

Identifying the Effective Factors for Auditing the Performance of Executive Managers of Public Hospitals: A Qualitative Study

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Abstract

Background: According to the characteristics of public hospitals, a review of the flexibility of the components of their management accounting system is necessary.

Objectives: The present study aimed to identify the factors affecting the audit of the performance of executive managers of public hospitals.

Methods: The present study is an applied qualitative study based on grounded theory. In this regard, semi-structured interviews were conducted using the expert sampling technique and interviewing 18 specialists and experts familiar with the financial affairs of public hospitals. The sample size for interviewing experts was finalized within the theoretical saturation framework. The data analysis was performed in 3 stages of grounded theory, including open coding, axial coding, and selective coding. Then, the effective factors were classified into 6 main categories: causal conditions, axial phenomena, contextual factors, intervening conditions, strategies, and consequences in the form of a paradigm model.

Results: "The field of auditing, the field of organizational management, and the field of the structure" were 3 categories related to causal conditions. "Budgeting and financial reporting" were identified as 2 main phenomena factors affecting the audit performance of executive managers of public hospitals; also, "establishment conditions, techniques, and requirements for auditing" were recognized as contextual conditions. "Environmental factors, applicable laws, and regulations" were identified as mediating/intervening conditions. Strategic conditions included "structural factors and behavioral factors at the level of medical universities"; also, the categories of "public sector productivity, economic efficiency, effectiveness, efficiency, and achievement of organizations" were recognized as outcomes related to auditing the performance of executive managers of public hospitals.

Conclusions: Recognizing the factors affecting the performance audit of public hospital managers is extremely significant and should be designed based on its affecting components, a standard and integrated auditing system for auditing the performance of public hospital managers.

Keywords: Performance Audit; Executives; Government Hospitals; Grounded Theory

1. Background

Performance auditing is part of a comprehensive auditing system that applies innovative methods to evaluate the efficiency, effectiveness, and cost-effectiveness of the general and functional financial resources of executive bodies (1, 2). According to progressive changes in a complex world with limited resources and numerous ambiguities, performance auditing enables the public sector to modify, improve, or strengthen its policies based on its relationship with citizens (3).

Performance audit reports highlight the most important public sector events and practices that are important to politicians and the public and make it possible to distinguish legitimate activities from illegal activities. In

addition, it plays an important role in enforcing accountability and increasing transparency and confidence-building in the public sector (3).

Performance auditing is not a new topic and dates back to the 19th century. In Iran, the Court of Audit, as the main body for monitoring the financial performance of public sectors, has considered it necessary to exercise continuous control and monitoring over the financial performance of agencies that use the public budget in some way (4), but presenting a performance audit report is one of the most fundamental and difficult steps in accomplishing a performance audit in Iran (5). Afshari and Sadat Salmasi reported that the performance audit frame-



work provided by the Court of Audit is not sufficient for performance auditing (6).

Governmental hospitals have a significant role in fulfilling the responsibility of maintaining public health. One of the main concerns of these institutions is the continuation of quality activities and optimal allocation of resources. In this regard, performance review and study of procedures and management accounting design to achieve this goal is essential (7). Because of the large share of public budgets and credits, first, the transparency of their financial performance has a special place in increasing the response to public demands; secondly, they face a large volume of people who have the lowest expectations of receiving quality services.; third, they have a large volume of financial activities that need to do fast and precise.

2. Objectives

Considering that no study has been conducted on the implementation of performance accounting in hospitals in Iran, this study, by recognizing the literature and the factors affecting the audit of the performance of public hospital managers, tried to help establish this type of accounting by the responsible bodies. It is hoped that the results can be useful in deciding the factors influencing the design of audit programs.

3. Methods

The present study is an applied qualitative study performed in a library field. The grounded theory was used as the main research method, carried out in 3 main stages: open coding, axial coding, and selective coding.

Open encoding is the analytical process of naming concepts and classifying and discovering features and dimensions in the data through an ongoing flip-flop technique in which the researcher examines and analyzes concepts from different angles (from inside out or upside down) to gain a different perspective on the importance and position of concepts.

In the open coding phase, semi-structured interviews with 18 public hospital experts, including 3 university professors, 3 hospital managers, 3 hospital department managers, 3 financial managers (one from resources and support assistants), and 5 heads of financial departments with at least 10 years of experience and familiarity with research issues. The sample size was stopped due to saturation. Interviewees were chosen through an expert sampling technique, which is a subset of the purposive sampling methods. In this sampling method, the researcher's goal is to select information-rich experts according to the purpose of the research and help the researcher to form his/her theoretical model, and that work continues until the classification of data and information is saturated with all the details, and theories are carefully described.

