

Analytics for Hospitals' Health-Care Data

Team ID: PNT2022TMID53225

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Literary survey

S.No	Title of the paper	Author	Methods	Observations
1.	Data analytics in healthcare: promise and potential	Wullianallur Raghupathi And Viju Raghupathi	The paper describes the nascent field of big data analytics in healthcare, discusses the benefits, outlines an architectural framework and methodology, describes examples reported in the literature, briefly discusses the challenges, and offers conclusions	Health data volume is expected to grow dramatically in the years ahead. Comparative effectiveness research to determine more clinically relevant and cost-effective ways to diagnose and treat patients. Big data analytics in healthcare is evolving into a promising field for providing insight from very large data sets and improving outcomes while reducing costs. Its potential is great; however there remain challenges to overcome. The paper provides a broad overview of big data analytics for healthcare researchers and practitioners.
2.	Big Data Analytics in Healthcare:	Ashwin Belle, Raghuram Thiagarajan, Fatemeh Navidi and Kayvan Najarian	The rapidly expanding field of big data analytics has started to play a pivotal role in the evolution of healthcare practices and research. It has provided tools to accumulate, manage, analyze, and assimilate large volumes of disparate, structured, and unstructured data produced by current healthcare systems. Big data analytics has been recently applied towards aiding the	Big data analytics which leverage legions of disparate, structured, and unstructured data sources is going to play a vital role in how healthcare is practiced in the future. One can already see a spectrum of analytics being utilized, aiding in the decision making and performance of healthcare personnel and patients. Here we focused on three areas of interest: medical image analysis, physiological signal processing, and genomic data processing. The exponential growth of the volume of medical images forces computational scientists to come up with innovative solutions to process this large volume of data in tractable timescales. Medical image analysis, signal processing of physiological data, and integration of

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			process of care delivery and disease exploration.	physiological and “- omics” data face similar challenges and opportunities in dealing with disparate structured and unstructured big data sources.
3.	Big data analytics in healthcare: a systematic literature review.	Sayantan khanra, Amandeep Dhir and A.K.Ajmul Islam.	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.	The current study intended to address four research questions related to the application of BDA in healthcare. These questions have been answered following a standard protocol for reviewing resources from key databases. The study has identified the gaps in the existing literature and provided an actionable research agenda for future research on the utilisation of big data in the healthcare sector. However, despite the significant contributions of this current study, it suffers from three main limitations: first, book chapters, magazine articles, and thesis studies have been excluded from the scope of this study; second, journal articles and conference studies not available in English were not considered; third, studies not available in the four databases were not reviewed unless they appeared in the forward and backward searches. Future research is invited to overcome these limitations.