

REVENUE CYCLE MANAGEMENT STRATEGIES AND FINANCIAL PERFORMANCE OF PROFIT MAKING PRIVATE HOSPITALS IN NAIROBI CITY COUNTY, KENYA

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ABSTRACT

The private healthcare sector in Kenya has made a remarkable contribution in the delivery of healthcare services. The growth of the sector is spurred by deteriorating performance in the public hospitals and lack of resources. However, their demonstrated significance in actualization of development goals, sustainability of private hospitals has been put to question, threatening the socio-economic status of both developing and emerging economies. These organizations struggle with ensuring that debts are collected while not pressuring the patients so much that they seek care at other facilities. There are however strategies advanced to ensure that the poor people have proper access to medical services in the private sector but its implementation is far from being effected due to the costs that are involved. This study sought to establish the effect of revenue cycle management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya. Specifically, this study focused on the effect of communication strategies between medical providers and billing staff, implementing payment strategies, billing strategies, and accounts receivable management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya. This study was anchored on the Transactions Cost Theory, Contingency Theory and Trade-off Theory. The study adopted a descriptive research design. This study targeted the private hospitals in Kenya. The unit of analysis is 47 profit making private hospitals. The unit of

observation was the 780 respondents comprising of senior management. To determine how the sample was distributed among the targeted respondents, the study selected the respondents using the purposive sampling technique. Self-administered questionnaires were used to collect primary data. Data was analysed using Statistical Package for Social Sciences (SPSS Version 25.0). Descriptive statistics included mean, frequency, standard deviation and percentages was used to profile sample characteristics and major patterns emerging from the data. In addition to measures of central tendencies, measures of dispersion and graphical representations were used to tabulate the information. Content analysis was also used in processing of this data and results presented in prose form. Inferential data analysis was done using regression and correlation analysis. Cross sectional data was presented in tables and graphs while qualitative data analysis was presented in prose form. The research found that hospitals provide reminder calls to patients and include discussion regarding patient balances and point of service (POS) collection policies. The research also found that the hospitals assist uninsured patients by scheduling a meeting with financial counsellors to complete financial assistance applications. The study also found that the hospitals use concurrent coding to improve medical necessity documentation. The research found that was not certain whether the hospitals hold weekly nursing and health information management (HIM) team meetings to discuss medical necessity documentation

and charge capture opportunities. The study concluded that communication strategies between medical providers and billing staff had the greatest effect on the financial performance of profit making private hospitals in Nairobi City County, Kenya, followed by accuracy of billing strategies, then consistent accounts receivable reviews while Implementing payment strategies had the least effect to the financial performance of profit making private hospitals in Nairobi City County, Kenya. The study recommends that the timeliness observed in billing service at profit making private hospitals should be

upheld in order to achieve its effectiveness and efficiency and consequently result to customer satisfaction. The study recommends long-term initiatives captured in a communication plan to enable conceptualization of dealing with complex issues such as conservation and to provide time for diverse functions including consensus building and forming networks.

Keywords: Healthcare, Communication Strategies, Implementing Payment Strategies, Billing Strategies, Financial Performance, Profit Making Private Hospitals

INTRODUCTION

Financial performance is a subjective monetary measure of how various businesses employ their tangible and intangible assets to create revenue. Various industries have their own unique techniques of analyzing their overall financial health over time, which can be compared within the same industry, such as the health sector, or across industries in aggregate (Gartenberg, Prat & Serafeim, 2019). The term "private sector health care" refers to all providers who are not affiliated with the government. Faith-based organizations and non-governmental organizations are examples of for-profit and non-profit companies in the private sector. Doctors, nurses, midwives, clinical officers, and pharmacists are among the health care professionals who work in the private sector (Rodriguez-Fernandez, 2016).

In comparison to public medical facilities, private medical facilities provide distinct and high-quality medical care. Clients and operations are involved in such extraordinary and specialized health services, while some face risks as a result of customer defaults and the cost of obtaining equipment, as well as highly experienced employees in medical and technological disciplines. The ability of private medical institutions to accomplish their financial goals and weather economic challenges is dependent on their ability to generate profit or value for their shareholders. A well-developed, high-quality, low-cost hospital is considered to be operating in a long-term business environment (Le Roux, 2018). Effective revenue cycle management is critical to the financial viability of private hospitals (Lubberink, Blok, van Ophem, & Omta, 2017). A private hospital analyzes prospective revenue channels based on the volume of patients and mix of insurance payers in the first phase of a revenue cycle strategy. Revenue collection processes in the form of accounts receivables are unlike those in most other sectors. Multiple payers

and specific rules, such as bundled payments, case-based payments, co-payers, and contractual allowances, must be dealt with by healthcare providers. Payment delays, payer problems for services rendered, and unreimbursed services are all issues that healthcare executives must deal with (Mindel & Mathiassen, 2015). As a result, in order to get timely payments from patients and their insurance payers, healthcare clinic managers must establish ways to handle these revenue cycle difficulties.