Implemented recorded interviews, were identified using the content analysis method by line-by-line review,

conceptualization, and categorization; then, based on similarity, conceptual relationship, and common features between open source, concepts, and categories.

To observe ethical considerations before the interview, a letter signed by the researcher that it has a moral obligation to keep and not publish the content of the interview and the details of the participants were given to the interviewees. Interviews were also recorded with participants' permission and examined for key points.

In the axial coding stage, using the results of the open coding stage, study and review the results and redistributing the data to the interviewees by telephone and direct presence, and the collected data and information were re-examined and modified. In addition, by making corrections and obtaining their expert's opinion, the information was expressed in 6 modes: casual condition, contextual condition, core category or phenomenon, intervening condition, actions, interaction, and consequences; then, through the paradigm model, they were interconnected.

In the selective coding stage, the core category on which other categories are based was selected methodically and by relating it to other categories; then, the theory was written.

4. Results

According to interviewees (hospital directors, hospital department directors, resource and support assistants, and administrative assistants), factors influencing the performance audit of public hospitals based on the 6 conditions of the grounded theory at the open coding stage were as follows:

4.1. Causal Conditions

The results of the open coding stage showed that the 3 categories related to causal conditions and affect the audit of the performance of executive managers of public hospitals were the audit area, organizational management area, and structural area. These conditions are the main factors causing the phenomenon under study.

4.2. Core Phenomenon

It was recognized as a pivotal phenomenon by examining the concepts and categories related to auditing the performance of executive managers of public hospitals. The results showed that 2 categories of audit performance and budgeting and financial reporting influenced the performance audit of the executive directors of public hospitals and were related to the central conditions.

4.3. Contextual Conditions

Based on the results of reviewing the audit concepts of the performance of the executive managers of public hospitals, 3 categories of empowerment, establishment conditions, techniques, and requirements for perform-

ing the audit were recognized as contextual conditions, representing a series of special features that indicate the phenomenon of the performance of the executive managers of public hospitals.

4.4. Intermediary/Interventional Conditions

The results showed that the 2 categories of environmental factors and applicable laws and regulations were among the conditions that facilitate or constrain the audit for the executive directors of public hospitals in a particular field. These conditions affect the act/interaction quality.

4.5. Strategy/Actions and Interactions

Three categories of structural factors at the level of public institutions, structural factors at the level of medical universities, and behavioral factors at the level of medi-

cal universities were identified as strategic conditions affecting the performance audit of public hospitals executives. Strategies in grounded theory refer to providing solutions to cope with the phenomenon under consideration, the aim of which is to manage the phenomenon studied, cope with it, and demonstrate sensitivity.

4.6. Results and Consequences

Based on the study results, 5 categories of public sector productivity, economic efficiency, effectiveness, efficiency, and achievement of organizations were known as the outcome conditions related to auditing the performance of executive managers of public hospitals. The consequences result from action and reaction conditions that exist about the phenomenon.

The overall results of the study are summarized in Table 1.

Table 1. Open Codes, Subcategories, and Categories Related to Auditing the Performance of Executive Managers of Public Hospitals

Core category	Category and Subcategory	Open Codes
Auditing the performance of executive managers of public hospitals	Casual conditions	
	Audit area	Professional competence; Uncertainty of scope of proceedings; Failure to determine appropriate indicators for evaluation; Failure to determine the appropriate framework for reporting
	The field of organizational management	Managers' awareness of the benefits of performance auditing; The proportion of powers and duties of department managers and operational staff
	Structural domain	Improper execution of the operating budget; Inadequacy of the existing accounting system
	Core phenomenon	
	Audit performance	Assurance of the members of the audit committee; Assurance of projects; fight against corruption; Ability to identify specific risks; Treasury risk; Strategic risk; Information technology risk; Communication skills; Familiarity with the place of business
	Budgeting and financial reporting	Establish a budgeting system with a performance-based budgeting approach; Observance of rules and regulations and financial reporting requirements; Establishment of an integrated financial and management system; Preparation and presentation of timely and reliable information and reports, as well as unification and consistency of statistics and information and reports issued by various units, especially financial reports, including financial statements (companies and capital asset acquisition plans); Management and control of expenses and establishment of budget control system; Prepare appropriate reports on the achievement of approved programs by units and periods and follow up on the implementation of programs at the strategic and operational levels; Utilizing an appropriate pricing system for activities and establishing a management accounting unit; Planning to attract the required financial resources for projects and capital projects within the framework of relevant rules and regulations
	Strategies (actions and interactions)	
	Structural factors at the level of public institutions	Operational budgeting; Audit Committee; Estimate the cost of goods and services; Applying IT tools; Accounting and reporting system; Submit an operation report; Applying an accrual basis; Internal Audit

