

Big Data Analytics for Decision Support in Healthcare Information Systems Opportunities and Challenges

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ABSTRACT

This research discusses the use of Big Data analytics to support decision making in Health Information Systems (HIS): associated opportunities and challenges. The aim of this research is to identify the opportunities offered by Big Data analytics in the context of HIS as well as identify the challenges that need to be overcome to effectively implement Big Data analytics in HIS. The research method used in this study involved a literature review of relevant scientific publications on Big Data analytics in HIS. The information collected from this literature review is then analyzed systematically to identify existing opportunities and challenges. The research results show that Big Data analytics has great potential to improve decision making in HIS. Opportunities identified include improving understanding of disease patterns, epidemic forecasting, developing predictive models for diagnosis and treatment, and improving real-time patient monitoring. However, this research also revealed several challenges that need to be overcome, including data privacy and security issues, complex data integration, and limited existing resources. Based on the results of this research, it is concluded that Big Data analytics has great potential to support decision making in HIS. However, successful implementation requires effective addressing of the associated challenges. In facing these challenges, collaboration between health stakeholders and Big Data analytics experts is essential.

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