**Enhancing Patient Attendance in Medical Appointments:**

**A Data-Driven Approach**

**Introduction**:

The healthcare sector has faced difficulties in recent years with regard to patient attendance at scheduled doctor's appointments. In order to identify the variables influencing patient no-shows and suggest tactics for raising attendance, this report analyses the Cotiviti dataset. The dataset includes details about a number of variables, including gender, age, health issues, and appointment schedules.

**Analysis of Relevant Trends**:

Some noteworthy trends in the dataset are revealed by the preliminary analysis. However, compared to male patients, female patients typically make more appointments. Age groups 1 to 81 appear to have an 80% show rate based on the distribution of no-shows and attendance across various age groups; this could point to potential outliers or special considerations for these groups.

Furthermore, insights are obtained from the examination of medical conditions like diabetes, hypertension, and SMS notifications. Individuals with diabetes or hypertension have higher attendance rates, which highlights the significance of managing chronic illnesses. Contrary to popular belief, patients who did not receive SMS notifications had a higher attendance rate than those who did, indicating that reminders have a negative effect on attendance.

Additionally, the data shows that Saturdays have substantially fewer appointments than other weekdays, and appointments are unavailable on Sundays.

**Opportunities and Threats:**

**Opportunities:**

Specific Age-Group Targeted Interventions: Create plans to deal with the unique needs of age groups 0 and 1, with the goal of raising these groups' attendance rates.

Enhancing Text Message Alerts: Learn about the surprising trend that is related to SMS notifications and think about using alternative or customised forms of communication to make them more effective.

Community Engagement: Share data about neighbourhoods where 80% of residents are present so that you can understand the dynamics of the community and carry out focused outreach initiatives.

**Threats:**

Despite the fact that female patients make more appointments, it is necessary to look into any potential gender-specific causes of no-shows.

Determine the cause of the problem of Saturday appointment attendance that may be solved by modifying scheduling practises or introducing rewards.

Choices for Wise Investments:

1. Age-Specific Programmes: To address the particular issues pertaining to age groups 0 and 1, develop age-specific health or educational programmes.

2. Personalised Communication Channels: In spite of the unanticipated effect that SMS notifications have on attendance, make an investment in technologies that facilitate personalised communication channels.

3. Community Health Initiatives: Implement health initiatives and promote a sense of health responsibility and awareness by collaborating with local communities in neighbourhoods with high rates of attendance.

**Conclusion:**

When making strategic decisions, the Cotiviti dataset offers insightful information. Through targeting particular age groups, improving communication strategies, and interacting with nearby communities, Cotiviti can raise patient attendance, which will improve overall health outcomes.