



The Role Of Modern Techniques Of Management Accounting and Cost Accounting in Improving Cost Efficiency and Quality Of Care in Urology: a Theoretical Study

Rasha Jasim Ahmed Ebraheem Alobaidy

Lecturer Dr. College Of Islamic Sciences, Department Of Islamic Banking And Finance,
University Of Al Iraqia, Iraq

*Korespondensi Penulis : rasha.ahmed@aliraqia.edu.iq**

Abstract. *Economic and demographic developments in the past few decades have increased the pressure on efficiency in the healthcare industry. Modern management accounting and cost accounting techniques are a critical component in improving the efficiency and quality of care in urology. With the ever-increasing costs of healthcare, the need for a sophisticated accounting system that can provide accurate data on costs and revenues is more important than ever. The aim of this research was to investigate the role of modern techniques in management accounting and cost accounting as a means of enhancing cost efficiency and quality of care in urology. The research highlights the importance of training medical staff in these techniques, as this can improve overall performance and reduce costs without compromising the quality of care provided to patients. These techniques have been shown to help physicians and administrators make informed decisions, which helps improve the efficiency and quality of care. They also contribute to improving communication between medical teams, enabling better patient care. By focusing on improving resource and cost management, these techniques can play a pivotal role in achieving superior and effective health outcomes.*

Keywords: *Management accounting, Cost accounting cost efficiency, Quality of care, Urology*

Abstrak. Perkembangan ekonomi dan demografi dalam beberapa dekade terakhir telah meningkatkan tekanan terhadap efisiensi dalam industri kesehatan. Akuntansi manajemen modern dan teknik akuntansi biaya merupakan komponen penting dalam meningkatkan efisiensi dan kualitas perawatan di bidang urologi. Dengan semakin meningkatnya biaya layanan kesehatan, kebutuhan akan sistem akuntansi canggih yang dapat menyediakan data akurat mengenai biaya dan pendapatan menjadi semakin penting. Tujuan dari penelitian ini adalah untuk menyelidiki peran teknik modern dalam akuntansi manajemen dan akuntansi biaya sebagai sarana untuk meningkatkan efisiensi biaya dan kualitas layanan di bidang urologi. Penelitian ini menyoroti pentingnya melatih staf medis mengenai teknik-teknik ini, karena hal ini dapat meningkatkan kinerja secara keseluruhan dan mengurangi biaya tanpa mengurangi kualitas layanan yang diberikan kepada pasien. Teknik-teknik ini telah terbukti membantu dokter dan administrator membuat keputusan yang tepat, sehingga membantu meningkatkan efisiensi dan kualitas layanan. Mereka juga berkontribusi untuk meningkatkan komunikasi antar tim medis, sehingga memungkinkan perawatan pasien yang lebih baik. Dengan berfokus pada peningkatan manajemen sumber daya dan biaya, teknik-teknik ini dapat memainkan peran penting dalam mencapai hasil kesehatan yang unggul dan efektif.

Kata Kunci : Akuntansi Manajemen, Akuntansi Biaya Efisiensi Biaya, Kualitas Pelayanan, Urologi

1. INTRODUCTION

As a tool to satisfy the needs of time, the accounting system has significant flaws such as invalidity, incompleteness, lack of repeatability, precision, inconsistent long-term impacts, misunderstanding, and erroneous variable measurement (Johnson and Kaplan, 1987). Despite this, accounting offers a wealth of important and practical information and is the worldwide language of business. Financial statements, according to Horngren and Foster (1991), are insufficient for making decisions. According to Kaydos (1991), the problem goes beyond semantics and those managers cannot possibly get all the information they require from current

accounting systems in order to act quickly and wisely. The rapid advancements in manufacturing technology, fierce global rivalry, and constantly expanding information processing capabilities mean that traditional management accounting systems are no longer able to provide management with the essential information they need to plan, control, and achieve organizational goals (Johnson & Kaplan, 1987). It is obvious that new technology is altering cost structures, and that this is causing competition, complexity, and changes to the environment and technology. Given the growing awareness of new technological advancements and competitiveness, as well as the significance of new instruments for enhancing operations in manufacturing and service companies, the suitability of current systems is being questioned (Moradi, 2016).

