

Safe opioid prescribing: a prognostic machine learning approach to predicting 30-day risk after an opioid dispensation in Alberta, Canada.

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<https://psnet.ahrq.gov/issue/safe-opioid-prescribing-prognostic-machine-learning-approach-predicting-30-day-risk-after>

Opioids are [high-risk](#) medications and a significant source of [patient harm](#). Using administrative data for over 390,000 adult patients in Alberta, Canada, who received an opioid prescription from 2017-2018, the authors developed machine learning models to estimate the 30-day [risk](#) of opioid-related adverse outcomes. Findings suggest that incorporating hospitalization or physician claims into the models can improve predictive performance, as compared to the inclusion of [guidelines](#) or prescribing history alone.