Higher patient revenue generated as a result of better revenue cycle management has a direct impact on hospital profitability. Hospital executives may pursue more aggressive pricing and try to eliminate revenue deductions, such as contractual allowances offered to third-party payers and charity care, as part of their revenue cycle management, resulting in increased net patient revenues. Higher operational income, net income, and operating cash flows occur from higher patient revenue and lower operating expenses, all of which boost a hospital's profitability.

North America dominated the Revenue Cycle Management (RCM) market in 2020, accounting for 52.6 percent of total revenue. The existence of several physician's offices across the United States is one of the factors responsible for this region's significant market share. In addition, legal changes like as the adoption of ICD-0 in 2015 increased demand for HIT solutions, notably revenue cycle management systems, to improve healthcare delivery efficiency (Himmelstein, Campbell & Woolhandler, 2020). Furthermore, the private sector in North America has potential growth opportunities because to the presence of major established hospitals and healthcare infrastructures, favorable legislation, and an increased demand to reduce healthcare costs.

Due to supporting government measures to improve the quality of private healthcare delivery employing HIT systems, rising healthcare expenditure, and expanding unmet healthcare requirements of the population, the Asia Pacific market is expected to develop at the quickest rate throughout the forecast period. Furthermore, due to low manufacturing prices and the availability of inexpensive labor, the ease of doing business in Asia Pacific is great. This is also a high-impact rendering driver for the region's market growth (Johnson & Garvin, 2017).

Saudi Arabia's private healthcare sector is undergoing a substantial transition as part of Vision 2030 and the National Transformation Program, which will dramatically alter the reimbursement structure for health services. The Ministry of Health (MoH) wants to transition from being an all-in-one payer, provider, and regulator of health services to governing corporatized payers and providers as a regulator. In the public healthcare system, the separation of payer and provider duties is a major part of this shift. The Ministry of Health has established the Program for Health Assurance and Purchasing to make future reimbursements to public healthcare providers easier (PHAP). Furthermore, the Council of Cooperative Health Insurance (CCHI) has tightened private insurer restrictions (Jadhav & Krishna, 2018).

The primary purpose of medical billing is to collect the full amount due for services performed, but due to an increase in patient financial responsibility, several healthcare institutions in Africa have recently had increased difficulty collecting payments from patients. According to CMS, around 90% of private healthcare firms in Nigeria choose a high-deductible insurance plan. The rise of high-deductible plans moved the burden of healthcare payment from the payer to the customer (Ogbuabor & Onwujekwe, 2019). According to an Instamed survey from Malawi, nearly three-quarters of providers saw an increase in patient financial responsibility in 2015, yet according to a McKinsey & Company report, clinicians only expect to collect 50 to 70% of a patient's balance following a visit. Patients' payments were expected to take a month or longer for 70% of providers. Malawian healthcare organizations developed financial practices that included calculating service costs, notifying patients about financial obligation, and collecting a portion of the amount during a visit to assist raise patient revenue (Borghini, Munthali, Million & Martinez-Alvarez, 2018). Healthcare institutions must also take steps to make patient bills easier to understand (bills are complicated). Medical bills were reported to be overly complicated due to medical jargon and frequent requests for payment, therefore the Department of Health and Human Services replied. The federal agency has created a competition in which five inventors will be recognized for designing a patient-friendly medical bill and a simpler medical billing system for providers.

Every year, a slew of new private health insurance businesses enter the Egyptian market, employing a variety of marketing methods and offering a diverse range of health insurance plans, including individual, family, and corporate plans (Mutopo, 2016). This is in addition to the Egyptian government's health insurance parties, which have seen significant growth recently, as evidenced by the government's Comprehensive Health Insurance Law, which established a specialized authority in accreditation, monitoring, and regulating the quality of medical services provided.

The primary function of hospitals in Kenya is to provide patient care. As a result, controlling the movement of patients through the hospital is critical, from appointment scheduling and patient registration at the front end of the revenue cycle to discharge and billing at the back end. The proper management of the revenue cycle has the potential to not only raise hospitals' operating performance but also to improve their total profitability and hence strengthen their ability to develop equity by generating larger patient revenues and shortening average collection durations (Ondari & Muturi, 2018). Since the devolution of this crucial service, the industry has experienced a number of issues that have contributed to negative health repercussions. It is crucial to look into how these key facilities manage their funds. In Kenya, private healthcare accounted for 2.9 percent of the 4.7 percent of healthcare spending in 2012. The industry accounts for 22% of all healthcare services (Musau, 2018). Almost 70% of the doctors on the market are owned by the private sector, and individuals are confined to those who can afford the private fees. They will be able to get to the amenities. The hospital

concentration is mostly in metropolitan regions, with the majority of hospitals being in Nairobi (Dinda, Ojera & Bulitia, 2020).