Because of its many approaches, perspectives, and analyses, management accounting is regarded as one of the renewable sciences. It is a contemporary science that is always adaptable and plays a significant and useful function in assisting managers with organizing, directing, assessing, and making the right choices. The old approach to management accounting has started to give way to the contemporary approach as its frameworks, concepts, dimensions, and methodologies have evolved to meet the demands of management and the demands of the current world. The emergence of fierce competition amongst businesses producing similar goods, the variety and multiplicity of consumer preferences, which has increased the percentage of the commodity mix, and the rise in the percentage of indirect costs compared to direct costs are some of the factors that have contributed to the development of management accounting methods (Mater & Kanasro, 2018). Many contemporary management financial accounting techniques have arisen in response to the growing significance of intangible assets and to satisfy management's information demands in light of economic, environmental, and technological aspects. The most well-known of them are: - A system of activity-based costing. - Targeting expenses. An examination of customer profitability. -A balanced scorecard. - The Six Sigma quality assessment system. Because it's critical for businesses to stay up to date with contemporary management accounting techniques in order to give management the data they need to make decisions across a range of industries (Shatnawi & Taber, 2020).

Furthermore, it is critical to evaluate the revenue and cost effectiveness of developing financial institutions because the financial services sectors' structures are changing quickly. Benefits like higher profitability, more funds available, improved pricing and customer service, and increased safety and reliability can be anticipated as these institutions become more efficient; in other words, variations in managerial capacity to control expenses or maximize revenues seem to outweigh the costs involved in determining the scale and scope of production

(Berger, 1993). According to Shank and Govindarajan (1993), Modern management accounting systems need to consider how important a company's performance is. Significant changes in the service sector have resulted in the rise of new rivals and more freedom to choose products and prices. In a competitive market, well-managed service organizations with a deep understanding of their offering and effective management strategies may dramatically boost their profitability.

Cost accounting systems are seen by Janserani (2020) as management planning and control methods that give management the accounting tools required for organizing, directing, and assessing activities. A cost accounting system allows for the continuous updating of data on the effectiveness of services rendered as well as the behavior and composition of costs. "The application of the principles, methods, and techniques of cost and cost accounting to the science, art, and practice of controlling costs and determining profit" is how cost accounting is defined. Presenting the data gathered for managerial decision-making is another aspect of it. The sophisticated facilities that businesses and hospitals have access to, the volume of operations they carry out, their complexity, or their outward look all contribute to their success. A health department's money is allocated in accordance with the consultant's capacity to sway higher-ups in the management chain. A successful healthcare center should be characterized by its capacity to provide high-quality, reasonably priced medical services (Marques, 2023).

2. RESEARCH PROBLEM

Countries have seen a progressive rise in healthcare spending over the last few decades. The implementation of various cost containment measures has resulted in greater pressure on cost control due to this development (Schwietz, 2016). However, in order to effectively support decisions about the allocation of resources and effectiveness, suitable performance measurement and control systems must be built in order to address efficiency concerns at the institutional level. Managers may be able to better grasp these techniques and identify the best combination of practices for their environments by closely examining a variety of management accounting procedures in various healthcare settings. When doing so, contextual elements must be carefully considered. Even though the topic of management accounting methods in healthcare has previously been extensively studied from both a global and national standpoint, there are still a lot of unexplored study opportunities in these nations (Malmlose, 2019).

To accomplish their objectives, healthcare companies rely on contemporary methods in cost accounting and management accounting. Modern methodologies in management accounting and cost accounting contribute to achieving a balance between cost efficiency and

quality of care. It is critical that healthcare institutions keep using these strategies in order to enhance both their clinical and financial results. Even with the availability of contemporary methods, certain companies might indicate a need for a more thorough comprehension of the relationship between increasing cost efficiency and care quality, since some might think that cutting costs will inevitably result in a drop in quality. It can be challenging for organizations to handle change and adjust to new developments, which hinders their capacity to increase productivity and quality.

