

Analysis of Patient Records Based on Data Mining

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Abstract

Data mining refers to the extraction of hidden predictive information from large database which helps in Predicting future trend and behavior thereby helping management make knowledge driven decisions. Patient records analysis System uses data mining tool designed to aid in quick access and retrieval of patient's information to avoid time wasted in retrieving of such data from hospitals data warehouse. In addition, the data mining tool was designed to discover hidden pattern that helps in decision making by management. Patients records analysis is an online automated system whose main aim is to aid in automating the process of capturing, storing and retrieval of patient medical records and have those records available at any other site (hospital) that has subscribed to the framework and can be access by authorized staff within an organization. Also, the system aimed at enabling doctors and records managers keep track of patient medical records and to enable them make good informed decisions regarding their patients based on their medical history. Through this system, physical files storage is significantly reduced hence patient's records are stored in professional way. There is security of records because they are stored remotely and anyone in need of the records can access them provided, they have the right credentials. To come up with this system, users and system requirements were elicited and analyzed to determine the functionality of the system. The system was designed using Structured System Analysis and Design Methodology (SSADM) which help in well-articulated analysis of the existing system, feasibility study, system design, implementation and proper documentation of design details. It majorly concentrates on the analysis and design phase of waterfall model of software development life-cycle (SDLC). The system enables quality of service in terms of medical attention given by enabling doctors and management to be able to view the rate of common diseases and their percentages. In addition, the management is able to know the number of patients a doctor has attended to within a particular period of time. This makes it easier for management to determine how much a doctor is supposed to be paid at the end of the month. Therefore, the system is able to analyze and generate reports on patient information and other related information that is useful for the management.