In Kenya, private healthcare providers are focusing more on increasing the quality of care while also being worried about reimbursements and collections. They are forced to rely on traditional ways due to a lack of financial automation tools and insufficient resources. When using the traditional revenue cycle management strategy, it's difficult to have a clear picture of costs, spending, and income, and the inability to track revenue leaks makes account receivables tough to handle. Furthermore, because many patients cannot afford to pay medical bills in full and many deductibles have increased, collecting at the point of service has become increasingly difficult. Healthcare institutions struggle to collect debts while without overburdening patients to the point where they seek treatment elsewhere. Despite practitioners' continuous interest in revenue cycle management (Njoroge, 2018), no empirical study has yet looked at the impact of revenue cycle management strategies on the Financial Performance of profit-making private hospitals in Nairobi City County, Kenya.

Statement of the Problem

It has been noted that health facilities generally experience poor Financial Performance. Most health facilities perform below expectation (Ondari & Muturi, 2018). In Kenya, over 47% of the health services are actually provided by the private hospitals. These important institutions are credited for better customer consistent accounts receivable reviews and modern technological investments and management. Despite their relevance in the health sector, their sustainability is a matter of interest and research. However, their demonstrated significance in actualization of a development goals, sustainability of private hospitals has been put to question, threatening the socio-economic status of both developing and emerging economies. NHIF Report (2019) indicated that 88% of the private hospitals had less than 99 bed capaCity while only 4% of the private hospitals had bed capaCity of over 200. In addition, most of the private hospitals cannot be able to increase their bed capaCity despite the high demand of health care due to financial constraints. For example, Nairobi hospital recorded an overall deficit of kSh.825 million in 2019 down from a surplus of kSh.900 million in 2018 (Nairobi hospital Annual Report And Financial Statements, 2019).

Mutia (2020) noted that declining health service use in Nairobi due to the COVID-19 has huge implications for their profitability as most capital hospitals are recording reduced patient numbers. Other factors affecting the Financial Performance of private hospitals in Nairobi County include the Revenue Cycle Management (RCM) process in healthcare. Many health service providers experience significant challenges with efficiently and accurately billing patients and payers for services they perform. Despite the long and winding journey, effective medical billing is essential for optimizing healthcare revenue cycle management and reducing days in accounts receivable.

Moreover, failure to capture patient information leads to claims reimbursement delays. A ClaimRemedi survey found that eligibility issues are the top reasons for claim rejections, and about 8 per cent of claims submitted are rejected because of eligibility problems. The survey stated that providers were not asking patients and insurance companies the right questions regarding eligibility, causing an increase in denials and rejections (Musau, 2018).

Private hospitals also have issues with the administrative burden created by the manual claims management processes, especially as more providers transition to data-driven value-based care models. However, one-third of providers still use a manual process for denials management. Given the complexities around submitting claims and the labor associated with managing denials, it came as a surprise that more organizations have not automated the denial management process through a vendor-provided solution, which contributes to inaccuracies. The specific business problem is that some private hospital managers lack strategies to obtain timely payments from patients and insurance payers (Shangala, 2020).

The government partially supports in payment for services through the National Hospital Insurance Fund and the customers pay the balance in either cash or through private insurance companies. Aimed at generating higher patient revenues and reducing average collection periods, the effective management of the revenue cycle has the potential not only to boost hospitals' operating performance but also to improve their total profitability and thus strengthen their ability to grow equity (Dinda et al., 2020).

There are various empirical studies done on this subject matter. They include Kombo and Wekesa (2017) who assessed the effects of working capital on Financial Performance of private medical facilities in Mombasa County. The study found a strong relationship between Financial Performance and accounts receivables, however there was not much literature on the current study's independent variable. Merritt (2019) explored the successful strategies billing managers employed to collect reimbursement for all legitimate Medicare claims. The study was done in Northern New Jersey region and hence its findings cannot be compared to Kenya. Amudha, Hamidah, Annamma and Ananth (2018) aimed to identify the contributing factors to the communication gap between doctors and nurses at selected private hospitals in Malaysia. The study did not argue points in line with healthcare revenue cycle management strategies. Therefore, this study sought to examine the effect of healthcare revenue cycle management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.

