
HEALTH ECONOMICS

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COMPILED BY EFFIE NAILA



OUTLINE

Introduction to economics.

The production process.

Macro & Micro – economics.

Introduction to health care financing

Social health insurance

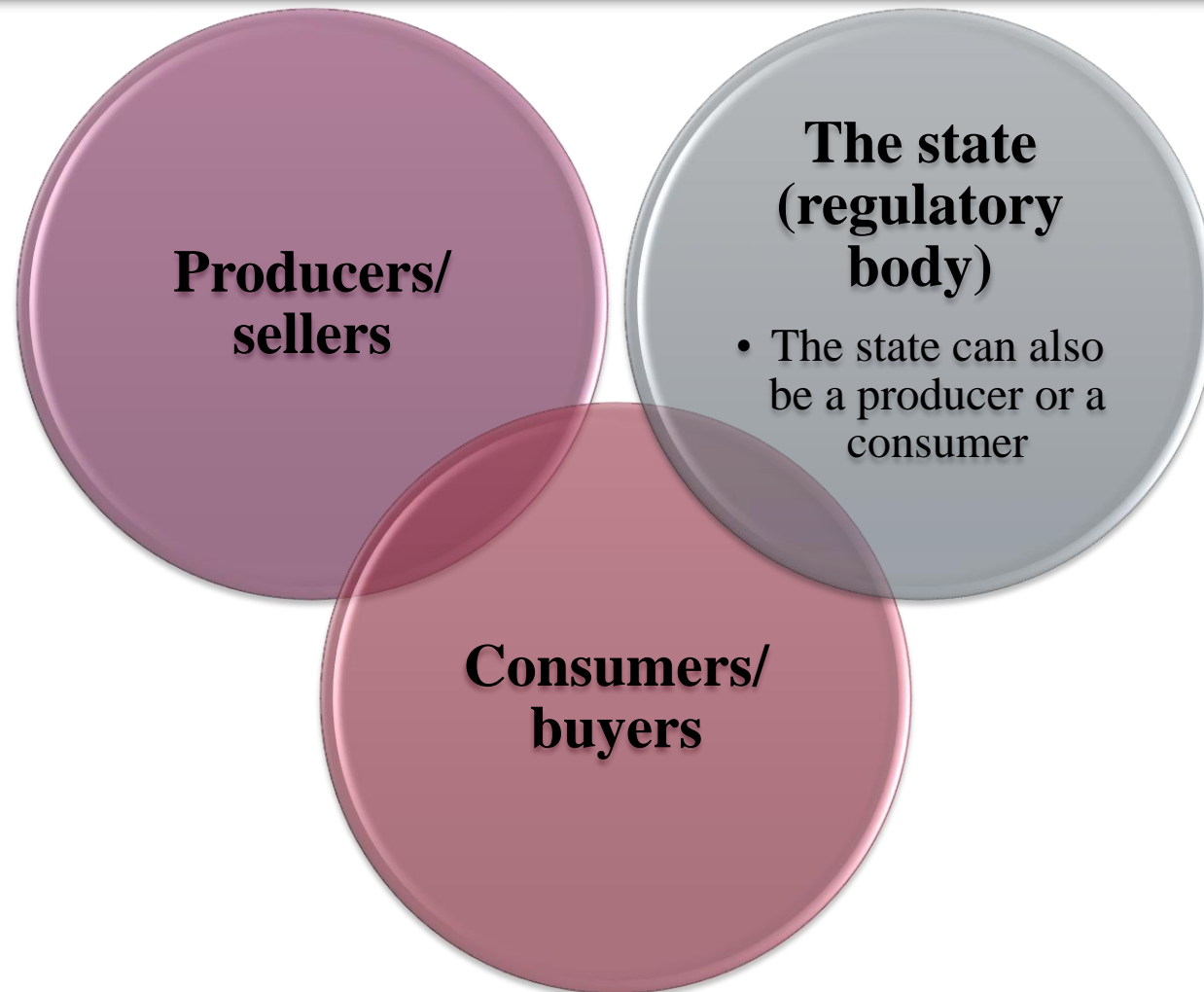
Economics of disease

Health & development

INTRODUCTION TO ECONOMICS

- Economics entails allocation of scarce resources to meet unlimited needs.
- **Scarcity**: this is the concept which determines that we don't have enough resources to meet all our needs hence the individual (and society at large) must make **choices**/ prioritize so that the most important needs are catered for.
- The **opportunity cost**: is the alternative foregone in acquiring a particular good or service.
 - Non – economic goods have no opportunity cost because they have no price attached to them e.g. sunlight.
- **Market**: this is where exchange of goods and services between buyers & sellers takes place. It facilitates the making of decisions on how resources are distributed.

There are 3 factors without which the market can't exist, namely -



Market systems

- Planned economy:
 - The state controls the market e.g. China, Cuba & N. Korea
- Market economy:
 - Citizens are allowed to participate as producers and consumers i.e. what they will produce, when, how & why depending on their respective abilities and wants e.g. in America, Great Britain & Germany
- Pure forms of both don't seem to exist & many times there is a mixed economy.

