The real issue is not that we are acquiring large amounts of data. It's what you do with the data that counts. Today, a significant proportion of the cost and time spent in the drug development process is attributable to unsuccessful formulations. By enabling researchers to identify compounds with a higher likelihood of success, Big Data can help reduce the cost and the time to market for new drugs. Also, by integrating learning from medical data in the early stages of development, researchers will now be able to customize drugs to suit aggregated patient profiles.

Currently, information privacy concerns are the single biggest obstacle to Big Data adoption in health care. Another is the absence of an analytics solution powerful enough to gather massive volumes of largely unstructured health data, perform complex analyses quickly, and trigger meaningful solution, for instance, gather all the data from ICU monitors, which today goes un-stored, put it on the Cloud, decipher significant medical patterns that are yet undiscovered, and trigger a medical action instead of merely an alarm.

By providing an overview of the current state of big data applications in the healthcare environment, this research paper has explored the existing challenges that governments and healthcare stakeholders are facing. All big data projects in leading countries and healthcare industries have similar general common goals, such as the provision of easy and equal access to public services, better citizens' healthcare services etc. However, each government or healthcare stakeholder has its own priorities, opportunities, and threats, based on its country's unique environment.

Second, for medical data that cuts across departmental boundaries, a top-down approach is needed to effectively manage and integrate big data.

Third, real-time analysis of in-motion big data should be carried out, while protecting privacy and security. Thus, governments and healthcare stakeholders should explore new technological playgrounds, such as cloud computing, advanced analytics, security technologies, legislation, etc.
Finally, this study is limited in that the practical applications of big data for investigating healthcare issues have not yet been fully demonstrated due to the dearth of practice. With regard to future study, practitioners and researchers should carefully look at and accumulate information with regard to the practical applications of big data in order to determine the best ways of using big data in healthcare issues.