

# **Improving Patient Attendance: An Analysis of No-Show Factors**

A Data-Driven Analysis of SMS Effectiveness and Key No-Show Drivers

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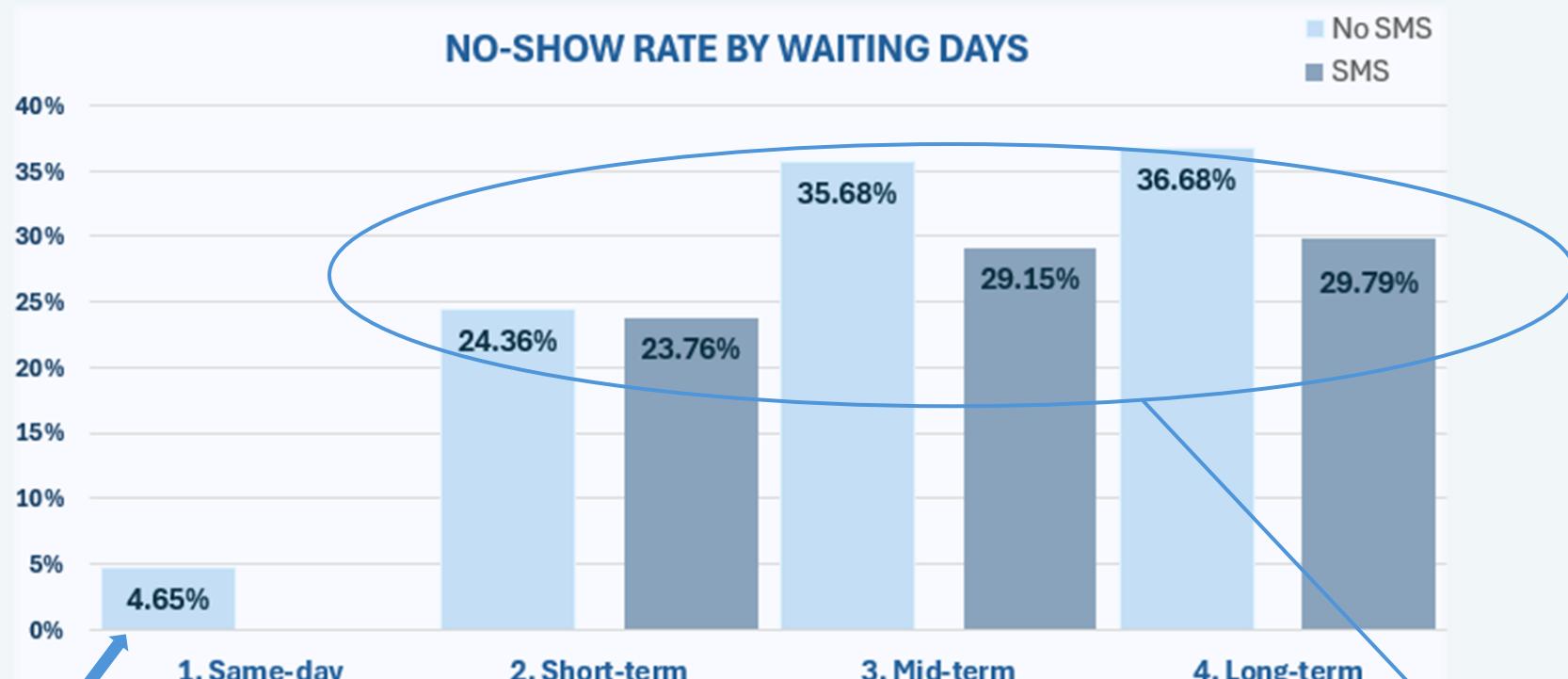
# The Initial Puzzle: Do SMS Reminders Actually Work?

SMS Received	No-Show Rate
No	16.70%
Yes	27.57%

**Observation:** Aggregated data surprisingly shows a **higher no-show rate** for patients who received an SMS.

**Hypothesis:** This counter-intuitive result suggests that a powerful confounding variable is skewing the analysis. The investigation focused on identifying this factor.

# The Real Driver: Waiting Time is the Key



**The Problem:** This massive, low-risk segment doesn't receive SMS, artificially lowering the 'No SMS' average

**The Truth:** For all planned appointments, SMS consistently reduce the no-show rate.

# Actionable Insights & Recommendations



## HIGH-RISK PATIENT PROFILE



Waiting Time:

Mid- and Long-Term (7+days)



Age Group:

Kids (0-18) and Young Adults (18-35)



Pre-existing Conditions:

Has Conditions



Neighbourhoods:

Gurigica, Jesus de Nazareth, Itararé



Day of the Appointment:

Monday, Friday



Social Program:

Bolsa Família



## ACTIONABLE INSIGHTS

It is worth expanding the number of SMS notifications to cover all patients. Taking into account the potential effectiveness, this will allow us to save about **\$320,000** per year instead of the nearly **\$160,000** we are saving now (extrapolated for a year).



It is worth paying attention to the types of visits and patients who are in the **HIGH-RISK PATIENT PROFILE**. For these target groups, it is worth changing the approach (perhaps modifying the text of the SMS or using phone calls).



Optimize scheduling by developing special strategies for appointments on Mondays and Fridays.