

# **Costing of CT scan Services of Shahid Rajaei Hospital In Qazvin Using The ABC Model: 2017**

## **Abstract**

### **Introduction:**

Hospitals and other health care organizations are increasingly faced with a lack of resources as a major challenge. This issue potentially prompts managers and health planners to think about ways to reduce costs and use more efficiently than existing resources. Therefore, cost analysis can be one of the most effective means for health planners and managers to achieve this goal. The Activity Based Costing (ABC) system is one of the new systems in which its various applications in service activities are increasing day by day. The aim of this study was to determine the cost of CT scan services at Shahid Rajaei Hospital of Qazvin based on the Activity Based Costing Model in 2016 year.

### **Material and Methods:**

The present study was descriptive and applied in a retrospective manner. In this study, the cost of CT scan services was calculated using the ABC model. The population under study was all services provided in the CT Scan unit of Shahid Rajaei Hospital in Qazvin, which was not selected as the sample of the community due to the nature of the research. The sample was considered to be equal to the whole society. For data collection, HIS software, financial software and forms related to activity centers and related costs were used. Also, for sharing costs, other sources were used. In order to more accurately allocate costs, the software of the new financial system and Excel was used.

### **Results:**

The total cost of the CT scan unit in the corresponding year was estimated at 12503692176 Rials. The largest share of total cost was related to manpower (57.9%), consumables (23.4%) and overhead (18.7%) respectively. In this study, the most cost-effective and low-cost services belonged to injecting and non-injected services, respectively. Also, the results of the last step of

ABC showed that CT scan of Pan spiral with injections, the most expensive and CT scan of internal ear, coronal and axial, were the least costly in the study year.

**Conclusion:**

The high share of personnel and materials costs shows that these resources and their proper use should be given special attention. In addition, identifying and eliminating waste costs can be a more effective step for improving efficiency and cost savings.

**Keywords:** Costing, Activity Based Costing, Hospital, CT Scan