

**TITLE PAGE**

**A COMPARATIVE STUDY OF EXPENDITURE CONTROL METHODS  
IN GOVERNMENT AND PRIVATELY OWNED HOSPITALS.**

**(A STUDY OF UNIVERSITY OF NIGERIA TEACHING HOSPITAL,  
ENUGU AND TORONTO HOSPITAL ONITSHA)**

**BY**

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## APPROVAL PAGE

This project on A comparative study of expenditure control methods in Government and Private hospitals was supervised and approved in partial fulfilment of the requirements for the Award of Bachelor of Science (B.Sc) degree in Accountancy.

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## **DEDICATION**

This project is dedicated to the supreme and Almighty God for his divine providence, protection and Grace during my stay in the University. And to my Late father, Mr. Felix Ugoh, my mum. Mrs. Eunice Ugoh, and all my siblings.

## **ACKNOWLEDGEMENT**

I am profound grateful and remain eternally indebted to God Almighty, who is my strength, source of inspiration, for his infinite mercy, protection, wisdom and for giving me the ability to complete my degree programme successfully.

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## **ABSTRACT**

This research work on A Comparative Study of Expenditure Controls method in Government and private Hospitals is aimed at studying and analysing the different methods of expenditure control that is being adopted by these hospitals, their practical application and their level of effectiveness. It is aimed at carrying out a comparative analysis of two hospitals. To achieve the aim of this research, secondary data through textbooks and journals were used to review some of the related literatures. Equally, questionnaires, interview and observation, which sought to find out facts needed for analysing, were used. The questionnaires were analyzed by simple percentages while hypothesis were tested using chi-square statistics. The findings of the analysis indicate among others that the method of expenditure control used by both hospitals are not the same; The daily control method for private hospitals and the vote card method for Government Hospitals. The different methods of expenditure control used by the two hospitals are effective, but with slight loopholes associated with vote card method. I recommend among others that both hospitals should adhere strictly to authorization procedure for drug purchased and materials purchases. Both hospitals should exhibit high degree of cash management and employ competent personnel for proper and efficient expenditure control.

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# **CHAPTER ONE**

## **1.0 INTRODUCTION**

### **1.1 BACKGROUND OF THE STUDY**

Expenditure control or cost control is part of management control process, in every organisation.

This process is very important to any organisation be it profit making organisation or non-profit making organisation. Thus, lack of this practice in any organisation will cause misapplication of cash in cash disbursement process and this will create a very big problem leading the organisation into deficit and at an extreme case, the organisation might wind up. Many researches have been conducted in the reason for winding up of companies and organisation in which lack of expenditure control process had found responsible.

Expenditure control has been defined as the process by which managers utilize effectively and efficiently, the scarce resource in the achievement of the organisational goals. At this juncture, let us look at expenditure and control from separate perspective.

Expenditure is the total amount spent on the process of trying to achieve a particular organisational goal. Control means to order, limit, instruct or rule something or someone's actions. It is used by either government officials or organisation managers to make restrictions on wages increases, immigrate credit and so on (which are all expenditure).

As regards, this research work, which is the comparative study of expenditure control methods in government and privately owned Hospitals, A study of the University of Nigeria Teaching Hospital Enugu (UNTH) and Toronto Hospital and Maternity Onitsha; this implies a comparative study of non-profit making organisations, since UNTH is government owned Hospital while Toronto Hospital is privately owned Hospital as a category of profit making organisation. Non-profit making organisations are characterized by the following:

- a) There is neither a conscious profit motive nor an expectation of earning net income.
- b) No profit of any excess of revenue over expenditure is distributed to those who contributed support through taxes and voluntary donations.

In profit making organisations, the reverse of these characteristics is the case in the sense that their major objective is to maximize profit and excess of revenue over expenditure are given to the owners of the organisation.

Government owned hospitals pay more attention to services they render to the public, as their major objectives is to provide services that fulfil a social needs for those who do not have the purchasing power to acquire these services themselves. Irrespective of the fact that privately owned hospitals try to render good and quality services to the public, they pay more attention to maximize of profit which their major objective.

Comparative study of expenditure control in Government and privately owned Hospital which is major research question in this research work has to with the different ways and methods by which expenditure is being controlled in each of the hospitals so that they will not run into deficit or liquidations.

According to Johnson (1976), the management control concept which imbibes the expenditure control are the same both in profit oriented and non-profit oriented organisations, but the implication of these concepts

differ in important respect. We will want to find out if also the expenditure control methods are the same or differ in the two hospitals under study, owing to the fact that one is profit oriented and the other is non-profit oriented.

## **1.2 STATEMENT OF THE PROBLEM**

The problems encountered by the Government and privately owned Hospitals in expenditure control are as follows:

- The problem of daily control method and the vote card method. The problem encountered is to know the effective method to use in the two hospitals. Here, the problem encountered is to check whether the daily control method will be efficient and effective in the Government owned hospitals or whether the vote card method is the best.
- Another problem encountered by the hospitals in expenditure control is the problem of internal control. Internal control is the essential feature of an organisation, be it profit making or non-profit making, and it is expected to be well managed effectively and efficiently. Any

problem or limitation of the internal control will pose a problem to the expenditure control of the organisation.

Therefore, the above problems encountered by the two hospitals are the problems of expenditure control methods encountered by the government and privately owned hospitals by the government and privately owned hospitals that attracted the attention of the researcher.

The problem definition in this research work is to investigate and analyse the different ways and methods by which expenditure is controlled in government owned hospitals and privately owned hospitals so that they will not run into deficit and liquidation. As a comparative study, two hospitals has been selected for the study, they are: University of Nigeria Teaching Hospital Enugu (UNTH) for government owned Hospitals, and Toronto Hospital and Maternity Onitsha for privately owned hospitals.

In this research, we study the different methods of expenditure control being adopted by these hospitals and their practical application and their level of effectiveness.

This study will form a basis for our analysis which will help to answer some research questions.



### **1.3 OBJECTIVES OF THE STUDY**

This study is conducted to:

1. Ascertain the expenditure control method adopted by the government and privately owned hospitals.
2. Establish whether government and privately owned hospitals are operating the same of different system of accounting.
3. Compare the expenditure method or model adopted by the privately owned hospitals with that of the government owned hospital if there is a difference.
4. Ascertain the efficiency and effectiveness of these expenditure control methods in the operation of the privately and government owned hospitals.
5. Make recommendations based on the findings.

### **1.4 RESEARCH QUESTIONS**

1. What expenditure control methods are adopted in the two hospitals?
2. Do privately owned hospitals and government owned hospitals operate the same method of expenditure control?
3. Are there any similarities and differences in their method and application?

4. How efficient and effective are they to their users?

## **1.5 FORMULATION OF HYPOTHESIS**

In this study, we will have two main types of hypothesis; the null hypothesis denoted by ( $H_0$ ) and Alternative hypothesis denoted by ( $H_1$ ). The null hypothesis is constructed such that it can be accepted if the alternative hypothesis is rejected.

Accordingly, the researcher would examine the following hypothesis.

### **HYPOTHESIS 1**

$H_0$ : Government and privately owned hospitals do not adopt the daily control method of expenditure control.

$H_1$ : Government and privately owned hospitals adopt the daily control method of expenditure control.

### **HYPOTHESIS 11**

$H_0$ : Government and privately owned hospitals do not use the same method of expenditure control.

H<sub>1</sub>: Government and privately owned hospitals uses the same methods of expenditure control

### **HYPOTHESIS 111**

H<sub>0</sub>: The methods of expenditure control used by government and privately owned hospitals are not effective and efficient.

H<sub>1</sub>: The methods of expenditure control used by government and privately owned hospitals are effective and efficient.

