

Advanced Prediction From Health Record Data

Description:

This technology uses data from electronic health records (EHR) to predict a patient's functional disability after hospitalization, focusing on activities of daily living (ADL). By analyzing patient history, diagnoses, and functional status, it helps clinicians anticipate recovery outcomes and improve post-discharge care planning.

Problem:

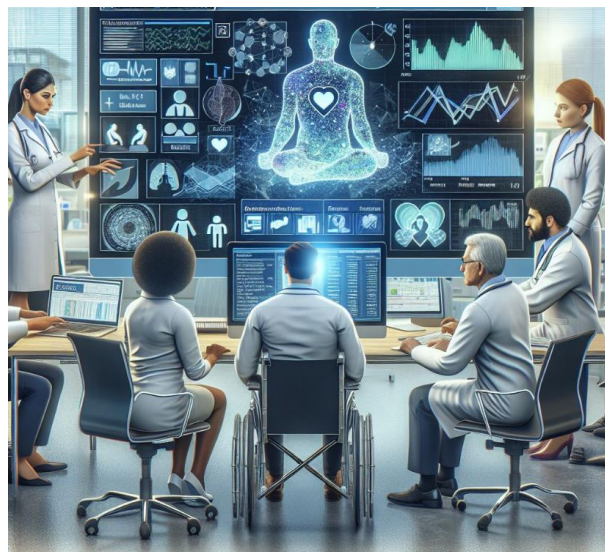
Current methods for predicting post-hospitalization functional status are often inaccurate and rely on subjective reports, leading to less effective care plans.

Solution:

This approach uses statistical models and machine learning techniques, such as Random Forest, to analyze EHR data and accurately predict functional recovery, providing reliable forecasts for both short and long-term disability after discharge.

Advantages:

- High accuracy in predicting functional disability (AUC ranging from 0.75 to 0.9)
- Uses existing EHR data, minimizing additional patient burden
- Provides timely insights for better post-hospitalization care planning
- Helps in assessing the effectiveness of medical treatments and recovery
- May be easily integrated into existing healthcare systems for clinical decision support



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