Research Objectives

This study sought to establish the effect of healthcare revenue cycle management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya. The research was guided by the following specific objectives:-

- i. To determine the effect of communication strategies between medical providers and billing staff on financial performance of profit making private hospitals in Nairobi City County, Kenya.
- ii. To establish the effect of implementing payment strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.
- iii. To investigate the effect of billing strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.
- iv. To assess the effect of accounts receivable management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.

Theoretical Review

In order to deepen clear understanding of the knowledge existing, theories are used in order to understand the phenomena within the limits of assumptions of critical thinking assumption. According to Tummala and Schoenher (2011), theoretical framework describes and introduces an explanation of a theory why a research problem under a study exists. This study was hinged on the Transactions Cost Theory, Contingency Theory and Trade-off Theory.

Transactions1 Cost Theory

This approach, first propounded by Commons (1934) and later elaborated upon by Coase (1937) in his essay, "The Nature of the Firm," was a major departure from the existing micro-economic theory, which focused on a task as the unit of analysis of organizational activity. The traditional theory only included costs (such as production and transport costs) directly related to organizational tasks and neglected the costs of entering into and executing contracts as well as costs of managing the transaction. In his attempt to "discover why a firm emerges at all in a specialized exchange economy," Coase (1937, p390) concluded that why it is profitable to establish a firm would seem to be that there is a cost to the price mechanism.

If payment and delivery can be separated, the customer's demand for cash can be reduced. This basic idea is incorporated by Bougheas (2009) in a formal two-period model that includes the trade-off between inventories and trade credit under stochastic demand conditions. They construct empirically testable statements about accounts payable and accounts receivable, as well as their relationship with changes in inventory costs, profitability, risk profile, business liquidity, and bank loans, using this model. All other things being equal, Brick and Fung (1984) suggested that purchasers with low effective tax rates prefer trade credit and are thus more likely to have larger levels of accounts payable than buyers with higher effective tax rates.

In the case of hospitals, the measurability of a transaction between a patient and provider is low. The treatment of (or relief to) a patient might be elusive, or occur very slowly. The overall quality of care (at least from a patient's perspective) is therefore difficult to determine precisely. This ambiguity also makes the transactions between patients and providers more complex. Within a hospital, however, the measurability of a transaction is relatively higher (as compared to the measurability of quality of care). The exchanges between clinicians (that is, physicians, nurses, and allied staff) and administrative staff (such as billing, coding, and business office staff) are more straightforward and measurable (as they occur through the exchange of patient data within the hospital's EMR system).

There are three major criticisms to the theory; it focuses on cost minimization, understates the cost of organizing, and neglects the role of social relationship in economic transactions. Minimization of transaction cost would have little advantage if transaction specific assets aren't valued in the market. Hence, it is important to move beyond the perspective that "economy is the best strategy" for an organization. This theory is linked to the objective on the effect of accuracy of billing strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.

The Contingency Theory

The Contingency Model was created in the mid-1960s by Fred Fiedler, a scientist who studied the personality and characteristics of leaders. The theory holds that there are various contextual factors that determine how an organization operates. This entails the ordinary investment outcomes history, professional competency degree and revenue cycle management control policy. While the contextual factors describe why accounting systems vary based on the particular organization, the theory assumes that organizations do not have similar accounting systems and thus attain different financial performances. This may be explained by the different contextual factors surrounding firms. Therefore, resource allocation to financial management practices should be made while considering these factors (Pike, 1986). Otley (1980) enforced contingency theory to management accounting processes and related information systems that there is no sole overall definitive accounting practice that applicable in all associations. This means that each association adopted its management accounting practice(s).

An absence of replications of such investigations of diverse settings such as the hospital sector in developing countries and of a focus on present facets of revenue cycle management practices restrict the ability to generalize and revive contingency theory through other major academic domains. An analysis of related literature shows that it is essential to discover how contingency factors affect revenue cycle management practices that have not been researched within the hospital sector. Regardless of the limitations of the theory of contingency raised, it is still a credible theory for pursuing a considerate

association flanked by determinants of revenue cycle management practices and hospital performance in the profoundly vibrant hospital industry.

The theory's proposition to the study is that there are certain revenue cycle management strategies that may work well with certain firms but not with others. This is due to the difference in the corporate settings and external factors. This thus implies that there are no standard financial management practices to be applied by the companies. Therefore, appropriate financial management practices should be chosen after evaluating the particular business setting to ensure it is appropriate in achieving its intended purpose. A positive influence on the companies' Financial Performance will only be attained when a balance is met between the corporate setting and the financial system operations (Pike, 1986). Focus was at specific significant elements aiding management in making decision on a suitable management accounting technique. These significant elements include external factors, organisational factors and processing factors. External factors are perceived to be environmental uncertainty and customer's power among others. Processing factors refer to complexity of the processing system, product perishability, TQM, technology advancement and JIT systems. The factors include competitive strategy; decentralization and firm's size.