### **1.6 SIGNIFICANCE OF THE STUDY**

Control has to be exercised over all aspect of a business organisation as a guard against any form of derailment from the organisations objective.

Therefore, the need to install an effective and efficient expenditure control method in any organisation be it profit making or non-profit oriented cannot be over emphasised. This is because lack of this practice (expenditure control) in any organisation (profit oriented or non-oriented) will cause misapplication of cash in cash disbursement exercise. Thus may create a very high problem which may lead the organisations into deficit and in extreme cases, the organisation may wind up.

This defines why this research hopes to create awareness to management team of government and privately owned hospitals in order to put in place an effective control system.

It will also improve the various ways and methods by which expenditure are being controlled in each of the hospitals.

Being a comparative study, it will be useful to policy formulations in health related issues, hospitals management board and potential managers of the hospitals.

## **1.7 SCOPE OF THE STUDY**

The study is on the expenditure control method on government and privately owned hospitals, as a comparative study, it will be limited to the accounting sections of the hospitals, which deals with its income and expenditure. However, other issue which has direct implication on the control aspect will be treated.

## **1.8 LIMITATIONS OF THE STUDY**

Like every other research work, a lot of things posed as limitations to the research. They include:

- a) Financial: The present economic constraint in the country makes it difficult for some families to feed well. Parents are faced with the difficulty of training their children, especially those who have children in the university find it difficult to pay their fees much more sponsoring the research project work. The researcher of this project is not an exception. So also, she uses the limited resources within her reach to make this research work a reality.
- b) Time: The interval between chosen of project topic, the submission of the project and the preparation for the degree exams is very infinitesimal, but these are mandatory activities and hence, the researcher was deprived of many other activities to ensure their fulfilment.
- c) Attitude of workers: owing to the fact that so many workers (employees) are not aware of what research is all about and its importance, they have non-challant attitude towards the researcher making it difficult for her to get the information's needed

## **1.9 DEFINITIONS OF TERMS**

For the purpose of clarity, the following terms used in this context are hereby elaborated.

- Expenditure control: Management tools that guides and ensures that company/organisational spending are in accordance with the policy plans.
- Misappropriation: To steal something that you have been trusted to take care of and use it for your own personal benefit.
- Comparative study: to examine the difference between two or more things.
- Deficit: Being run at losses.
- Privately owned Hospital: Hospital owned and financed by an individual or group of people.
- Audit guidelines: These are basic principles and practices which members are expected to adhere to in the conduct of audit work.
- Government owned hospitals: Hospitals owned and controlled by government either federal or state government.
- Liquidation: To cause a business to fold up so that its assets can be sold to pay its debts.

## **CHAPTER TWO**

### **2.0 REVIEW OF RELATED LITERATURE**

#### **2.1 INTRODUCTION**

The main aim of this chapter is to review the literature in the area of expenditure control.

The major aim of here is to understand and present how expenditure control method is being applied in the real world situation. It will also explore relevant theories on the subject matter.

As a comparative study of government and privately owned hospitals, emphasis will be laid on analyzing how the two different hospitals apply expenditure control method as a way of attaining and effectively. Specifically, this chapter will provide us with some detailed knowledge and information about our case study, some terms which will be used in this research work will be defined also.

#### **2.2 OVERVIEW OF EXPENDITURE CONTROL**

Expenditure control involves the regulations, limitations of confinement to expenses to minimize over spending and ensure compliance with specified plans of the organisation. Expenditure control also means the management tools that guides and ensure that the organisational spending are in

accordance with the policy plans and for the achievement of organisational goals and objectives. For expenditure control to be effective, it must have a dual purpose, viz:

- a) It must attempt to keep, misappropriation, inefficiency and other expenses under check.
- b) It must allow for re-allocation of system of record which will establish accountability for expenses, the employment of current and concise accounting and statistical report to reveal their duties.

Expenditure control is also the regulation of cost of operating s business and is concerned with keeping the costs within acceptable limits. Expenditure control can be seen as an exercise in good managerial activities by avoiding wasteful use of valuable resources and encouraging efficiency and cost consciousness.

However, expenditure control is the process of ensuring that firms activities conform to its plan and that its objectives are achieved. There can be no control without plans and objectives, since these predetermine and specify the desirable behaviour and set out the procedure that should be followed by members of the organisation to ensure that a firm is operated in a



desired manner. Expenditure control encompasses all the methods and procedures that direct employees towards achieving the organisational objectives.

Therefore, the aim of expenditure control is to influence the employees behaviours in desirable ways in order to achieve the organisations goals and objectives and in order to increase profitability.

## **2.3 THE EXPENDITURE CONTROL METHODS**

### **2.3.1 INTERNAL CONTROL (AN OVERVIEW)**

The Auditing practices committee defines internal control system as the whole system of control, financial or otherwise, established by the management in order to carry on the business of the enterprise in an orderly and efficient manner, ensure adherence to management's policies, safeguard the assets and secure as far as possible the completeness and accuracy of the records.

Control procedures which means those policies and procedures which management has established to achieve the entity's specific goals and objectives. Specific control procedures include:

- a) Reporting, reviewing and approving reconciliations.
- b) Checking the arithmetical accuracy of records.
- c) Maintaining and reviewing control accounts and trial balances.
- d) Approving and controlling of documents.
- e) Comparing and analysing the financial results with budgeted amounts.

Some of the features of internal control are as follows:

- I. Segregation of duties: One of the prime means of expenditure control is the separation of those responsibilities or duties which would, if combined, enable one individual to record and process a complete transaction, segregation of duties reduces the risks of intentional manipulation or error, and increases the element of checking.
- II. Physical: These internal controls are concerned mainly with the custody of assets and involve procedures and security measures designed to ensure that access to assets is limited to authorized personnel.

- III. Authorization and Approval: All transactions and actions should require authorization or approval by an appropriate responsible person.
- IV. Supervision: Any internal control system should include the supervision by responsible officials of day-to-day transactions and the recording thereof.
- V. Arithmetical and Accounting: These are controls within the recording function which check that the transactions to be recorded and processed have been authorized, that they are all included and that they are correctly recorded and accurately processed. Such controls include checking the arithmetical accuracy of the records, the maintenance and checking of totals, control accounts and accounting for documents.
- VI. Personnel: This is the procedures to ensure that personnel have capabilities commensurate with their responsibilities.

John (2002) states that even basically honest employees may be tempted occasionally to steal assets or otherwise to take advantage of his/her position of authority to trust in the company.

Guarding against dishonest and honest mistakes are the prime concern of expenditure control which can be expected through its accounting procedures.

An organisation whether profit or non-profit making needs to design, install and enforce concrete procedure and method so that its accounting system will be highly reliable.

It is management's lack of attention to internal control that encourages expenditure to reach a very high level.

There is no substitute for good internal control system as a means of expenditure control.

### **2.3.2 RESPONSIBILITY FOR INTERNAL CONTROL**

Willsmore (1999) attests, that responsibility for establishing and maintaining adequate internal control rests with the management. This attestation is supported by the CICA in Audit Technique study, internal control and procedure audit test where it states that "it is management which is responsible for safeguarding the assets, ensuring that accounting data is reliable, promoting operating efficiency and adherence to prescribed

policies. It points out that the internal control system should not be regarded as something installed purely to meet the auditor's need, but should include the controls which the management considers necessary to discharge its responsibilities. Willsmore, however notes that an auditor in making audit is to review the internal control system and check that which is in existence. As a result, he noted that the auditor may recommend modifications and improvements to the system but the entire responsibility for safeguarding the asset still rest on the shoulder of the management.

