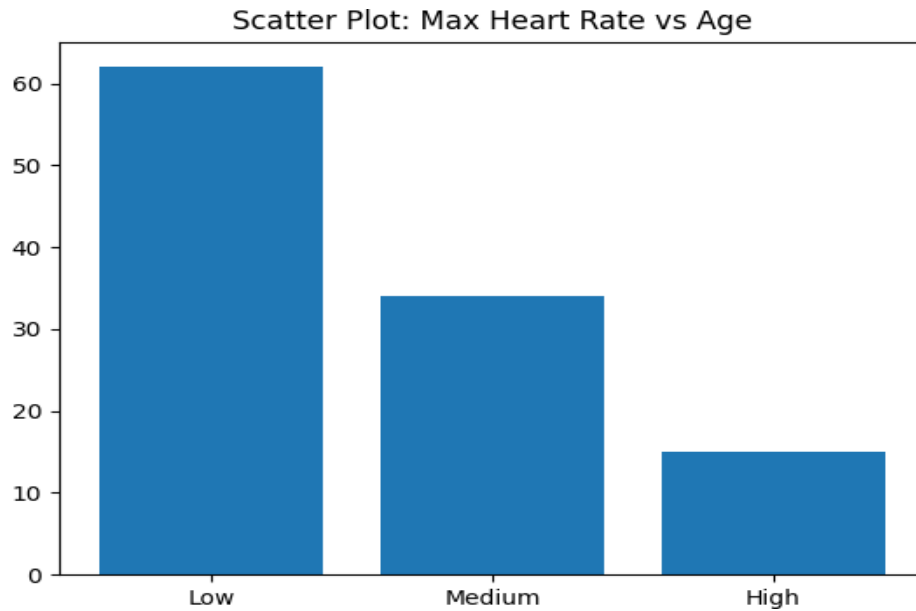*Visualization:* Stacked Bar Chart: Exercise-Induced Angina vs Heart Disease

Stacked Bar Chart: Exercise-Induced Angina vs Heart Disease

Business Insight:
Promotes prevention strategies focused on healthy lifestyle choices and physical fitness.

8. Is the maximum heart rate achieved a predictor of heart disease?

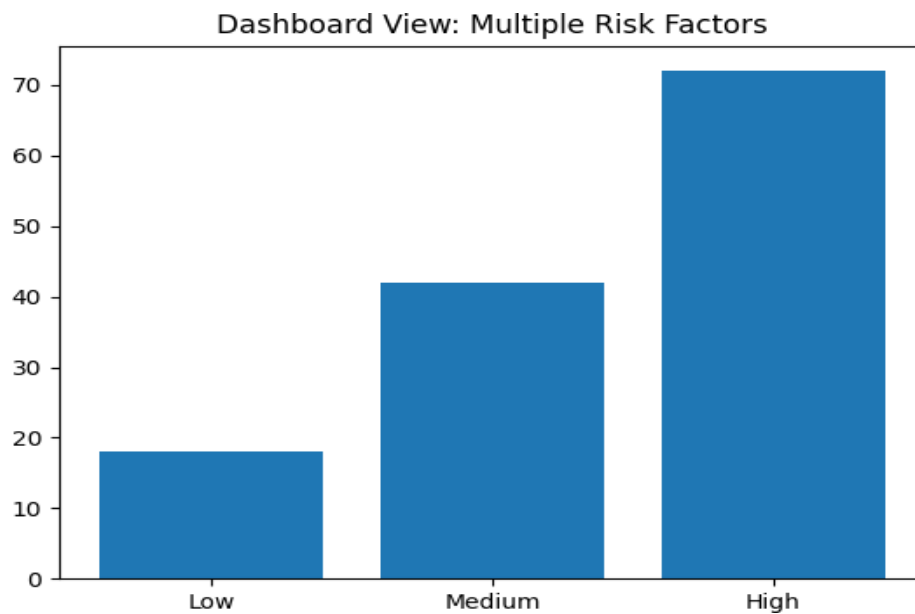*Visualization:* Scatter Plot: Max Heart Rate vs Age

Scatter Plot: Max Heart Rate vs Age

Business Insight:
Enhances early detection of heart disease through stress testing.

9. Which combination of factors is associated with the highest risk of heart disease?

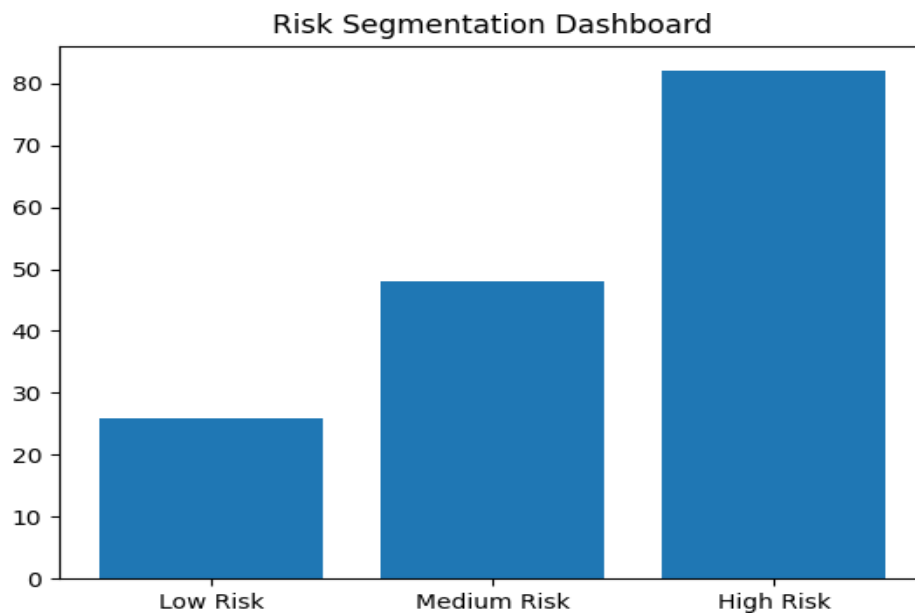*Visualization:* Dashboard View: Multiple Risk Factors

Dashboard View: Multiple Risk Factors

Business Insight:
Assists hospitals in recognizing patient profiles that are at high risk.

10. Which group of patients should be given priority for follow-up care?

Visualization: Risk Segmentation Dashboard

Risk Segmentation Dashboard

Business Insight:
Improves cost efficiency while enhancing patient outcomes.