



**NATIONAL OPEN UNIVERSITY OF NIGERIA**

**FACULTY OF HEALTH SCIENCES**

**COURSE CODE: NSC407**

**COURSE TITLE: Introduction to Health Economics**

Course Code NSC407

Course Title Health Economics

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National Open University of Nigeria 2007

First Printed 2007

ISBN:

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Printed by

National Open University of Nigeria

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**MODULE 1**

- Unit 1 Introduction to economics
- Unit 2 Introduction to health economics
- Unit 3 Demand and supply in healthcare
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**UNIT 1 INTRODUCTION TO ECONOMICS****CONTENTS**

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## **1.0 INTRODUCTION**

Economists are concerned with the wants of human beings. Among other things human beings want love, recognition, comfort of life and material things. Economists are concerned with our material wants which ultimately is to improve our well-being or make a living. Society's material wants are virtually unlimited and insatiable. Human basic needs include air, water, food, shelter and clothing. However, we seek to have much more than these in terms of goods and services that will make us live comfortably or have standard living.

Human wants are several times more than the productive capacity of our limited resources. Therefore, it becomes difficult to satisfy our material wants. The means of producing goods and services are limited and scarce. Our desire for goods and services cannot be completely satisfied. Over time, wants of man change and multiply and this might be as a result of the development of new products and extensive promotion of the products or change in circumstances.

In this unit you will be able define economics and study basic concepts in Economics. You will also learn about demand and supply and understand economics with a global perspective. This unit will prepare you to understand the subject 'health economics.'

## **2.0 OBJECTIVES**

On completion of this unit, the learner should be able to:

- define and understand what is meant by economics,
- understand basic concepts in economics which will be helpful in preparing the learner for good understanding of health economics, and
- know about economy with a global perspective.

## **3.0 MAIN CONTENT**

### **3.1 Definition of Economics**

There are several definitions of Economics, some of which you can familiarize yourself with include:

According to Lionel Robbins, economics is the science which studies human behaviour as a relationship between ends and scarce means which have alternative uses.

To Alfred Marshal, economics is the study of mankind in the ordinary business of life.

Richard Lipsey brings our thought to bear by defining economics as the study of the use of scarce resources to satisfy unlimited wants.

Broadly speaking, economics is the study on how best to allocate our scarce resources, given that this is part of our daily living.

### 3.2 Basic Concepts in Economics

Before explaining the economic concepts, it is important to note that there are three economic agents/units. They are: 1. Individual 2. Firm and 3. Government. Therefore, these economic agents are those that are confronted with one decision or the other.

Having known this, there are basic economic concepts that will aid our understanding of this course. The basic concepts include; goods and services, scarcity, opportunity cost, choice, economic resources, utility, demand and supply.

A **good** is a tangible object that is capable of satisfying human wants. Examples of goods are drugs, food, water, cars, clothes, and so on.

A **service** rendered is an intangible action that is capable of satisfying human want – such services include healthcare services, waste disposal, health sensitization programmes etc. Services satisfy our needs as much as goods.

Goods and services are either classified as a luxury good or service, necessary good or service and giffen good. A necessary good obeys the law of demand. It increases when price reduces and vice-versa. However, a luxury and giffen good or service are exceptional to the law of demand. An increase in the price of a luxury good leads to an increase in the quantity demanded of it and vice-versa. A giffen good is also known as an inferior good. A reduction in the price of a giffen good leads to a decrease in the quantity demanded of that good.

**Scarcity** is a condition in which it is impossible to satisfy all human wants for goods and services and this forms the central concept in economics. In the field of economics, scarcity refers to the limited amount of resources available for man to meet his wants. No one can have everything that he or she desires. Therefore, we have to select goods and services we think can give us greatest amount of satisfaction, given our limited resources. This can be well achieved if we arrange our



wants in order of importance and allocate our scarce resources to the most important on the list (our needs). For example some people who are economically disadvantaged may have to choose between going for healthcare and using the available money to pay school fees or house rent. Scarcity exists at individual, institutional, community and government levels.

**Opportunity Cost** is defined as the value of the second best choice that is given up when a first choice is made. Every choice one makes is a trade-off which an economic agent makes, having weighed the benefits and costs of undertaking an action. Usually, one will want to make a choice that will result in the smallest opportunity cost and the greatest possible benefit. If this is the case then one has made a **rational choice**. It is important to know that our choices are limited because resources are scarce.

If a person chose to use little money available to him to buy prescribed drugs for his child as against the other choice of buying alcoholic drink, that choice can be considered rational. From this example one can imagine how well people choose to make rational choice. Rational behaviour means that different people will make different choices because their preferences, circumstances, and available information differ. Rational decisions may change as circumstances change. Try to imagine how our culture makes people spend their money on ceremonies rather than spending such money to take care of themselves, so that they can live well.

**Utility** is the amount of satisfaction that a consumer derives from the consumption of the goods or services he/she purchases. It helps to determine how much the consumer is willing to pay. Marginal utility is the additional utility gained by consuming one more unit.

**Economic resources** are all natural, human, and material resources which go into the production of goods and services. It is broadly divided into two:

1. Physical resources include land (natural resources) or raw materials and capital.
2. Human resources, which include labour and entrepreneurial ability.

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### SELF ASSESSMENT EXERCISE 1

Attempt to define the following terms; Good, Service, Scarcity and opportunity cost. Try to understand these terms in your own words and then see how you apply this to the day-to-day things in your environment.

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### 3.3 Demand and Supply

Before now, demand and supply were mentioned as economic concepts. However, given that this is a crucial concept, we shall discuss this under a separate heading.

#### 3.3.1 Demand

Demand is the quantity of a product that a consumer (or any economic agent) is **willing** and **able** to purchase at a particular **price**, within a given period of **time**. It is very important to know those bold words. Willingness takes about choice, being able lays emphasis on the scarce means (resource – money) or we can say ability is effective demand – a demand backed up by the ability to pay, the price determines the quantity and time is much likely to affect all of the above. For instance, the willingness, availability and price consideration in consuming a product such as beer, cloth, genotype and blood group test, etc are higher in festive seasons (usually at the end of the year). These affects demand. Under normal condition there is a relationship between the price of a product or service and the quantity that will be demanded.

The law of demand states that if everything else remains equal, more of a product will be purchased at a lower price than at a higher price or less of a product will be purchased at a higher price than a lower price. For example, an increasing in the cost or price of a contraceptive will result in less demand if all else are equal and conversely a reduction in the price or cost will result in increase in demand. In economics, ‘all things being equal’ means that there are other factors other than the price of the product that affects the demand for that product. Examples of these factors are: the price of other products, income of the consumer, taste and fashion and so on. Therefore, everything else remaining equal means that those factors are assumed not to hold (equal to zero, or held constant).

You can try and understand demand in the context of goods purchased for food in our markets. What happens when many people suddenly get interested in buying a product particularly during festivities? This is because time is an important component of demand and cannot be assumed away in the definition of demand.

### **Determinants of demand**

- Tastes and preferences – Personal feelings toward the value or desirability of various products. The desire for a particular type of frame for eye glasses may be determined by the individual's taste which may be influenced by what is in vogue.
- Disposable income – The amount of income that people have left after they pay their taxes. The quantity of products that people buy depends on the disposable income. If you were given some money as a gift you are likely to make demand for certain items which you ordinarily would not have demanded for if you were not given this gift. There is a direct relationship between disposable income and demand under normal circumstances. However, sometimes demand for low quality or inferior goods are inversely related to income. Demand for low quality or fake drugs and even low-quality healthcare is usually higher among those with low income.
- Price of related goods – When the price of a good changes, it often has effect on the demand for a related product (substitute good) which can be used in place of the other. If you find out that you cannot afford to buy tin milk as a result of price increase, you may then choose to buy powdered milk. Increase in price of certain drugs may result in higher demand for its alternatives
- Number of consumers – Increase in the number of people who purchase a product or utilize a service will bring about a change in demand. In epidemics, the large number of people affected brings about an increase in the demand for some drugs or vaccines required to manage or control the epidemics.
- Expectation of the future – Demand for a product can change based on their expectation for the future.

### **3.3.2 Supply**

Supply is defined as the quantity of a good or service that firms will offer for sale at each possible price, within a given period of time. The Law of supply states that if all other factors affecting supply other than price remains the same, more of a product will be offered for sale at a higher price than at a lower price or conversely less of a product will be offered for sale at a lower price than at a higher price. If the price of a product increases, the quantity supplied will increase.

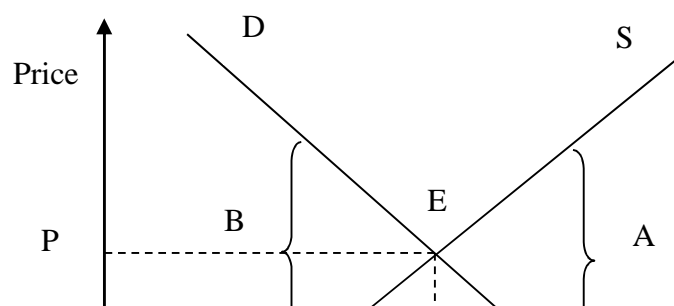
### **Determinants of supply**

The basic **determinants of supply** are:

- Resource prices – the price used in the production of the good or service. This determines the price of the goods. If the price of production becomes higher it may reduce the supply of such goods.
- Technique of production – With improvement in technology some goods become cheaper to produce and thus improve the supply of such goods.
- Taxes and subsidies – Increase in sales or service tax will increase cost of good or service and where subsidies increase then the cost reduces. Government subsidy on drugs can increase supply of drugs.
- Prices of other goods – In manufacturing firms, increase in price of a particular product may make the firm shift to production of similar product of lesser price and through this increase supply
- Price expectations – Expectation of the future price of a product can affect the producer's current willingness to supply that product
- Number of sellers in the market – Other things being equal the more the number of people or firms involved in the supply of a product or service the more the market supply. Increase in the number of firms producing anti-retroviral drugs (ARV) result in increase in the supply of the drug in the market.

### The Concept of Equilibrium

Equilibrium is a state of balance of two or more variables. In the analysis of demand and supply, equilibrium can be said to be attained where the quantity demand equals the quantity supplied. This can be graphically illustrated below.



### Figure 1: Market Equilibrium

Figure 1 above illustrates the concept of equilibrium as it relates to demand and supply. The vertical axis is the price axis, while the horizontal axis is the quantity axis. The demand curve is negatively sloped (downward sloping) from left to right as shown on the line DD, to illustrate that more quantity is bought at a lower price and vice-versa. On the other hand, the supply curve is positively sloped (upward movement) from left to right as shown on the line SS. This shows that more are supplied at higher prices than at lower prices.

Equilibrium is attained where demand is equal to supply, the very point of intersection at point E. At that point of equilibrium, we have the equilibrium price at point P, and equilibrium quantity at point Q.

There is something quite interesting from this analysis. To the right of our graph (area A), the price for supply exceeds that of demand. While at area B, the price for demand exceeds that of supply. At any point other than E, the market is in disequilibrium.

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### **SELF ASSESSMENT EXERCISE 2**

Attempt a definition of demand and supply and enumerate those things that determine the demand and supply of certain goods you use frequently.

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### **3.4 Global Economy**

## **Economic Systems**

Economic system is a set of rules or understandings that govern how scarce resources are used to produce goods and services that satisfy human wants. They are not isolated from the political and social organizations or systems. All nations have economic systems. All nations are faced with the problem of scarcity because of limited resources. This scarcity forces every economic system to address three central economic questions which are:

- (1) What goods and services will be produced from our scarce resources?
- (2) How will goods and services be produced?
- (3) For whom will goods and services be produced?

With these questions in mind, the following are the types of economic system which can easily be identified with a sovereign nation.

**Capitalism** – An economic system in which the factors of production are owned and controlled by the people. In capitalism people sell goods or services to make profit. People have private property and also have freedom of choice to spend their income. In capitalism firms exist to earn profit. Such individuals are referred to as capitalists. The role of government in this economic system (market economy) is limited and there is competition amongst individuals and firms. Private clinics exist to make profits and are privately owned by individuals or groups.

**Socialism** – This is an economic system in which the government owns and controls the factors of production. Socialists believe that the control of productive resources by private individuals increases the gap between the rich and the poor; a situation whereby the rich are richer while the poor are poorer. They believe that their economic system is more stable than capitalism. In this system, people are gainfully employed, and the inequality gap contracts. Socialists believe people should receive a share of the goods and services that are produced, regardless of the value of their contribution to production. Socialism is not the same as communism.

**Communism** – is an economic and political system where private property ownership which is fundamentally profit based is being replaced with the ownership and communal control of at least the major means of production and the natural resources of a society.

**Mixed economies** – where capitalism and socialism as economic systems are in place, this is commonly the case in many countries.

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### **SELF ASSESSMENT EXERCISE 3**

List examples of countries which fall into the economic systems describe above. Which economic system is in place in Nigeria and what are the reasons for your answer?

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## **4.0 CONCLUSION**

You have to understand that the study of economics is relevant to everyday living and knowledge of the basic concepts of economics will prepare you towards understanding health economics as elaborated in the subsequent units. The economic system of a nation is the underlying factor for demand for services and it determines the way goods and services are supplied.

## **5.0 SUMMARY**

In this unit you have been exposed to the meaning of economics, the basic concepts in economics which you need to understand before you can understand the dynamics of healthcare from the economic point of view. This unit has shown you what demand and supply is and the global economic systems.

## **6.0 TUTOR MARKED ASSIGNMENTS**

1. Define the following terms and give appropriate illustration
  - a. Economics
  - b. Scarcity
  - c. Capitalism
  - d. Equilibrium
2. Describe the determinants of demand for goods and services with relevant examples.

## 7.0 REFERENCES/FURTHER READINGS

Jhingan, M. L. (1997). *Modern microeconomics*. Delhi: Vrinda.

Lipsey, R., & Chrystal, A. (2020). *Economics*. Oxford University Press. 14<sup>th</sup> Edition

McConnell C.R., Brue S. (1999). *Microeconomics: Principles, Problems, and Policies*. 14<sup>th</sup> Edition. Irwin McGraw-Hill, USA.

Schiller B. and Gebhardt, K. *The Economy Today*. 16<sup>th</sup> Edition, 2022. McGraw-Hill eBook, New York.

Stafford A.L., LoCascio H.C. (1994). *Introduction to Economics*. Published by Glencoe/McGraw-Hill, 21600 Oxnard St., Woodland Hills, CA.

Tomey A.M. (2003). *Guide to Nursing Management and Leadership*. 6<sup>th</sup> edition. Elsevier Science (Singapore) PTE Ltd, Singapore.



**UNIT 2      INTRODUCTION TO HEALTH ECONOMICS****CONTENTS**

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- 3.0 Main Content
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  - 3.2 Importance of Health economics
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  - 3.5 Globalization and health
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- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## **1.0 INTRODUCTION**

This unit defines health economics and examines certain basic concepts that will help you to understand health economics. Before now, relatively little attention has been placed on health economics in developing countries. As a result of the dearth of knowledge within the field, health economics is now taking the center stage in health management. Your sound knowledge of health economics will assist you as an individual healthcare provider to understand the dynamics of healthcare in terms of institutional policies, ways of implementation and how best results can be achieved within the limits of available resources.

Inefficiency in using resources available for healthcare has affected coverage and quality of healthcare delivery in developing countries. You need to understand that for any nation to develop, its citizens must be productive and they can be productive only when they are healthy.

## **2.0 OBJECTIVES**

On completion of this unit, the student should be able to:

1. define and understand what is meant by health economics and its importance,
2. understand basic concepts in health economics which will be helpful in preparing the learner for good understanding of other units in this module,
3. assist the student to see how economy affects health and vice-versa, and
4. understand the demand and supply concepts in healthcare.

## **3.0 MAIN CONTENT**

### **3.1 Definition of Health Economics**

Health economics is defined as the application of the theories, concepts, and techniques of economics to the health sector. It is concerned with issues like allocation of resources within the various healthcare strategies, quantity and quality of resources used in healthcare delivery, funding of healthcare services, efficiency in the use of resources allocated for healthcare and the effects of preventive, curative, and rehabilitative health services on individuals and the society.

## 3.2 Importance of Health Economics

You will remember that we defined economics as the study of the use of scarce resources. Resources in the health sector like other sectors are not enough to satisfy man's health wants. The main function of health economics is to apply economic theory to practical problems of rationing the use of resources for effective healthcare services. In response to peoples needs and demands.

There is increasing attention on health economics globally as a result of renewed cost-consciousness within the health system and the shift from exclusively humanistic approach to one incorporating an increasing use of managerial techniques and quantitative research methods.

Countries all over the world are faced with increased burden of healthcare. Public fund available to the health sector are often short of what is required. You're your experience and observation you probably would have made, resources required for health services and needs constitute a significant proportion of family, community and government expenditure.

This situation is a common feature in developing countries. Costs of medical care is increasing due to heavy disease burden couple with technological changes and increasing cost of required inputs for healthcare.

