Contribution ID: **98** Type: **not specified**

Data-Driven Predictions to Minimize No-Shows in Diagnostic Scheduling

Missed appointments in diagnostic services contribute significantly to healthcare inefficiencies, increased operational costs, and delayed patient care. This study explores the use of data-driven predictive models to identify patients at high risk of no-show behavior in diagnostic scheduling. The analysis focuses on the MRI department, where the impacts of no-shows are particularly crucial. By leveraging historical appointment data, demographic information, and behavioral patterns, machine learning algorithms were trained and validated to forecast no-show likelihood. The proposed model demonstrates strong predictive performance and offers actionable insights for healthcare administrators to implement targeted interventions such as reminder systems or overbooking strategies.

Special/ Invited session

Classification

Both methodology and application

Keywords

No-shows, Machine Learning, Healthcare analytics, MRI, predictive modeling

Primary author: KARAMINAS, Antonios (UNIVERSITY OF PIRAEUS)

Co-author: BERSIMIS, Sotiris (University of Piraeus, Greece)

Presenter: KARAMINAS, Antonios (UNIVERSITY OF PIRAEUS)

Track Classification: Predictive Analytics