Contingency approach suffers from inadequately of literature. Therefore, it has not adequately spelled out various types of actions that can be taken under different situations. It is not sufficient to say that a managerial action depends on the situation. Contingency approach being complex, presents problems in testing the precepts of the theory. For empirical testing of the theory, it is necessary that some methodology is available. No doubt, methodology is available but because of the involvement of too many factors, testing becomes difficult. As there is no definite solution to a problem, managers think of alternatives to arrive at the right choice. This is costly in terms of time and money. It also does not provide theoretical foundation upon which management principles was based. This theory was applied in this research since it will be looking at the effect of consistent accounts receivable management strategies and communication strategies between medical providers and billing staff on financial performance of profit making private hospitals in Nairobi City County, Kenya.

Resource-Based Value Theory

Wernerfelt (1984), developed this theory. RBV within a healthcare organization improves patient outcomes with internal resources within the healthcare organization towards continuity of care (Szymaniec-Mlicka, 2016) and guides business strategies towards competitiveness in the marketplace (Li, Jiang, Pei, & Jiang, 2017). The healthcare industry has integrated RBV into its business models to drive potential success, economic prosperity, and strategic preparation.

RBV principles emphasize the importance of the delivery of services and resources for private hospitals to set themselves apart from competitors. Healthcare organizations

allocate resources efficiently to give legitimacy to management and leadership in the decision-making process of RBV (Angelis, Kanavos, & Montibeller, 2017). Business leaders consider the healthcare organization's resources to be valuable assets. The healthcare organization is poised to use all available internal resources to provide consistency and continuity of care to patients. The internal resources available to the healthcare organization are well thought-out, have identifiable characteristics, and designated as VRIO (valuable, rare, inimitable, and organized). The VRIO characteristics selected are the foundation for RBV.

The connection between products and services are intertwined and generate combinations of resources (Benedettini, Neely, & Swink, 2015). The resulting resources are significant to the private hospitals advantage over competitors, but are not sustainable and will not benefit the healthcare organization over the course of time (Mweru & dan Muya, 2015). Private hospitals managers use RBV strategies to recognize and implement approaches to make improvements in efficiency and effectiveness (Tece, 2017). Private hospitals incorporate resources into their payment planning for the purposes of financial achievement (Patidar et al., 2016). Healthcare organizations value internal resources, which are components of their competitive advantage (Helmig, Hinz, & Ingerfurth, 2014). Their competitive positions regarding administration efficiency influence potential operational development of competitive strategies (Krzakiewicz & Cyfert, 2017). The private hospitals' used for this doctoral study have strategic approaches in line with RBV, as cost and organizational performance are devices providing the business with sustainability and competitive advantage for years to come (Abidemi et al., 2017).

Through implementing payment strategies, an organization can establish a competitive dominance over its rivals (Kash et al., 2014). RBV is becoming a strategic management model trending towards organizational management, and developing applicability of external resources within the healthcare industry (Hitt, Xu, & Carnes, 2016). The RBV framework in the healthcare industry is an innovative approach within the confines of the management structure and all internal resources within the organization has not been sufficient to establish RBV within healthcare strategic planning. However, healthcare organizations are willing to be a part of this rapidly growing model.

The healthcare industry consists of operational and clinical professionals and their collaboration within the health care environment is essential. Business leaders consider VRIO attributes: valuable, inimitable, rare, and organized difficult to replace that lead towards a competitive advantage for the health care organization. The health care organization's administration explores competitive advantages coming from within the firm's specific resources and limitations, depending on the location (Yang, 2014). The healthcare profession has organizations that can strategically manage resources to improve their performance (Evans, Brown, & Baker 2015). RBV's place within clinics

in combination with implementing payment strategies remains driven by healthcare professionals whose objective is quality care.

The RBV approach, a health care business implementation, is the building block of competitiveness not only in the present but in the future and reinforces sustainable benefits for the long-term (Teece, 2017). Private hospitals managers can use RBV as a reliable business model to properly use internal resources to facilitate sustainment. The financial results were referencing accounts receivable segments of the business focus on the strategies implemented by leaders within the establishment. A private hospitals manager uses RBV in conjunction with its business model to develop financially and clinically to build the community's trust. This theory was linked to the objective on the effect of implementing payment strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.

