

Analyzing Dental Patient Attendance Patterns to Improve Scheduling Efficiency at Sea Mar Community Health Center



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Background

Missed dental care appointments present a significant problem at Sea Mar Community Healthcare Dental Clinic because every missed visit is a lost opportunity to prevent pain, address critical oral health issues, and support the well-being of the community

Understanding missed appointment patterns can uncover systemic factors affecting healthcare access and equity, highlighting the impact of economic and social structures on individuals and communities

My project analyzed the average number of no-shows and same-day cancellations per day of week at Seamar Community Dental Clinic over seven months to identify trends for improving scheduling and outreach strategies



Impact

Sea Mar Community Health Centers is an organization committed to providing quality, comprehensive health, housing, educational, and cultural services to diverse communities

Sea Mar serves over **290,000 patients** across Washington, offering health and human services through **36 medical clinics**, **30 dental clinics**, **47 outpatient behavioral health clinics**, **4 inpatient centers**, and **16 affordable housing properties**

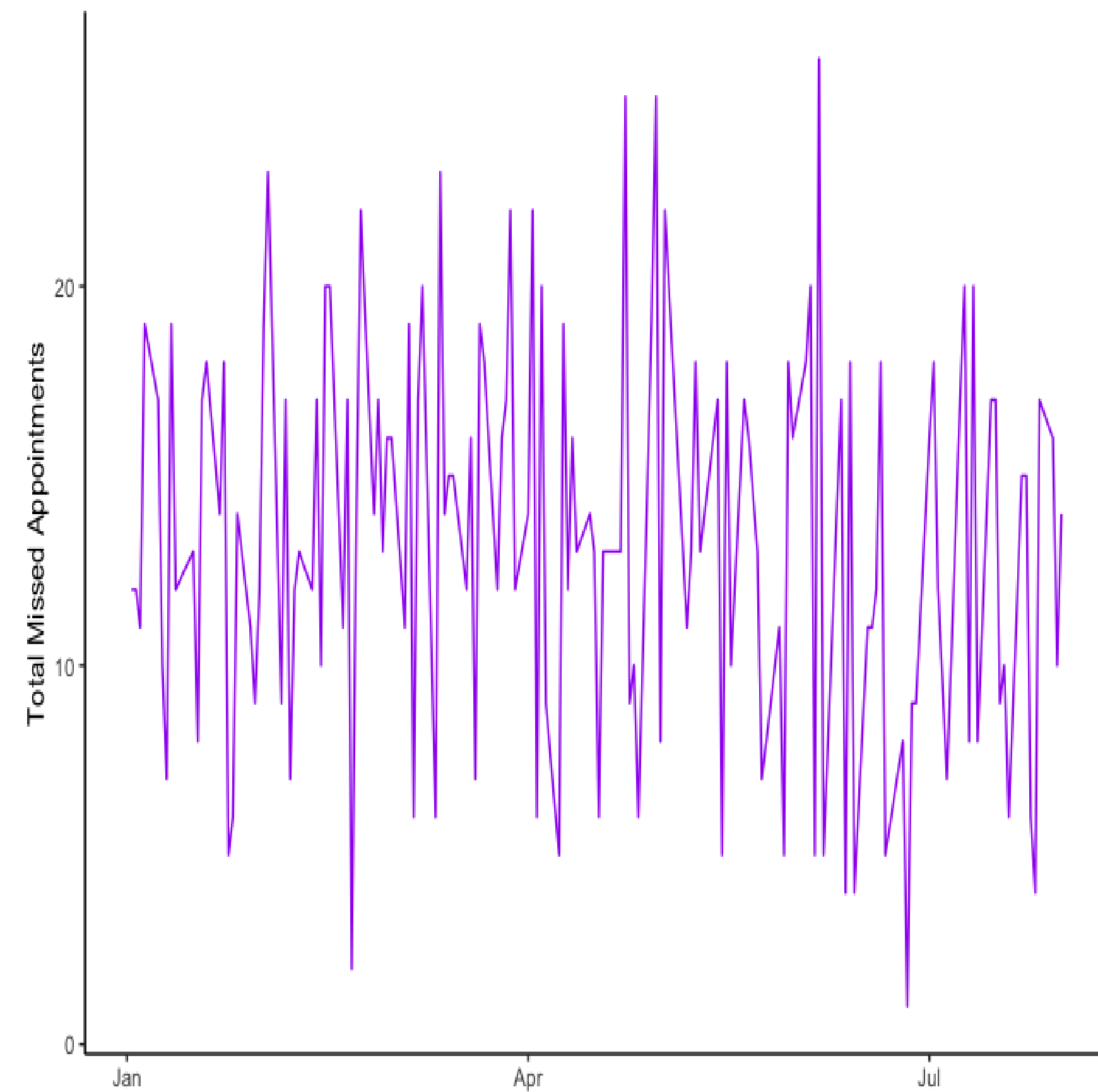
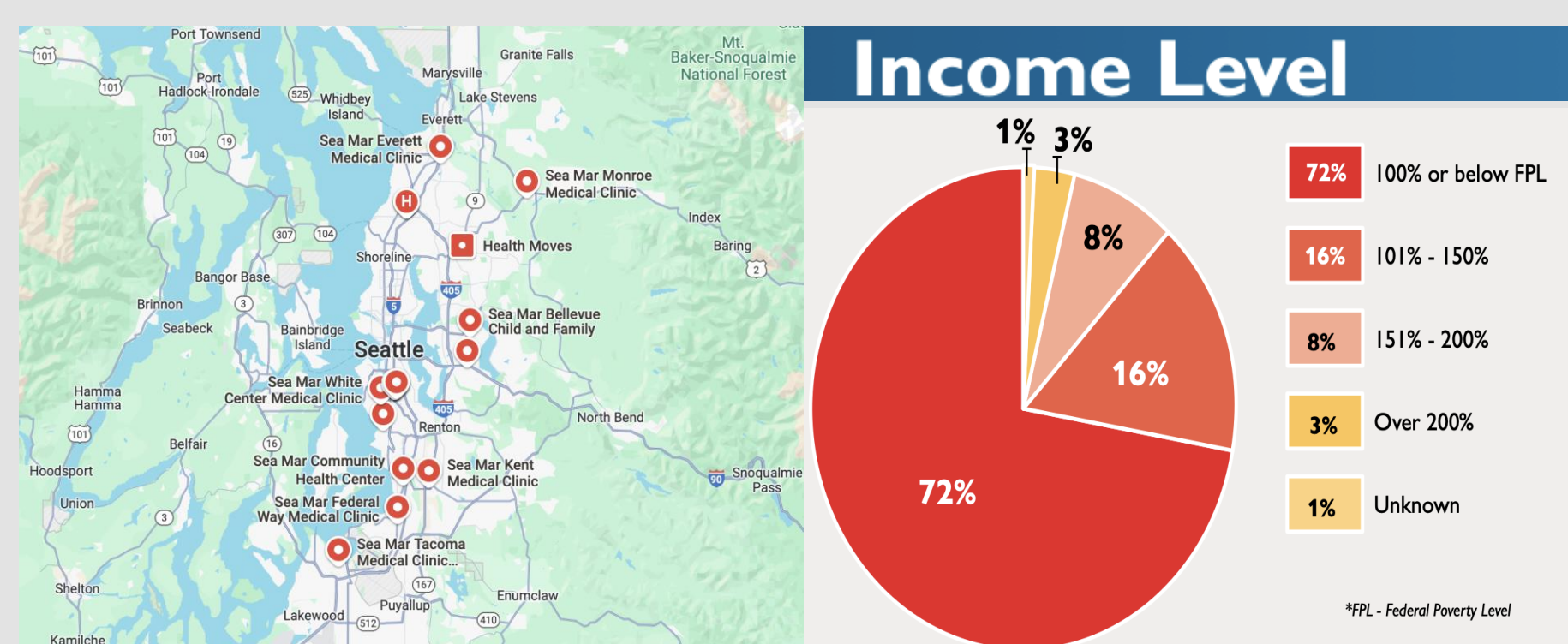


Figure 1. Total missed appointments, including no-shows and same-day cancellations, summarized from January to July 2024.

Methodology

Observe patient attendance patterns over a 7-month period

Obtain data on total number of appointments scheduled, missed, and actual visits completed

Perform data-analysis about the number of no shows, same-day cancellations, and scheduled appointments



References



Results

Over the 7-month period, a total of **1,935** appointments were missed, emphasizing the critical need for further research on reducing missed appointments.

Tuesday recorded the highest number of missed appointments, with a total of **499**, highlighting specific days that require targeted interventions.

