SUMMARY AND RECOMMANADATION

Objectives:

The primary objectives of this analysis include understanding the key factors influencing patient attendance and no-show behaviour, identifying trends based on demographic, socioeconomic, and medical attributes, and evaluating the impact of communication strategies like SMS reminders on attendance. The analysis also aims to propose actionable recommendations to improve patient retention, optimize resource allocation, and enhance scheduling practices to increase appointment adherence across different patient groups.

Summary:

Female patients account for more appointments than males. The show-to-no-show ratio is consistent across most age groups, except for ages 0 and 1, which have a higher show rate of 80%. Most neighbourhoods also maintain an 80% show rate. Patients without scholarships or chronic conditions like hypertension and diabetes generally have a show rate of around 80%, while those with these conditions show slightly higher attendance (83–85%). Interestingly, patients without SMS reminders have a better show rate (84%) than those receiving reminders (72%). Additionally, there are no appointments on Sundays, and Saturdays see significantly fewer appointments compared to weekdays.

Recommendations:

- Targeted Interventions for Male Patients: Since female patients dominate
 appointments, consider campaigns or health awareness drives targeted at male
 patients to improve their engagement.
- 2. Focus on Low Show Rate Groups:
 - Tailor strategies to improve show rates among patients with scholarships (currently at 75%).
 - Explore reasons for lower attendance among those who receive SMS reminders and optimize the messaging for better impact.
- 3. **Hypertension and Diabetes Awareness**: Patients with hypertension and diabetes have higher show rates. Strengthen outreach programs for these groups to maintain and improve attendance.
- 4. **Optimize SMS Campaigns**: Revise the SMS communication strategy. Analyze the content, timing, and personalization of SMS reminders to increase their effectiveness.

- 5. **Weekend Scheduling**: Since Saturday appointments are low, consider promoting weekend slots for patients with weekday constraints or adjusting staffing/resources accordingly.
- 6. **Neighbourhood Insights**: Leverage the consistent 80% show rate across neighbourhoods to pilot targeted health campaigns or reward systems to further boost attendance.
- 7. **Focus on Paediatric Attendance**: Investigate why children aged 0 and 1 have a higher show rate and replicate effective practices for other age groups.
- 8. **Holistic Incentives**: Introduce incentives for show-ups, such as reduced wait times or follow-up benefits, especially for no-show-prone demographics like scholarship recipients and SMS recipients.