Structural factors at the level of medical universities	Partnership with international organizations outside the organization; Development of information technology tools; Determining the scope of consideration; Special Performance Auditing Groups; Define appropriate criteria
Behavioral factors at the level of medical universities	The view of auditors of medical universities; Training of audit staff; Perspectives of the directors of the University of Medical Sciences; Knowledge and experience of managers; Selection of heads and expert managers; Knowledge and experience of auditors
Behavioral factors at the level of institutions; general	Knowledge and experience of employees; Managers' tolerance threshold; Perspectives of public institutions employees; Perspectives of public institutions managers; Knowledge and experience of managers
Contextual conditions	
Empowerment	Status of manpower; Strengthen Islamic discipline and transparency; Targeted development of human capital; Creating and integrating human resource management information systems; Supporting micro- and macroeconomic activities
Deployment conditions	Existence of rules and regulations; Emphasis on transparency of financial information and performance; Accountability of public sector institutions; The level of public demands of the people; Level of the response of manager of public hospitals (MPs); Support of senior officials of the country; Development of related courses and disciplines; Performance auditing standards
Techniques and requirements for auditing	Total Quality Management; Balanced assessment card; Activity-based costing; Implementation of operational budgeting system
Intermediary/interventional conditions	
Environmental factors	Lack of uniform rules in the executive apparatus; Quality of Court of Audit supervision
Applicable laws and regulations	Amendment of the General Accounting Law; Amend the law of the Court of Audit; Amend the program and budget law; Amendment of the Civil Service Law
Consequences	
Productivity of public sectors	Improvement and development of structural resources; Improvement and development of capital resources; Improvement, development, and design of management systems; Development, improvement, and empowerment of human resources
Economic efficiency	Care and maintenance of resources; Use the selection of appropriate methods for procurement; Use of appropriate manpower according to the volume of executive operations; Prevent the appointment of highly qualified personnel in inappropriate positions; Maintenance of materials over the need; Maintenance of valuable and expensive equipment; Avoid wasting resources
Effectiveness	Achieving goals or any other measurement criteria; Evaluate the organizational planning system, including the goals and detailed plans of the organization; Assess the adequacy of the management system; Determine the appropriate space to achieve the desired level of results; Identify barriers to achieving satisfactory results; Compliance with relevant laws and regulations; Proper implementation of the goals of the program/plan/activity in progress
Performance	Strive to fulfill your responsibilities; Avoid inappropriate manual and computer methods; Avoid paperwork in vain; Avoid inefficient systems and operational methods; Avoid complex hierarchies or communication patterns; Avoid rework; Avoid unnecessary and inefficient work
Achievement of organization	Improve the costing system and allocate costs more optimally; Determining the cost and pricing more rationally and accurately; Operations control and business decision-making planning; More accurate evaluation of managers' operations; Eliminate value-added activities

The relationships between causal/core phenomenon, contextual/mediating conditions, strategies, and consequences are shown in Figure 1.