Research on the relationship between contemporary management accounting methods and healthcare quality in the urological setting is lacking, necessitating further investigations into this area. The research concern is how to use contemporary methods of cost accounting and management accounting to enhance the quality and cost-effectiveness of urological care while addressing the obstacles and difficulties that healthcare organizations currently face. This research will contribute to providing new insights and practical solutions to improve performance. Therefore, the problem of the study lies in answering the following main question: **“What is the role of modern techniques of management accounting and cost accounting in improving cost efficiency and quality of care in urology?”**

This main question is subdivided into the following sub-questions:

1. What are the most important modern techniques used in management accounting and cost accounting in urology?
2. What is the role of using modern management accounting techniques (target cost, activity-based costs, quality costs and value engineering) in improving cost efficiency and quality of care in urology?
3. How does the information provided by management accounting contribute to improving the quality of care for patients in urology?
4. What is the role of using direct costs in improving cost efficiency and quality of care in urology?
5. What is the role of using indirect costs in improving cost efficiency and quality of care in urology?
6. What is the role of using urology services in improving cost efficiency and quality of care in urology?

Research Objectives

The main objective of this research is: **"To investigate the role of modern techniques of management accounting and cost accounting in improving cost efficiency and quality of care in urology."**

This main objective is subdivided into the following sub-objectives:

1. To explain the role of using modern management accounting techniques (target cost, activity-based costs, quality costs and value engineering) in improving cost efficiency and quality of care in urology.
2. Investigate the role of using direct costs in improving cost efficiency and quality of care in urology.
3. Investigate the role of using indirect costs in improving cost efficiency and quality of care in urology.
4. Investigate the role of using urology services in improving cost efficiency and quality of care in urology.

Research Significance

This study's significance arises from the need to understand the use of contemporary cost and management accounting methods in the field of urology, which is a major area of research and a worldwide concern. Studies on modern approaches of management accounting and cost accounting in improving cost effectiveness and quality of care in the field of urology are rare, both from a bedside health care staff and a managerial perspective. It is therefore anticipated that carrying out this kind of research on this subject will have very beneficial effects and significance, which may be summed up as follows:

- This study is significant from a scientific standpoint because it is one of the few that focuses on how contemporary management accounting and cost accounting techniques can enhance care quality and cost effectiveness in the field of urology surgery. It also represents a new scientific effort to determine the nature of the relationship between variables and provide relevant scientific recommendations.
- Since patient safety is a crucial aspect of healthcare, this study will be a helpful source of information regarding the role that contemporary management accounting and cost accounting techniques can play in enhancing cost effectiveness and quality of care in the field of urology.

- Because it will give interested and future urologists access to significant material, recommendations, and suggestions for their planned studies, this study will be a useful resource for future research in the field.
- The findings of this study could be used to create awareness campaigns about the value of contemporary cost and management accounting methods in the urology sector for raising both the standard of treatment and cost effectiveness.
- Those who are interested in this research can take advantage of the findings and suggestions for further investigations to ascertain the contribution of contemporary cost accounting and management accounting methods to raising the standard of care and reducing costs in the urology sector.

The modern techniques of management accounting

Given that the management information system in the project offers financial and economic data, management accounting is regarded as one of its most crucial elements. It gathers additional data produced by the project's other sub-information systems (Al-Arabit, 2003). The management accounting system's primary goal in carrying out these tasks is to support management's decision-making, performance assessment, and control procedures. The goal of management accounting is to provide quantitative financial and non-financial information to management by gathering, evaluating, categorizing, and storing fundamental data or information derived from other sub-information systems in businesses. As management accounting evolved from its traditional concept to strategic management accounting, it started to move from the traditional approach to the contemporary approach as its concepts, dimensions, methods, and frameworks adapted to meet the demands of the modern era and the needs of internal and external consumers (Basili, 2007). Among the modern management accounting methods that will be discussed are:

Activity-based costing system.

One example of an integrated system is the activity-based costing system. Contrary to what some academics suggest, it is more than merely a technique or a mechanism to allocate indirect costs. Its inclusion of the fundamental components of any system inputs, operational processes (processing), outputs, and feedback confirms that it is a system and not a technique or a way. Financial data, represented by cost accounts, and non-financial data, represented by data and information pertaining to cost drivers, are the inputs of the activity-based costing system. The computations and steps required to separate the unit cost from the cost drivers and

extract the cost of each activity comprise the operating processes. The activity-based costing system's outputs are represented by calculating the costs of each product and the costs of the cost objectives that are represented by activity costs (Al-Takriti, 2007).