There are two approaches to the classification of internal control, vix:

- a) That given by the Auditing Statement and Guidelines 3204. The guideline classified internal control by organisation, segregation of duties, physical control, authorization and approval, arithmetic and accounting, personnel supervision and management.
- b) International standards on Auditing (ISA 400) classified the internal control by its objectives, Jurisdiction method and general nature.

## **2.4 INTERNAL AUDITING OVERVIEW**

The growing recognition by the management of the advantages of good internal control system and the complexities of an adequate system of internal control in government and privately owned hospitals has led to the development of internal Auditing as a method or form of control over all controls.

Giles (2001) notes that emergency of the internal auditor as a specialist in internal control is the result of an evolutionary process that is similar in some ways to he evolution of independent auditing.

Internal auditing is an element of internal control system set up by the management of an organisation to examine, evaluate and report on accounting and other controls in operation.

However, Lucey (2002) described internal auditing as a review of operations and records, sometimes a continuous undertaken without an organisation by specially assigned staffs.

Internal audit is defined as an independent appraisal activity established within an organisation as a service to it. It is a control which functions by examining and evaluating the adequacy and effectiveness of other controls.

From the above definitions, two main features of internal auditing emerge:

a) **INDEPENDENCE:** Although an internal audit department is part of an organisation, it should be independent of the line management whose sphere of authority it may audit. The department should therefore report to the board or to a special internal audit committee and not to the finance director. The reason for this is best seen by thinking about what could happen if the internal audit department reported some kind of irregularity to a finance director without realizing that the finance director was actually involved.

b) **APPRAISAL:** Internal audit is concerned with the appraisal of work done by other people in the organisation, and internal auditors should not carry out any of the work themselves. The appraisal of operations provides a service to management, providing

information on strengths and weakness throughout the organisation.

Therefore, the scope and objectives of internal audit are as follows:

- I. Review of the accounting and internal control system: Management is responsible for the establishment of adequate accounting and internal control systems. Often, internal audit is assigned specific responsibility for reviewing the design of the systems, monitoring their operations and recommending improvements.
- II. Examination of financial and operating information: This may include review of the means used to identify, measure, classify and report information and specific enquiry into individual items including detailed testing of transactions, balances and procedures.
- III. Review of economy, efficiency and effectiveness: This review may include the non-financial controls of an organisation.
- IV. Review of compliance: This review may cover compliance with laws, regulations and other external requirements and with internal policies and directives and other requirements including appropriate authorization of transactions.



V. Special investigation: One example is suspected frauds.

The essentials for effective internal auditing are as follows:

- I. Independence: The internal auditors should have independence in terms of organisational status and personal objectivity which permits the proper performance of their duties.
- II. Staffing and Training: The internal audit unit should be appropriately staffed in terms of numbers, grades, qualifications and experience, having regard to its responsibilities and objectives. Training should be a planned and continuing process at all levels.
- III. Relationships: The internal auditors should seek to foster constructive working relationship and understanding with the management, external auditors, with any other review agencies and where one assets with audit committee.
- IV. Due care: The internal auditors cannot be expected to give total assurance that control weakness or irregularities do not exist, but they should exercise due care in fulfilling their responsibilities.
- V. Planning, controlling and recording: Like the external auditors, internal auditors should adequately plan, control and record their

work. As a part of planning, the internal auditors should identify the whole range of systems within the organisation.

- VI. Evaluation of internal control system: The internal auditors should identify and evaluate the organisations internal control system as a basis for reporting upon its adequacy and effectiveness.

Therefore, Nepworth (2000) opines that the most important concern of internal audit is to ensure that financial dealing of organisation are conducted in proper manner, that no fraud or misappropriation of funds or accounts occurs and that proper system of financial control including internal check arrangement, that is one part of the system automatically checking on another exists.

#### **2.4.1 INTERNAL AUDIT AS A METHOD FOR EXPENDITURE CONTROL**

The internal auditors controls the expenditure of an organisation by reviewing charges to the account to determine that expenditure are properly authorized and that they represented justifiable expenditure of the organisations fund and that the charges have been properly accounted for.

Internal auditors also control expenditures by monitoring the operations of the managers and recommending improvements.

Usually, the internal auditor's principle concern in the examination of cost and expenses should be the minimization and control of the unnecessary expenditure. Since management control costs and expenditure largely through internal report, the internal auditor should pay close attention to the reliability and usefulness of these reports.

Natale (2001) pointed out the managements role in employee theft is effective or as well as its management.

Thus, procedures and policies can only be as strong as those regulating and enforcing them without full support of top management, the auditing department cannot function as useful working part of any organisation.

Hence, the need for internal audit to appraise and review the internal expenditure control system and to be effective in addition to the continuous audit should be made at least annually. This should include an examination schedule and such, further test as the settlement may require. The audit programme should cover a comprehensive examination, and verification of all assets, liabilities, income and expenditure control extends

further to the budgets, the preparation of the internal auditors. Variances submitted by management accountant are further analysed, the work done by other people in the organisations are appraised by the internal auditor.

## **2.5 MANAGEMENT AUDIT**

Management audit according to Auditing Guidelines, is an objective and independent appraisal of the effectiveness of managers and the effectiveness of the corporate structure in the achievement of company objectives and policies. Its main aim is to identify existing and potential management weakness within an organisational and to recommend ways to rectify, these weakness.

Herbert suggests the following definitions:

- a) Management auditing is the terms used for evaluating the efficiency and economy of a given operation.
- b) It is distinct from program auditing which is used to evaluated the effectiveness of a given operation.
- c) Management auditing could be described as performance auditing.

Washbrook (1999), gives a wider definitions as follows "Because of the importance of standards procedures and controlled organisations, there has been a tendency to extend the functions of internal audit departments, to cover the checking of many aspects which are neither financial nor connected with the assets of the company in the accounting sense. The total examination of an organisation, or part of it include checks on the effectiveness of managers; their compliance with professional standard; the reliability of management data; the quality of performance of duties and recommendations for improvement. These are variously termed management audits". A management audit would focus attention on the managers themselves.

The primary aim of management audit is to motivate management to take action which will lead to an increase in efficiency and decrease in expenses and also increase in profitability of an organisation through exist reduction.

Philip explained management audit as a systematic, comprehensive, critical and constructive examination and appraisal of the organisational structure, management practice and method conducted by an external auditor. It involves a review of each and every aspect of management activities and

its objective is to ascertain whether or not economic resources of an organisation are used by its management in the most economic way to produce the maximum possible result in the shortest possible time in accordance with its goal management audit contains management auditors finding and specific recommendation, its objective is to motivate management to increase in efficiency and profitability of the organisation.

## **2.6 COST BENEFIT ANALYSIS**

The term cost benefit analysis as Broadway pointed out refers to the measurement of the economic benefits from any change in resources allocation. In the context of public finance, it most often refers to calculation of net special benefit arising from specific public expenditure such as road, irrigation or a disease control programme.

Nepworth (2000) defined cost benefit analysis as a technique for use in either investment appraisal or measuring the cost and benefit of the community adopting specified course of action.

The objective of cost benefit analysis is that it tries to take into account all the cost and benefits which will accrue from project.

Therefore, cost and benefit are defined in the widest sense and not only to narrow accounting definitions.

## **2.7 QUANTITATIVE MODELS FOR EXPENDITURE CONTROL**

### **2.7.1 ECONOMIC ORDER QUANTITY AS METHOD OF EXPENDITURE CONTROL**

Economic order quantity according to Drury is the order quantity that will result in the total amount of the ordering and holding costs being minimized. The optimum order will be determined by those costs that are affected by either the quantity of stocks held or the number of orders placed. If more units are ordered at one time, fewer orders will be required per year. This will mean a reduction in the ordering cost. The optimum order size is known as economic order quantity (EOQ); it can be determined by tabulating the total costs for various order quantities, by a graphical presentation or by using a formula.

