Analytics For Hospitals Health-Care Data

Literature Survey

The main aim of this paper is to provide a deep analysis on the research field of healthcare data analytics. This paper is analyzing the previous studies and works in the Research area , as well as highlighting some of highlighting some of guidelines and gaps. The paper has listed some data analytics tools and techniques that have been used to improve healthcare performance in many areas such as medical operations , reports, decision making , prediction and prevention system. Healthcare analytics refers to the use of vast amounts of collected data to provide organizations with actionable insights. These insights are developed through analytical disciplines to drive fact-based decision making. In turn, these decisions improve planning, management, measurement and learning.

As healthcare organizations around the world are challenged to reduce costs, improve coordination with care teams, provide more with less, and focus on improving patient care, analytics will be especially important. Primary care physician and nursing shortages are requiring overworked professionals to be even more productive. Plus, new businesses entering the market and new approaches to healthcare delivery will increase competition in the industry. Building analytics competencies can help healthcare organizations harness big data to create actionable insights that can be used by healthcare providers, hospital and health system leaders, and those in government health and human services to improve outcomes deliver value for the people they serve. As tumultuous as the current healthcare environment is, it's expected to become even more complex over the next several years. Challenges such as evolving market dynamics, increasing governmental regulation and more demanding consumers will require smarter, more informed decisions from organizations so they can remain competitive and deliver value in their communities.

Clinicians, healthcare providers-suppliers, policy makers and patients are experiencing exciting opportunities in light of new information deriving from the analysis of big data sets, a capability that has emerged in the last decades. Due to the rapid increase of publications in the healthcare industry, we have conducted a structured review regarding healthcare big data analytics. With reference to the resource-based view theory we focus on how big data resources are utilised to create organization values/capabilities, and through content analysis of the selected publications we discuss: the classification of big data types related to healthcare, the associate analysis techniques, the created value for stakeholders, the platforms and tools for handling big health data and future aspects in the field. We present a number of pragmatic examples to show how the advances in healthcare were made possible. We believe that the findings of this review are stimulating and provide valuable information to practitioners, policy makers and researchers while presenting them with certain paths for future research

In this modern techno-world, the term data is unavoidable and certainly, nothing is possible without its usage. The trends about how to analyse the data are the need of the hour. Data analytics is becoming a future escalating tool of all industries including medicine, robotics, etc. This article briefly explains how data analytics is used in healthcare systems. Health care is the process of maintaining and improving the health of an individual by preventing, diagnosing and treating the diseases, illness and other physical and mental imbalances in people. Data analytics is classified into four types and they are descriptive, diagnostic, predictive and prescriptive analysis. Health care makes use of prescriptive analysis to arrive at the best results and make better decisions. Big data plays a major role in data analytics. It helps the data analysts to collect data from the patients and store them efficiently. After the completion of this whole article, the reader will be able to get the collective idea about health care analytics.

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