# Tittle: Diabetes Patients Health Condition Analysis Report

#### Introduction:

The analysis presented in this report explores various health-related conditions in diabetic, prediabetic, and non-diabetic patients. The purpose of this analysis is to identify patterns and correlations between diabetes and other health conditions such as BMI, blood pressure, cholesterol, and many other factors like smoking and alcohol consumption.

### Main categories:

Based on main categories patients' diabetic status:

Prediabetes: 6K patientsDiabetes: 34K patients

No Diabetes: 197K patients

# **Key Findings:**

#### Prevalence of Diabetes:

- The majority of the patients (197K) do not have diabetes, where 34K diabetic patients and 6K prediabetic patients.
- There is a noticeable difference in the number of diabetic and non-diabetic patients, that diabetes management could be effective.

# BMI Distribution by Age:

- Average BMI decreases as patients age, starting from 36.16 for younger patients around age 4 and reducing to 28.43 for patients around age 13
- This analysis suggests that younger patients may be at a higher risk of developing weight-related health conditions compared to older patients.

#### Gender Distribution:

• There is a balanced distribution in gender among diabetic patients. There is 17.5k male and 16.1k female are diabetic patients.

### Others Insights:

- High blood pressure and high cholesterol levels are more prevalent in older patients, with the highest occurrences in patients aged 10 to 13. That means indicating age-related risks in managing these conditions.
- 63% of non-diabetic patients consume fruits, while 37% do not. This indicates that most patients maintain healthy eating habits and 84% of non-diabetic patients consume vegetables, while 16% do not.
- 86% of non-diabetic patients report excellent health, while only 6% rate their health as poor. Other health ratings include very good (4%) and fair (1%).

## Conclusion:

This analysis reveals several critical insights into the relationships between diabetes and various health conditions, such as BMI, cholesterol, and blood pressure. It also provides lifestyle factors like smoking and alcohol consumption. Further studies must explore how lifestyle interventions, such as promoting healthy eating habits, may help prevent or manage diabetes. Additionally, early intervention is essential for younger patients with elevated BMI levels to prevent long-term health risks.