

THE USE OF A MACHINE LEARNING MODEL TO ASSESS LONGITUDINAL COLORECTAL CANCER ADHERENCE AND TO PREDICT FUTURE ADHERENCE

Roni Lotan

UEG Week Berlin 2025

Poster

Colorectal

October 7, 2025

A machine-learning model using individual-level data predicts low adherence to colorectal cancer screening within two years with high accuracy.

KEY POINTS

- The XGBoost model achieved an AUC of 0.917 (95% CI: 0.909-0.913) and accuracy of 83.58% (95% CI: 83.47%-83.68%) in predicting low adherence, defined as less than 50% proportional time coverage.
- Key predictive factors were low prior proportional time coverage, no prior colonoscopy, and older age at the first test.
- The study included 553,180 individuals aged 50 to 74 from Clalit Health between January 2008 and January 2020, with a screening rate of 55% at the end of follow-up.
- The tool can help healthcare organizations identify individuals at high risk of low adherence to colorectal cancer screening programs.

VIEW THIS CONTENT ON GUTFLIX

<https://gutflīx.eu/search/d/107c4daa-a813-11f0-a8fe-0242ac140006>



AI-generated summary

This summary was generated by an AI large language model based on the content transcript. It is for informational purposes only and should not be considered a substitute for clinical judgment. Always rely on your professional expertise and the full clinical context when making clinical decisions.