

Letter to the Editor: The Basis for Calculating Costs in Health Technologies Assessment Studies

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Dear Editor,

Health technologies are necessary for the functioning of health systems (1). The World Health Organization has defined health technology as “the application of organized knowledge and skills in the form of devices, medicines, vaccines, procedures, and systems developed to solve a health problem and improve quality of lives” (1, 2). For the better diagnosis and treatment of patients, technology is increasingly used in health systems.

Due to the high costs of new technologies, health technology assessment (HTA) has become one of the main programs of the health systems of different countries to improve resource efficiency (3). Health technology assessment is a multidisciplinary activity that acts as a bridge between evidence and policymaking. Health technology assessment investigates the application of a health technology in terms of safety, clinical efficacy and effectiveness, cost, cost-effectiveness, organizational outcomes, social outcomes, and legal and ethical considerations (4).

One of the most important topics discussed in HTA studies is the analysis of an activity, intervention, or program in terms of its costs and consequences, which is known as economic evaluation in the health economics literature (5). Given that in recent years HTA has been the main step in the introduction of new technologies and its role in policies related to the compensation of providers and insurance coverage for technologies, researchers have paid much attention to performing such studies.

Considering the appropriate base for calculating the costs or choosing the appropriate type of cost in economic evaluation can play an important role in the accuracy of the obtained results and the right decision about it (6). Since various types of cost-related phrases are used in the health systems (i.e., price, cost, or tariff), these terms should be carefully considered to provide an appropriate

base for HTA studies. The distinguishing definitions of these terms are as follows.

- Price: According to the economic theories, the interaction of demand and supply determines the price of goods or services; in other words, the value of goods or services, which is usually determined by the market mechanism (interactions of supply and demand), is called price (7).

- Tariff: For some goods and services, economic conditions are such that pricing goods or services through the market mechanism is impossible or inefficient. Therefore, governments or states usually intervene to set the price, which is called tariff (8, 9).

- Cost: It is defined as the total value of resources consumed to achieve a goal (10). Based on the definitions provided and considering the nature of economic evaluation and HTA studies, cost should be considered as the result of interventions in studies.

Actual costing, normal costing, and standard costing are the three main methods for costing (11, 12). In actual costing, the key component of the final price consists of the costs that are actually incurred. In normal costing, among the cost factors, the costs of direct materials and direct labor are actual, but overhead costs are estimated. In standard costing, costs are calculated using the direct materials, direct labor, and overhead standards (11, 12).

In the standard costing method, the standard is used as a criterion for calculating the cost; therefore, these standards should be considered as the most important source for costing because not including these standards in costing can lead to unrealistic estimations of the costs (13), and in turn, mislead managers' decisions about insurance coverage of a technology and other service provision arrangements that are technology-based. Thus, it is suggested that the standard costing method be considered as the baseline in the economic evaluation of HTA studies.



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