The formula used in determining the economic order quantity is:

$$\frac{D_o}{Q} \Rightarrow \frac{\text{Total demand for period}}{\text{Quantity ordered}} \times \text{ordering cost per order}$$

Where;

$D$  = Number of orders for a period

$Q$  = Quantity ordered in units

$O$  = Ordering cost per order.

Economic order Quantity according to Adeniyi (2009), is the level of activity at which the cost of inventory control is minimized. It is the quantity of stock, which is normally ordered each time the stock, is being replenished. It is also called re-order quantity.

Economic order quantity model has the following assumptions:

1. Demand rate is constant and can be ascertained.
2. Lead time is certain.
3. The purchase price per unit is constant and hence quantity discounts are not allowed.
4. Orders arrive instantaneously and not gradually.
5. The ordering cost per order is known.
6. The annual holding cost per item can be determined and is constant.



## **2.7.2 BUDGETING AS INSTRUMENT OF EXPENDITURE CONTROL**

Budgeting is a systematic and formularized approach for performing significant phases of the management planning and control of functions.

It is the process of preparing detailed short-term corporate plan into action.

According to Adeniyi (2009), budget can be defined as a plan quantified in monetary terms prepared and approved prior to a defined period of time usually showing planned income to be generated and/or expenditure to be employed to attain a given objective.

Budgetary control is a system of accounting in which cost and revenues are analyzed in accordance with areas of personal responsibilities so that the performance of the budget holders can be monitored in financial terms.

Budgetary control consists of:

- a) Establishing budget for each area of functional responsibility identifying the performance required in order that the objectives of the business as a whole may be achieved.
- b) The regular comparison of actual with budgeted results.

- c) Action resulting from this comparison, either to secure adherence to the defined objectives or to agree some modification of the original plan.

Budgeted therefore, fulfil both a planning purpose and a control purpose. The aim of budgeting control is to provide a formal basis for monitoring the progress of organisation as a whole and of its component parts, towards the achievement of the objectives specified to the planning budgets.

From the above, it can be seen budgeting and budgetary control is an important tool for financial planning and expenditure control in any organisation be it profit making or non-profit making.

### **2.7.3 BENEFITS OF BUDGETING AND BUDGETARY CONTROL TO EXPENDITURE CONTROL**

- I. Ensure sound organisation structure.
- II. Helps to increase and promote coalition of interest and to increase motivation.
- III. Serves as useful performance monitoring tool.
- IV. Compels all members of management to participate in establishment of goals and plans.

- V. Pin point efficiency and inefficiency.
- VI. Help to achieve co-ordinations between various departments and functions of the organisation.
- VII. Medium of communication for organisational plans and objectives and the progress towards meeting those objectives.
- VIII. Enables management to plan resources to be invested in capital additions to satisfy customers' demands and ensure growth.
- IX. Its planning process helps avoid the following;
  - Idle operating capacity
  - Excess capacity
  - Investment that will earn less than adequate returns on funds invested.
- X. Focus the attention of management on cash flows a critical and often neglected problem.

## **2.8 ITEMS RELATED TO THE INCOME GENERATED IN A HOSPITAL**

It is thus important at this juncture to look and examine the sources of income to a hospital since this will enable us to have a clear understanding

of the systems. Since the items of income of a hospital are not similar to those of ordinary business entity.

These items are divided into two sub-heading, viz;

- a) Medical fees
- b) Non-medical fees.

### **2.8.1 MEDICAL FEES SOURCES OF FUND**

These belong to the items of medical services, that is these income are those that relates to the main hospital business. They are as follows:

- i. Admission fees: Admission fees are payable to the hospital when a patient is fully permitted to receive services from the hospital. This sum is always equal to all patients in the hospital.
- ii. Diet fee: This income depends on the quality and quantity of diet the hospital is giving to the patient.
- iii. Nursing services: Nursing services depends on the number of times the patient receives such services.
- iv. Operating fees: This income depends on the nature of operation. Presently, in some hospitals the sum payable by patients ranges from ₦5000 and above.

- v. Sterilization: This comes as a result of taking care of injuries and tendering it till the wound is healed.
- vi. Card fees: In the form of admission fee, it is payable for treatment on this card recommendation is made by doctors.
- vii. Open Health Operation fees: These incomes relates to outdoor operation services rendered by the hospitals to her patients.
- viii. Physiotherapy: This income is generated as a result of treatment by means by exercise, massage, the use of light, heat, electricity and other natural forces.
- ix. Casual collection fees: These fees are charges per head on collection of casualty. Example, motor accident victims who are unfortunate.
- x. Storage of body: Where a patient dies at the hospital and the body is left for some days at the hospital, an amount is paid by the relatives of the deceased on collection of the body.
- xi. Anti-Natal: This income is generated from the periodic check of pregnant women at the hospital during pregnancy.
- xii. Lab-fee: For laboratory tests carried on by the laboratory scientist at the hospital to generate income.

xiii. Ultra-sound: Similar to lab fee, X-ray fee, etc.

### **2.8.2 NON-MEDICAL SOURCES OF FUND**

These include other services which are indirectly related to the services of a hospital. They include following fees:

1. Sale of forms: Hospitals sells forms to intending Nursing students and the money paid for this form are usually not refundable even where the applicant fails.
2. Grants: These may be from government for improvement of services and equipments in the hospitals. For instance, World Health Organisation (W.H.O) may through its agencies in the country decide to grant hospital some money for improving the services but this is usually to government owned hospitals.
3. Donations: These incomes are not always expected. It is a wilful gift from individuals, organisations, and government agencies to the hospitals. Example, government may donate a sum of money to the hospital.

## **2.9 ITEMS RELATED TO THE EXPENDITURE OF A HOSPITAL**

Having discussed income sources of a hospital, it is also pertinent for the purpose of this study to also explore the nature of expenditures in relation to the hospitals. They include the following sub-headings according to Bhatar. H.;

- a) Statutory expenditure
- b) Non-statutory expenditure

### **2.9.1 STATUTORY EXPENDITURE**

Statutory expenditure of hospitals are those group of expenditure that appeared to be certain. That is, they must be incurred in the normal course of business activity of the hospital. They include;

- i. Power/electricity bill
- ii. Water rates
- iii. Telephone bills
- iv. Rents in the case of private hospitals.

## **2.9.2 NON-STATUTORY EXPENDITURE**

According to Bhatar. H, these are expenses that are necessary but they are not mandatory. Hospitals are left to the options of incurring such expenditures. They are as follows:

- a) Drugs: Hospitals sometimes require patients to buy drugs in the pharmacy outside the hospital.
- b) Departmental equipments
- c) Salaries
- d) Leave allowances
- e) Repair, plumbing, etc.
- f) Fuelling of generator
- g) Vehicle Maintenance
- h) Television
- i) Miscellaneous expenses.

## **2.10 THE EXPENDITURE CONTROL METHOD THAT ARE IN APPLICATION**

Practically, the method of expenditure control that are in use and which are found effective and efficient are as follows:



a) Daily control method

b) Vote card method (departmental vote expenditure analysis book)

### **2.10.1 DAILY CONTROL METHOD**

The daily control method of expenditure control involves daily budgeting, daily check and daily analysis. This is normally used in private hospitals. This method was found effective and there are limited funds to out stock of drugs and materials. There also arose the need to save the hospital from the danger inherent in over storage of drug which might result to damage of the drugs due to reason of inadequate storage facilities. Dr. Osita ngwu during the seminar organised for residence Health worker week said that "it has been found that the hospital management are one of the sectors of the economy whose inventory control are always worrisome due to stock control system, therefore, the daily control method has been the most efficient method of stock control in the hospitals.