In view of the problem of scarcity, health economics has become an important area of health , which requires some level of understanding. Countries need healthy citizens to develop. As a person you will remember how unproductive you were when you were ill.

## 3.3 Concepts in Health Economics

### 3.3.1 Health as an Economic Good

Health can be seen as an economic good or service. The nature of health is such that it can be seen as a collective good. **Collective goods** (or social goods) are defined as the public goods that could be delivered as private goods, but are usually delivered by the government for various reasons, including social policy, and financed from public funds like taxes.

### 3.3.2 Medical Economics

Often used synonymously with Health economics. Medical economics is the branch of economics concerned with the application of economic theory to phenomena or problem associated typically with cost-benefit analysis of pharmaceutical products and cost-effectiveness of various medical

treatments. Medical economics often use mathematical models to synthesize data from biostatistics and epidemiology for support of medical decision making, both for individuals and for the wider health policy. This module will not discuss the details of medical economics.

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### **SELF ASSESSMENT EXERCISE 1**

Define again or try to explain some basic concepts of economics in Unit 1, relate them to what you have learnt so far in health economics

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### **3.4 The Economy and Health**

Health plays a major role in the socio-economic development of a people. Health can no longer be seen as by-product of develop but rather a pre-condition for economic development. The health sector is just one of the components of the sectors in a given economy; every sector of the economy has a bearing with the health sector and cannot be under-estimated for socio-economic development.

Economic development requires a healthy workforce. Try to imagine a workforce where about a third of them are ill at the same time, you know that in such a situation, productivity will be low. Improvement in health status of a country represents both gains in welfare and an investment towards the country's future growth.

Healthy people are more productive, perform better in learning and can work to earn a living. Unhealthy people may not be able to work to earn income and even if they work, they will be much likely to be less productive. You know that a nation with large number of unhealthy people will be required to spend much money on healthcare and have little for other activities. Poor health therefore lowers the prospect for the development of a nation.

Also, economic development is usually followed by changes in production which have positive impact on the health of the population, although economic development does have negative impact on health too. Certain diseases like cardiovascular diseases and cancers are common in well developed countries than in the less developed countries. This is mainly because of change in lifestyle resulting from economic development. For example consumption pattern changes with economic development. Obesity is usually a significant public health problem of developed countries whereas malnutrition is a problem of under-developed countries. Generally economic development has more positive than negative effect on the health of people. A developed economy

is characterised by a proportionate even development of nearly all the sectors in the economy. Therefore, such a country will tend to have a robust health sector with great emphasis on the services they render.

Health is higher on the international agenda than ever before. Concern for the health of poor people is a central development issue. In addition to its intrinsic value on individuals, investment in health is an important and previously underestimated means of economic development. Substantially improved health outcomes are a pre-requisite if developing countries are to break out of the cycle of poverty.

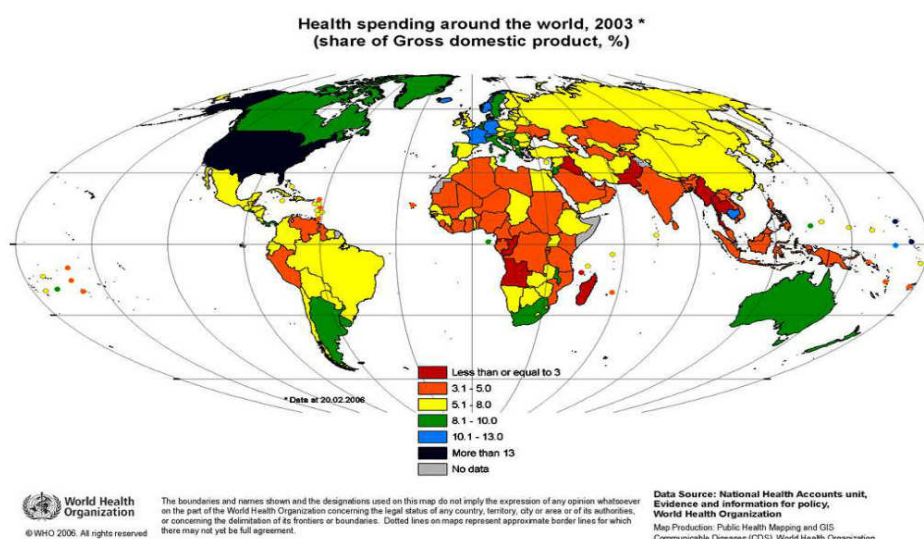
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## SELF ASSESSMENT EXERCISE 2

- i. List four (4) ways health can affect economy
- ii. List four (4) ways economy can affect health

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Figure 2: Health spending around the world




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## SELF ASSESSMENT EXERCISE 3

- i. List five (5) developed countries, categorizing them according to their continents.
  - ii. List five (5) developing countries and the continent they belong to.
- 

### 3.5 Globalization and Health

Globalization is reshaping the social geography within which humanity strives to create health or prevent disease. The determinants of health and disease – be they SARS virus or increasing HIV/AIDS are affected by increasing global mobility. You often hear people say “the world is a global village.” What happens in one country readily have effect on other countries.

### **Impact of Globalization on Health**

Driven by economic liberalization and changing technologies, the phenomena of ‘access’ is likely to dominate to increasing extent the unfolding experience of human disease and well-being. The extent to which individual countries are able to engage the process of globalization on their own terms differs widely from country to country. Child mortality, for example, changes quickly in response to subtle changes in purchasing power in impoverished communities. In affluent communities however, a small change in income has little effect on utility in either direction. The long term effect of globalization on wellbeing is different for populations who are dependent on fragile local economics.

A significant change in the price of some goods in some of the developed countries or even policy shift may have effect on another country which may affect the health of its people. Globalization has brought about high movement of people from one country to the other, mainly as a result of economic activities. With these movements are some diseases that easily get across borders of countries.

## **4.0 CONCLUSION**

Health economics is an important discipline that is now gaining much attention in developing countries in view of the growing health burden, need for higher health expenditure in the midst of inadequate fund. To attain development, countries must have citizens that are productive and to be productive, one need to be in good health. It is therefore imperative that health brings about development. Development also result in more money made available for healthcare. Economic development can however have negative effects on health that result from change in lifestyle that are detrimental to health.

## **5.0 SUMMARY**

In unit you have been able to go through the definition of health economics and some basic concepts in health economics. To develop, every country needs to have healthy citizens. The relationship between economy and health has been described in this unit. Some countries that are poor unfortunately go through the cycle of poverty and poor health since they have little resources for healthcare, its citizens remain unhealthy and therefore unproductive.

## **6.0 TUTOR MARKED ASSIGNMENTS**

Describe the relationship between economy and health.

## **7.0 REFERENCES/FURTHER READINGS**

Culyer A.J. (1989). A Glossary of the more common terms encountered in health economics" in MS Hersh-Cochran and KP Cochran (eds) Compendium of English Language Course Syllabi and Textbooks in Health Economics, Copenhagen, WHO, 215-234.

Development in Practice. (1994). Better Health in Africa: Experience and Lessons Learned. The International Bank for Reconstruction. The World Bank: USA.

[http://www.paho.org/English/DD/PIN/ptoday18\\_sep05.htm](http://www.paho.org/English/DD/PIN/ptoday18_sep05.htm)

Tomey A.M. (2008). Guide to Nursing Management and Leadership. 8<sup>th</sup> edition. Elsevier Science (Singapore) PTE Ltd, Singapore

**UNIT 3      DEMAND AND SUPPLY IN HEALTHCARE****CONTENTS**

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- 2.0 Objectives
- 3.0 Main Content
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  - 3.2 Reasons why healthcare needs exceeds effective demand
  - 3.3 Demand and supply of healthcare services in developing nations
  - 3.4 Elasticity of demand
  - 3.5 Resource allocation in healthcare
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings



## **1.0 INTRODUCTION**

Supply and demand leads to demand-based pricing. Higher prices are paid for products or services that are in high demand. Reduced demand leads to lower prices. Strategic planning is needed to determine which activities can be in the most demand and make the most profits. In the early 1960s, economists first became interested in estimating demand for health services. Supply of trained nurses in United States is not increasing nearly as fast as the demand. The demand for medical services will depend on the price of that service, other prices, income and tastes. In this unit you will read through demand and supply in healthcare.

## **2.0 OBJECTIVES**

In this unit you, are expected to understand:

1. the concept of health care demand and supply,
2. know the reasons for the difference in healthcare need and the demand for healthcare,
3. understand elasticity of demand, and
4. know about resource allocation in health.

## **3.0 MAIN CONTENT**

### **3.1 Concept of Demand and Supply in Healthcare**

Every individual has a potential need for healthcare in the form of health promotion, prevention, cure or rehabilitation. This need is not always translated into a demand for healthcare particularly in developing countries for various reasons. Health need is transformed into a healthcare demand for example when a patient seeks a medical care.

All the numerous wants of the society cannot be met at the same time even in richer countries. Therefore, all users of resources is being confronted to making an opportunity cost and the scarcer the resources, the higher the opportunity costs.

In the case of health and health services, these costs are incurred both by producers of health services, through their use of staff, buildings, equipment and materials supplies, and by consumers, who use transport to health services, buy drugs, etc.

Not all demand will become needs and not all needs will find expression as demand. You do know that some people get sick and have the need to be treated but they do not demand for treatment.

### **3.2 Reasons why Healthcare Needs Exceeds Effective Demand**

Recall that in our definition of demand, we mentioned ‘the ability to pay’, effective demand is the demand backed up by the ability to pay for a particular commodity/product.

- a. Price of healthcare may not be affordable by the individuals (Affordability).
- b. The Individuals may not have ready access to the health facility at a time or place that is convenient (Geographical accessibility).
- c. The service required may not be available to the individual (Availability).
- d. Religious and cultural believes and practices may hinder the use of the health facilities (Acceptability).
- e. Cost of time off from work and costs of waiting.

### **3.3 Demand and Supply of Healthcare Services in Developing Nations**

The demand for healthcare in developing countries is largely influenced by the above factors. The extents to which these factors are being reversed in developing countries vary considerably among nations and even within nations. The global economic recession has made affordability of healthcare service far from the reach of the common man in these countries. Therefore, utilization of health facilities is seriously affected particularly with the changing trend in which free healthcare is fast disappearing.

The supply of healthcare is multifaceted. The supply can be in the form of promotion, preventive, curative, and rehabilitative healthcare. In Nigeria, this can be provided at the various levels of healthcare namely; primary, secondary and tertiary healthcare. The health sector in developing countries consists of a heterogeneous mixture of public or government activities and non-government activities including services provided by both modern and traditional practitioners. The level of demand for healthcare goes far beyond the level of supply. Economic recession has made geographical accessibility and availability of healthcare difficult; this affects coverage.

Undersupply of sufficient trained personnel must be tackled as it remains a major health problem. Large number out of the inadequate health personnel emigrate to developed countries. There is also the problem of under use of some of the personnel available. Most of the skilled healthcare personnel in African countries are found in the urban areas to the detriment of those within the rural areas where we know about 70% of the population resides.

In 1988, the World Bank conducted an extensive study on household demand for outpatient services in Ogun State. The empirical model assumed that choice of healthcare is a function of the following; price of the care, quality of the care, sex and education of the patients, wealth of the household, income of the household, urban residence, symptoms of the illness and how severe the illness is.

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### SELF ASSESSMENT EXERCISE 1

List reasons why healthcare demand is less than the need for healthcare in Nigeria.

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#### 3.4 Elasticity of Demand

This is the degree to which the demand for a good or service decreases in response to a price increase and increase in response to a price decrease. Put differently, elasticity of demand is the degree of responsiveness of a change in demand with respect to the change in any of the factors that it depends on, especially price. We have three main types of demand. We have the elastic demand, inelastic demand and unitary elastic demand. These three types of elasticity will be presented graphically below in three panels.

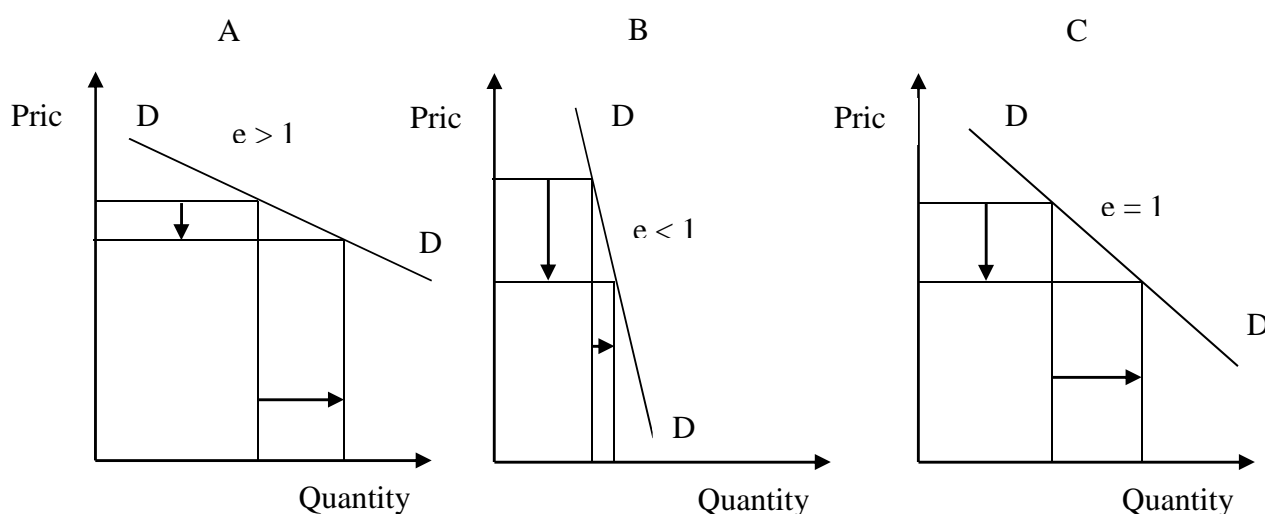


Figure 3: Elasticity of demand

The three panels above shows the types of elasticity of demand. Panel A shows an elastic demand curve, panel B shows an inelastic demand curve, while panel C shows a unitary demand curve.

An elasticity of demand for an elastic demand curve is greater than unity (one). This means that a slight change in the price for an elastic good, leads to a greater proportionate increase in the quantity demanded. For instance, a reduction in the price of undertaking a test to know your HIV status by 20%, will lead to an increase in the number of people who needs to undertake the same test by, let's say, 50%. This therefore shows that the test procedure has an elastic demand.

An inelastic demand is less than unity (one). This shows that a reduction in the price of a good or service, leads to little increase in the quantity demanded. For instance, let's say that the sensitisation or health awareness is fixed at a price ₦5000. If for some reason, there is a reduction in the price to ₦3000, since it has an elastic demand, there will be no much increase in the number of people that will be in attendance.

The unitary elastic demand is equal to one. This means that an increase (decrease) in the price of a unitary elastic good or service will lead to a proportional (equal magnitude) decrease (an increase) in the quantity demanded for that good or service.

Healthcare is generally a necessary good or service and for that reason, the elasticity of demand for healthcare services or goods is generally inelastic in nature. This suggests that an increase or a decrease in the price of this good or service will not affect the quantity demanded in an equal magnitude.

### **3.5 Resource Allocation for Healthcare**

If healthcare systems devote greater attention to preventive and primary care, the recovery of costs at public hospitals takes a monumental importance. The determination of what proportion of fund available should be allocated to preventive care is dependent on a number of reasons; it is well known that preventive healthcare delivery is cheaper to the society. From basic economic point of view, it is better to pay more attention to preventive care than curative care in resource allocation.

When the high capital and recurrent costs of hospitals are financed by government, then government health budget will be much more towards hospital services. In most African setting it is the urban fairly well to-do families that have easy access to this level of care and they therefore

receive a disproportionate share of government subsidy on health to the detriment of the largely poor rural dwellers. This situation worsens the problem of equity.

The pyramid of curative healthcare in Nigeria has primary healthcare as its base and then followed by secondary healthcare which is made up of general, cottage and mission/big private hospitals. The apex of the pyramid is the tertiary healthcare consisting mainly of teaching and specialist hospitals. Primary healthcare is the closest and first point of contact with the health system and therefore should attract adequate resources in terms of personnel, funds, equipment and materials. The more the simple cases that are treated at higher levels of healthcare, the more the inefficiency in health system

#### **4.0 CONCLUSION**

In every community, the need for healthcare is always there but not all translates into demand for healthcare services. Price increase in healthcare goods or services does not lead to a proportionate decrease in demand (unlike some other goods) because of desire of people to be in good health. Demand following price increase in a particular facility may result in individuals trying some other places for alternative healthcare.

To attain economic development, a nation must have citizens that are productive and to be productive, one needs to be in good health. It is therefore imperative that health brings about development. This need to be achieved through efficient allocation of resources to the various segments and levels in healthcare delivery

#### **5.0 SUMMARY**

In this unit, you have been able to go through demand and supply of healthcare. Demand for healthcare particularly in developing countries has been described along with its determinants. To develop, every country needs to have healthy citizens. You have also been exposed to the important issue of resource allocation in the health sector.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

Discuss the various determinants of demand for healthcare in the context of your locality.