Because the activity-based costing system focuses on achieving a fair reduction of scarce resources available to activities as an initial or intermediate axis, and then reallocating additional costs through cost drivers to products as a final cost axis, it leads to an appropriate allocation of additional costs and, consequently, a more accurate determination of the cost (Adas and Al-Khalaf, 2007). "A tool used by management to rationalize decisions by obtaining accurate information about costs that cannot be obtained through traditional system approaches" is the definition of the activity-based costing system (Neumann and others, 2004). and according to Sami (2001), functional improvement and re-engineering activities and capabilities require the use of activity-based costing. Another definition of the activity-based costing system is "an accounting strategy that enables the facility to ascertain...The true cost of services determined by the resources used in the tasks necessary to complete these services (Arnaboldi and Lapsley, 2003).

Target costing

The target costing system is a relatively new system that has some advantages over other costing systems. First, it focuses on coordination and organization processes across all project departments and sections, not just cost management. It also addresses the production process from the start of planning until the product reaches the final consumer, and for some products that require it, it may even go beyond this stage to focus on maintenance, follow-up, and operation (Fellman, 1999). In order to achieve operating economies and efficient use of resources, the project must adhere to a target cost those balances achieving the targeted profit margin for investors with maintaining a suitable level of quality given the cost accepted by the consumer market. To save costs and achieve continuous improvement, this calls for researching and evaluating internal activities beginning with the product's planning and design phase and utilizing contemporary methodologies and techniques like value engineering and value analysis (Abdulrahman, 2000).

According to Ellaram (2000), target cost is the process by which an organization establishes precise objectives regarding the costs associated with offering a good or providing a service, based on a desired profit margin, a set selling price for the good or a set value for the service, and reasonable estimates of what the good should cost. According to Mufti and Sheikh, the service is a cost-management strategy to management accounting that strives to lower

product costs during the product's design and development phase while also offering a variety of high-quality products that meet the expectations of clients (Mufti and Sheikh, 2005). Numerous studies have demonstrated that target costing helps a company meet its objectives of lowering expenses, increasing quality, and launching items into the market fast while also strengthening its competitive position. In terms of quality, employing the target costing method results in higher-quality products since it avoids compromising the desired features and specifications of the product or lowering its performance rates in order to reach the goal cost. In terms of cost, the target costing method's foundation is cost reduction. Using this method, the company plans costs during the preparation of profitability plans using product design and development plans in accordance with the customer's specifications and desires in cost management before entering into production processes. Instead of waiting until production is finished to enter into cost management and reduction programs.

Customer profitability analysis

In order to determine the profitability of each client, a corporation must identify, match, or allocate its costs and revenues to each customer. This process is known as customer profitability. It is an accounting metric for the value that businesses derive from their interactions with clients. The difference between the revenues received and the expenses related to the customer relationship during a specific time period is known as customer profitability (Erik, 2002). Less than one-third of businesses assert to be aware of their customers' profitability, according to multiple field studies. Many of these businesses also employ subjective techniques to determine client profitability, which could lead to poor decision-making (Erik, 2002).

Sometimes a corporation may believe that a certain set of consumers is more profitable than others, but eventually it may discover that these clients are not profitable at all. For instance, a large industrial corporation uses a proportion of revenues to calculate and apportion customer expenses. Using this strategy, we discover that clients who obtain larger revenues than are actually spent on them may be charged additional fees. Customers who generate larger income may be charged more for services rendered by this method than what is actually spent. On the other hand, a client who purchases in tiny amount might seem more successful for the firm because they can download it for free. Generally speaking, business organizations try to estimate future customer profitability by analyzing past and present customer profitability (Winer, 2001).

According to Erik (2005), customer profitability analysis is the process of assigning revenues and expenses to specific customer accounts or customer segments in order to make it simple to determine the profitability of those accounts or segments. The challenge that these companies face is the difficulty of measuring customer profitability, so that they can focus more on the customers who bring the company the highest profits. In the past few years, companies have increased their focus on serving their customers in order to increase customer satisfaction. As a result, these companies have spent enormous amounts of money in order to satisfy those customers.