Research Methodology

The study adopted a descriptive research design. This design was adopted because it describes the state of affairs, as it exists at present in the study. This study targeted the private hospitals in Kenya as at June 2021 (appendix IV). The unit of analysis was 47 profit making private hospitals. The unit of observation was the 780 respondents comprising of senior management (comprising of the CEO/MD and the heads of departments), finance directors and junior staff in the finance departments of the hospitals obtained from Kenya Medical Practitioners and Dentists Board documents. Senior management oversees finances such as patient fees, billing, and fundraising. Finance directors are members of a senior executive team with responsibility for private hospitals' financial health. They combine operational and strategic roles, manage accounting and financial control functions, and establish a financial strategy for the profitable long-term growth of the hospitals.

The sample size was determined at 95% confidence level and an error of 0.05 using the Nassiuma (2000) formula using a target population of 780 respondents. To determine how the sample was distributed among the targeted respondents, the study selected the respondents using the purposive sampling technique. The researcher selected one senior manager, one finance director and three junior staff from each hospital. The junior staff was from the billing department.

Self-administered questionnaires were used to collect primary data. Data was also collected through secondary sources from the private hospitals' annual reports and financial reports. The net income and average total assets of the private hospitals was collected from financial records. Data was analysed using Statistical Package for Social Sciences (SPSS Version 25.0). Descriptive statistics included mean, frequency, standard deviation and percentages to profile sample characteristics and major patterns emerging from the data. In addition to measures of central tendencies, measures of dispersion and

graphical representations were used to tabulate the information. To facilitate this Likert Scale were used to enable easier presentation and interpretation of data. Data was presented in tables. Qualitative data from the open-ended questions was analyzed using content analysis and presented in prose form.

Inferential data analysis was done using regression and correlation analysis. The study also computed F-statistic and t-statistics at 95% confidence level to test whether there was any significant effect of healthcare revenue cycle management strategies on the financial performance of profit making private hospitals in Nairobi City County, Kenya.

Research Findings and Discussions

The researcher conducted both the Pearson correlation analysis and the multiple regression analysis. The regression analysis was used to establish the relations between the independent and dependent variables while correlation was conducted to assess the degrees of association between the variables.

Pearson Moment Correlation Results

This was conducted to assess the degrees of association between the variables. A Pearson moment correlation is a number between -1 and +1 that measures the degree of association between two variables. A positive value for the correlation implies a positive association while a negative value for the correlation implies a negative or inverse association. Table 1 shows the results for the Pearson moment correlation.

Table 1: Correlation¹ Coefficients¹

		Financial performance	Communication strategies between medical providers and billing staff	Implementing payment strategies	Accuracy of billing strategies	Consistent accounts receivable reviews
Financial performance of profit making private hospitals	Pearson Correlation	1				
	Sig. (2-tailed)	.				
Communication strategies between medical providers and billing staff	Pearson Correlation	.932	1			
	Sig. (2-tailed)	.013	.			
Implementing payment strategies	Pearson Correlation	.672	.213	1		
	Sig. (2-tailed)	.001	.008	.		

Accuracy of billing strategies	Pearson Correlation	.889	.228	.483	1	
	Sig. (2-tailed)	.011	.004	.000	.	
Consistent accounts receivable reviews	Pearson Correlation	.732	.313	.435	.522	1
	Sig. (2-tailed)	.007	.000	.000	.000	.

The analysis of correlation results between the financial performance of profit making private hospitals and communication strategies between medical providers and billing staff shows a positive coefficient 0.932, with p-value of 0.013. It indicates that the result is significant at $\alpha = 5\%$ and that if the communication strategies between medical providers and billing staff increases it will have a positive impact on the financial performance of profit making private hospitals. The correlation results between Implementing payment strategies and financial performance of profit making private hospitals also indicates the same type of result where the correlation coefficient is 0.672 and a p-value of 0.001 which significant at $\alpha = 5\%$.

The results also show that there is a positive association between accuracy of billing strategies and financial performance of profit making private hospitals where the correlation coefficient is 0.889, with a p-value of 0.011. Further, the result shows that there is a positive association between consistent accounts receivable reviews and financial performance of profit making private hospitals where the correlation coefficient is 0.732, with a p-value of 0.007. Nevertheless, the positive relationship indicates that when the practice of the afore-mentioned factors is in place the levels of financial performance of profit making private hospitals increases.

Overall, communication strategies between medical providers and billing staff had the greatest influence on financial performance of profit making private hospitals, followed by accuracy of billing strategies, then consistent accounts receivable reviews while implementing payment strategies had the least influence on the financial performance of profit making private hospitals. The findings highlighted the need of ensuring that profit making private hospitals are well-versed in healthcare revenue cycle management strategies, particularly the communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies and consistent accounts receivable reviews.