#### **7.0 REFERENCES/FURTHER READINGS**

Culyer A.J. (1989). A Glossary of the more common terms encountered in health economics" in MS Hersh-Cochran and KP Cochran (eds) Compendium of English Language Course Syllabi and Textbooks in Health Economics, Copenhagen, WHO, 215-234.

Development in Practice. Better Health in Africa: Experience and Lessons Learned. The International Bank for Reconstruction / The World Bank. USA 1994.

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[http://www.paho.org/English/DD/PIN/ptoday18\\_sep05.htm](http://www.paho.org/English/DD/PIN/ptoday18_sep05.htm)

Tomey A.M. (2008). Guide to Nursing Mangement and Leadership. 8<sup>th</sup> edition. Elsevier.

**CONTENTS**

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## 1.0 INTRODUCTION

The cost of healthcare is high and has increased rapidly. Higher healthcare prices combined with an increase in the quantity of services provided have resulted in rising healthcare cost. The spending on healthcare involves 'prices' and 'quantities' and is often loosely referred to as healthcare costs.

The production of healthcare goods or services require scarce resources such as capital in the form of hospital facilities and diagnostic equipment and the highly skilled labour of physicians, technicians, nurses and other paramedical staff.

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### SELF ASSESSMENT EXERCISE 1

What are the things that make up cost of healthcare?

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## 2.0 OBJECTIVES

On completion of this unit, students should be able to:

- understand the various types and elements of healthcare cost,
- to be familiar with the reasons for the increasing cost of healthcare, and
- know the peculiarities of the healthcare market.

## 3.0 MAIN CONTENT

### 3.1 Types of Healthcare Cost

The economic cost of a disease consists of direct and indirect cost. Direct cost is monetary expenditures attributable to the disease and indirect cost is what can be associated with loss of output attributable to the disease owing to premature death or disability. Indirect cost can also be seen as the alternative forgone. For instance, the cost of getting a good treatment and boarding a bus from Lagos to Onitsha is the flight fare that you have forgone, given that your resources is limited in supply.

There are four (4) different types of healthcare cost as described below and they include:



**Direct medical cost** – Medical cost incurred for medical products and services used to prevent, detect, and or treat a disease. These cover costs for drugs, laboratory tests and supplies. This cost has monetary value that is you cost it terms of Naira.

**Direct non-medical cost** – This type of cost covers non-medical services that result from illness but do not involve purchasing medical services. Examples of this type of cost include: cost of transportation, food, family care. This type of cost is usually enormous in developing countries where several relatives, friends come around to get involved in the care of patients.

**Indirect non-medical cost** – This type of cost results from reduced productivity because of ill-health. When a patient is unable to do his usual job, the loss of productivity and income is at a cost.

**Intangible costs** – These are non-financial outcomes of disease and medical care not expressed in monetary value. The non-financial outcome can be in form of suffering, pain and grief. This cost cannot be estimated in monetary value.

### 3.2 Elements of Cost

Cost comprises three (3) elements.

- i. Loss of production.
- ii. Expenditures for medical care.
- iii. Pain, discomfort and suffering that accompany the disease.

Due to the paucity in data and also the inability to measure the last element of cost, it becomes pretty difficult to conduct a data analysis.

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### SELF ASSESSMENT EXERCISE 2

List the types of healthcare cost and give 5 examples of each type.

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### 3.3 Benefits from Healthcare

The types of benefits the individual receives from healthcare could be psychic or monetary, they include:

- a. Relief from pain, suffering, anxiety etc.

b. Benefits in the form of capital good being monetary “pay off” measured by increased production.

### **3.4 Economic Appraisal in Healthcare**

Economic efficiency is relevant in healthcare because the resources that are used in providing services and programs are scarce. Since resources is not and can never be enough to satisfy human wants completely, their use in one beneficial activity means that the community automatically foregoes the opportunity to use the other in another beneficial activity. Remember what you learnt in Unit 1 and 2 on the basic concept of economics and thus, health economics.

Expenditure on medical care is rising in both developing and developed countries. In-patient services are a large and fast growing part of all health service expenditures. Staff costs which alone account for about half the cost of all personal healthcare and this together with drug costs take up the largest share of all health service expenditures. You can now begin to imagine that the real cost of healthcare is much more than what patients pay for in most public healthcare facilities in developing counties.

To evaluate the costs of healthcare to the society rather than to a category of users, the money spent on resources is not considered a good indicator. Such expenditure might be artificially high owing to high taxes or profits or artificially low owing to subsidies and grants.

Economic efficiency in healthcare can be defined as the provision of necessary care of good quality at minimum cost. Therefore, the aim is to move towards a better economic balance of services and eliminate ineffective, excessive and unnecessary medical procedures. Many economic factors are beyond the control of health decision makers, but one measure well within their powers is to curb the growth of high-cost programs and services for the few and promote low-cost services which, by using less expensive primary healthcare personnel which will reach a much larger proportion of the community.

It is important to encourage cost awareness among healthcare providers in view of the scarce resources from both the private and the public sectors. There is also a need to make consumers aware of the costs of health by being better informed on the choices available to them and the cost of the choices so that they can make well informed decisions to save cost.

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### SELF ASSESSMENT EXERCISE 3

What do you understand by economic efficiency in healthcare?

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#### 3.5 Reasons for the Present Trend in Cost of Healthcare

The reasons for the current trend in cost of health include:

- i. Demographic reason – There is population growth in developing countries, to keep pace with this growth, healthcare cost has to increase.
- ii. Labour intensive nature of health services – Healthcare is labour intensive and there is limited scope for savings on labour cost in personal health services. Skilled people are required to provide healthcare.
- iii. Quality of health services – Advances in technology has improved quality of diagnosis and therapy. Unfortunately the cost is often greater than the increased effectiveness achieved. Try and think of the various equipments we use today as compared with what obtains some 10 – 20 years ago.
- iv. Public expectation – People desire increasing standard facilities in health services. There is a high demand for curative healthcare, while underutilizing preventive personal health services particularly in developing countries.
- v. Changing epidemiological picture during socio-economic development – chronic and degenerative diseases and their high cost of care or cure.
- vi. Organization and structure of health system – There are situations where multitude of agencies are financing and delivering parallel and uncoordinated health services with consequent overlapping. This is much more in preventive healthcare services.
- vii. Extension of health services coverage – The attempt is to extend the range, coverage or impact of services to a larger population increase cost.

#### 3.6 Peculiarities of Healthcare Market

**Ethical and equity considerations** – The society regards healthcare as an entitlement or a right and is reluctant to ration it solely by price or income unlike other goods and services. This is because in healthcare, human life is involved and this inevitably raises ethical issues. Therefore you can appreciate that unlike other markets, healthcare cost must take consideration of the human life involved.

**Asymmetric information** – Healthcare providers particularly physicians possess the information and knowledge concerning details of treatment and diagnostic procedures patient need, while the buyer (client or patient) has little information concerning this. The providers who in this context are the supplier dictate what the patient (consumer) should consume. The consumer is not the one in the position to determine what to buy unlike other goods and services. The result of this asymmetric information is supplier induced demand. In simple terms most providers ‘dictate’ to the patient what they have to spend money on to take care of their health.

**Spillover effects** – The service received by consumers sometimes generate a spillover effect in which not only the consumer benefit from the healthcare, someone also received but a third party. If majority of a population are immunized against a disease, the transmission of that disease reduces significantly that even those not vaccinated get reduced chance of being affected by the disease that others are immunized again. The fact that people receive medical care when they are ill and return back to work to become productive, makes a third party to benefit from their recovery and return back to work. A healthy labour force is more productive, contributing to the general prosperity and well-being of the society.

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#### **SELF ASSESSMENT EXERCISE 4**

Give reasons for the increasing cost of healthcare to individuals and to the society at large.

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#### **4.0 CONCLUSION**

Healthcare cost is made of different things which may be direct or indirect cost. All over the world the cost of healthcare is on the increase as result of increasing population particularly in developing countries, increased burden of disease and the use of costly facilities and equipment in addition to the skilled personnel required to provide service.

Healthcare market is peculiar since it has to do with human life unlike other goods which if not affordable can be left unpurchased? The providers largely determine what the consumers need to

pay for unlike other forms of market in which the consumer have enough information to determine exactly what he needs and to what extent the thing to be paid for will be beneficial.

## **5.0 SUMMARY**

In this unit you have been able to go through what makes up cost of healthcare which are mainly grouped into direct and indirect cost. The real cost of healthcare, when all these costs are considered, can be so much. Ill health can therefore be seen as something that cost individuals and societies a lot of money. Also you have been able to learn the comon reasons for the increasing cost of healthcare and the peculiarities of the health are market.

## **6.0 TUTOR MARKED ASSIGNMENTS**

1. Discuss the various types of healthcare cost and the major things that make up these types of costs in your own locality.
2. Discuss the reasons for the increasing cost of healthcare in public and private health facilities in Nigeria.

## **7.0 REFERENCES/FURTHER READINGS**

- Abel-Smith B. (1984). Improving cost effectiveness in healthcare. World Health Forum: Vol. 5: 88-90.
- Abel-Smith B (1986). Paying for health for all. World Health, The Magazine of the World Health Organization, May: 4 – 6.
- Abel-Smith B and Leiserson A. (1987). Making the most of scare resources. Healthcare – Who pays: World Health Forum reprint: Geneva: 13 -22.
- Akande T.M. (1998). Cost consideration in healthcare in developing countries. Ilorin Doctor Vol 3. No 1: 4 – 9.
- Andres, C. (1992). Health is Wealth “but also Wealt h is Health” World health. The Magazine of the World Health Organization: Nov – Dec. Geneva: 2- 10.
- Carr-Hill R. (1994). Equity for the poor, Healthcare tomorrow, World health. The magazine of World health Organization: Vol5, Geneva: 22 – 23.

Cornacchia, H and Berret S. (1982). Shopping for Healthcare. Mosby Press, New York: 4 – 22.

Ensor T. (1993). Broadening the market for healthcare. World Health.

The magazine of World Health Organization, Vol. 3, Geneva:18 -19.

Groose R. and Plessas J. (1987). Counting the cost of primary healthcare. Healthcare - who pays:  
World health Forum reprint, Geneva: 87 – 90.

McConnell C.R., Brue S.L. (1999). Microeconomics. Principles, Problems, and Policies. 14<sup>th</sup>  
Edition. Irwin McGraw-Hill.

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## 1.0 INTRODUCTION

Every health organization is involved in budgeting. Organizations budget for their human and material resources. Nurses particularly at the managerial level need to be familiar with the principles and process of budgeting. Budgetary leaders inspire proactive fiscal planning, determine resource needs, guide visioning of justification for resources, and negotiate for needed resources. Nursing managers also need to analyse expenses, anticipate, recognize and creatively deal with budgetary problems. Budgets help coordinate the efforts of the organization by determining what resources will be used by whom, when and for what purpose. Budgets can be prepared by units in an organization or for each function in a unit. In most developing countries it is common to find budgets for the organization and units hardly have their own developed budget.

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### SELF ASSESSMENT EXERCISE 1

List the advantages of budgeting in a family. Attempt to group what can be budgeted for then relate this to a health institution.

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## 2.0 OBJECTIVES

In this unit you will be required to:

- understand and be able to define budget,
- know and understand the various types of budget, and
- be familiar with the advantages and disadvantages of budgeting

## 3.0 MAIN CONTENT

### 3.1 Definition of Budget

Budget is defined as a quantitative statement, usually in monetary terms, of the expectations of a defined area of the organization over a period of time in order to manage financial performance.

Budget can also be seen as a plan for the allocation of resources and a control for ensuring that the results comply with the plans. The results are expressed in quantitative terms. Budgets are often associated with financial statements, such as revenues and expenses; they may also be in form of non-financial statements covering output, materials and equipment.



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~~SELF ASSESSMENT EXERCISE 2~~

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Attempt to define budget in your own words.

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### 3.2 Basic Concepts Related To Budget

**Budgeting** – Is the process of planning and controlling future operations by comparing actual results with planned expectations.

**Controlling** – It is the process of comparing actual results with the results projected in the budget.

**Incremental (line-by-line) budget** – This is a budget worksheet listing expense items on separate lines. This is usually divided into salary and non-salary expenses. The worksheet may include several columns for the amount budgeted for the current year, the amount actually spent year-to-date, the projected total for the year based on the actual amount spent, increases and decreases in the expense amount for the new budget, and the request for the next year with an explanation attached.

This line-by-line budget has an advantage of simplicity but the disadvantage is that it discourages cost-efficiency. Astute managers ensure that they spent the entire amount budgeted for the year to avoid budget cuts in the next year.

**Zero-based budget** – This is a budgetary approach that assumes the base for projecting next year's budget is zero. Managers are required to justify all activities and every proposed expenditure, regardless of the level of expenditure in previous years. Every expenditure for the new year must be justified in view of organization's objectives and current environment.

**Fixed budget** – A budget in which budgeted amounts are set regardless of changes that occur during the year such as volume of patients, unanticipated inflation, etc.

**Variable budget** – A budget developed with the understanding that adjustments to the budget may be made during the year based on changes in revenues, number of patients, utilization of supplies, and other expenses.

**Fiscal budget** – A specified 12-month period during which operational and financial performance is measured.

### 3.3 Types of Budget

### 3.3.1 Operating Budget

This is also known as Revenue-and –expense budget or annual budget. It is the organization's statements of expected revenues and expenses for the coming year. It coincides with the fiscal year of the organization which in the public sector in Nigeria corresponds to the calendar year – January to December. The operating budget reveals an input-output analysis of expected and revenues and expenses.

The **revenue budget** for a nursing unit may represent the patient care income expected for the budget period. The **expense budget** consists of salary and non-salary items. Among the factors that nurse managers might include in their operating budget are personnel salaries, employee benefits, medical and surgical supplies, drugs and pharmaceuticals, office supplies, among others.

Expense budget should be comprehensive and thorough; it should take into consideration, all available information regarding the next year's expectations. Both controllable and non-controllable expenses are projected. Examples of non-controllable expenses include indirect expenses like lighting, equipment depreciation. The non-controllable expenses and the probability of rises in materials and labour costs during the budgetary period need to be accommodated in the budget to provide for changes that are beyond the control of the organization or unit.

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### SELF ASSESSMENT EXERCISE 3

List the items or activities in your unit that can be under revenue and expenditure budget.

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### 3.3.2 Personnel Budget

Personnel budgets estimate the cost of direct labour necessary to meet the agency's objectives. This budget is used as a guide to recruit, hire, lay off and discharge personnel. In developing the budget, the nursing manager needs to determine the level of need of nursing care that will meet the need of estimated patient population in its unit. The nursing manager will need to estimate number of the various cadres of nursing personnel required during what shifts, in what months and in which areas.

Managing the salary budget is directly related to the manager's ability to supervise and lead the staff. In addition to anticipated salary expenses, peculiar expenses to nursing such as overtime, shift-duty, on-call expenses need to be budgeted for.

Some information that will be helpful in budgeting will include; Current staffing pattern, number of vacant positions, previous years reports and performances, variety of patient cases, seasonal variation in patient load and disease burden.

### **3.3.3 Capital Expenditure Budget**

Capital budget is an important component of the plan to meet the organization's long term goals. Capital expenditures include physical changes such as replacement or expansion of the plant, major equipment and inventories. Organizations define capital items based on certain criteria; must have an expected performance of a least 1 year or at least cost a minimum of certain amount like equivalent of \$500 or \$ 1,000.

Usually, administrators establishes ceiling for capital budget and the nurse manger will need to prioritize requests if the request exceeds the available fund. Unfortunately in many developing countries, nursing mangers are hardly involved in capital budgets. This is taken up by hospital administrators at higher level though with some input from the nurse managers in form of selecting and determining the amount of equipment needed.

### **3.3.4 Cash Budgets**

Cash budget are planned to make adequate funds available as needed and to use any extra funds profitably. Cash budget ensures that the organization during the budgetary period has enough, but enough but not too much cash on hand. This is necessary because incomes do not necessarily coincide with expenditures and also seasonal variations should be anticipated which result in fluctuations in resource needs.

If there is insufficient cash on hand, purchase of needed resources will be hindered. If the budget is well planned, it will provide cash as needed and produce interest on excess fund.

### **3.3.5 Flexible Budgets**

Some expenses are unpredictable and can only be determined after change has commenced. Because of this it is necessary to have flexible budget. The changes can be compensated for by having periodic budget reviews. Sometimes variation in cost can be predicted through historical analysis of costs in previous budgets. Attendance of health facilities in many places in Nigeria

drops significantly during festivities and in some cases attendance of clinic is higher soon after workers receive salaries. These forms of variations require that budgets are made flexible. There are a lot of uncertainties in the Nigerian environment which makes flexible budget to be advantageous.

