AUTOMATIC IDENTIFICATION OF UNPLANNED HOSPITAL RE-ADMISSIONS

NON-TECHNICAL WRITE-UP

Unplanned hospital readmissions are a concerning patient safety indicator, often signaling their premature discharge or complications after treatment. Healthcare providers are required to report their unplanned readmissions to regulators, such as PHIN.

Identifying these cases demands objectivity and consistency, which is currently ensured through a labor-intensive manual process by governance teams.

To address this, I trained a logistic regression model on existing manually classified data, enhanced by information from electronic health records (EHR). This model classified new cases with a sensitivity of 87%, ensuring objective and uniform evaluations across hospitals, saving time and resources, and improving reporting accuracy.