Multiple Regression Analysis

Multiple regression analysis was carried out to determine the influence of communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies and consistent accounts receivable reviews on financial performance of profit making private hospitals in Nairobi City County, Kenya. The findings were presented in Table 2, 3 and 4.

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.876	0.767	0.761	1.332

Table 2 shows that adjusted R-Square value (coefficient of determination) is 0.761, which indicates that the independent variables (communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies, consistent accounts receivable reviews) explain 76.1% of the variation in the dependent variable (financial performance of profit making private hospitals). This implies that there are other factors that influence the financial performance of profit making private hospitals in Nairobi City County, Kenya attributed to 23.9% unexplained. Effective revenue cycle management is critical to the financial viability of private hospitals. A private hospital analyzes prospective revenue channels based on the volume of patients and mix of insurance payers in the first phase of a revenue cycle strategy. Revenue collection processes in the form of accounts receivables are unlike those in most other sectors (Lubberink, Blok, van Ophem, & Omta, 2017).

Table 3: Analysis1 of Variance1 Results

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	992.31	4	248.078	137.296	0.000
	Residual	301.75	167	1.807		
	Total	1294.06	171			

The results shown in Table 3 revealed that p-value was 0.000 which is less than 0.05; thus, the model is statistically significant in predicting how communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies, and consistent accounts receivable reviews influence financial performance of profit making private hospitals in Nairobi City County. The F critical at a 5% level of significance was 2.4258 (4, 167). Since F-calculated was 137.296 is greater than F critical, it shows that the overall model was significant. The healthcare revenue cycle process includes coding medical services and billing insurance. Making sure that patients have eligible insurance on file can help in determining costs for various treatments. Faster and more accurate claims transmission allows for greater flexibility in arranging patient care (Singh, Mindel & Mathiassen, 2017).

Model coefficients provide unstandardized and standardized coefficients to explain the direction of the regression model and to establish the level of significance of the study variables. The results are captured in Table 4.

Table 4: Regression1 Coefficients1

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	0.987	0.417		2.367	0.019
Communication strategies between medical providers and billing staff	0.923	0.372	0.901	2.481	0.014
Implementing payment strategies	0.653	0.251	0.704	2.602	0.010
Accuracy of billing strategies	0.834	0.199	0.821	4.191	0.000
Consistent accounts receivable reviews	0.751	0.213	0.723	3.526	0.001

As per the SPSS generated table above, the equation ($Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \epsilon$) becomes:

$$Y = 0.987 + 0.923X_1 + 0.653X_2 + 0.834X_3 + 0.751X_4$$

The findings showed that if all factors (communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies, consistent accounts receivable reviews) were held constant at zero, financial performance of profit making private hospitals will increase by 0.987 units. The findings presented also show that taking all other independent variables at zero, a unit increase in the communication strategies between medical providers and billing staff would lead to a 0.923 unit increase in financial performance of profit making private hospitals. This implied that there was a positive relationship between communication strategies between medical providers and billing staff and the performance of profit making private hospitals. This variable was significant since the p-value 0.014 was less than 0.05. Le Roux (2018) asserted that technology platforms can play a role in assisting providers, payers, and consumers communicate and interact more efficiently, which will lead to a more durable revenue cycle management strategy.

The findings also show that a unit increase in implementing payment strategies would lead to a 0.653-unit increase of financial performance of profit making private hospitals. This implied that there was a positive relationship between implementing payment strategies and the performance of profit making private hospitals. This variable was significant since $0.010 < 0.05$. Gartenberg, Prat and Serafeim (2019) affirm that with the payment plan, the hospital can gain a return of up to 100 percent on the principal amount when a patient selects an interest bearing plan or will pay a contingency fee on each dollar collected on short term plans or when payments are made in full. By fairly managing the payment plan, the patient can effectively pay off their debt and the hospital achieves a steady cash flow month after month. It becomes a winning situation for everyone involved.

Further, the findings show that a unit increase of accuracy of billing strategies would lead to a 0.834-unit increase in financial performance of profit making private hospitals. This implied that there was a positive relationship between accuracy of billing strategies and the performance of profit making private hospitals. This variable was significant since p-value (0.000) was less than 0.05. According to Tseng, Kaplan, Richman, Shah and Schulman (2018), despite the long and winding journey, effective medical billing is essential for optimizing healthcare revenue cycle management and reducing days in accounts receivable. Automating the medical billing and claims management process could help providers retrieve reimbursements from rejections and denials in a timelier manner.