### **3.4 Advantages and Disadvantages of Budgeting**

#### **Advantages of Budgeting**

The advantages of budgeting include:

- Budget plans for detailed programme activities.
- Help fix accountability by assignment of responsibility and authority.
- State goals for all units, offer a standard of performance, and stress the nature of the planning and control process.
- Encourage managers to have careful analysis of operations and to base decisions on careful consideration.
- Minimize hasty judgments in decision making.
- Can expose organizational weaknesses and allow corrective measures to be taken.
- Resources can be projected and waste minimized
- Financial matters can be handled in orderly fashion and activities of organizations can be coordinated and balanced.

#### **Disadvantages of Budgeting**

The disadvantages of budgeting include:

- Only aspects of organization activities that are easy to measure are considered in budgeting as budget convert all aspects of organization performance into monetary values.

- It may become an end in itself instead of a means to an end. Particularly in situations where symptoms are treated as causes, it is important to find out the underlying reasons for the symptoms.
- Budgetary goals may sometime supersede the organization's goals and gain autocratic control of the organization.
- Danger of over-budgeting making the budget cumbersome and expensive.
- Time consuming and expensive.
- Require skill and experience for successful budgetary control.
- Require forecasting but this can be uncertain because budgetary control is subject to human judgment, interpretation and evaluation.

#### **4.0 CONCLUSION**

Budgeting is an important component of a nursing manager's responsibilities. Budget can be seen as a plan for the allocation of resources and a control for ensuring that the results comply with the plans. The results are expressed in quantitative terms. Budgets are often associated with financial statements, such as revenues and expenses; they may also be in form of non-financial statements covering output, materials and equipment.

There are various types of budgets. All the types of budgets can be put to use in the health sector and nurses need to have an understanding of budgets and the process of budgeting.

#### **5.0 SUMMARY**

In this module you have read through and should be able to understand what budget is and the various types of budgets which include; operation budget, personnel budget, capital budget, cash budget and flexible budget.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

Discuss the advantages and disadvantages of budgeting in healthcare delivery.

#### **7.0 REFERENCES/FURTHER READINGS**

Sullivan E.J., Decker P.J. (2009). *Effective Leadership & Management in Nursing* (7<sup>th</sup> Edition).  
Pearson Prentice Hall, Pearson Education International, Upper Saddle River, New Jersey.

Tomey A.M. (2008). *Guide to Nursing Mangement and Leadership*. 8<sup>th</sup> edition. Elsevier.

**MODULE 2**

Unit 1      Cost Containment in Healthcare

Unit 2      Poverty and Health

Unit 3      Healthcare Financing I

Unit 4      Healthcare Financing II

Unit 5      Health Insurance

**UNIT 1 COST CONTAINMENT IN HEALTHCARE****CONTENTS**

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## 1.0 INTRODUCTION

The objective of healthcare is to improve health status by reducing morbidity, postpone mortality and give people a higher quality of life.

This can be achieved by promoting health, preventing ill health, curing ill-health when it has occurred, and enabling those whose conditions cannot be cured with existing knowledge to live a full life as much as possible despite their disabilities. All these is at a cost, it has to be acknowledged that good health like most “goods” costs money. You can recall the various things that make up cost of health in Unit 3 in the last module. Those who can afford to spend more on their health to a certain point are seen to benefit the most.

The Healthcare market is one of a difficult market in economic analysis since ill-health determines the demand for healthcare services. The individual’s determination of ill-health is personal, emotional and can be uncertain. Healthcare is one of a subset of goods and services that provides both psychic and monetary benefits to a consumer.

The individuals demand for healthcare is derived from his perception of his optimal level of health. Demands for healthcare thus arise because the individual wants to bridge the gap between the perceived current health state and some higher health state that he desires. The individual then takes action to decide to seek healthcare.

The need for healthcare and the demand for it is not the same, more so in developing countries. The cost of meeting this need and demand is enormous. Health for all by the year 2000 (HFA 2000) is at risk of remaining a dream without a careful consideration. A plan for health that does not take account of costs amounts to no more than window shopping.

## 2.0 OBJECTIVES

The objective of this unit is for the reader to:

- understand the need for providers of healthcare to be cost conscious,
- understand factors that contribute to resource inadequacy in developing countries, and
- know about the various cost-containment strategies in healthcare delivery

### 3.0 MAIN CONTENT

#### 3.1 Cost Consideration in Healthcare

Provision of healthcare is at a cost to individuals who make the demand and also the individuals, communities, government and non-governmental agencies who supply it. Consumer health deals with the decisions individuals make in regard to the purchase and use of the available health products and services that will have a direct effect on their health. It involves economic or monetary aspects of health over which individuals have control. Consumer health includes self-motivated or self-initiated actions. From this you know that healthcare often follow a demand from the consumer (patient).

The fact is that it is no longer possible to meet the increasing cost of healthcare with the emergence of several new health risks and problems unless health is built in among the priority economic objectives by individuals, families, communities and government. It is desirable to increase accessibility to health services by either increasing people's ability to pay or reducing costs. This can positively change healthcare seeking behaviour such that people benefit from early detection, diagnosis and treatment and ultimately reduce expenditure on chronic or complicated cases which is now usually the case in developing countries.

Resources available for healthcare is not enough to meet the demand, it is therefore necessary to closely examine the main problems in the health sector that are contributory. These problems are mainly; allocation, internal inefficiency and inequity.

#### **Allocation Problem**

There is a problem in allocation of funds to healthcare particularly in developing countries. Private and public spending on healthcare in developing countries average \$8 per capita in low income countries which represents about two-thirds of sub-Saharan Africa's people and \$16 per capita in middle income countries which represent nearly 30% of sub-Saharan Africa's people and \$68 per capita in the high income group of countries representing only one-twentieth of Africa's population.

Even though many developing countries have embraced primary healthcare, current public and private spending on basic health services is inadequate. Private spending in these countries is substantial, and a little of it goes to low-cost services which are more cost effective. In some

countries, individuals' expenditure on health account for over 70% of the total health expenditure. If the private and public resources tied up in hospital care are redirected to lower levels of health system, many of these health problems could be treated earlier at a less severe stage or prevented altogether and even at lesser cost.

You can now appreciate from what you have just read that allocation problem exists at individual level, even though it is commonly seen as a problem at governmental level. Rather, people spend money on basic things that can promote or prevent health. Allocation problem at the level of government is common in African countries. Government rather than spend appropriately on preventive healthcare which is cheaper end up spending on curative healthcare at higher level which is costlier.

### **Inefficiency Problem**

Inefficiency is common in healthcare delivery. One of the ways it occurs is the use of higher-level facilities by patients who could well be served at less sophisticated units or facilities. It is common in developing countries for the high-level facilities to be overcrowded with lengthy waiting times while other health facilities usually at the lower level have few patients. This result in delivery of unnecessary care through costly facilities and use of highly skilled personnel and because of the demand on the high-level facilities, they are further expanded at some costs which certainly affects the lower levels. The supply of funds to the lower levels is thus further reduced.

### **Inequity Problem**

Inequity is another important problem in developing countries. There is inequitable urban-rural distribution of benefits. About 70% or more of government spending goes to urban based care and in developing countries 70-90% of hospital clients live within 10kms to the facility they use therefore about 70% of people in the rural areas receive just about 30% of government health expenditure. There is also inequality in income; the poor who are at greater health risk have low income.

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### **SELF ASSESSMENT EXERCISE 1**

What are the factors contributing to inadequacy of resources for healthcare in your own local area?

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## 3.2 Cost Containment in Healthcare Delivery

The goal of cost containment is to keep costs within acceptable limits for volume, inflation and other parameters. It involves costs awareness, monitoring, management and incentives to prevent, reduce, and control costs.

### 3.2.1 Cost Awareness

This focuses the health staff attention on costs of service delivery and the steps available for containing them. Health staff in developing countries are hardly know or get bothered about the ultimate cost of service to the organization and the consumers. An awareness of the cost can bring about a desire to see how such costs can be contained.

### 3.2.2 Cost Monitoring

This is another measure for cost containment. Organizations providing healthcare can focus on how, when, where and why it is to be spent. With answers to these, the cost of providing services can be monitored with the ultimate aim of checking where wastes can be reduced. Incentives can be provided to staff that have clear ideas and have demonstrated money-saving measures in their unit.

### 3.2.3 Cost Avoidance

Where possible, **cost avoidance** for unnecessary procedures can be put in place to minimize expenditures on the part of the consumer and the organization.

### 3.2.4 Cost Reduction

In healthcare delivery, it is desirable to contain healthcare cost. Preventive measures like childhood immunization can save a lot of cost in healthcare when compared to cost of managing the disease that would have been prevented.

### 3.2.5 Cost Control

These can be very useful as a cost-containment strategy. Cost control is effective use of available resources through careful forecasting, planning, budgeting, reporting and monitoring. Cost-effectiveness entails comparing costs and identifying the most beneficial outcomes.

This is done by, analyzing the alternative methods in achieving the same objective and then determine the cost implication of all inputs for each method. For each method the cost outcome and cost-effectiveness is determined.

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## SELF ASSESSMENT EXERCISE 2

What do you understand by the following terms?

- a. Cost awareness
- b. Cost monitoring
- c. Cost avoidance
- d. Cost reduction
- e. Cost control

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### 3.3 Ways to Contain Cost of Healthcare

The main objective in cost cost-containment must be to realize the same benefits at lower cost and to increase benefits without adding costs. The consumer and providers of healthcare services have roles to play in cost-containment. Consumers need to make rational use of healthcare service though they need to be assisted to do this in developing countries through adequate health information on the costs, consequences and quality of treatments, and the adequacy of competition between providers.

Consumers need to be educated to use lower levels of healthcare where most of the health problems can be solved at reduced cost and referrals made to higher levels when necessary. Financial disincentives can also be used to discourage use of secondary and tertiary healthcare unnecessarily.

For example, if patients choose to go for treatment by-passing the lower level of care such patients can be made to pay more than someone who was referred from the lower levels.

#### **Other ways costs can be saved include:**

- a. To ensure that the degree of technical complexity involved in the service delivery is appropriate to the task to be performed.

- b. Highly skilled staff not to be used on tasks that can be performed by lesser skilled staff.
- c. People should have positive health behaviour to maintain better health.
- d. Standardization of construction technology, equipments and drugs to the minimum acceptable standard and therefore relatively inexpensive level. Large sum of the health budget is spent on drugs; costs can be contained through rational prescribing and use of drugs.
- e. Using all resource to full capacity, avoiding waste by ensuring that they complement one another where possible and serve as many users as possible.
- f. Economy in procurement of resources of given characteristics.

### **3.4 Cost containment in Primary Healthcare**

Lack of interest in cost analysis is a characteristic of the whole range of health activities particularly in developing countries. It is particularly pronounced in primary healthcare services, probably because of the diversity of the activities involved.

In developing countries, the only health services that can be expected to reach the entire population, are those that are of low cost. The largest element of cost in health services is staff and the least expensive way to do this is through community participation in which people provide some of the services themselves where possible.

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### **SELF ASSESSMENT EXERCISE 3**

List ways through which the cost of healthcare can be contained. How is this applicable to the nursing profession?

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### **4.0 CONCLUSION**

Providing healthcare is at a cost, this is increasing in all nations and resources of most countries, particularly developing countries, are scarce. Also, health has to compete with other needs for the scarce resources of individuals, communities and nations. It becomes apparent that cost of healthcare has to be controlled with efficiency. Consumers and providers of healthcare services need to be cost conscious.

Cost saving measures, are required to be put in place in the health sector while at the same time striving to provide quality healthcare services for the populace.

It is important that all healthcare providers are made to be cost conscious, to ensure that services do not cost more than absolutely necessary, so that more people can be reached with healthcare.

## **5.0 SUMMARY**

Healthcare in developing countries continue to increase in demand even though the demand is less than the healthcare need. The resources available are not enough, and are not likely to be enough to meet the increasing health problems. The economic depression and inadequate management of resources in developing countries has made supply of healthcare products and services in their various forms grossly inadequate. In addition, the cost of healthcare to individuals, government and agencies is increasing. It is therefore necessary for providers and consumers to be cost conscious with the ultimate aim of cost containment in healthcare delivery.

It is necessary to increase general awareness on costs of healthcare, so that cost saving measures can be practiced widely and through this increase affordability and coverage of healthcare in developing nations. This unit dealt with various cost saving measures which you need to be familiar with and consciously practice to contain cost on healthcare.

## **6.0 TUTOR MARKED ASSIGNMENTS**

1. Explain the following terms:
  - a. Cost awareness
  - b. Cost monitoring
  - c. Cost avoidance
  - d. Cost reduction
  - e. Cost control
2. Write an essay on cost containment in healthcare for developing countries.

## 7.0 REFERENCES/FURTHER READINGS

Abel-Smith B. (1984). Improving cost effectiveness in health care.

Abel-Smith B (1986). Paying for health for all. *World Health, The Magazine of the World Health Organization*, May: 4 – 6.

Abel-Smith B and Leiserson A. (1987). Making the most of scarce resources. *Healthcare – Who pays: World health Forum reprint: Geneva: 13 -22.*

Akande T.M. (1998). Cost consideration in healthcare in developing countries. *Ilorin Doctor Vol 3. No 1: 4 – 9.*

Andres, C. (1992). Health is Wealth “but also Wealth is Health” *World health. The Magazine of the World Health Organization: Nov – De. Geneva: 2- 10.*

Carr-Hill R. (1994). Equity for the poor, *Healthcare tomorrow, World health. The magazine of World Health Organization: Vol5, Geneva: 22 – 23.*

Cornacchia, H and Berret S. (1982). *Shopping for Healthcare. Mosby Press, New York: 4 – 22.*

*World Health Forum: Vol. 5: 88-90.*



**UNIT 2      POVERTY AND HEALTH****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Definition of Poverty
  - 3.2 Health problems and the economy
  - 3.3 Improved economy leading to improved health
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## 1.0 INTRODUCTION

Some two-third of the world's population go to sleep hungry at night. The World Bank estimated that perhaps as much as one-quarter of the world survives on no more than \$1 (about N130.00) per day. Outright famine regularly occurs in various parts of the world. Recent examples of this are the mass starvation of an estimated one million people in Ethiopia during the drought of 1984 – 1985, the catastrophes in Asia, etc. This people had little access to healthcare, they live in unsanitary environment, infant and child mortality is high and life expectancy is low.

Poverty is related to the economic activities of the country. There is no society that has the resources necessary to produce enough goods and services that will satisfy all wants and desires of its people. The production of goods and services within an economy can be measured by the Gross Domestic Product (GDP). Gross Domestic Product is the measure of all final goods and services produced within an economy during a year. Countries with low GDP among other causes have problem of poverty, though in some countries with high GDP, poverty can be found (poverty amidst plenty).

Poverty creates ill-health because it forces people to live in environments that make them sick, without decent shelter, clean water or adequate sanitation.

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### SELF ASSESSMENT EXERCISE 1

- i. What is Gross Domestic Product?
- ii. Find out the GDP for 10 countries and relate it to their standard of living.

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## 2.0 OBJECTIVES

In this unit you will be required to:

- define poverty and understand basically why the poor have ill-health problems, and
- understand the relationship between economy and health problems.

### 3.0 MAIN CONTENT

#### 3.1 Definition of Poverty

Poverty is concerned with the relationship between the minimum needs of people and their ability to satisfy those needs. Poverty can be difficult to define because of the relative meaning of minimum needs. The United Nations uses living on less than \$1 (₦438.00 official rate as at October, 2020) per day to define poverty.

The poor are at greater risk of becoming ill. Poor health has adverse effects on productivity which further contribute to poverty. Poverty affects access to health services. Poverty also limits ability to meet the cost of healthcare. The poor have worse health outcomes than other economic and social groups. Infant, child and maternal mortality rates are higher in poor communities.

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#### SELF ASSESSMENT EXERCISE 2

From the above list five (5) ways poverty affects health

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#### 3.2 Health Problems and the Economy

Major causes of death and illness –prenatal, infectious, and parasitic illnesses are responsible for 75% of infant deaths. These illnesses can largely be attributed to poverty. Infectious diseases and parasitic diseases are responsible for 71% of deaths of children aged one to four.

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#### SELF ASSESSMENT EXERCISE 3

If people are not poor, list ways they would avoid the situation described above?

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The heavy burden of ill-health in Africa is a reflection of the level of poverty in the continent. You need to know that the effect of poor health goes beyond physical pain and suffering; learning is compromised, returns to human capital diminish, and the environment for entrepreneurial and productive activities is constrained. Poor health imposes immense economic costs on individuals, households, and society at large.

Household survey in Cote d'Ivoire showed that about 24% of the adult labour force experienced an illness or injury in the previous month to the study, 15% became at least temporarily inactive. The workers on average lost nine (9) full days of work and the cost of treating them amounted to 11% of their normal monthly earnings. In Nigeria, Guinea worm disease temporarily incapacitated

2.5 million Nigerians in 1987. Cost/benefit study revealed the net effect of the disease was to reduce rice production by 50 million dollars and it was estimated that the benefits of a worm control program would exceed its costs only after 4 years. These studies show you how ill-health further worsens sufferers' economic state.