Balanced scorecard

One of the most significant administrative ideas and modern instruments for establishing an organization's strategic direction and tracking performance toward objectives is the balanced scorecard. It is founded on a well-defined philosophy. All that the balanced scorecard is a conceptual framework that converts the organization's strategic goals into a collection of performance indicators (Idris and Al-Ghalbi, 2009,). A model that offers different approaches to managing the organization to achieve satisfactory returns through strategic decision-making that considers the effects reflected on each of the financial axis, customers, operations, internal stages, and individual learning is the balanced scorecard, according to Robinson's definition. The examination and diagnosis of both financial and non-financial performance metrics for both short- and long-term objectives is necessary for the performance analysis and assessment of the aforementioned axes (Robinson, 2005). As it has come to light that traditional measures that concentrate on the financial perspective are insufficient for the modern business environment and that interest in a broader set of measures related to quality, market size, customer satisfaction, and employees can help form a more complete picture of the organization, this card is considered both a strategic tool and an evaluation tool because it uses four perspectives to evaluate the organization's performance instead of focusing on the financial perspective only. increases understanding of the variables influencing financial success (Horngren, 2005). The company organization's future and existing circumstances are better understood thanks in part to the balanced scorecard. This strategy is predicated on the idea that measurement is essential to strategic management and that anything that cannot be quantified cannot be effectively controlled.

Six Sigma system for measuring quality

One of the contemporary management ideas that addresses the topic of quality is the Six Sigma concept. When Total Quality Management (TQM) first appeared in the early 1980s, Japanese businesses embraced it and used it to create the greatest products possible. However, because they were unable to cut costs, they were unable to compete on price. The wave of reengineering that started in the 1990s of the previous centuries ignored the quality of operations and products in favor of cutting costs.

Six Sigma is a strategic process that helps businesses enhance their fundamental operational and organizational structure by planning and observing day-to-day operations in a way that minimizes waste and resource consumption (time, mental, and physical energy) while simultaneously satisfying customer needs and achieving satisfaction (Harry & Schroeder, 2008).

The concept behind Six Sigma is that an organization can approach the point of being defect-free by systematically eliminating faults if it can quantify the number of defects in a process (Al-Daradkeh, 2002).

Cost accounting

In addition to providing the data required to conduct certain specialized studies that aid in the development of policies related to sales, production techniques, purchasing procedures, financial plans, etc., cost accounting can be defined as the analysis, recording, and reporting of data related to costs in the institution with the goal of achieving cost control after recording them (Ghrabieh, 1979). It is often referred to as a subfield of accounting science that focuses on understanding cost ideas, including their components and theories, and using the cost accounting cycle to accomplish cost accounting's goals (Gomaa, 1999).

By calculating the net profit or loss for the financial period and assessing the inventory of goods at the end of the period in all of its forms, cost accounting seeks to quantify costs. Inventory is one of the most significant components of current assets on the balance sheet. The administration of the institution aims to attain maximum production efficiency, which translate into the highest potential profits, by minimizing expenses while preserving the kind and quality of production. Making certain administrative decisions about the usage of a new raw material can lower the cost (Gouranga, 2019).

The reports required by different administrative levels to distinguish between short-term and long-term administrative decisions rationally are supplied by cost accounting. As the cost accountant assists in providing the data required to generate the statements for the cost of

each item, cost center, or cost of each branch of the organization, cost accounting also plays a significant part in aiding in the preparation of budget estimates. "Analyzing cost behavior is thought to be at the core of advanced cost accounting, as it allows the budget preparer to forecast future events and makes use of historical cost data." A quantitative plan described in financial values to accomplish the institution's objectives for a future financial period, along with a list of the tools, resources, and means required to carry it out, is what is known as a budget estimate. Cost accounting assists the institution's management in setting prices for its goods and services because it considers a variety of factors, including the product's cost, profit margin, level of market competition, and goals to gain market share or control (Ayadi, & Dunya, 2015).

The role of modern techniques of management accounting and cost accounting in urology

Globally, some of the complex environmental constraints that are putting an increasing strain on health care systems include the aging population in OECD nations, the growing expenses of public health insurance schemes, and the remarkable advancements in pharmaceuticals and medical technologies. To improve the efficacy of care delivery, the medical profession must adjust to these extreme pressures and the requirements of interdisciplinary synergy. Urology treatment quality and cost-effectiveness are essential components of efficient and long-lasting healthcare. In order to provide high-quality healthcare at a reasonable cost, new treatment modalities including laparoscopic surgery and early disease detection are needed. By reducing hospital stays and complications, these strategies can help cut expenses. Prioritizing health education and prevention can also lessen the need for intensive care, which increases resource efficiency and enhances patients' quality of life (Houle et al., 2015).