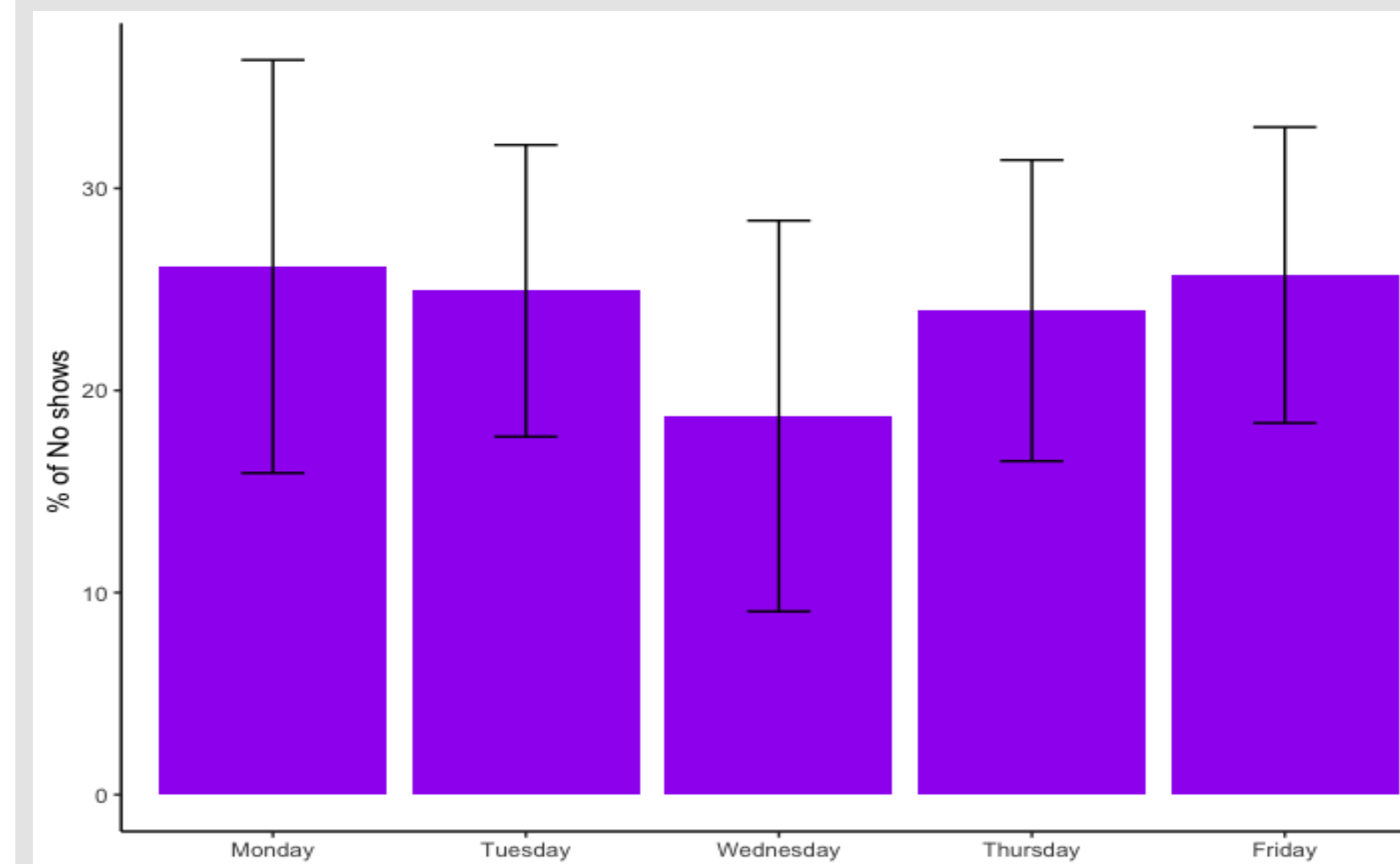


Figure 2. Average missed appointments per day of the week, highlighting trends in no-shows. Error bars represent plus and minus one standard deviation of the mean.