In view of the demonstrated importance of human capital to economic progress, a country cannot attain high level of economic development with a population burdened by high infant and maternal mortality, pervasive illness of its workforce and low life expectancy.

The economic status of an individual, community, and country is related to the health of the individual or its people. Y

Though wealth does not necessarily bring health, a buoyant economy can create the enabling environment for health. A poor economy shows features of poor housing, inadequate food and nutrition, poor water supply, inadequate environmental sanitation, and low level of education, low affordability of healthcare.

AIDS is a cause of deaths and illness in developing countries which has heavy toll on economy of countries. Prevalence of AIDS in sub-Saharan Africa countries remains high. In hard-hit African countries, the active age group is mostly affected. Deaths in this age group affect skilled manpower and professionals which take a heavy toll on countries.

Malaria is endemic in most of sub-Saharan Africa and it appears to be worsening in much of Africa and results in high childhood morbidity and mortality. The cost of treatment of malaria in most countries when put together is enormous. This money would have helped families, communities and the country at large to improve on quality of life. Absenteeism from work among adults affected by malaria is also high, this affects productivity. From the examples described you can appreciate how poor health imposes immense economic cost on individual and the nation.

### **Some Health Effects of Poverty**

1. Poverty creates hunger which in turn leaves people vulnerable to diseases.
2. Poverty denies people access to reliable healthcare services and affordable medicines.
3. Denies people access to prevent healthcare. For example, it denies poor children access to immunization.

4. Poverty creates illiteracy, which eventually make people less informed about health risks.
5. Poverty compels people to live in environments that make them susceptible to certain diseases.

One of the barriers to healthcare for the poor is the time it takes to get treatment. Time is a resource since the time taken away from work may mean lost income.

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#### **SELF ASSESSMENT EXERCISE 4**

Now improve on exercise 2, List ways poverty can affect health of a person.

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### **3.3 Improved Economy Leading To Improvement In Health**

Economic developments will provide enabling environment that will reduce disease burden and deaths in the following ways:

- a) **Safe water and sanitation:** Poor sanitation and lack of safe water contributes immensely to morbidity and mortality in developing countries.
- b) Studies have shown that improvement in excreta disposal reduced diarrhoea morbidity by 22 – 36%.
- c) **Food and Nutrition:** Malnutrition underlies more than one-third (1/3) of infant and child mortality in rural and urban areas of many African countries.
- d) Inadequate quality and quantity of food intake causes growth failure, decreased immunity, learning disabilities and reduced productivity.
- e) Increase in income of poor families is likely to lead to increased food consumption. Countries with strong economy are likely to provide an environment where its citizens get good income that can help improve household food security.
- f) **Housing:** Some diseases in developing countries are attributable to poor housing. Poor housing results in overcrowding, poor environmental sanitation, poor ventilation, cohabiting of man and animals among others.
- g) **Education:** Countries with good economy are likely to invest in education. Education of people, particularly female education usually brings about informed choice and right

decision that relates to individual's health or family health. Educated women marry and start having children later, make better use of health services, and make better use of information that will improve personal hygiene and health of their children.

- h) **Health infrastructure and equipment:** Countries with buoyant economy are likely to invest in health infrastructure and equipment. Where there is wide coverage of the population with health facilities, geographical access to these facilities can improve on the health of people. Physical proximity to health facilities is only the beginning of effective healthcare coverage. A facility that is near people's homes will have little value if it lacks basic equipment. Money is needed to procure necessary equipment and for maintenance of these equipment.

#### **4.0 CONCLUSION**

As good health is crucial to protect the family from poverty, so is better health central to poverty reduction. Improving the health of the poor must become a priority, not only for public health but also for other sectors of development. The best cure for the various infectious diseases that plague developing countries is economic growth and broad-based development.

#### **5.0 SUMMARY**

In this unit you have been able to read about the effect of poverty on ill-health and how ill-health can also precipitate poverty. At the level of nations you now see that illness reduces productivity of countries and can therefore affect the economy of such countries. It is also true that economic development provides enabling environment to reduce poverty and also reduce some illness.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

1. Discuss the relationship between poverty and ill-health
2. Describe how improved economy can lead to improved health

#### **7.0 REFERENCES/FURTHER READINGS**

Register C.A., Grimes P. (2022). Economics of Social Issues. (The McGraw-Hill Series in Economics). 21<sup>st</sup> Edition, eTextbook, USA

Drummond M.F., Sculpher, M.J., Claxton, K., Stoddart, G.L. and Torrance, G.W. (2015) Methods for the Economic Evaluation of Healthcare Programmes, Oxford University Press, ISBN 0-19-852945-7.

[http://www.cms.hhs.gov/TheChartSeries/downloads/private\\_ins\\_chap4\\_p.pdf](http://www.cms.hhs.gov/TheChartSeries/downloads/private_ins_chap4_p.pdf)

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WHO/World Bank. Dying for change. Poor peoples experience of health and ill-health.

World Bank (1994). Development in Practice Better Health in Africa: Experience and Lessons Learned. The International bank for Reconstruction and Development/The World Bank.

**UNIT 3      HEALTHCARE FINANCING I****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Options in healthcare Financing
    - 3.1.1 Direct Government Financing
    - 3.1.2 User Charges (Out of pocket expenses)
    - 3.1.3 Community Financing
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings



## 1.0 INTRODUCTION

You will recall in Unit 2 that we described the role health plays in the socio-economic development of any nation. Health is no longer and cannot therefore be regarded as a by-product of economic development but a pre-condition for it. Most often government is viewed as ultimately responsible for the population's health.

There is a growing financial need to fund healthcare projects in almost all nations, with resources becoming limited because of the global economic recession, health financing now take a major focus of attention. Health costs have been increasing because of the aging population with increased healthcare needs, increased use of technology, new and expensive treatment modalities and increasing administrative costs.

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### SELF ASSESSMENT EXERCISE 1

List reasons for increasing cost of healthcare in this country.

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## 2.0 OBJECTIVES

On completion of this unit, the learner should be able to:

- know what healthcare financing is, and
- describe the major options in healthcare financing which will include direct government financing, user charges, and community financing in this unit.

## 3.0 MAIN CONTENT

### 3.1 Options in Healthcare Financing

**Options** for financing health services are now being widely considered. We can broadly divide healthcare financing into two namely; public and private healthcare financing. Examples of public healthcare financing include; direct government funding, social insurance while examples of private healthcare financing include; user fees, private health insurance, community financing and donations. They may be grouped into 5 major categories which are: Direct government financing, User charges (Out-of-pocket expenditure), Community financing, health insurance, Donors (foreign aid).

### 3.1.1 Direct Government Financing

Direct government financing of health activities is the most widespread approach to health financing in the developing world. Government either provides periodic allocations from general government revenues or assigns the proceeds of a designated tax to the health sector or both.

Because national governments are responsible for overall health policy and strategic planning for health, it might be assumed that governments are also the major sources of healthcare financing and health expenditures. We know in reality that government's share of total health expenditure varies widely all over the world.

Public revenues are obtained from various sources and then generally are added together, in which case the source of financing for a particular public program cannot be identified. However, in some cases governments dedicate the proceeds of a particular tax instrument to the health sector. For example in several countries in the Americas and in Asia, lotteries have been organized to benefit social welfare programs such as healthcare, primary education, etc.

Direct government funding of health activities alone has been inadequate in many countries particularly in developing countries. The World Health Organization (WHO) recommends that all levels of government should allocate at least 15% of their total budgetary expenditure to healthcare. You know that in Nigeria, government financing of healthcare is inadequate. Reasons why African governments have committed less money to health than other countries include:

- ✚ Economic condition of some of the countries, since the expenditure on health in these countries is largely from general tax revenues, including duties on imports and exports.
- ✚ Structural Adjustment programmed in some of the countries which is responsible for cutbacks in government expenditure on social services.
- ✚ Some countries spend heavily on other sectors like defense to the detriment of the health sector, whereas there is little evidence that defense expenditures contribute positively to economic growth or sustainable development.

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### SELF ASSESSMENT EXERCISE 2

Do you consider government expenditure on health in Nigeria adequate? If No, List the things that make you consider expenditure on health by government inadequate.

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### 3.1.2 User Charges (Out-Of-Pocket Expenditure)

User charge is also known as out-of-pocket expenditure. Another way of financing healthcare is by charging patients. These charges take a variety of forms. Fees for medical services are diverse. The definition of the item on which fees is to be charged varies widely. A fee may be required for an encounter with the healthcare provider, an episode of illness or a fixed number of contacts with the healthcare system.

A single encounter may be broken into items like laboratory test, drugs, procedures, etc. The fees for each of these vary. There may be a uniform price charged for all the patients or with the exception for the poor, children or some are exempted from paying. In some places, there are sliding scales of rates applied such that persons of lesser means pay lower fees.

User charges have the advantage of providing a link between financial responsibility and the provision of services. This link has generally enhanced willingness to contribute to the cost of health programs and has encouraged both consumers and providers to be cost conscious. In addition, user charges help to control the use of health services by imposing financial disincentives to consumers. You know that when people pay for a service, they are careful since it costs them something but if they do not pay then they may not be bothered about careful use of such service. When user fees are low or not practiced, consumers have no reason to pay attention to costs.

User fees are also a tool for reinforcing the referral system. In some countries people who are not referred from the lower levels are made to pay more than those referred. User fees are becoming increasingly common in Africa. This method of cost recovery directly addresses the problem of under-funding of government health facilities.

The administration of user charges throws some challenges in developing countries where it is observed that the largest reduction in the use of services is as a result of charges for health services particularly among the poor. You are familiar with this problem of the poor who are not able to afford healthcare because of user fees. This then calls to question the need for equity. However, some people are of the opinion that user fees that result in availability of services is better and more people are cared for than a free health service with services not available because money is not available.

**Important arguments in favour of user charges include:**

- a) Fees make the patient more conscious of the services they ask for, it therefore strengthens self-caring.
- b) User fees however small, will make up some level contribution to the health financing.
- c) Keep services running and improves quality of care and confidence in the services

**Arguments against user fees include:**

- a) Fees collection and its management requires management capabilities which may not be available at some lower levels of healthcare delivery.
- b) Revenues collected in some instances are not substantial compared to cost of providing services.
- c) Introduction of user charges reduces utilization rates.

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**SELF ASSESSMENT EXERCISE 3**

List the pros and cons of user fees as an option in healthcare financing.

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User charges can lead to greater use of health services where there is:

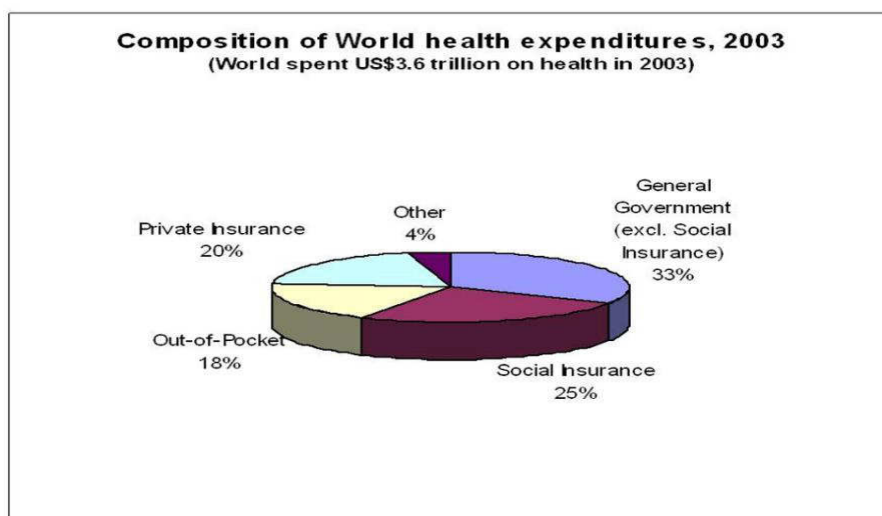
- ✚ Phased in rather than sudden increase in prices (gradual introduction of fees).
- ✚ Greater accountability of the provider to the population – where consumers find that quality of service received is justified when compared with fees paid.
- ✚ Local management of resources (decentralized system).
- ✚ If patients perceive they will have higher quality of care.
- ✚ Service received can compete favourably with services elsewhere

Garland defined three relations between charging for health services and the population:

- a) **Contributive capacity** – This is defined as the money an average family can spend for health in a defined period. This varies widely, some studies in rural households' show that the share of the budget households allocated for health ranges between 2.5 – 6.5%.

b) **Financial capacity** – This is defined as the availability of cash by the respective household at the moment when cash is needed for medical treatment. It is known that financial capacity increases after food harvest, especially at month end when salaries are paid. It is also common observation in some developing countries that financial capacity decreases after major festivities like Christmas and Sallah. However in Africa, the potential family solidarity in the event of ill-health is high which translates to some form of assistance.

c) **Institutional relationship** – Target families and communities can organize and have some relationship to provider of health service. It can be in form of financial contributions from users. This can provide solutions for those who cannot pay immediately and those who cannot pay at all.



Source – World Health Organization

### 3.1.3 Community Financing

The emphasis of community support in most developing countries has been on providing resources, either financial, material or human for the establishment or improvement of health and sanitation infrastructure e.g. Health facilities, latrines, wells, etc.

Community financing of health activities requires community organization. The most serious problems have arisen in trying to sustain contributions to pay for the recurrent costs of programs. People have frequently been unwilling to continue to pay for programs from which they were not benefiting at the time.

Greater reliance on community financing of healthcare has been advocated for several reasons, which include:

- ✚ Individuals / households spend a lot of money purchasing modern and traditional healthcare from the private sector. It would not be additional burden if this expenditure were redirected towards services that have a greater impact on health.
- ✚ Community financing will attract other unexploited resources like labour, land and contributions in kind.
- ✚ People will readily use and cooperate with services that they have helped to create and later help to maintain.
- ✚ It is a suitable mechanism for mobilizing contributions from the self-employed.

**Community financing cover the following:**

- ✓ Paying at full or preferential rates for health facilities organized through community efforts. The crucial feature is that the community rather than established market forces or individual negotiation has approved this form of payment.
- ✓ Paying for socially organized voluntary community insurance schemes e.g. prepayment for services that may be linked to income or production or a healthcare scheme for which standard charges are laid down.
- ✓ Giving of gifts in cash, labour, or kind for which no wholly individual benefit is expected but from which the donor may partake of the collective benefits.
- ✓ Paying for the creation and utilization of community capitalization schemes for the promotion of healthcare such as nutrition and sanitation funds from which grants or loans are given to members for health-related activities.

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**SELF ASSESSMENT EXERCISE 4**

List the benefits of community financing of health.

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**4.0 CONCLUSION**

There are various forms of healthcare financing mainly public and private. Healthcare financing options vary from one country to the other. There can be variations even within countries. Government alone can no longer bear the total cost of healthcare. Hence, other options of healthcare financing are getting some attention. Each of the options in healthcare financing has its

merits and demerits. In this unit the options of direct government financing, user-fees and community financing have been discussed.

## **5.0 SUMMARY**

In this unit you have been able to go through the major options in healthcare financing which include; direct government financing, user charges (out-of-pocket expenses), health insurance, community financing, you have also been able to see the advantages, disadvantages of each option of healthcare financing discussed in this module.

## **6.0 TUTOR MARKED ASSIGNMENTS**

Discuss user fees as an option in healthcare financing and what are the advantages and disadvantages of this option.

## **7.0 REFERENCES / FURTHER READINGS**

Financing District Health Services. International Workshop held 11<sup>th</sup> – 15<sup>th</sup> April 1994 in Nairobi Kenya. Published by GTZ Eschborn, Germany.

GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) Workshop Report.

[http://www.paho.org/English/DD/PIN/ptoday18\\_sep05.htm](http://www.paho.org/English/DD/PIN/ptoday18_sep05.htm)

World Bank (1994). Development in Practice Better Health in Africa: Experience and Lessons Learned. The International Bank for Reconstruction and Development / The World Bank.

**UNIT 4      HEALTHCARE FINANCING II****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Health Insurance
  - 3.2 Foreign Aid
  - 3.3 Voluntary Donations
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings



## 1.0 INTRODUCTION

You will remember that in Unit 8, we described the importance of healthcare financing and looked at some of the options in healthcare financing like direct government financing, user fees (out-of-pocket expenses) and community financing. In this unit other options in healthcare financing which are equally important will be discussed.

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### SELF ASSESSMENT EXERCISE 1

What are the options in healthcare financing discussed in unit 8?

What other options do you know of apart from those discussed in unit 8?

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## 2.0 OBJECTIVES

On completion of this unit, the learner should be able to:

- know what healthcare financing is, and
- describe the major options in healthcare financing which will include direct government financing, user charges, community financing in this unit.

