Abstract

This paper describes the problem of hospital patient care data visualization. Although a significant amount of different kinds of tools have been created to improve health care still there is a lack of tools that support patient care decision making. We briefly describe the method for visualization and analysis of multidimensional data implemented in the NovoSpark® Visualizer software (NV). An example of problem salvation based on data of patient state observation after the laparoscopic gallbladder removal is provided as well. The experiment results indicate that it is possible to visualize all the data from nurse report in a single image, to identify the anomalies, trends and regularities in it using multidimensional visualization. The decision time, error rate and amount of invested mental effort were analyzed. The conducted experiments demonstrate the significant difference between decision time and mental effort amounts for paper report analysis and visualizations analysis in favor of the visualizations.

References


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