The study also found that a unit increase of consistent accounts receivable reviews would significantly lead to a 0.751-unit increase of financial performance of profit making private hospitals. This implied that there was a positive relationship between consistent accounts receivable reviews and the performance of profit making private hospitals. This variable was significant since p-value (0.001) was less than 0.05. Accounts receivable

management strategies apply strategies to ensure payments made by patients and insurance payers for services rendered are effective and efficient (Reddy, Onitskansky, Singhal & Velamoor, 2018). The hospital managers' ability to collect compensation from patients and insurance payers is essential for sustainability and financial independence.

Overall, it was established that communication strategies between medical providers and billing staff had the greatest effect on the financial performance of profit making private hospitals in Nairobi City County, Kenya, followed by accuracy of billing strategies, then consistent accounts receivable reviews while implementing payment strategies had the least effect to the financial performance of profit making private hospitals in Nairobi City County, Kenya. All the variables were significant since their p-values were less than 0.05.

Conclusions

Under this section, the findings are linked with the literature review to check the consistency or agreement of the findings with previous studies. The study discusses the effect of effective communication strategies between medical providers and billing staff, implementing payment strategies, accuracy of billing strategies, and consistent accounts receivable management strategies on financial performance of profit making private hospitals in Nairobi City County, Kenya.

The study concluded that communication strategies between medical providers and billing staff affect the financial performance of profit making private hospitals in Nairobi City County, Kenya significantly. The study concluded that, although there are many approaches to drive public policy debate, communication approaches remains important and are one of the most influential approaches in driving the public policy debate.

The study concluded that implementing payment strategies affect the financial performance of profit making private hospitals in Nairobi City County, Kenya significantly. The study deduced that the use of prepayment systems makes it easy for the hospitals to collect payments in advance before the patient is offered a service. The use of on-site billing would entail timely delivery and settlement of bills. The study also deduced that the use of electronic money transfers and mobile money payment platforms would enhance revenue collection because customers can settle their bills at their convenience.

The study concluded that accuracy of billing strategies affect the financial performance of profit making private hospitals in Nairobi City County, Kenya significantly. The research also concluded that e-billing service timeliness is crucially vital for customer satisfaction. That is, the responsiveness of the system both to the customer and hospitals, ability dispatch lots of bills faster and timely receipt of bills by customers at their convenience.

The study concluded that consistent accounts receivable reviews affect the financial performance of profit making private hospitals in Nairobi City County, Kenya significantly. The study concluded that the shorter the average collection period, the more adequate financial performance experienced by profit making private hospitals in Nairobi City County, exhibited through their surpluses. Profit making private hospitals with more extended average collection periods experienced poor financial performance explained in their respective deficits due to the inability to meet their obligations.

Recommendations

The study recommends that the timeliness observed in billing service at profit making private hospitals should be upheld in order to achieve its effectiveness and efficiency and consequently result to customer satisfaction. For customers to be satisfied with a new electronic system, it should be easy to use and navigate through. As such the study recommends that the e-billing service system should be simplified for customers to understand and profit making private hospitals in Nairobi City County should accord the necessary support structures for the system to be easily used.

This analysis recommends that respective managements should develop sustainable debt collection policies that will achieve prompt debt collection within the shortest time possible, such as recommending the ideal 30 days to their debtors. As such, profit making private hospitals in Nairobi City County should lower their average collection periods to experience better and improved financial performance. The study recommended that profit making private hospitals in Nairobi City County should reduce its average collection period and accounts receivable turnover in order to improve their financial performance.

The study also recommends that profit making private hospitals in Nairobi City County should endeavor to educate clients about the healthcare revenue cycle management strategies. This would result to economic growth within the county which would also impact them positively. The study also recommends that hospitals to learn about accounts receivable management practices and financial growth that translates to economic growth for the entire Nation.

The empirical evidence presented here reveals that profit making private hospitals in Nairobi City County are taking the bold step of fully adopting revenue cycle management strategies to realize benefits associated with financial performance. They may be able to predict the growth of the hospitals, increase yields, reduce operations costs, and generate revenues. There is a need for full actualization of revenue cycle management strategies in profit making private hospitals in Nairobi City County to realize the full potential of the sector.

The study recommends long-term initiatives captured in a communication plan to enable conceptualization of dealing with complex issues such as conservation and to provide

time for diverse functions including consensus building and forming networks. The researcher, therefore, recommends that the head of corporate communication should initiate policy development guided by the activities that support strategic communication in order to strengthen the flow of information within and between the different parts of profit making private hospitals in Nairobi City County and consequently promote the realization of the set goals and objectives.

Senior managers of profit making private hospitals in Nairobi City County should use modern and error-free methods for payment to avoid billing complaints. Customer complaints regarding incorrect bills could result in low revenue collection. The ICT department accompanied by the marketing department should monitor and disseminate the results through training, literature, and conferences.

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