

# **Analytics for Hospitals' Health-Care Data**

## **LITERACY SURVEY**

**TITLE:** Data-Driven Methods for Typical Treatment Pattern Mining

**DESCRIPTION :**

A huge volume of digitized clinical data is generated and accumulated rapidly since the widespread adoption of Electronic Medical Records (EMRs). This paper discusses the research background - big data analytics in healthcare, the research framework of big data analytics in healthcare, analysis of medical process, and treatment pattern mining. Then the challenges for data-driven typical treatment pattern mining are highlighted, including similarity measure between treatment records, typical treatment pattern extraction, evaluation and recommendation, when considering medical information in EMRs. Furthermore, three categories of typical treatment patterns are mined from doctor order content, duration, and sequence view respectively, which can provide a data-driven guideline to achieve the “5R” goal for rational drug use and clinical pathways.

**TITLE:** A Systematic Mapping Study

**DESCRIPTION :**

The current study performs a systematic literature review (SLR) to synthesise prior research on the applicability of big data analytics (BDA) in healthcare. The SLR examines the outcomes of 41 studies, and presents them in a comprehensive framework. The findings from this study suggest that applications of BDA in healthcare can be observed from five perspectives, namely, health awareness among the general public, interactions among stakeholders in the healthcare ecosystem, hospital management practices, treatment of specific medical conditions, and technology in healthcare service delivery. This SLR recommends actionable future research agendas for scholars and valuable implications for theory and practice.

**TITLE:** Exploring big data analytics in health care.

**DESCRIPTION :**

Cost optimization is one of the major issues in health care as it has become very difficult in fetching patient's information across huge data bases. Here, various data mining techniques such as SVM, Decision Trees etc. have been discussed in order to address various healthcare issues. Later on Big Data Analytics tools were addressed on top of data mining techniques in health care sector, as the health care industry is one of the leading sectors where huge revenue will be generated across globe as the numbers of patients are increasing drastically with the population. In future Machine

learning with Big Data has lot of scope in healthcare as so many new diseases are coming into lie light across the world.

**TITLE:** Big Data Analytics Framework for Opinion Mining of Patient Health Care Experience

**DESCRIPTION :**

Preciously administration might be able to acknowledge the crucial decision-making process where the new investigations would be accounted for different research avenues.

**TITLE:** A systematic review of health care big data.

**DESCRIPTION :**

Analysing different perspectives about the concept of big data in healthcare Exploring the origins of healthcare big data Identifying tools and techniques for healthcare big data Analytics.