### **2.10.2 DAILY BUDGETING**

Daily budget can be said to be the process involved in the daily control method. Budgeting has been found to be inevitable in any stage of production. In our hospital, it is like the requisition follows a particular

pattern and for this regards the co-ordinator budgets on daily basis what the expenditure will look like considering that the expenditure will never be up or more than income for the day. Daily budgeting does not end in estimating daily need of stock; it also involves the process of daily recording of expenditure stock requisition from store, miscellaneous expenditure for the day. It can be inferred from the daily budgeting that excess fund are not tied down, therefore making meaningful utilization of fund and creating a speedy access to stock taking and similar checking that the hospital may demand in its business times.

### **2.10.3 DAILY CHECK**

Daily check is a similar way followed by the auditor during vouching. It can be said that while daily check is being done, vouching audit are being done.

Before any payment, voucher is prepared and when incomes generated are received, receipt voucher is prepared and issued.

This is to ascertain that the expenditure incurred and income generated receipt voucher is prepared and used daily after which they are used at the end of the days business to check the actual expenditure that took place

and then check the actual income generated for the day after the daily check, the voucher are used in the preparation of daily statement of income and expenditure followed by analysis.

It can be seen from the explanation that there is much need for daily check as a process of expenditure control in our hospitals. It serves as the spot check of expenditure and income. And this creates a greater and effective room for control of expenditure in our hospital which was considered vigorous by many proprietor of this sector of production.

#### **2.10.4 DAILY ANALYSIS**

Daily analysis is a book that analyzes how daily expenditure of a hospital was made. It has been pointed out that the nature of expenditure of hospital maintains an irregularity pattern that the reason why it is necessary to make adequate analysis of daily expenditure of a hospital. It is also expedient to make clearly that items related are brought together for this purpose. This analysis book brings to light the actual amount spent for a particular item and this also serves as deterrent to unnecessary price inflation. It may be pointed out that expenditure control in public/government owned hospitals and private hospitals maintain a similar

patterns but regulatory procedure are different. The instruments that enable the analysis in this book are as follows:

6.0 Expenditure allocation

7.0 Charges to it

8.0 Purpose for expenditure

9.0 Recipient (sectional/department)

#### **2.10.5 BENEFITS OF THE DAILY CONTROL METHOD OF EXPENDITURE CONTROL.**

According to Fayemi, The benefits of the daily control method of expenditure cannot be over emphasized in hospital management/expenditure control due to the irregular pattern of expenditure. Some of the benefits of daily control method are outlined below:

3.0 Serves as daily financial report of a hospital, since hospitals makes use of daily analysis book. It serves as a daily report on financial statements and makes it easier for any calculation to be made in regards to the financial statements.

4.0 It produces on the spot result. This implies that the financial position of the hospital can easily be ascertained with regards to expenditure for proper and efficient achievement of the hospitals goals and objectives.

5.0 It creates no room for fraudulent financial deal. Because fraudsters are unrelated in their activities the daily basis analysis deter them from conceiving the idea of fraud and misuse of fund.

#### 2.11 **VOTE CARD METHOD OF EXPENDITURE CONTROL**

This method of expenditure control is used in the government owned hospitals. This is a card that is used to record expenses of various departments.

The vote card unlike the departmental vote expenditure analysis book used in the government ministries are used to record expenditure and liabilities incurred in ministries. Its principle purpose is to facilitate vote watering and ensure that subhead do not exceed authorized limit.

The vote card used in hospitals are used in form of setting an amount or vote an amount for a department at the beginning of the accounting period and the corresponding expenses will be recorded to ascertain how the

money was utilized. Here, the expense continues to accumulate until the voted money is utilized or used up. In a situation where there is deficit, in one department, another department with surplus can transfer their surplus fund to the one running a deficit.

This is used to check the expenses of the department and this is equally used to indicate when a department is favourably disposed (surplus) and unfavourably disposed (deficit).

### **2.11.1 BENEFITS OF VOTE CARD METHOD**

1. To monitor expenditure: This implies that the amount voted for any departments are not left to be used in a way that it is not meant for. It ensures that the amounts voted are used in pursuit of the departmental objectives instead of unnecessary spending.
2. To determine whether a department have a favourable or unfavourable balance. This enables the planning unit to determine in future the amount that will be voted for a department in future to avoid having a wide range of deficit.
3. To analyze account on comparative basis. Accounts of various departments are studied closely on a comparative basis. That is, to

identify the usage and utilization of fund. It studies the production effectiveness of a department and watch closely on the fund allocation.

4. To know the amount a department is authorized to spend at any point in time. The vote card as a regularity instrument determines the voted amount a department or unit is authorized to pay any point in time. This unique function/importance of vote card serves so much in hospital management. It is assumed that hence expenditure is incurred corresponding recording for such must be made and hence create no reason for embezzlement of fund.
5. Serves as a basis for next year forecast. In any organization, adequate planning is inevitable and for this reason, usually in business organisation, there is a well constituted committee for planning purposes. And this planning is broken down into short term and strategic planning, through planning; manager has an overall comprehension of the relationship of many activities. The vote card as an expenditure control method is used to estimate the next years' organizational goal.

## **CHAPTER THREE**

### **RESEARCH DESIGN AND METHODOLOGY**

#### **3.0 INTRODUCTION**

This chapter deals with the structure and strategy adopted in carrying out the research work. Research methodology is the method or procedures applied in the investigation of problems of subject with the sole aim of discovering new relevant fact and acquiring additional information.

In order to have a clear understanding of the concept "research methodology" it is important to define these two words, which are research and "methodology".

Tuckman (2000), defines research as a systematic attempt to provide answers or process of finding out a solution to a problem.

According to Bardam (1998), methodology connotes the means, ways or methods of doing something.

According to the Oxford Advanced Learners dictionary, methodology is defined as a set of methods used in a particular area of activity.



Therefore, research methodology is simply a scientific mechanism in social research. It has both rules and objectives. In other words, it is a device employed by the researcher in an attempt to provide information for solving the identified problems.

## **RESEARCH DESIGN**

Research design simply means an exploitation of the method adopted in carrying out the research. Anikpo on his part defined research design as a plan or structure of any aspect of the research procedure.

For the purpose of this study, the researcher adopted the method of survey and interview by using questionnaire, oral interview and observation. And the researcher also used library design which has to do with gathering information from textbooks, magazines, journals, etc.

### **3.1 SOURCES OF DATA**

The data to be used for this study will be collected through two main sources which are:

1. Primary source
2. Secondary source.

## 1) PRIMARY SOURCES OF DATA

Primary source of data is the data collected on first hand information from the original source for the users express purpose. Hence, primary sources of data collection are process by which the researcher obtains information from questionnaire and the personal interview from the respondents. The questionnaire was designed and distributed to respondents and later collected and analyzed by the researcher.

## 2) SECONDARY SOURCES OF DATA

The secondary source of data is obtained from the review of related literature. The major sources of information were gathered from the secondary sources. The researcher consulted published and unpublished books, journals, newspapers, magazines, official documents (that is, government and non-government organisation official documents with relevant data), and library. The researcher made use of Caritas University library.

### 3.2 **RESEARCH INSTRUMENT**

According to Odo (2001), instrumentation deals with the foils the researcher employed to generate information for data analysis. The

information can be informed of questions or statement which the respondent is given to answer. It is called a questionnaire, when more than a piece of different type of such instrument is given to one respondent to react to.

The instrument which the researcher used to gather information was questionnaire and interview method. Questionnaires is the major instrument used in the work, also useful information was derived from oral interview.