How effectively incentives increase the efficiency of health care services depends on how accurate the cost data is. This in turn is dependent upon the price and the presence of a cordial working relationship amongst doctors. Physicians won't spend the money required to acquire quality cost data if they don't use it in their daily decision-making. Furthermore, without the active participation of physicians in the cost system design, it is impossible to obtain excellent cost information in the health care industry, as they are the ones who have a deep understanding of the activities required to generate robust and accurate cost data in the first place. Thus, a vicious cycle that may be advantageous or detrimental is created. When things go wrong, doctors will typically disregard low-quality cost data to the extent that they

can. If all goes as planned, though, cost variance data can be a useful tool for pinpointing areas that require further therapeutic development (Chapman et al., 2016).

Most importantly, the process of producing high-quality cost data might affect doctors' opinions of what qualifies as reasonably priced medical care. Using an activity-based approach to costing can help create better plans going forward so that healthcare professionals can actively contribute to maximizing the health benefits for their patients within the limitations imposed by standard management accounting practices. The goal of costing is not just to report what is happening. A collection of standard management accounting procedures is used by clinicians when working with cost data:

Targeted cost improvement plans

Usually, governmental or political organizations set the initial cost reduction goals. After that, they create focused cost-improvement plans that are created for particular clinical departments and units and subsequently trickle down to providers. When employing an activity-based approach to costing, cost optimization plans may be made that take into account the impact indirect costs have on various activities. Certain service lines may have a stronger correlation with some overhead categories than others. Cost management would be better served by concentrating on certain costs and activities that are the source of excessive expenditure than by demanding a 10% decrease in costs overall. These data can be compared to health outcomes when analyzed at the patient level to assess efficacy and efficiency Witkowski and Kaplan (2014). Targeted cost improvement programs are still crucial, but there's a big catch: because health care services are still in high demand, efforts will probably need to go toward raising current health spending rather than making significant cuts to it. The following management accounting initiatives should be given more priority in accordance with this agenda.

Benchmarking

When cost data is activity-based and connected to health outcomes, benchmarking can effectively involve doctors in the kind of thorough study needed for cost-improvement strategies. Talking with doctors about the reasons why their expenses are higher or lower than those of other providers is the foundation for effective benchmarking. To make sure that cost data accurately represent medical practices and resource-use decisions, cost experts and physicians must have discussions (Chapman et al., 2016).

Disparities in the utilization of resources for indirect costs can also be uncovered through discussions regarding cost comparison between service lines at other hospitals. If activity-based costing is used, decision-makers will be able to pinpoint the source of these variations and improve the effectiveness of services with greater ease. Activity-based costing has been demonstrated to lower total expenses (Pizzini, 2006), but its primary benefit might be that it makes better use of already-existing resources. This is especially crucial when addressing rising demand without expanding the pool of resources that are accessible.

Budgeting

Activity-based costing data can also be utilized to direct more suitable budgeting decisions as part of continuous provider monitoring. When patient-level cost data are unavailable, budgets run the risk of being based less on clinical requirements, procedures, and outcomes and more on historical practices, power dynamics, and vested interests. More precise cost projections at the service line level are made possible by activity-based costing at the patient level, which takes into account the anticipated volume and variety of patients. The budget process becomes more impartial and objective when it places less focus on local interests and power and more on modeling the usage of clearly specified resources (Witkowski and Kaplan, 2014).

Service redesign

Redesign can manifest itself in decisions on which products or services to offer, in the complete abandonment of some procedures or therapeutic areas, or in more hopeful ways. In hotspots like downtown London, where there are too many doctors for every patient, this kind of choice has become crucial for the health care system in many other countries. Subsequently, providers are requested to concentrate on offering services that most effectively showcase their strengths; in the interim, rivals may seize any that are viewed as shortcomings. A portfolio matrix shows the profit/loss per service line and the relative size of a provider's service lines (Monitor, 2006). However, electing services is simpler technique than using activity-based cost data to direct redesign efforts to make services more clinically and financially effective.