## 3.0 MAIN CONTENT

### 3.1 Health Insurance

Health insurance is a system in which prospective consumers of care, make payment to a third party in the form of an insurance scheme, which in the event of future illness will pay the provider of care for some or all of the expenses incurred. Health insurance is a mixed source of finance as it often draws contributions from both employers and employees and sometimes government. Contributions to such schemes are often mandatory. There are three main types:

- A. Government or social insurance – maybe compulsory or voluntary often employed in the formal sector. Contributions based on individuals' income not on actual risk
- B. Private insurance – coverage through third-party payer institutions. Employer based insurance-employers or parastatal or private bodies serve as the third-party payer or collection agent.

Health insurance diversify sources of revenue of the health sector, individuals play some role in paying for their own healthcare and to spread the burden of health costs over time and across a wider population which will reduce risk.

A variety of insurance mechanisms can be used to help finance the health services rendered to individuals and families. These entails collection of funds directly from potential users of the healthcare system, either to pay the providers for their services or to reimburse users in full or in part for payments made to providers.

Membership of health insurance scheme can be voluntary or compulsory. Government, statutory agencies, profit making organizations, or non-profit making organizations such as, cooperatives or benevolent societies can operate these schemes. The insuring agency may employ the providers of healthcare and own facilities (the direct method) or contract with healthcare providers – public or private (the indirect method).

The advantage of insurance is that it converts unpredictable future health expenses into payments that can be budgeted for in advance. The agreements convert large, infrequent and unpredictable expenditures into smaller, periodic payments. These payments are collected to a pool of resources that can be drawn upon to meet the needs of a participant who encounters misfortune of ill-health.

Nearly all developed countries that now provide the same right to healthcare to the whole population went through an evolutionary stage of voluntary health insurance followed by compulsory health insurance.

**Compulsory insurance** – These schemes are generally financed by employers and or employees' contributions calculated as a percentage of pay roll. Compulsory insurance schemes may cover the self-employed as well on a compulsory or voluntary basis. However, it is extremely difficult even in developed countries to collect compulsory contributions from the self-employed.

**Voluntary insurance** – People may be allowed to be voluntary contributors to a social security scheme, run by government or statutory agencies, which is compulsory to others. Alternatively, they may insure with profit or non-profit agencies or they may join a group scheme.

Insurance schemes typically require the patient to make an initial payment for care (deductible) before applying for benefits and many also require the patient to pay a small share of the additional amount (co-payment) – these two devices are intended to discourage overuse of healthcare

services. Some insurance programmers have set standard rates for common procedures, and have defined a limited number of “services” for which payment will be made. These moves are intended to control the claims against the insurance fund.

### 3.2 Foreign Aid

Donors are important financiers of healthcare in Africa; especially where the government has been unable to meet health needs due to revenue shortfalls. During the 1980s bilateral donors accounted for 62% of total health assistance in Sub-Saharan Africa, while multilateral agencies provided 32% and non-governmental agencies 6%. External financing is generated mostly through development-oriented institutions such as bilateral agencies, multilateral organizations and banks e.g. UNICEF, WHO, UNDP, World Bank, EEC, and USAID etc.

Financial cooperation is generally channelled through a central authority in the recipient country such as Ministry of Finance or Ministry of National Planning. In some cases, funds may be routed directly to particular ministries, agencies or NGOs. While NGOs in financial terms may be small in most cases, their potential for mobilizing people and strengthening their self-reliance cannot be overlooked.

Foreign aid has played invaluable role in public expenditures in developing countries but has some **negative effects** like:

- Emphasis on vertical programmers
- Sustainability problem
- Priority program often determined by donors and not recipient countries.
- Some donor funding of programs are out of proportion to total health needs.
- Poor coordination of efforts by various external agencies involved in funding of the programmers.

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### SELF ASSESSMENT EXERCISE 2

- i. List some organizations providing foreign aid in health in your locality.

- ii. In what form are these aids financing healthcare?
- 

### **3.3 Voluntary contributions**

These are contributions usually from individuals or groups within the country. Philanthropists may make cash donations and/or donations in kind (buildings, equipment, etc). Religious groups also fall into this category. Some groups run non-profit making health services.

#### **Other private sector involvement**

- Medical services run for employees by private or quasi-government enterprises.
- Salaried government physicians engaged in private practice.
- Physicians engaged in full-time private fee for service practice.
- Chemist shops/Pharmacies.
- Private for profit hospitals and clinics.
- Indigenous or traditional practitioners and quacks.

The above are some forms of healthcare financing which may be profit oriented but then contributing immensely in some ways in financing of healthcare

### **4.0 CONCLUSION**

There are various forms of healthcare financing mainly public and private. Healthcare financing options vary from one country to the other. There can be variations even within countries. Government alone can no longer bear the total cost of healthcare; hence other options of healthcare financing are getting some attention. Each of the options in healthcare financing has its merits and demerits.

### **5.0 SUMMARY**

In this unit you have been able to go through the major options in healthcare financing which include; health insurance, foreign aid and voluntary contributions (philanthropists).

## **6.0 TUTOR MARKED ASSIGNMENTS**

Analyse succinctly health financing in Nigeria.

## **7.0 REFERENCES/FURTHER READINGS**

Financing District Health Services. International Workshop held 11<sup>th</sup> – 15<sup>th</sup> April 1994 in Nairobi Kenya. Published by GTZ Eschborn, Germany.

GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) Workshop Report.

[http://www.paho.org/English/DD/PIN/ptoday18\\_sep05.htm](http://www.paho.org/English/DD/PIN/ptoday18_sep05.htm)

World Bank (1994). Development in Practice Better Health in Africa: Experience and Lessons Learned. The International Bank for Reconstruction and Development / The World Bank.

**UNIT 5      HEALTH INSURANCE****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Definition of health insurance
  - 3.2 History and evolution of health insurance
  - 3.3 Types of Health Insurance Scheme
    - 3.3.1 Private
    - 3.3.2 Public Insurance
    - 3.3.3 Social
    - 3.3.4 Community Health Insurance
    - 3.3.5 Direct
    - 3.3.6 Indirect
    - 3.3.7 Reimbursement
  - 3.4 Problems with health insurance
    - 3.4.1 Problem with health insurance
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## 1.0 INTRODUCTION

Everyone no matter how healthy needs medical care at some point in time. This may be in form of preventive care or treatment for sicknesses and injuries. With medical care comes payment of fees in one form or the other.

Affordability of such fees at the point of use may be difficult. Health insurance provides a form of financing which makes payment for the fees relatively easier. Health insurance is an institutional and financial mechanism that helps households, individuals and organizations to set aside financial resources to meet costs of medical care in the event of illness.

The advantage of insurance is that it converts unpredictable future expenses into payments that can be budgeted for in advance. From this you will observe that health insurance scheme option in healthcare financing significantly differs from user-fees which in some places are described as 'cash and carry'.

## 2.0 OBJECTIVES

The learner through this unit is to;

- understand what health insurance scheme means,
- know the various types of health insurance sheme, and
- know some of the problems that can be encountered in health insurance scheme.

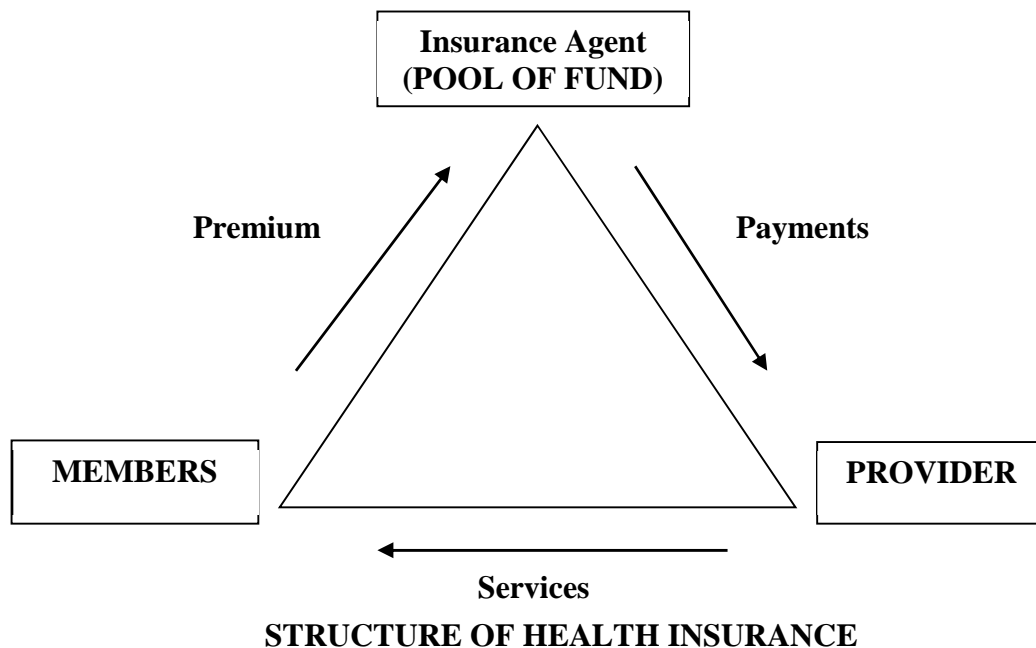
## 3.0 MAIN CONTENT

### 3.1 Definition of Health Insurance

**Health insurance** is a system in which prospective consumers of care make payment to a third party in the form of an insurance scheme, which in the event of future illness will pay the provider of care for some or all of the expenses incurred. Health insurance is a type of insurance whereby the insurer pays the medical costs of the insured if the insured becomes sick due to covered causes, or due to accidents. The insurer may be a private organization or a government agency. Health insurance is an agreement between a person, who is called the policy holder, and an insurance

agent. Insurance agents or carriers are organizations that offer financial protection in case of illness or injury and pays for the policyholder's medical treatment.

The fundamental concept of health insurance is that it balances costs across a large, random sample of individuals. For instance, an insurance company has a pool of 1000 randomly selected subscribers with each paying N1000.00 per month. Fifty of them get really sick that month while the others stay healthy, which means the insurance company, can use the money of the paid by the healthy people to treat the sick persons.




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### SELF ASSESSMENT EXERCISE 1

Briefly describe the concept of health insurance scheme.

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### 3.2 History and Evolution of Health Insurance

The concept of health insurance was proposed in 1694 by Hugh the Elder Chamberlen from the Peter Chamberlen family. In the late 19<sup>th</sup> century, early insurance was actually disability insurance that covered cost of emergency care for injuries that could lead to disability. This continued until the 20<sup>th</sup> century where all laws in some jurisdictions in US regulating health insurance actually referred to disability insurance and patients were expected to pay for all other costs of medical care in a form of fee for service. Today health insurance schemes cover a wider area of healthcare to include the cost of routine, preventive, and emergency healthcare procedures.



The origin of health insurance can also be traced to medieval Europe when labour unions, associations of employers of labour and craftsmen formed guilds which in turn created funds to help members in times of need on account of illness. Although they started with cash benefit they later broadened the scope to request doctors to certify illnesses and paid them to provide healthcare for members. New incentives then came from employers with the scheme becoming compulsory as employers in specific high-risk industries such as mining, began to make employment often tied together with willingness to pay contributions. With these, came the development of earnings-related contributions rather than risks-related contributions. This potential for such solidarity was exploited in Germany in 1883, Austria in 1887, Norway in 1902 and the UK in 1910. By the early 1930s compulsory health had been developed in most industrialized countries of Europe under the name of sickness and maternity insurance.

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## **SELF ASSESSMENT EXERCISE 2**

Write a short essay on the history of health insurance.

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### **3.3 Types of Health Insurance**

#### **3.3.1 Private Health Insurance**

Private health insurance is a contract between an insurance company and the customer and in the private sector. Private insurance can be for **groups** like companies, labour unions, professional association or for **individuals**.

**Private:** This is through employer owned on-sight health facilities or through contract with outside providers, contribution payable is based strictly on the needs of the individual i.e. the higher the health needs of the contribution the higher the payment.

#### **3.3.2 Public Health Insurance**

The public sector third party may be parastatals, insurance scheme, government, and social security and sometimes the providers. With the publicly funded health insurance, the good and the bad risks all receive coverage without regard to health status, which eliminates the problem of adverse selection and amplifies the problem of moral hazard.

### 3.3.2 Social Insurance

Insurance program financed by government through tax revenues that guarantee citizens financial benefits for events which are beyond individual control, such as old age, disability and poor health. Payment is irrespective of the needs and is usually based on employment and income.

### 3.3.4 Community Sponsored Insurance

A community based program which normally operates in the rural areas and mostly localized e.g. healthcare scheme in Thailand, Tsonga in Kwara State, Nigeria.

**Other types of Health Insurance Scheme (HIS) include**

#### 3.3.5 Direct

Here the Health Insurance Scheme builds or rents its own healthcare premises exclusively for the use of the insured persons.

#### 3.3.6 Indirect

Here the scheme makes contracts with selected providers for the provision of defined services at negotiated prices; the authority rather than the insured persons makes the payment.

#### 3.3.7 Reimbursement

The patient buys his own medical care in the private market and then sends the receipted bills to the insured who reimburses the insured person either for part of the full cost or on the basis of standard payment for a particular service which will normally be well below the prices actually paid.

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### SELF ASSESSMENT EXERCISE 3

List the types of health insurance scheme and explain each type briefly

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#### 3.4 Problems of Health Insurance Include:

1. Increasing cost of healthcare.
2. Some private insurance companies charge people at different rates based on their own personal health.

3. Some medical problems may not be covered by the scheme.
4. Healthcare recipient is not involved in negotiating the cost of care. Some healthcare providers have popular and unpopular ways of controlling these costs.
5. Some providers may have different rates for the same procedure for those insured and those not insured.

### 3.4.1 Problems with Private Health Insurance

There are two main problems and these are adverse selection and moral hazard.

**Adverse selection** - Describes the tendency for only those who will benefit from insurance to buy it or participate in it. Adverse selection can leave an insurance company with primarily sick subscribers and will have the problem of balancing out the cost of medical expenses with a large number of healthy subscribers. This is because unhealthy people are more likely to purchase health insurance because they anticipate heavy medical bills whereas those who consider themselves to be healthy may decide that medical insurance is an unnecessary expense; if they see a doctor once in a year and it costs N500.00, that much better than making monthly insurance of N600.00. The insurance companies too can deny those with medical history suggestive of a future a heavy financial burden may be denied or screened out.

**Moral hazard** – Describes the state of mind and change in behaviour that results from the knowledge the health insurance will take care of medical bills and people therefore overuse medical care since they do not incur out-of-pocket expenses. Where health insurance is in practice, people who do not have insurance cover or are under-insured may wait for too long out of fear of high medical bills until the illness become life-threatening.

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### SELF ASSESSMENT EXERCISE 4

Describe the observed and likely problems of health insurance scheme from your view of our health system.

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## 4.0 CONCLUSION

Health insurance is an option of health financing that is used in most developed countries and increasing number of developing countries are also practicing health insurance scheme. It converts unpredictable future expenses into payments that can be budgeted for in advance. There are various

types of health insurance scheme. The scheme now appear to be a sustainable way of financing healthcare and reduces the problem of 'cash and carry' health financing and this to a large extent reduces the emergency of huge financial burden when household need to utilize healthcare services.

## **5.0 SUMMARY**

This unit has given you a definition of health insurance and described the various types of health insurance. They include private and public health insurance, direct and indirect health insurance, social insurance, community health insurance and reimbursement health insurance. The various problems that can be encountered in health insurance scheme are described in this module. Also described are the two main problems in private health insurance which are; adverse selection and moral hazard.

## **6.0 TUTOR MARKED ASSIGNMENTS**

1. Describe the various types of health insurance schemes known to you.
2. What are the common problems of private and public health insurance scheme?

## **7.0 REFERENCES / FURTHER READINGS**

Financing District Health Services. International Workshop held 11<sup>th</sup> – 15<sup>th</sup> April 1994 in Nairobi Kenya. Published by GTZ Eschborn, Germany.

GTZ (Deutsche Gesellschaft fur Technische Zusammenarbeit) Workshop Report.

[http://www.paho.org/English/DD/PIN/ptoday18\\_sep05.htm](http://www.paho.org/English/DD/PIN/ptoday18_sep05.htm)

World Bank (1994). Development in Practice Better Health in Africa: Experience and Lessons Learned. The International bank for Reconstruction and Development / The World Bank.

**MODULE 3**

- Unit 1      Healthcare financing in Nigeria
- Unit 2      National Health Insurance Scheme in Nigeria
- Unit 3      Strategies for implementation of NHIS in Nigeria
- Unit 4      Economic evaluation of health programs

**UNIT 1      HEALTHCARE FINANCING IN NIGERIA****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 National Health Policy on Healthcare Financing
  - 3.2 Health Financing by tiers of Government
  - 3.3 Options in healthcare financing
  - 3.4 Healthcare expenditures
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## 1.0 INTRODUCTION

Health is fundamental to the socio-economic development of any nation. Nigeria like many other countries have its people health funded by government, but as result of the inadequacy of government funding several other options in healthcare financing are also in place.

All tiers of government are involved in health care financing even though the level of health they fund differ. The proportional allocations of money to health sector out of the total budgetary expenditure by these tiers of government vary considerably. Effective use of the meager financial resources available to the health sector in Nigeria remains a problem and challenge.