### **3.3 RELIABILITY AND VALIDITY OF RESEARCH INSTRUMENT.**

Odo said that reliability of an instrument is a process of obtaining information on the degree to which a measure will yield similar results for the same subjects at different times.

In reliability of the research instrument, the researcher used test-re-test method to establish the reliability of the instrument. This shows that the constructed questionnaire was distributed at interval more than once to the same group of people to know how consistent each element of the group is in the scoring of the instrument. However, the good use of questionnaire and interview has a wide reaching influence on this work, this is because

with the use of questionnaire opinion of various categories of people were collected.

### **3.4 POPULATION**

Research population according to Osuala (2000) refers to the whole object from which the sample is drawn.

Fisher and fort (2003), defined population as the totality of any group, person or project which is defined by some unique attribute.

However, population of this study consists of the area of study which comprises of the accounts departments and management departments of the two hospitals used as the case of study for this research work. The population of the hospitals was gotten by the researcher with the use of judgemental basis. The estimated population of the University of Nigeria Teaching Hospital Enugu in their accounts and management departments is made up of two hundred and five workers (205), and Toronto Hospital and Maternity Onitsha employees in the accounts and management departments are one hundred and fifteen workers (115), total of three hundred and twenty workers (320) in the accounting and management departments of the two hospitals.

### 3.5 **SAMPLE SIZE/TECHNIQUE**

The sample technique applied in selecting sample for the study is random sampling techniques.

According to Borg, simple random sampling is a procedure in which all the individuals in the defined population have an equal and independent chance of being selected as a member of the sample so as to be representative of the population from which they are drawn.

However, due to the fact that there is no how the researcher would have reached the entire population, the researcher made use of simple random technique to obtain the information needed for the research work and from the information gathered, the researcher draws her conclusion.

Hence, the researcher adopted Taro Yamane (1964) formula to determine the sample size.

Therefore, to ensure the effective coverage of the population, the formula was applied thus:

$$n = \frac{N}{1 + N e^2}$$

where,  $n$  = sample size

$e$  = level of significance (5%)

$N$  = population size

Therefore, substituting the figures in the formula, we have:

$$n = \frac{N}{1+N(e)^2}$$

$$n = \frac{320}{1+320(0.05)^2}$$

$$n = \frac{320}{1+0.8} (0.0025)$$

$$n = \frac{320}{1+0.8}$$

$$= \frac{320}{1.8}$$

$$= 177.7778 \cong 178$$

The questionnaire would be shared to each hospital with the proportion of 4:3 for the government and private hospitals respectively. With the proportion above, the apportionment of the questionnaires to each hospital will be 102 questionnaires will be shared to University of Nigeria Teaching

Hospital Enugu, and 76 questionnaires would be shared to Toronto Hospital and Maternity Onitsha.

### **3.6 ADMINISTRATION OF RESEARCH INSTRUMENT**

The researcher collected data for this study through the use of questionnaire. The researcher went to the location of the study to distribute the copies of the questionnaire. A face-to-face system of questionnaire distribution is the process where the researcher visits the institutions, University of Nigeria Teaching Hospital Enugu, and Toronto Hospital and Maternity, that is used as a case study to distribute the questionnaire directly by herself to the sample elements.

### **3.7 METHOD OF DATA ANALYSIS**

Data analysis is a process by which data collected were processed and arranged in such a way that one can easily make meaning out of it. For the fact that most of the information obtained was largely from questionnaire and personal interview, conclusion were drawn based on the answer given by the respondents. The information gotten from the respondents to questionnaires were analyzed by simple percentage technique while the hypotheses were tested using chi-square statistics. The completed and

returned questionnaires were tabulated into frequency distribution tables and then chi-square technique was employed to test the hypothesis set in chapter one of this study.

### **3.8 DECISION CRITERION FOR VALIDATION OF HYPOTHESES**

In testing the hypotheses, the null hypothesis ( $H_0$ ) is formulated with the aim of either rejecting or accepting it. Any hypotheses which differ from null hypothesis is called Alternative Hypothesis ( $H_1$ ). Thus, the decision rule is formulated to help the researcher know when to accept or reject a null hypothesis ( $H_0$ ). For this research work, the decision formulated is that if the chi-square ( $\chi^2$ ) calculated is greater than the critical value of the chi-square obtained from the chi-square ( $\chi^2$ ) statistical table at 5% level of significance, the researcher would reject ( $H_0$ ) and accept ( $H_1$ ), otherwise ( $H_0$ ) would be accepted and ( $H_1$ ) rejected.

This can be shown in mathematical form as:

Reject  $H_0$  if  $\chi^2_{\text{calculated}} > \chi^2_{\text{critical}} (V-X) (E-1)$

Where,  $\chi^2 = \sum (o_i - e_i)^2$  and  $(r-1)$  is the degree of freedom.



## CHAPTER FOUR

### 4.0 DATA PRESENTATION AND ANALYSIS

The data presented was structured based on the number of questionnaires designed for this research work.

The questionnaire used for this research contains about 13 questions concerned with the data related to the research questions.

#### 4.1 PRESENTATION AND ANALYSIS OF QUESTIONNAIRE

Question 1: Does the hospital adopt any expenditure control method?

Table 4.1

UNTH

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	102	100
No	Nil	Nil
Total	102	100

Toronto Hospital

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	76	100
No	Nil	Nil
Total	76	100

The above shows that the two hospitals have an expenditure control method they adopt in their hospitals.

Question 2: Do your hospital adopt the daily control method of expenditure control?

UNTH Table 4.2

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	10	9.7
No	92	90.1
Total	102	100

## Toronto

Options	Frequency	% response
Yes	70	92.1
No	60	7.9
Total	76	100

Source: Research Survey, 2013

From the above, analysis, about 70 respondents representing 92.1% from Toronto hospital were of the view that the hospital adopts the# daily control method of expenditure control, while 92 respondents representing 90.1% from UNTH were of the view that the hospital do not adopt the daily control method of expenditure control.

Question 3: Does the hospitals operate by making budgets as one of the method of expenditure control?

Table 4.3

UNTH

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	58	56.9
No	44	43.1
Total	102	100

Toronto Hospital

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	56	73.6
No	20	26.5
Total	76	100

Source: research survey 2013.

From the above analysis 73.6% of the respondents from Toronto Hospitals were of the opinion that the hospital operates with making budgets. While 56.9% of respondents from UNTH believe that the hospital makes budget as one of ways of controlling expenditure.

Question 4: Is there any attempt to compare budgeted expenditure with actual expenditure within the period?

UNTH

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	41	40.9
No	61	59.6
Total	102	100

Toronto Hospital

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	58	76.3
No	18	23.7
Total	76	100

Source: research survey 2013.

From the foregoing analysis, 59.6% respondents from UNTH were of the option that the management/Accountants of the hospital do not compare the budgeted expenditure with actual expenditure within the period. But

76.3% respondents from Toronto hospital says that the hospital compares budgeted expenditure with actual expenditure within the period?

Question 5: Does your hospital have an internal control system?

Table 4.5

UNTH

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	72	70.6
No	30	29.4
Total	102	100

Toronto Hospital

<b>OPTIONS</b>	<b>FREQUENCY</b>	<b>% RESPONSE</b>
Yes	66	86.8
No	10	13.2
Total	76	100

Survey: research survey 2013.

From the above analysis, 70.6% representing 72 respondents from UNTH were of the view that the hospitals have an internal control system. But 86.8% representing 66 respondents were of the opinion that the hospitals (Toronto Hospital) have an internal control system.

Question 6: Does your hospital use internal audit as a method of expenditure control?