Performance management

An often-used metric to assess efficacy is the mean duration of hospital stays. This offers a simple method of reducing the potentially daunting complexity of each patient's resource usage habits to a visible driver of overhead costs. Research, however, indicates that the length

of a patient's hospital stay appears to have minimal bearing on the overall costs of their stay (Taheri, Butz & Greenfield, 2000). Research by Taheri, Butz, and Greenfield showed that A one-day reduction in stay duration only yielded a 3% decrease in overall care costs. They came to the conclusion that employees who wished to boost productivity ought to concentrate on better capacity use and process changes. The utilization of activity, cost, and clinical data from the service lines are examples of advance performance management strategies. Numerous providers have adopted balanced scorecard-based performance metrics (Kaplan & Norton, 1996). In the medical field, contemporary performance management systems go one step farther. Their goal is to create a connection between clinical and financial success (Kaplan & Porter, 2011).

3. CONCLUSION AND RECOMMENDATIONS

In summary, contemporary management accounting methods are widely used in the healthcare industry, while the relative significance of various approaches varies depending on the setting under study. In order to apply more complex methodologies and so reduce this limitation, it may be preferable to align the revenue recognition approach in the healthcare industry with the widely acknowledged accrual concept. The adoption of costing procedures seems to be mostly driven by technological advancement, even though the prevalence of conventional costing practices offers a chance for possible efficiency advantages.

By reorganizing cost pools away from traditional structures, which are frequently motivated by financial reporting and toward activity-based analysis utilizing known cost drivers, activity-based costing makes it possible to manage indirect costs. To properly utilize this data for decision-making, cost pools need to be mapped to decision-making authority regions. In general, there's a chance that an incompatibility between cost analysis and decision-making frameworks may hinder early attempts at service reform.

Because of this mismatch, there is a chance that any savings from service redesign won't eventually be converted into changes to resource allocation. While activity-based costing cannot directly advise on reducing overall expenditure, it can help raise productivity by highlighting areas of slack and therefore improve efficiency, particularly in a setting where a significant percentage of expense is fixed. This appears especially pertinent in healthcare settings, where there is probably going to be a higher demand for services, making lower spending projections seem illogical.

This research is critical to understanding how cost accounting improves service quality. It is anticipated that carrying out this kind of study on this subject will be highly beneficial and

significant. The study question will be addressed using a quantitative approach based on the dependent and independent research variables through the use of questionnaires. The researcher will also theoretically review prior studies to get data covering the study's factors. The suggests that:

1. The goal should be to create low-cost medical goods and services without sacrificing the caliber of the finished product. This can be accomplished by streamlining the production process and making effective use of premium materials.
2. Modern management accounting techniques, cost accounting, and operations management are important topics for doctors and nurses to learn more about. Teaching them to use these tools methodically and thoughtfully will help improve the quality of healthcare by enabling them to make decisions based on accurate data.
3. Medical teams can get the knowledge they need to make informed decisions about resource and spending allocation by using information technology in accounting and management. This information helps to save waste and increase efficiency, which benefits the standard of patient care.

4. REFERENCE

- Adas, N., & Al-Khalaf, N. (2007). *Cost accounting: A modern introduction*. Juhayna Publishing and Distribution.
- Al-Takriti, I. Y. (2007). *Advanced cost accounting: Contemporary issues (1st ed.)*. Dar Al-Hamed for Publishing and Distribution.
- Arnaboldi, M., & Lapsley, I. (2003). Activity based costing, modernity and the transformation of local government: A field study. *Public Management Review*, 5(3), 345-375. <https://doi.org/10.1080/1471903032000158672>
- Ayadi, & Dunya. (2015). *The role of cost accounting in improving production efficiency (Master's thesis)*.
- Basili, M. A. (2007). *Management accounting: Authenticity and modernity*. Modern Library for Publishing and Distribution.
- Berliner, C., & Brimson, J. (Eds.). (1988). *Cost management for today's advanced manufacturing: The CAM-I conceptual design*. Harvard Business School Press.
- Chapman, C. S., Kern, A., Laguecir, A., & Quentin, W. (2016). *Management accounting and efficiency in health services: The foundational role of cost analysis*. In *Health system efficiency: How to make measurement matter for policy and management (pp. 75-98)*. World Health Organization.

