

Ambulatory Clinic No-Show Prediction Model Clinical Operations



Business Need & Use Case Overview

Across all Children's Mercy clinics, a non-trivial number of patients are missing their appointment due to the family not showing up at the allotted appointment time. This leaves providers with open slots where they could be providing care to patients in need. Alternatively, some patients are experiencing delays in setting their appointment(s).

By predicting which patients are most likely to no show for their appointment, clinics can perform interventions to improve patient attendance and/or be more efficient when scheduling all patient appointments.

Ethical/Regulatory Considerations

Avoid creating a bias in the model that would unintentionally harm a patient based on race, ethnicity, language, insurance type, etc.

Archetype

Taker

AI Technique(s) Used

Supervised ML

Core System(s) Used

Cerner

Digital Solution(s) Used

N/A

Implementation Stage

Piloting

Assessments

Risk	Complexity	Financial Impact
2/5	3/5	\$\$

Challenges/Lessons Learned

- Practice variations (amongst myriad clinics) add complexity to modeling
- Missingness challenges in our scheduling and billing data

Initial Outcomes

Piloting clinics have seen improvement in no-show rate