UNITH

Table 4.6

option	Frequency	% Response
Yes	66	64.7
No	36	35.3
Total	102	100

## Toronto Hospital

option	Frequency	% Response
Yes	59	77.6
No	17	22.4
Total	76	100

Source: research survey 2013.

From the above analysis, 64.7% respondents from UNTH have the opinion that the hospital use internal audit as a method of expenditure control. And 77.6% respondents from Toronto hospital believe that the hospital has internal audit as an expenditure control method.



Question 7: Does your hospital adopt the cost benefit analysis?

UNITH TABLE 4.7

OPTION	FREQUENCY	% RESPONCE
Yes	32	44.7
No	70	68.6
total	102	100
Yes	36	44.4
No	40	52.6
Total	76	100

From the above analysis, 80.4% of responsibility from UNTH were of the expenditure control method in the hospital is effective and 86.8% of respondent from Toronto hospital were of the hospital were of the view that the hospitals method of expenditure control used is effective and sufficient.

Question 9: does the expenditure control method used in your hospital boost your out put?

Table 4.9

UNTH

OPTION	FREQUENCY	% RESPONCE
Yes	72	70.6
No	30	29.4
total	102	100

TORONTO HOSPITAL

OPTION	FREQUENCY	% RESPONCE
YES	62	60.7
NO	40	39.3
TOTAL	102	100

Source: research survey 2013.

From the above analyses, 70.7% of respondent from UNTH were of the opinion of the expenditure control method used by the hospital boost their

output. And 86.8% of the respondent from the Toronto hospital were of the expenditure control method used boost their output.

Question 10: does expenditure control enhance decision making in your hospital?

Table 4.10

UNTH

OPTIONS	FREQUENCY	%RESPONCE
Yes	60	60.7
No	40	39.3
total	102	100

Toronto hospital

OPTION	FREQUENCY	% RESPONCE
yes	60	78.9
No	16	21.1
total	76	100

Source: research survey 2013.

From the foregoing analysis, 60.7 of the respondents representing from UNTH were of the opinion that the expenditure control method in their hospital enhances decision making. And 78.9% of the respondents were of the views that the method of expenditure control in the hospital enhances decision making.

Question 11: how would you rate the expenditure control method in your hospital?

OPTIONS	FREQUENCY	% RESPONCE
Effective	25	24.5
Very effective	26	25.5
Not effective	51	50
total	102	100

## TORONTO HOSIPTAL

OPTIONS	FREQUENCY	% RESPONCE
EFFECTIVE	9	8.8
VERY EFFECTIVE	65	89.24
NOT EFFECTIVE	2	1.96
TOTAL	76	100

Source: research survey 2013.

From the above analysis, 89.24% of respondent from Toronto hospital were of the same view that expenditure control method used by this is very effective while 50% of respondents from UNTH are of the opinion that the expenditure control method are not effective.

QUESTION 12: do you think that your hospitals have the quality of personnel for effective expenditure control method adoption?

## UNTH

OPTIONS	FREQUENCY	% RESPONCE
Yes	72	76.6
No	30	29.4
Total	102	100

## TORONTO HOSPITAL

OPTIONS	FREQUENCY	% RESPPONCE
Yes	66	86.8
No	10	13.2
total	76	100

Source: research survey 2013.

From the above analysis, 86.8% representing 66 respondents from Toronto hospital were of the view that the hospital has quality personnel for efficient expenditure control, and 13.2% representing 10 respondents from UNTH are of the opinion that the hospital has quality personnel of efficient expenditure control method.

### **9.1 TESTING OF HYPOTHESIS**

Having presented all the information and data gathered from the hospitals, it is time to test the hypothesis made in the first chapter of the study.

The hypothesis will be tested statistically using the chi-square. This will be done at 5% level of significance using 1 degree of freedom which is 3.841.

The formula for calculation is

$$\chi^2 = \frac{oi - Ei^2}{Ei}$$

Where:

O = The observed frequency of any value

E = The expected frequency of any value

Constantly, the Ei is calculated by

$$Ei = \frac{\text{row total} \times \text{column total}}{\text{Grand total}}$$

## **HYPOTHESIS 1**

HO1: Government and privately owned hospitals do not adopt the daily control method of expenditure control.

Table 4.13

tables	Yes	No	Total
4.1	178	Nil	178
4.2	80	98	178
Total	258	98	356

## Calculation of expected frequencies

$$E_i = \frac{\text{row total} \times \text{column total}}{\text{Grand total}}$$

$$E_{i1} = \frac{178 \times 258}{356} = 129$$

$$E_{i2} = \frac{178 \times 98}{356} = 49$$

$$E_{21} = \frac{178 \times 258}{356} = 129$$

$$E_{22} = \frac{178 \times 98}{356} = 49$$

## COMPUTATION OF CHI-SQUARE STATISTICS

$O_i$	$E_i$	$(O_i - E_i)$	$(O_i - E_i)^2$	$O_i - E_i$
178	129	49	2401	18.6
-	49	-49	2401	49
80	129	-49	2401	18.6
98	49	49	2401	49
356	356			135.2

$$X^2 \text{ cal} = 135.2$$



To calculate for the critical value at  $\alpha = 0.05$

$$\text{Degree of freedom} = (r - 1) (c - 1)$$

$$= (2 - 1) (2 - 1)$$

$$= (1) (1)$$

$$= 1$$

Recalling the hypothesis test

Ho: Government and privately owned hospital do not adopt the daily control method of expenditure control.

H1: Government and privately owned hospital adopt the daily control method of expenditure control.

DECISION RULE:

From the table calculation,  $X^2 = 135.2$  is greater than the  $X^2$  table 5% of significance using 1 degree of freedom which is 3.841.

Based on the decision rule which is adopt Ho of  $X^2$  calculated if it is less than  $X^2$  table, we reject the null hypothesis and accept the alternative

hypothesis that certainly, Government and privately owned hospital adopt the daily control method of expenditure control.

HYPOTHESIS 2: Government and privately owned hospitals do not use the same method of expenditure control. To test this hypothesis, we shall use question 6 and 7.

Table 4.20

tables	yes	no	total
4.6	125	53	178
4.7	68	110	178
total	193	163	356

Calculation of expected frequencies

$$E_{i1} = \frac{178 \times 193}{356} = 96.5$$

$$E_{i2} = \frac{178 \times 163}{356} = 81.5$$

$$E_{21} = \frac{178 \times 193}{356} = 96.5$$

$$E_{22} = \frac{178 \times 163}{356} = 81.5$$

## COMPUATION OF CHI-SQUARE STATISTICS

O <sub>i</sub>	E <sub>i</sub>	(O <sub>i</sub> -E <sub>i</sub> )	(O <sub>i</sub> -E <sub>i</sub> ) <sup>2</sup>	$\frac{O_i - E_i^2}{E_i}$
125	96.5	28.5	812.25	8.417
53	81.5	- 28.5	812.25	1.533
68	96.5	- 28.5	812.25	8.417
110	81.5	28.5	812.25	1.533
356				19.9

$X^2$  calculated = 19.9

Degree of freedom =  $(r - 1) (c - 1)$

$$= (2 - 1) (2 - 1)$$

$$= (1) (1)$$

$$= 1$$

$X^2$  table at 5% level of significance using 1 degree of freedom is 3.841.

### Recalling the hypothesis.

Ho: Government and privately owned hospitals do not use the same method of expenditure control.

Hi: Government and privately owned hospitals use the same method of expenditure control.

DECISION RULE:

Since the  $X^2$  is 19.9 is greater than the  $X^2$  table value of 3.841, we reject the null hypothesis by accepting the alternative hypothesis.

HYPOTHESIS 3: The method of expenditure control used by government and privately owned hospitals are effective and efficient.