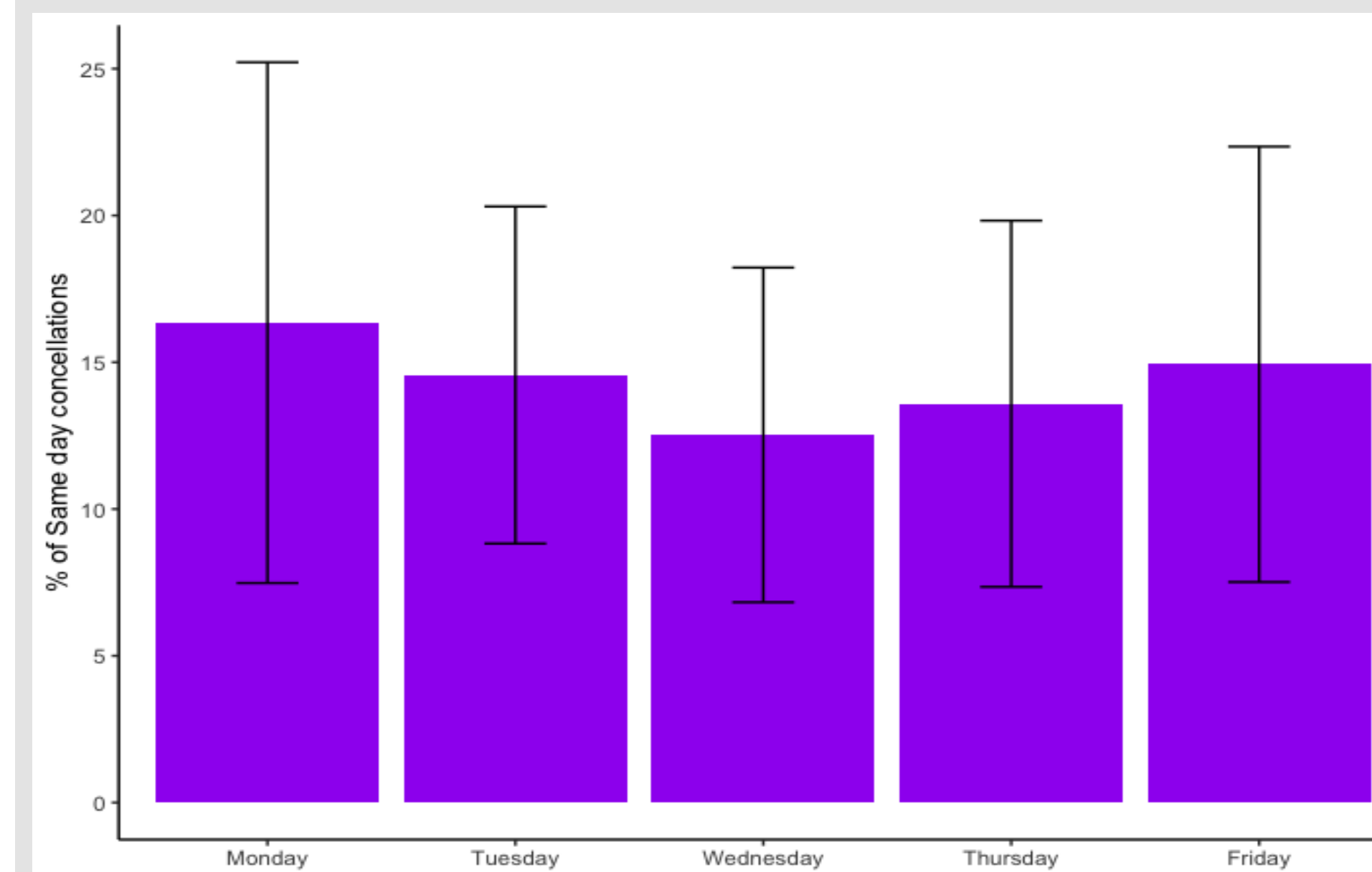


Figure 3. Average missed appointments per day of the week, highlighting trends in same-day cancellations. Error bars represent plus and minus one standard deviation of the mean.