## 2.0 OBJECTIVES

In this unit learners are expected to:

- understand the what the National Health Policy is on healthcare financing,
- know about the various roles of the different tiers of government in healthcare financing,
- be able to describe the various options in healthcare financing that is used in Nigeria, and
- familiarize themselves with the pattern of healthcare expenditure in Nigeria.

## 3.0 MAIN CONTENT

### 3.1 National Health Policy on Healthcare Financing

The 1988 National health policy declares that Federal and State Government shall review their allocation of resources to the health sector and within available resources give priority to primary healthcare. Also, community resources are to be mobilized in the spirit of self-help and self-reliance.

In the 1988 policy it states that efforts shall be made to redistribute financial allocation among primitive, preventive and curative healthcare services to ensure that more emphasis is placed on primitive and preventive services other highlights on healthcare financing include;

- Exploration of health insurance scheme.
- User charges for curative services but subsidized preventive services.

- ✚ Public assistance shall be provided to the socially and economically disadvantaged segments of the population.
- ✚ Governments of the Federation shall encourage employers of labour to participate in financing healthcare services to employees.

Within the rights of individuals to participate in the economy of the nation, private individuals shall be encouraged to establish and finance private healthcare services in under-served areas.

Within the concept of self-reliance, communities shall be encouraged to finance healthcare directly or find local community solutions to health problems through contribution of labour and materials

Mechanisms shall be established to undertake continuing studies on benefit of various health programmers in relation to costs and inclusion of analysis of needs in terms of cost, material and personnel in all consideration of health technology and of the establishment and maintenance of health infrastructure.

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## **SELF ASSESSMENT EXERCISE 1**

List the major healthcare financing issues addressed by the National Health Policy.

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Recently the public sector reform of government has its own form in the health sector, which is referred to as the health sector reform. Health sector reform seeks to improve efficiency in service delivery, make healthcare accessible and provide quality health services. Government is now outsourcing some of the services in the health facilities like Laundry, Security service, Kitchen among others. Government is also promoting public-private partnership in healthcare delivery.

### **3.2 Health Financing by Tiers of Government**

#### **Local Government**

The provision of primary healthcare is largely the responsibility of the various Local Governments within their Local Government Areas. Each the Local governments are expected to provide the various components of PHC. This requires facilities, equipments and personnel.

The Local Government provides funding for this levels of care particularly the public institutions providing this care.

#### **State Government**



The State governments provide secondary healthcare which is specialized care to patients referred from the Primary Healthcare through in-patient and out-patient services of hospitals for general medical, surgical, pediatrics patients and community health services.

Specialized supportive services such as Laboratory, Blood Bank, Rehabilitation and Physiotherapy services are supposed to be available at this level. This type of care is expected to be at the level of districts, Local governments and zonal levels of each State.

In addition to the secondary healthcare service, the State Governments also provide supportive PHC services to the Local Governments.

### **Federal Government**

The Federal Government is involved in provision of specialized services through Teaching Hospital and other special hospitals which provide care for specific disease conditions or specific group of patients e.g. Orthopedic, Ophthalmic, Maternity and Pediatric Hospitals. This level of care requires big facilities, infrastructures and equipment as well as highly skilled personnel. This is financed by the Federal Government although presently some State governments now get involved in provision of this level of care. In addition to this role, the Federal Government also provide supportive and supervisory role to Primary Healthcare at the State and Local Government Levels.

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### **SELF ASSESSMENT EXERCISE 2**

Write briefly on what each tier of government finance in healthcare delivery and give specific examples.

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### **3.3 Options in Healthcare Financing**

### **Government Financing of Healthcare**

This option as in healthcare financing has been in place since the colonial period. From independence government continued to fund healthcare in form of primitive, preventive and curative healthcare as described above.

In the past there were some governments that had free healthcare programmes where the government made healthcare free to its people and bear the cost of such care. The coverage of such healthcare was however grossly inadequate. In view of the very cost required to provide such free healthcare which some of the State governments were unable to provide, the free healthcare programmes virtually became 'no' healthcare. Some particular health needs are still provided free by some State government e.g. free eye tests, maternal care, children care.

### **User charges**

This option in healthcare has been in place over a long period. Though initially at a low scale, but is now increasing and the most dominant in healthcare financing in Nigeria. This is with its advantages and disadvantages. Remember you learnt the various advantages and disadvantages of this option in healthcare financing in Unit 6 of this module. Affordability of cost of healthcare is a big problem to many Nigerians and this is affecting utilization of services. Unfortunately patients go for alternatives that are usually sub-standard in terms of quality of care.

### **Community Financing**

In Nigeria, there are several community based organizations. Some of these organizations engage in self-help projects which include health related activities. Some communities erect buildings for health centre.

Some provide labour to augment healthcare financing in their areas.

Communities are sometimes involved in preventive healthcare services in the form of digging of public wells, construction of public latrines.

Some communities are however faced with poor contributions to sustain projects they had earlier embarked upon. At the same time some community projects that were completed and handed over to government are poorly maintained.

## Health Insurance

The National Health Insurance scheme which had been on the drawing board for decades in Nigeria has been launched and is in its early phase of implementation. Most of the people currently enrolled on the scheme are public civil servants. The scheme with time will cover increasing number of people in the country.

Private healthcare financing is also available in some urban settings in Nigeria. Unit 9 discuss in more details health insurance scheme in Nigeria.

## Foreign Aid

Nigeria receives foreign aid from several international agencies and bilateral government agencies. Some of these funds are channeled through the National Planning Commission. A number of international agencies also channel funds directly to various levels of government, Non-Governmental Organizations and religious groups.

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### SELF ASSESSMENT EXERCISE 3

- i. Describe the various options of healthcare financing in the community where you work.
- ii. List areas of differences in healthcare financing options in the community where you come from.

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### 3.4 Healthcare Expenditures

Total public health expenditures consist of expenses incurred in the provision of all forms of healthcare by all levels of government. There is insufficient data on this. Available data point to the fact that public expenditures in the health sector has been very low either when compared with those of other key sectors of the economy, such as education, agriculture, etc or when expressed in percentage terms in relation to the gross domestic product. Total government expenditure in relation to GDP ranged from 4.3–5.5% from 1998 to 2 004. In percentage terms, the federal health sector in relation to total federal government expenditures fluctuated between 0.98% and 2.51 % between 1980 and 1990. Recent data suggest a little increase in percentage budgetary allocation to the health sector but still far short of World health Organization recommendation of a minimum of 15% to the health sector.

While the health sector in the 70s and early 80s consumes between 2.0% and 3.0% of the Federal recurrent budgetary allocation, its share in the State and Local Government levels range from 10-11% and 31- 40% respectively. Between 1998 and 2004 government expenditure on health as a proportion of total expenditure ranged between 3.1 – 7.1%.

Total health expenditure reveals that at all levels of government; recurrent expenditures take the lion share. At the Federal level, the recurrent share of the health budget was between 64.8% and 70.0% between 1980 and 1990 respectively.

Also, on the average for State and Local governments 80.0% and 90.0% of the health budget is devoted to recurrent expenditure, while personnel cost dominates the recurrent expenditure. User fee (out-of-pocket expenditure) is the predominant expenditure for healthcare in Nigeria.

As a proportion of total expenditure on health, user fees ranged from 90.4 – 95.0% between 1998 and 2004.

Federal allocation to Primary Healthcare (PHc) has been negligible less than 0.5% of recurrent expenditures. Although the proportion is still low, there is an indication that the policy emphasis on PHc in recent time has led to a gradual increase in the level of its funding. However, major part of the State and total Local government health budget is devoted to PHc.

Out of the total budgetary allocation to the health sector, a disproportionately high percentage is expended on recurrent expenditure to the detriment of capital expenditure. This is responsible for the rapid decline in standard of public health facilities, poor infrastructures and inadequate equipments for health services.

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#### **SELF ASSESSMENT EXERCISE 4**

Write on the major features of healthcare expenditures in Nigeria.

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#### **4.0 CONCLUSION**

Healthcare financing is addressed by the National Health Policy. Adherence to the National Policy on health financing does not appear satisfactory. Government funds both preventive and curative healthcare but the gap in funding over the years has brought in other options in healthcare financing. Available data suggest that user fees (out-of-pocket expenses) is the highest contributor

to healthcare financing in Nigeria. Generally government funding of healthcare in Nigeria is far below WHO requirement.

## **5.0 SUMMARY**

In this unit you have been put through the Healthcare financing from the perspective of the National Health Policy. The various options of healthcare financing in Nigeria has been described. This unit also helps you to understand the trend and pattern in healthcare expenditures in Nigeria and this will help you understand the current state of health facilities and services.

## **6.0 TUTOR MARKED ASSIGNMENTS**

1. Describe the various options in healthcare financing in Nigeria.
2. Write on the pattern and trend in healthcare expenditure in Nigeria.

## **7.0 REFERENCES/FURTHER READINGS**

Alausa O.K., Osibogun A. (1996) Healthcare financing in a depressed economy – options for Nigeria. *Nigeria Journal of Health Planning and Management* 1(2):37 – 40.

FMOH. (1998). *The National Health Policy and Strategy to Achieve Health for all Nigerians*. Federal Ministry of Health, Nigeria. 49 -50

[http://www3.who.int/whois/core/core\\_select\\_process.cfm?country.NGA](http://www3.who.int/whois/core/core_select_process.cfm?country.NGA)

<http://www.who.int/nha/country/nga/en/> 3-2-07

**UNIT 2      NATIONAL HEALTH INSURANCE SCHEME IN NIGERIA****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 History perspective
  - 3.2 NHIS: Nigerian concept
  - 3.3 Objectives of the Scheme
  - 3.4 Healthcare benefits of the scheme
  - 3.5 How the scheme works
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## **1.0 INTRODUCTION**

Health Insurance Scheme is now in place in Nigeria as one of options for healthcare financing. The history of health insurance scheme in Nigeria is over 3 decades but not until 1997 that the scheme was officially launched. The implementation of the scheme in Nigeria is planned to be in phases commencing with public civil servants. Private sector involvement is incorporated into the scheme with the use of Health Maintenance Organizations (HMOs) to collect contributions from participants and also pay providers of services.

## **2.0 OBJECTIVES**

In this unit readers will be made to:

- know the historical background of health insurance in Nigeria,
- know the objectives of the scheme and the healthcare covered by the scheme,
- understand how the scheme works.

## **3.0 MAIN CONTENT**

### **3.1 Historical Perspective**

In Nigeria, the first search for health insurance system started in 1962 during the first republic. The federal government invited Dr. Halevi through the International Labour Organization (ILO) to look into starting an health insurance system in Lagos.

Dr. Halevi supported the system but the Nigerian Medical Association opposed it. The civil war years, caused the matter to be shelved but was resuscitated by the National Council on Health in the early 80s, two decades after. The Minister of Health, Admiral Patrick Koshoni, on the advice of the National Council of Health commissioned a study led by Professor Diejomaoh of the Nigerian Institute for social and economic research (1984). This was later followed in 1965 by a feasibility study chaired by Mr. Yinka Lijadu of the National Insurance Corporation of Nigeria which found the scheme feasible, workable and desirable in Nigeria. Finally, in 1988, Professor Olikoye Ransome Kuti, commissioned the National Committee on Establishment of the NHIS, chaired by Emma-Eronini and recommended the capitation model, which is easy to run and almost tailor made for our health system and traditions. The United Nations Development Programme (UNDP) and ILO consultants along with others conducted their own studies in Nigeria to provide

costing, draft legislation and implementation guidelines for establishing the scheme in 1992. Then the federal executive council, which had given its approval in 1989, directed federal ministry of health in 1993 to start the scheme, which was launched in 1997, and finally signed to law in May 10, 1999 by the then Head of State General Abdulsalam Abubakar.

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### **SELF ASSESSMENT EXERCISE 1**

Write a short essay on the history of health insurance scheme in Nigeria.

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#### **3.2 NHIS: The Nigerian Concept**

It is a social health security arrangement to provide financial security to the citizens against unforeseen ill health. A scheme established by law number 35 of 1999 to improve healthcare delivery by providing a sustainable alternative source of funding healthcare services. The scheme works on the principle that higher income earners will subsidize those with lower income; and those with lower health needs will subsidize those with higher needs. Resources are pooled among a large population so that sufficient fund will be made available to take care of individuals needing healthcare at any one time. It will be a solution to the problem of inappropriate use of the levels of healthcare leading to unnecessary costs and underutilization. It guarantees access to healthcare as of right to participants.

The establishment of the scheme was informed by the general poor state of the nation's healthcare services especially in relation to accessibility, quality of services rendered, utilization and distribution, the excessive dependence and pressure on the government provided health services, and dwindling funding in the face of rising cost of healthcare services.

#### **3.3 Objectives of the scheme**

The objectives of NHIS include:

1. To ensure that every Nigerian has access to good healthcare services.
2. Protecting families from the financial hardship of huge medical bills.
3. To ensure equitable distribution of healthcare costs among different income groups.
4. Limiting the rise in the cost of healthcare services.
5. To improve and harness private sector participation in the provision of healthcare services.



6. To ensure equitable patronage of all levels of healthcare.
7. To maintain high standard of healthcare delivery services within the scheme.
8. To ensure availability of funds to the health sector for improved services.
9. To ensure efficiency in healthcare services.
10. To ensure adequate distribution of health facilities within the federation.

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## SELF ASSESSMENT EXERCISE 2






List the objectives of the National Health Insurance Scheme

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### 3.4 Healthcare Benefits of the Scheme

The benefits derived from participating in the scheme are defined by law, are fairly comprehensive and include the following:

Defined elements of curative care such as:

-  Outpatient attendance.
-  Maternity care for up to four births for every insured person.
-  Consultation with defined range of specialist.
-  Hospital care in a public or private hospital in a standard ward, during a stated duration of stay, for physical or mental disorders.
-  Eye examination and care, excluding tests for and the actual provision of spectacles.

Defined dental care:

- Consultant, Oral examination, preventive care and pain relief.
- Preventive care including immunization, family planning, ante-natal, post-natal care and health education.
- Prescribed drugs and diagnostic tests.
- Prostheses and rehabilitation.

From the above it is evident that the contribution of a small affordable amount buys a lot in terms of healthcare.

### **3.5 How the Scheme Works**

For participation in the scheme, contributors will first register with an NHIS approved Health maintenance Organization (HMO) and thereafter register with a primary healthcare provider of his/her choice for an approved list of providers supplied HMOs. When a contributor is registered he will be issued an Identity card (ID) card with a personal identification number. In the event of sickness the contributor presents his ID card to his chosen primary healthcare provider (PCP) for treatment. A contributor has a right to change his PCP after a minimum period of six months if he is not satisfied with his services. Disputes between actors in the scheme shall be settled by arbitration boards to be set up at state level, whose membership includes representative of NMA; Pharmaceutical Society of Nigeria; The National Association of Nigerian Nurses and Midwives and the public. The HMO will make payment for services rendered to him to the healthcare provider. A contributor may be asked to make a small co-payment per prescription at the point of service.

A contribution made by the insured person entitles himself or herself, spouse and four children under the age of 18 years to full health benefits. However students in school upon to the age 25 years qualify as dependants. Extra contributions will be required for additional dependants. Contribution to be made by formal sector employees for health benefits under the scheme will be 15% of wages, the payment of which will be by both the employee and the employer. The employee pays 5%, while the employer makes up the remaining 10%. The employee's part of the contribution is to be deducted from his pay with the employer adding his own and subsequently forwarding the total payment to the appropriate quarters.

The implementation of the scheme is planned to be in phases to cover all Nigerians categorized as follows:

1. Employers in the formal sector (public and private) – their contribution will be paid by their employers and those in public sector by the federal state local governments parastatals and agencies as appropriate.

2. Self-employed person (market women, traders, artisans, farmers and businessmen etc) – they will be encouraged to pay their contributions either by themselves or through cooperatives formed by them.
3. Rural dwellers –for this group suitably priced programmes designed for them will be implemented in consultation with various organizations such as the community banks, cooperatives, local state and federal governments as well as donor agencies and other NGOs.
4. Vulnerable groups which include the unemployed, the aged, the disabled, the street children, the retarded and the retirees – their contribution will be paid on their behalf by the federal government, state government and local governments NGOs, local community and philanthropists.

It is however important to emphasize that coverage will be phased starting with employees in the formal sector representing a definable group.

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### **SELF ASSESSMENT EXERCISE 3**

Write briefly on how the National Health Insurance Scheme works.

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#### **4.0 CONCLUSION**

The National health Insurance Scheme is set to provide access to quality healthcare to all Nigerians. Quality, accessible and sustainable healthcare that is adequately funded, will be guaranteeing a healthy populace, also provide an economically productive one, the benefits of which will be accruable to the individual, the organization and to the Government. The scheme is already being implemented in the country and started with workers in the public sector.

#### **5.0 SUMMARY**

In this unit you have read through the history of health insurance scheme in Nigeria and the objectives of the scheme were itemized. Also the various benefits of the scheme are listed. You have also been able to understand how the scheme works. The next unit will discuss the strategies and action points in the implementation of the scheme.