To test this hypothesis, we shall use question 8 and 12

Table 4.21

Tables	Yes	No	Total
4.8	96	82	178
4.12	138	40	178
Total	234	122	356

Calculation of expected frequencies

$$E_{i1} = \frac{178 \times 234}{356} = 117$$

$$E_{i2} = \frac{178 \times 122}{356} = 61$$

$$E_{21} = \frac{178 \times 234}{356} = 117$$

$$E_{22} = \frac{178 \times 122}{356} = 61$$

COMPUTATION OF CHI-SQUARE STATISTICS

$O_i$	$E_i$	$(O_i - E_i)$	$(O_i - E_i)^2$	$\frac{O_i - E_i^2}{E_i}$
96	117	-21	441	3.769
82	61	-21	441	7.229
138	117	21	441	3.769
40	61	-21	441	7.229
356				21.996

$$X^2 = 21.996$$

$$Df = (r - 1) (c - 1)$$

$$= (2 - 1) (2 - 1)$$

$$= 1$$

$X^2$  table at 5% level of significance using 1 degree of freedom is 3.841

### **DECISION RULE**

Since the  $X^2$  is 21.996 is greater than the  $X^2$  table value of 3.841, we reject the null hypothesis and accept the alternative hypothesis by concluding that the method of expenditure control used by Government and Privately owned hospitals are effective and efficient.

## **CHAPTER FIVE**

### **5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **5.1 SUMMARY OF FINDINGS**

This result of the response to the question and findings of this research work are summarized as follows:

1. Government and privately owned hospitals have account department as well as purchasing units department.
2. There are authorization procedure for purchases of drugs and materials in both the government and privately owned hospitals, although they are not the same.
3. Government and privately owned hospitals, do not have similar method of expenditure control even though that both of them to some extent have written drugs/material requisition for which controls the release of stocks drugs and materials for use in the hospital.

4. Attempts are usually made by Government and privately owned hospital to compare their income with expenditure run within a period. Thus, emphasizing the matching concept of accounting.
5. Government owned hospitals operate by making budgets annually and efforts are usually made to compare these budgets with the actual expenditure within the period. However, the privately owned hospitals do not usually operate by making annual budgets.
6. Government and privately owned hospitals use internal audit as a method of expenditure control.
7. There is an internal control system in both Government and privately owned hospitals which also serve as expenditure control method. Because internal auditors serve as watch dog in an organisation.
8. The expenditure control method adopted and used by both hospitals are effective and also, qualified personnel should be employed in the hospitals for proper management.
9. The hospitals use the first-in-first-out cost accounting methods.
10. The both hospitals operate by making budgets as part of controlling expenditure and boosting income.



## **5.2 CONCLUSION**

It has been seen that no organisation including government and privately owned hospitals (profit making and non-profit making) can survive without integrating a solid method of expenditure control in their system. This is because lack of expenditure control will cause misapplication of cash in the cash disbursement and this will create a big problem. In conclusion, an organisation without adequate and effective expenditure control system always has the risk of running deficit or at extreme case, the organisation will fold up. Also, this research work has revealed that the importance of expenditure control in organisation is to enhance efficiency and effectiveness in the organisation.

## **5.3 RECOMMENDATIONS**

Based on the research findings, a number of recommendations are outlined for effective expenditure control which involves the following:

1. The management of both privately and government owned hospitals should endeavour to adopt an effective expenditure control method in their organisation.

2. Both government and privately owned hospitals should use the daily control method of expenditure control because it is more reliable.
3. The management should ensure that accounting information are provided timely because it enhances expenditure control.
4. The hospitals should always endeavour to create budget because it will help in controlling the expenses in the hospitals.
5. An effective training programme which should include accounting courses should be organized regularly for those staff within the management and account departments who are directly or indirectly concerned with the daily implementation of internal control.
6. Before employing staff, management should make sure that those people employed are those that are really qualified for the job.
7. Employees should be properly motivated in order to make them perform their duties diligently. It should be noted that proper functioning of a system of expenditure control depends upon the competence and integrity of the operating personnel.

8. Computerized system of accounting should be adopted by the management of the hospitals so as to ensure adequate and proper records of the drugs and materials purchased.
9. The education, training and experience of the management team on expenditure control methods must be of high standard and kept up to date, as well as government assistance through adequate funding and donation of drugs and other materials to the hospitals.
10. Furthermore, the both hospitals should adopt a cost accounting method and first-in-first-out (FIFO) method in their hospitals, so as to prevent the drugs from expiring before it is being used.
11. Furthermore research work should be carried out on this topic because expenditure control is such a complex issue that many government and private parastatals loose millions of naira each year due to inefficient and ineffective expenditure control system.

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## **APPENDICES 1**

Faculty of Management and Social Sciences  
Department of Accounting,  
Caritas University,  
Amorji-Nike,  
Enugu,  
Enugu state.

Dear Respondent,

### **REQUEST FOR INFORMATION**

I, Ugo Olivia, a final year student of the department of Accounting, Caritas University, Amorji-Nike, Enugu state carrying out a research on the topic "Comparative Analysis of Expenditure Control Method in Government and Private Hospitals" using University of Nigeria Teaching Hospital and Toronto Hospital, as my case study, in partial fulfilment of the Award of Bachelor of Science degree in Accountancy.

In order to source for useful data and information, I have drawn up this attached questionnaire for your kind response to the issues raised.

I strongly believe that your response will help me actualize my dream of obtaining a Bachelor of degree in Accountancy.

Be rest assured that all the information given will be treated confidentially as far as the project is concerned.

Thank you for your anticipated co-operation and assistance.

Yours Faithfully,

Ugo Olivia

## APPENDIX 2

### QUESTIONNAIRE

Please tick (√) in the box that best answered the question asked, otherwise fill the space provided.

1. What is your name?

2. Educational qualifications?

a) F.S.L.C ( )

b) SSCE/NECO ( )

c) ND/NCE ( )

d) HND/B.Sc ( )

e) M.Sc/MBA/Ph.d ( )

3. Working Experience?

a) Under 5 years ( )

b) 6 – 10 years ( )

c) 11 – 15 years ( )

d) 16 – 20 years ( )

e) 21 years and above ( )

4. Does the hospital adopt expenditure control method?



- a) Yes (   )
  - b) No (   )
5. Does your hospital adopt the daily control method of expenditure control?
- a) Yes (   )
  - b) No (   )
6. Does the hospital operate by making budgets as one of the methods of expenditure control?
- a) Yes (   )
  - b) No (   )
7. Is there any attempt to compare budgeted expenditure with actual expenditure within the period?
- a) Yes (   )
  - b) No (   )
8. Does your hospital adopt the internal control system?
- a) Yes (   )
  - b) No (   )
9. Does your hospital use internal audit as method of expenditure control?

- a) Yes ( )
  - b) No ( )
10. Does your hospital adopt the cost benefit analysis?
- a) Yes ( )
  - b) No ( )
11. Is the method of expenditure control used in your hospital effective and efficient?
- a) Yes ( )
  - b) No ( )
12. Does the adoption of expenditure control method in your hospital boost your output?
- a) Yes ( )
  - b) No ( )
13. Is it true that expenditure control enhances management decision making and managerial output?
- a) Yes ( )
  - b) No ( )
14. How would you rate the expenditure control method in your hospital?

- a) Very effective ( )
  - b) Effective ( )
  - c) Not effective ( )
15. Is there direct relationship between organisation performance and effective use of expenditure control method?
- a) Yes ( )
  - b) No ( )
16. Do you think that your hospital have the quality of personnel for efficient expenditure control method adoption?
- a) Yes ( )
  - b) No ( )