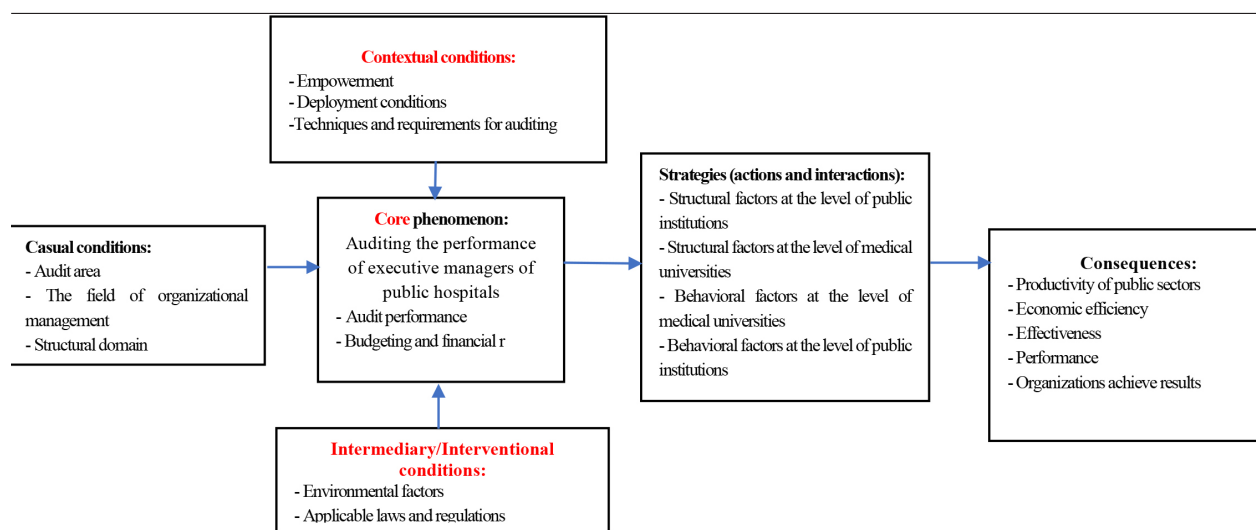


Figure 1. The relationships between causal/core phenomenon, contextual/mediating conditions, strategies, and consequences for auditing the performance of executive managers of public hospitals.

5. Discussion

This study identified the components of auditing the performance of executive managers of public hospitals. Due to the limited scope of the study and the lack of a general pattern for classifying the information disclosed in performance audit reports, it is only classified and presented in the form of internal control components based on the Kozo framework. The main challenge of performance auditing in the public sector of Iran is to define and measure the criteria of efficiency, effectiveness, and economic efficiency, and the proper implementation of performance auditing requires the use of new management techniques, such as balanced evaluation, total quality management, and activity-based costing (8).

Based on the study findings, “the field of auditing, the field of organizational management, and the field of the structure” were 3 categories related to causal conditions. “Budgeting and financial reporting” were identified as 2 main phenomena factors affecting the audit performance of executive managers of public hospitals; also, “establishment conditions, techniques, and requirements for auditing” were recognized as the contextual conditions. “Environmental factors, applicable laws, and regulations” were identified as the mediating/intervening conditions. Strategic conditions included “structural and behavioral factors at the level of medical universities.” Also, the categories of “public sector productivity, economic efficiency, effectiveness, efficiency, and achievement of organizations” were recognized as outcomes related to auditing the performance of executive managers of public hospitals.

Lack of proper professional rules and standards, improper implementation of performance-based budgeting, inappropriate accounting system, lack of sufficient knowledge and skills, the ambiguity of scope of proceed-

ings, inappropriate indicators for measuring criteria, inappropriate framework for performance audit reports, lack of managers’ awareness about the benefits of performance auditing, disproportionate responsibilities of managers and employees, lack of a culture of public accountability, budget constraints, and lack of effective private, professional organizations are the most important challenges of achieving performance audit in executive bodies (9-11).

In general, the accountability system of large public sector institutions, including the government and hospitals, is based on the theory of systems and subsystems, which in communication and balance with each other provides the necessary conditions to achieve its goals (12). The accountability system of such institutions has different types and levels, the realization of which depends on the functioning of subsystems such as budget, accounting, auditing, performance appraisal, and free uncomplicated access to information and the logical fit of these systems (12).

Considering that the use of performance auditing will increase information transparency and promote trust and accuracy, there is a significant direct relationship between declining corruption and information transparency and improving trust and accuracy, which is caused by performance auditing (13), and, there has been no research on the content of performance audit reports. Therefore, it is suggested that the findings of this study could be the basis for further research to improve the field of performance auditing. In future research, while paying more attention to details and more accurate classification of information, reports issued by other regulatory bodies, including the Court of Audit, should be evaluated separately to obtain more definite and specific results from the reports provided by the auditing orga-

nization. To improve accountability in the public sector, it is necessary to formulate mandatory rules and regulations for proper performance auditing in the executive apparatus and provide the necessary preconditions for facilitating this type of audit by creating performance-based budgeting systems and performance appraisal. The guidelines used by the auditing organization in this audit are reviewed by using the experiences of leading countries in the field of performance auditing. In addition, efficiency, economic efficiency and effectiveness, environment, social justice, and organizational ethics are considered.

Despite the limitations of this study in selecting more sample sizes to increase the accuracy of the study in better identifying the factors affecting the audit of the performance of executive managers of public hospitals, according to the present findings, there are various recommendations as follows: (1) subjecting the provision of job and organizational facilities in the public sector to the quality of performance audit reports to increase motivation and observe the criteria of efficiency, effectiveness, economic efficiency, and environment; (2) training and employing qualified manpower with the necessary non-accounting specialties (such as economics, information technology, environment, statistics, etc.) according to the basics of the evaluated organization; (3) employing the graduates of the field of auditing and public sector accounting in performing audit operations, along with optimal and continuous training.

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