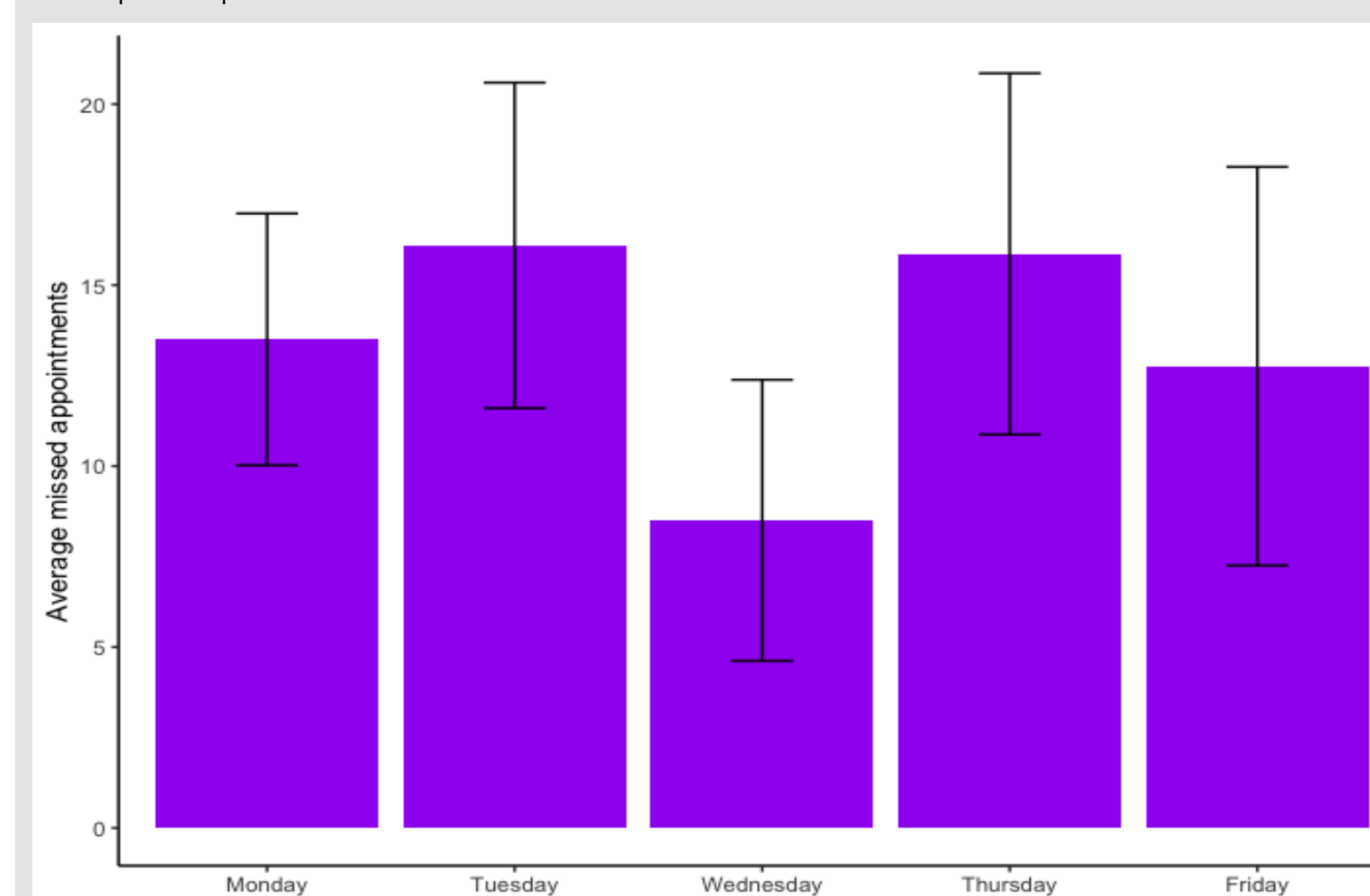


Figure 4. Average total missed appointments per day of the week, highlighting trends in no-shows and same-day cancellations. Error bars represent plus and minus one standard deviation of the mean.

Conclusion

There was no significant difference in the number of appointments missed across each day of the seven months. However, there was a high percentage of appointments missed overall throughout the time.

High missed percentages on Mondays and Tuesdays may indicate challenges with weekend communication or preparation for the start of the week.

Developing an efficient scheduling system that prioritizes and promotes patient attendance is essential and should remain a top priority in dental research.

Future Directions

Implement targeted communication strategies (e.g., text messages, voicemails, emails) several hours before appointments to reduce missed appointments on high no-show days.

Explore innovative appointment reminder platforms, such as direct messages via social media, to enhance patient outreach.

Investigate the effectiveness of attendance incentives, such as special sliding fee discounts for uninsured patients with consistent attendance.

Acknowledgements

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