

## **Determination of the Risks of Heart Attack at the First Stage as Well as Their Control and Resource Planning with the Method of Data Mining**

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**Abstract :** Frequently preferred in the field of engineering in particular, data mining has now begun to be used in the field of health as well since the data in the health sector have reached great dimensions. With data mining, it is aimed to reveal models from the great amounts of raw data in agreement with the purpose and to search for the rules and relationships which will enable one to make predictions about the future from the large amount of data set. It helps the decision-maker to find the relationships among the data which form at the stage of decision-making. In this study, it is aimed to determine the risk of heart attack at the first stage, to control it, and to make its resource planning with the method of data mining. Through the early and correct diagnosis of heart attacks, it is aimed to reveal the factors which affect the diseases, to protect health and choose the right treatment methods, to reduce the costs in health expenditures, and to shorten the durations of patients' stay at hospitals. In this way, the diagnosis and treatment costs of a heart attack will be scrutinized, which will be useful to determine the risk of the disease at the first stage, to control it, and to make its resource planning.

**Keywords :** data mining, decision support systems, heart attack, health sector

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