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## Analysis of Diabetes Patients Using Pearson, Cost Optimization, Control Chart Methods

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**Abstract :** In this paper, we have taken certain important factors and health parameters of diabetes patients especially among children by birth (pediatric congenital) where using the above three metrics methods we are going to assess the importance of each attributes in the dataset and thereby determining the most highly responsible and co-related attribute causing diabetics among young patients. We use cost optimization, control chart and Spearmen methodologies for the real-time application of finding the data efficiency in this diabetes dataset. The Spearmen methodology is the correlation methodologies used in software development process to identify the complexity between the various modules of the software. Identifying the complexity is important because if the complexity is higher, then there is a higher chance of occurrence of the risk in the software. With the use of control; chart mean, variance and standard deviation of data are calculated. With the use of Cost optimization model, we find to optimize the variables. Hence we choose the Spearmen, control chart and cost optimization methods to assess the data efficiency in diabetes datasets.

**Keywords:** correlation, congenital diabetics, linear relationship, monotonic function, ranking samples, pediatric **Conference Title:** ICOCPA 2017: International Conference on Opportunity Costs in Production and Analysis

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