

Health Prediction and Monitoring with the use of Electronic Medical Records (EMR)- A Review

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Abstract. As the number of people in the world has grown, the need for electronic medical records has increased because large volumes of information are generated in hospitals, and it can be difficult to handle these records physically. Electronic Medical records (EMR) have significantly impacted the healthcare field, providing better patient care by computerizing hospital records. EMRs facilitate the electronic entry, maintenance, and upkeep of medical information about patients over long periods, resulting in better patient care and safety. This review describes and compares various methods and techniques to determine the most accurate ways to diagnose and predict diseases using EMR. Model evaluation is conducted in this review using metrics such as accuracy, recall, precision, and F1-score to evaluate the performance of each model. These techniques were divided into Deep Learning (DL) Methods, Machine Learning (ML) Methods, and Rule-Based Methods by studying recently published publications. Among the methods discussed in the review, Machine Learning is frequently regarded as the best method for health prediction using an EMR. Furthermore, this review also outlines the benefits and drawbacks of using these various techniques and how they have affected the healthcare industry.

Keywords: *Healthcare, Electronic Medical Records (EMR), Rule-based method, Disease diagnosis, Machine learning*