Comparison of the Ministry of Health’s tariffs with the cost of radiology services using the activity-based costing method

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Abstract

Introduction: Efficient use of resources in organizations is one of the most important duties of managers. Appropriate allocation of resources can help managers to do this well. The aim of this study was to determine the cost of radiology services and to compare it with governmental tariffs (introduced by the Ministry of Health in Iran).

Methods: This was a descriptive and applied study that was conducted using the retrospective approach. First, activity centers were identified on the basis of five main groups of hospital activities. Then, resources and resource drivers, activities, and hospital activity drivers were identified. At the next step, the activities related to the delivery of radiology process were identified. Last, through allocation of activities cost to the cost objects, the cost price of 66 services that were delivered in the radiology department were calculated. The data were collected by making checklists, using the hospital’s information system, observations, and interviews. Finally, the data were analyzed using the non-parametric Wilcoxon test, Microsoft Excel, and SPSS software, version 18.

Results: The findings showed that from the total cost of wages, materials, and overhead obtained, the unit cost of the 66 cost objects (delivered services) in the Radiology Department were calculated using the ABC method (Price of each unit of Nephrostogram obtained $15.8 and Cystogram obtained $18.4). The Kolmogorov-Smirnov test indicated that the distribution of data of cost price using the ABC method was not normal (p = 0.000). The Wilcoxon test showed that there was a significant difference between the cost of services and the tariff of radiology services (p = 0.000).

Conclusions: The cost of delivered services in radiology departments was significantly higher than approved tariffs of the Ministry of Health, which can have a negative impact on the quality of services.

Keywords: activity based costing (ABC), radiology services, public sector, governmental tariffs, Iran