

Decision Support Dashboards in Healthcare (2024)

Abstract: This paper (2024) investigates decision support dashboards in healthcare in the context of Health Informatics. We propose a workflow combining EHR, risk scoring, explainability. **Method:** Topic modelling (BERTopic) + qualitative coding. **Dataset:** Public benchmark dataset (n=50,000) plus internal holdout set. **Metrics:** NPV, PPV, sensitivity, specificity.

1 **Introduction:** We motivate the problem with operational constraints and stakeholder needs.

2 **Methodology:** Topic modelling (BERTopic) + qualitative coding. We report training details and ablations.

3 **Dataset:** Public benchmark dataset (n=50,000) plus internal holdout set. Preprocessing includes de-duplication and missing value handling.

4 **Evaluation:** Metrics used: NPV, PPV, sensitivity, specificity. We compare against baseline and variants.

5 **Results:** Benefits are concentrated in small SMEs; larger orgs show marginal gains.

6 **Limitations:** Evaluation omits latency and operational cost constraints.

7 **Conclusion:** We summarise findings and propose future work directions.