



# **CASE STUDY**

# REDUCING PATIENT NO-SHOWS WITH CCD'S PREDICTIVE MODEL

70%

Reduction in Predicted Cancellations

+50,000

Patients served annually

25%

Increase in resource utilization

### Overview

Our client faced a significant challenge with high patient no-shows, reaching a rate of **9.4%.** This negatively impacted operational efficiency, increased costs, and overall patient care and satisfaction. Implementing our advanced predictive model, this Healthcare Organization substantially improved patient scheduling, resulting in a **70%** reduction in predicted cancellations and over **\$300,000** in cost savings across seven locations.

# Background

Our client, a leading healthcare network with 20 locations across the country, was dealing with:

- An alarmingly high no-show rate of 9.4%.
- Significant uncaptured revenue. Inefficient resource utilization.

These issues had a huge negative impact in financial outcomes and patient care quality.

#### Goals

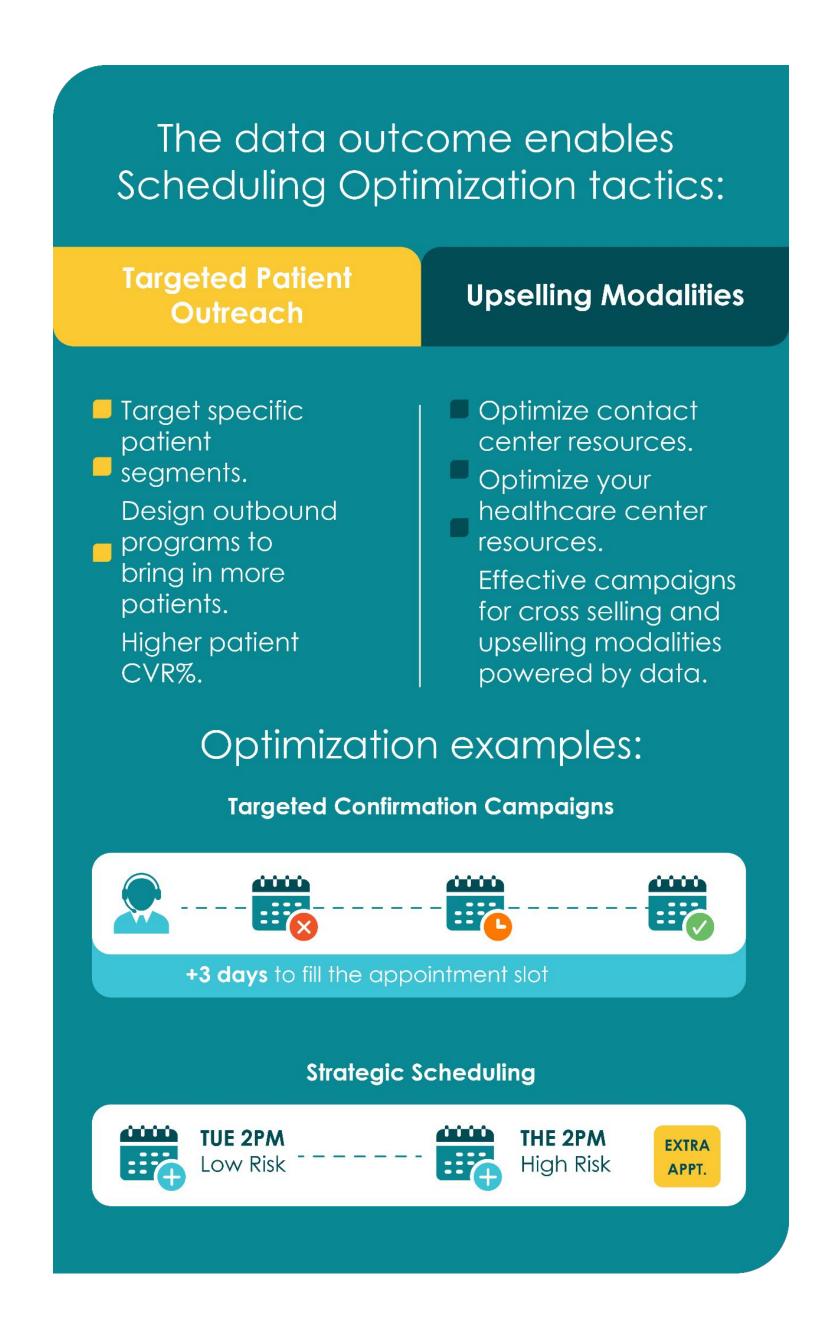
- Reduce the no-show rate by predicting patient cancellations.
- Increase operational efficiency and optimize resource utilization.
- Improve patient experience through more consistent appointment attendance.

# Solution: CCD's Predictive No-Show Model Implementation

We implemented our proprietary no-show predictive model to tackle this challenge head-on:

Advanced patient risk assessment: using machine learning to identify high-risk patients likely to miss appointments.

- Data-driven optimization: applied model outcomes to derive innovative scheduling tactics.
- Targeted intervention strategies: developed personalized approaches for high-risk patients.



#### **Results**

70% reduction in predicted cancellations: focusing on the patients identified by our model, helped our client successfully reduced 70% of the potential no-shows.

Improved resource utilization: staff scheduling, facility management, and overall operational efficiency improved, allowing the client to better allocate resources and reduce downtime.

Average appointment duration

Number of additional -effective- appointments generated

16

\$300,000+ in cost savings: no-shows reduction led to \$300,000 in cost savings across just seven locations within the first six months of implementation.

Enhanced patient experience and appointment adherence: through timely reminders and rescheduling options.

# **Key Takeaways**

- Predictive modeling allows the client to make decisions based on data, leading to more effective scheduling strategies and interventions.
- Scalable solution: implemented across seven locations effectively demonstrates the solution's scalability
- Positive financial impact: the substantial cost savings highlight the financial benefits of addressing no-shows through advanced predictive analytics.

#### Conclusion

Our predictive no-show model provided a strategic advantage to this healthcare organization, helping them tackle one of the most persistent challenges in healthcare as shown in the substantial cost savings, improved operational efficiency and patient care.

# **Next Steps**

**Expansion to additional locations:** to maximize impact of our ML-based solution.

Based on the success in the initial 7 locations, we can project:

- Total annual cost savings: approximately \$857,000 across all 20 locations.
- Improved patient care: potential to serve an additional 50,000 patients annually.
- Operational efficiency: 25% increase in overall resource utilization.

Integration with other operational processes: to increase operational efficiency across the entire organization.

Continuous improvement: regularly update and refine the predictive model based on new data and evolving patient behavior trends.

# **Client Testimonial**

"The implementation of this predictive model has been transformative. We've seen significant financial benefits and marked improvement in patient satisfaction and care delivery. It's a game-changer for our entire network."