## 6.0 TUTOR MARKED ASSIGNMENTS

Write an essay on the history of Health Insurance Scheme in Nigeria.

## 7.0 REFERENCES/FURTHER READINGS

Akande T.M., Olugbenga-Bello A.I. National Health Insurance Scheme in Nigeria. Medilor Vol. 7 No.1:21 – 25.

Aruna O.S. The National Health Insurance Scheme- Concept and Implementation

Katibi I.A., Akande A.A., Akande T.M. Awareness and attitude of medical practitioners in Ilorin towards National Health Insurance Scheme. Nigeria medical Practitioner Vol. 43 No. 2: 33 – 35.

NHIS National Health Insurance Scheme (NHIS) Guidelines. NHIS Abuja.

Onafase A.N. (1998). The Perceived role of private insurance companies in the national Health insurance scheme. Ilorin doctor.

Oniyia J.C (2001). Essential information for medical lab. Scientists. Lab news. 9 – 10.

Report of technical committee on the coverage of the vulnerable group in the national health insurance scheme December 1999.

Sambo M.M (2001). The National Health insurance scheme (Paper presentation).

**UNIT 3      STRATEGIES FOR IMPLEMENTATION OF NHIS IN NIGERIA****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Strategies/implementation action points in Nigeria
    - 3.1.1 Use of HMOs
    - 3.1.2 Involvement of insurance companies
    - 3.1.3 Malpractice Insurance
    - 3.1.4 Registration/Licensing of healthcare providers
    - 3.1.5 Payment system
    - 3.1.6 Responsibilities of the providers
  - 3.2 Classification of health providers
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## **1.0 INTRODUCTION**

In Unit 9 you read through the history of health insurance scheme in Nigeria, the objectives of the scheme as well as the benefits of the scheme.

In this unit you will be exposed to the strategies in the implementation of the scheme in Nigeria. In the evolution of the National Health Insurance Scheme, the recognition of inefficient and inappropriate use of resources as prevalent and recurring problems in the health sector, informed the decision to make the scheme private-sector driven. This led to the introduction of HMOs as integral stakeholders in scheme.

## **2.0 OBJECTIVES**

In this unit readers will be made to:

- know the strategies for the implementation of National Health Insurance in Nigeria,
- know the action points in the implementation of NHIS, and
- understand the classification of the various healthcare providers in the scheme.

## **3.0 MAIN CONTENT**

### **3.1 Strategies/Implementation Action Points in Nigeria**

#### **3.1.1 Use of HMOs**

As the financial managers of the scheme and their functions include:

1. Collection of contributions from eligible employers and employees.
2. Collection of contributions from other contributors.
3. Payment of healthcare providers for services rendered.
4. Maintenance of quality assurance in the delivery of healthcare benefits under the scheme.

Private or public individuals/establishments may form these organizations, which are limited liability companies solely formed for the purpose of provision of health services and registered by the scheme.

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**SELF ASSESSMENT EXERCISE 1**

- i. What is Health Maintenance Organization (HMO)?
- ii. Mention some of their functions.

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**3.1.2 Involvement of Insurance Companies**

The NHIS saw a need to entrust the provision of the malpractice insurance to only reputable and reliable companies. The role of Insurance in the Scheme also includes Healthcare delivery as Health Insurance Companies.

As the private sector has now been allowed full participation in the operation of the National Health Insurance Scheme, the operative from this sector are to be:

1. Health Maintenance Organizations (HMOs) to be formed by Healthcare Management professionals.
2. Health Insurance Companies (HICs) to be formed by insurance professionals for the purpose of NHIS.

An insurance company with adequate resources could form a health insurance subsidiary for this purpose. In the alternative; a number of companies may jointly register a Health Insurance subsidiary. However, the role of both HMOs and the HICs would be the same, as both of them would ensure that health providers provide the required healthcare to the insured user under the scheme.

To be able to perform this role the Health Insurance Companies must be registered by the Corporate Affairs Commission, satisfy the requirements of National Insurance Commission and must ultimately be registered by the National Health Insurance Council. As the scheme is expected to take off initially only in some pilot states, each HIC is expected to put in place necessary facilities for efficient operation in the zone in which the company will operate. For proper functioning, it is advisable that Healthcare management professionals form part of the health Insurance Companies.

The HICs are expected to be associated with HMOs who will carefully select from the registered healthcare providers, those they would use for their key role of healthcare delivery to their insured. Proper record keeping and regular monitoring of their operations, using modern information technology will enhance the success of the scheme.

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**SELF ASSESSMENT EXERCISE 2**

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In what ways can insurance companies be involved in NHIS?

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**3.1.3 Malpractice Insurance**

In order to ensure seriousness in the healthcare providers and also that compensation is available for an aggrieved user of their service or negligence; the National Health Insurance Scheme requires every healthcare provider to have in force malpractice insurance. It is expected to be one of the conditions of their registration. As medical practice is noted for its nomenclature, malpractice insurance seems to be the medical nomenclature for professional indemnity insurance.

Apart from the physician, all other professionals in the healthcare provider's outfit such as nurses, midwives, pharmacists, physiotherapists, radiographers should possess valid professional indemnity insurance either as an individual or as a corporate body, depending on their mode of operation.

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**SELF ASSESSMENT EXERCISE 3**

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How relevant is malpractice insurance in healthcare delivery in Nigeria?

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**3.1.4 Registration/Licensing of Healthcare Providers**

A healthcare provider is a licensed government or private healthcare practitioner or facility registered by the scheme for the provision of health benefits to contributors and their dependants.

They are classified under the scheme as either a primary healthcare provider or a fee-for service healthcare provider.

The primary healthcare provider (gate-keeper) will serve as first contact with the care system and they include:

- Private clinic/ hospital
- Primary healthcare centre (private or Government)
- Nursing and maternity homes (overseen by a doctor)
- Outpatient department of General, Specialist and Teaching Hospitals.



Payment for services rendered by these providers to contributors shall be by capitation. This is a predetermined sum of money paid by the HMOs on behalf of a contributor for services rendered by the provider. This payment is made monthly whether or not the services are used. The fee-for-service healthcare provider include: specialist doctors, pharmacists, laboratory scientists, radiographers, physiotherapists and dentists.

The provider shall only provide services to the contributor on referral from the primary healthcare provider, the essence of which is to ensure the appropriate use of the levels of healthcare for efficiency. Their payment will be made immediately on completion.

### **3.1.5 Payment System**

Health providers under the scheme will be paid either by capitation or fee-for service rendered. Capitation is the payment to a primary healthcare provider by the HMOs on behalf of a contributor for services rendered. This is made monthly whether or not the services are used.

**Fee-for service-:** this is made by HMOs to non-capital receiving healthcare providers who render services on referral from other healthcare providers.

When a registered client in a health facility consumes some form of healthcare, the client is required to pay directly to the provider 10% of the total cost of care consumed that are within the coverage of the scheme.

### **3.1.6 Responsibilities of the Provider**

The NHIS is a worthwhile scheme that will be of immense benefits to the entire stake-holders, including the healthcare providers. But any provider who hopes not only to survive but also grow in the new dispensation must be well equipped to cope with the changes that are imminent with new healthcare funding arrangements. A good understanding of the principles of the NHIS is imperative. For the scheme to succeed there are responsibilities imposed on the healthcare providers and they include:

1. Provision of agreed services that are of good quality to the patient at all times.
2. The provision and maintenance of standard facilities in their establishment.

3. Providers' facilities are required by law to set up quality assurance programmed. Such programmers must be well-defined, comprehensive, problem-focused, effective, well-coordinated, and flexible and cost efficient.
4. Creating means effective communication with patients, their relations and friends and putting in place an efficient feedback mechanism to get the views of patients, monitor their reactions and level of satisfaction with the types/quality of service offered, and ensuring the needed adjustment are made.
5. The provider should at all times abide by the provision of the legal agreement between himself and the HMO.
6. There should be in place organized booking system to reduce waiting time for patients to a minimum level.

### **3.7 Classification of Healthcare Providers**

#### **1. Primary Healthcare Providers** – this is the first contact with the Scheme i.e. gatekeepers.

This can be narrowed into primary healthcare centers which include:

- i) Comprehensive healthcare centers.
- ii) Nursing and maternity homes (With prove of access to Medical Practitioner).
- iii) Out-patient departments of General Hospitals, Specialty Hospitals, Specialist Hospitals, Federal Medical Centers, Teaching Hospitals, Armed Forces, the Police and other uniformed services Hospitals/Clinics, University Medical Centers, and Federal Staff Clinics/Hospitals.
- iv) Non-specialist private hospitals and clinics.

#### **2. Secondary Healthcare Providers** – they provide health services on referral from Primary Providers. These include:

- i) General/Divisional Hospitals (out-patient specialist care and in-patient care for medical, surgical, pediatrics, obstetrics and gynecology etc),
- ii) Specialist Hospitals/Reference Hospitals
- iii) Federal Medical Centers

- iv) Pharmacies
- v) Laboratories
- vi) Dental clinics
- vii) Physiotherapy clinics
- viii) Radiography centers, etc.

**3. Tertiary Healthcare Providers** provide health services on referral from primary and secondary levels. These include:

- i) Teaching hospitals ;
- ii) Specialist hospitals,
- iii) Specialty/specialized hospitals (orthopedic, psychiatric, etc),
- iv) Federal medical centers, and
- v) Military reference hospitals.

#### **4.0 CONCLUSION**

The National Health Insurance Scheme is set to provide access to quality healthcare to all Nigerians. Beneficiaries of the scheme register with a Health Maintenance Organization that collects contribution from the employee and employer and also make payment to providers of health services. Clients are expected to make use of health facility through a primary care provider who refers the patient to other levels if necessary.

#### **5.0 SUMMARY**

Private participation in the scheme through Health Maintenance Organizations has been described. The strategies and implementation action points of the scheme are also described in this unit. You have also been exposed to the classification of health facilities for the purpose of effective functioning and referral system within the scheme.

#### **6.0 TUTOR MARKED ASSIGNMENTS**

1. Write an essay on the Operations of the National Health Insurance Scheme.

## **7.0 REFERENCES/FURTHER READINGS**

Akande T.M., Olugbenga-Bello A.I. National Health Insurance Scheme in Nigeria. Medilor Vol. 7 No.1:21 – 25.

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Aruna O.S. The national Health Insurance Scheme- Concept and Implementation

Katibi I.A., Akande A.A., Akande T.M. Awareness and attitude of medical practitioners in Ilorin towards National Health Insurance Scheme. Nigeria medical Practitioner Vol. 43 No. 2: 33 – 35.

NHIS National Health Insurance Scheme (NHIS) Guidelines. NHIS Abuja.

Onafase A.N. (1998). The Perceived role of private insurance companies in the national Health insurance scheme. Ilorin doctor

Oniyia J.C (2001). Essential information for medical lab. Scientists. Lab news. 9 – 10.

Report of technical committee on the coverage of the vulnerable group in the national health insurance scheme December 1999.

Sambo M.M (2001). The national Health insurance scheme (Paper presentation).

**UNIT 4      ECONOMIC EVALUATIONS OF HEALTH PROGRAMS****CONTENTS**

- 1.0 Introduction
- 2.0 Objectives
- 3.0 Main Content
  - 3.1 Cost-Benefit Analysis (CBA)
  - 3.2 Cost effectiveness Analysis
  - 3.3 Cost of Illness Evaluation
  - 3.4 Cost-Minimization Analysis
- 4.0 Conclusion
- 5.0 Summary
- 6.0 Tutor Marked Assignments
- 7.0 References/Further Readings

## 1.0 INTRODUCTION

Economic evaluation is now becoming increasingly important and relevant in healthcare delivery. In view of scarce resources, decision makers need to know how best to use the little available funds judiciously. Through economic evaluation various strategies of healthcare delivery can be compared objectively making it relatively easy to choose the best and most efficient service.

## 2.0 OBJECTIVES

In this unit the learner is to:

- understand what economic evaluation is, and
- the various methods of economic evaluation

## 3.0 MAIN CONTENT

### 3.1 Costs-Benefit Analysis (CBA)

The CBA makes comparison on the cost incurred and the benefits obtained from the utilization of resources for healthcare service provision. When the benefits exceed costs, the resources have been effectively utilized. Cost benefit analysis compares the costs and benefits in using resources in a specific way as against alternative uses.

Cost benefit analysis allows for the identification, measurement, and comparison of the benefits and costs of a programme or treatment alternative. The benefits realized from a programme or treatment alternative compared with the costs of providing the programme or treatment alternative. Both the cost and the benefits are measured and converted into the monetary equivalent in the year in which they will occur. Future costs and benefits are discounted or reduced to their current value. The costs and benefits are expressed as a ratio (a benefit– to-cost ratio). If the Benefit/Cost ratio is greater than 1 the program or treatment is of value, i.e. the treatment benefit outweighs the cost of providing the programme. Where Benefit/Cost is equal to 1, then the benefit equals the cost. If Benefit/Cost ratio is less than 1, then the program or treatment is not economically beneficial. To measure in monetary terms the benefit of an health intervention particularly in developing countries is difficult and a major limitation to using this type of economic evaluation.

### 3.2 Cost-Effectiveness Analysis (CEA)

It compares the cost or effectiveness of different options of using resources. Because of the difficulty in measuring benefits particularly humanitarian benefits, cost-effectiveness analysis is often used for economic appraisal in healthcare. CEA is a way of summarizing the health benefits and resources used by competing healthcare programs so that policy makers can choose among them. The outcome unlike the input is not measured in monetary unit.

Cost-effectiveness-Analysis investigates the best and cheapest way of achieving a single objective by comparing effects and costs. The aim of Cost Effectiveness Analysis (CEA) is to determine one of the following;

- ✚ Which of a number of possible interventions achieves a given objective at least cost?
- ✚ Given a fixed budget, what possible intervention maximizes the effectiveness of the expenditure?

The best cost-effective intervention is the one with the lowest total costs and in a situation where interventions are equal in cost, the better one is the one with highest effectiveness. The most cost-effective alternative is not always the least costly alternative for obtaining a specific treatment objective.

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### **SELF ASSESSMENT EXERCISE 1**

Differentiate Cost Benefit Analysis from Cost Effectiveness Analysis

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#### **3.3 Cost of Illness Evaluation**

This identifies and estimates the overall cost of a particular disease on a defined population. This method is often referred to as 'burden-of-illness' and it involves measuring the direct and indirect costs attributable to a specific disease. This method of evaluation does not really compare various strategies. Rather, it helps establish the cost of a particular disease on a defined population.

#### **3.4 Costs-Minimization Analysis**

Cost-minimization analysis (CMA) involves the determination of the least costly alternative when comparing two or more treatment alternatives. In CMA analysis, the alternatives must have an assumed equivalency in outcome. This method of evaluation is simple as it compares competing treatment modalities or programme as long as there is evidence that the outcomes of both modalities are equal.

### **Other forms of Economic Evaluation**

Another form of economic appraisal is Quality Adjusted Life Years (QALYS') which is a cost-utility analysis (CUA). It allows more than one type of outcome to be included unlike CEA. This however assumes that there are no other objectives to healthcare than health maximization.

### **CONCLUSION**

Economic evaluation is becoming increasingly relevant in healthcare delivery. This will assist in making informed choice on the most effective strategies or intervention that can be used in healthcare delivery. Each of these methods of economic evaluation has their limitations and the areas in which they can be applied. Costing the benefit of health intervention or programme is a big challenge in developing countries.

### **5.0 SUMMARY**

In this unit, you have been able to read about economic evaluation. This unit also describes some types of economic evaluation which include; cost benefit analysis, cost effectiveness analysis, cost of illness evaluation and cost minimization evaluation.

### **6.0 TUTOR MARKED ASSIGNMENTS**

1. Describe the various methods of economic evaluation in healthcare delivery.

### **7.0 REFERENCES/FURTHER READINGS**

Abel-Smith B. (1984). Improving cost effectiveness in healthcare. World Health Forum: Vol. 5: 88-90.

Djukanovic, V. and Mach E. (1995). Alternative approaches to meeting basic health needs in developing countries. A Joint UNICEF/WHO study. pp 19 – 21.

GTZ (Deutsche Gesellschaft fur Technische Zusammenarbeit) Workshop Report.

Financing District Health Services. International Workshop held 11<sup>th</sup> – 15<sup>th</sup> April 1994 in Nairobi Kenya. Published by GTZ Eschborn, Germany.



WHO (1981). Guidelines for healthcare practice in relation to cost-effectiveness. Report on a WHO Workshop, Euro Report on a WHO Workshop, Euro reports and studies 53. World health Organization Publication, Geneva pp 32 – 34.

World Bank (1987). Financing health Services in Developing Countries. An Agenda for reform; A World Bank Policy Study, Washington USA, pp 10 – 24.

World Bank (1994). Development in Practice, Better Health in Africa, Experience and lessons learned. A World Bank Publication pp 125 – 142.