- Eldenburg, L. G., Krishnan, H. A., & Krishnan, R. (2017). Management accounting and control in the hospital industry: A review. *Journal of Governmental & Nonprofit Accounting*, 6(1), 52-91. <https://doi.org/10.2308/jogna-10453>
- Erik, M. V. R. (2005). The strategic value of customer profitability analysis. *Marketing Intelligence & Planning*, 23(4), 372-382. <https://doi.org/10.1108/02634500510610344>
- Fellman, M. (1999). Selling IT goods to disabled end-users. *Marketing News*, 33(6).
- Ghrabieh, (1979). *Cost accounting: Principles, procedures, and control*. Islamic Renaissance Library.
- Gomaa, A. H. (1999). *Advanced cost accounting (1st ed.)*. Safaa Publishing and Distribution House.
- Gouranga, E., et al. (2019). Influence of cost accounting techniques on performance improvement: An empirical study on manufacturing organizations in Bangladesh. Daffodil International University.
- Hornigren, C. T., & Foster, G. (1991). *Cost accounting: A managerial emphasis (7th ed.)*. Prentice Hall.
- Houle, A. M., Ouimet, G., Beiko, D., Oake, J. S., & Davies, T. O. (2017). Exploring the business of urology: Influence management and political skills. *Canadian Urological Association Journal*, 11(8), 227-232. <https://doi.org/10.5489/cuaj.4724>
- Hussain, M. M., Gunasekaran, A., & Laitinen, E. K. (1998). Management accounting systems in Finnish service firms. *Technovation*, 18(1), 57-67. [https://doi.org/10.1016/S0166-4972\(98\)00031-5](https://doi.org/10.1016/S0166-4972(98)00031-5)
- Jansirani, E., et al. (2020). Cost accounting systems structure and information quality properties: An empirical analysis. *European Journal of Molecular & Clinical Medicine*, 7(8), 1-10.
- Johnson, H., & Kaplan, R. (1987). *Relevance lost — The rise and fall of management accounting*. Harvard Business School Press.
- Kaplan, R. S. (1996). *The balanced scorecard: Translating strategy into action*. Harvard Business Review Press.
- Kaplan, R. S., & Porter, M. E. (2011). How to solve the cost crisis in health care. *Harvard Business Review*, 89(9), 46-52.
- Kaplan, R. S., & Witkowski, M. L. (2014). Better accounting transforms health care delivery. *Accounting Horizons*, 28(2), 365-383. <https://doi.org/10.2308/acch-50788>
- Kaydos, W. (1991). *Measuring, managing, and maximizing performance*. Productivity Press.
- Malmlose, M. (2019). Accounting research on health care: Trends and gaps. *Financial Accountability & Management*, 35(1), 90-114. <https://doi.org/10.1111/faam.12176>

- Marques, E., et al. (2023). Hospital costing methods: Four decades of literature review. *Journal of Risk and Financial Management*, 16(10), 433. <https://doi.org/10.3390/jrfm16100433>
- Mater, W. S. A., & Kanasro, H. A. (2018). Adoption of managerial accounting techniques in decision making process among SMEs in Amman capital city of Jordan. *Research Journal of Finance and Accounting*, 9(5), 31-37.
- Monitor. (2006). How service-line reporting can improve the productivity and performance of NHS foundation trusts. *Monitor*.
- Moradi, E. (2016). Using accounting information in decision making of hospital managers. *International Journal of Finance and Managerial Accounting*, 1(2), 1-9.
- Neumann, B. R., Gerlach, J. H., Edwin, F. M., & Olson, C. (2004). Cost management using ABC for IT activities and services. *Management Accounting Quarterly*, 6(1).
- Pizzini, M. J. (2006). The relation between cost-system design, managers' evaluations of the relevance and usefulness of cost data, and financial performance: An empirical study of US hospitals. *Accounting, Organizations and Society*, 31(2), 179-210. <https://doi.org/10.1016/j.aos.2005.05.002>
- Schwietz, C. (2016). Cost-containment policies in hospital expenditure in the European Union (No. 037/2016). Directorate General Economic and Financial Affairs (DG ECFIN), European Commission.
- Shatnawi, B. N. T., & Taber, T. A. (2020). The role of using modern managerial accounting techniques in reducing production costs in the listed industrial companies on the Amman Stock Exchange. *International Journal of Supply Chain Management*, 9(5), 471-480.
- Taheri, P. A., Butz, D. A., & Greenfield, L. J. (2000). Length of stay has minimal impact on the cost of hospital admission. *Journal of the American College of Surgeons*, 191(2), 123-130. [https://doi.org/10.1016/S1072-7515\(00\)00588-6](https://doi.org/10.1016/S1072-7515(00)00588-6)
- Winer, R. (2001). Customer relationship management framework. Haas School of Business.