THE PRODUCTION PROCESS:

Factors of production & their rewards/ incentives

Capital

Interest

Labor

Salary
& wages

Land

Rent

Entrepreneur

Profit

Costs of production

- Variable inputs: inputs whose volume can be adjusted to increase output
- Total output: overall output of the production process
- Fixed costs: do not change with the volume of the output in the short run
- Variable costs: costs that vary with increase in the volume of output
- Total costs: overall cost of the production process
 - $\text{Total cost} = \text{variable cost} + \text{fixed cost}$
- Value added: value of the change effected on the inputs in the production process

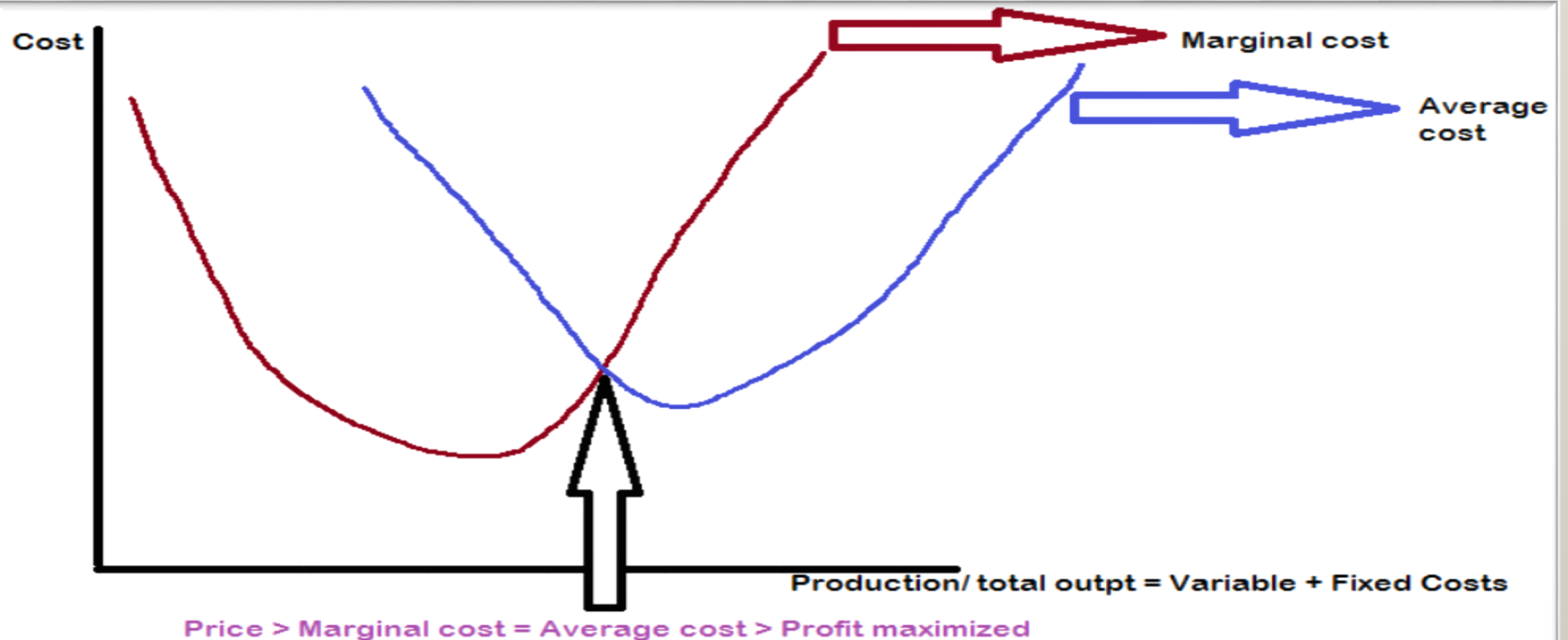
Average costs

- This is the cost per unit item of output produced
- i.e., $\frac{\text{Total cost}}{\text{Total output (Q)}}$
- When considering the average cost, the best criterion to decide on the production levels is when the objective is to minimize costs.
- To move to a lower average cost, a firm is therefore required to increase the fixed factors of production so that they can develop scale economics.

Marginal costs

- This is the cost of producing an additional/ extra unit of output at any given production level.
 - $$\frac{\text{Extra cost of production (change in variable cost)}}{\text{Additional output (change in total output)}} = \frac{C_2 - C_1}{Q_2 - Q_1}$$
- When considering MC, the best criterion to decide on the production levels is when the objective is to maximize profit.
- A firm's break – even is achieved when the price is equal to the marginal cost.
- A firm's decision to maximize profit depends greatly on if the marginal costs are lower than the price of a product, hence expanding production until the marginal costs is equal to price.

Change in MC & AC with increase in total output

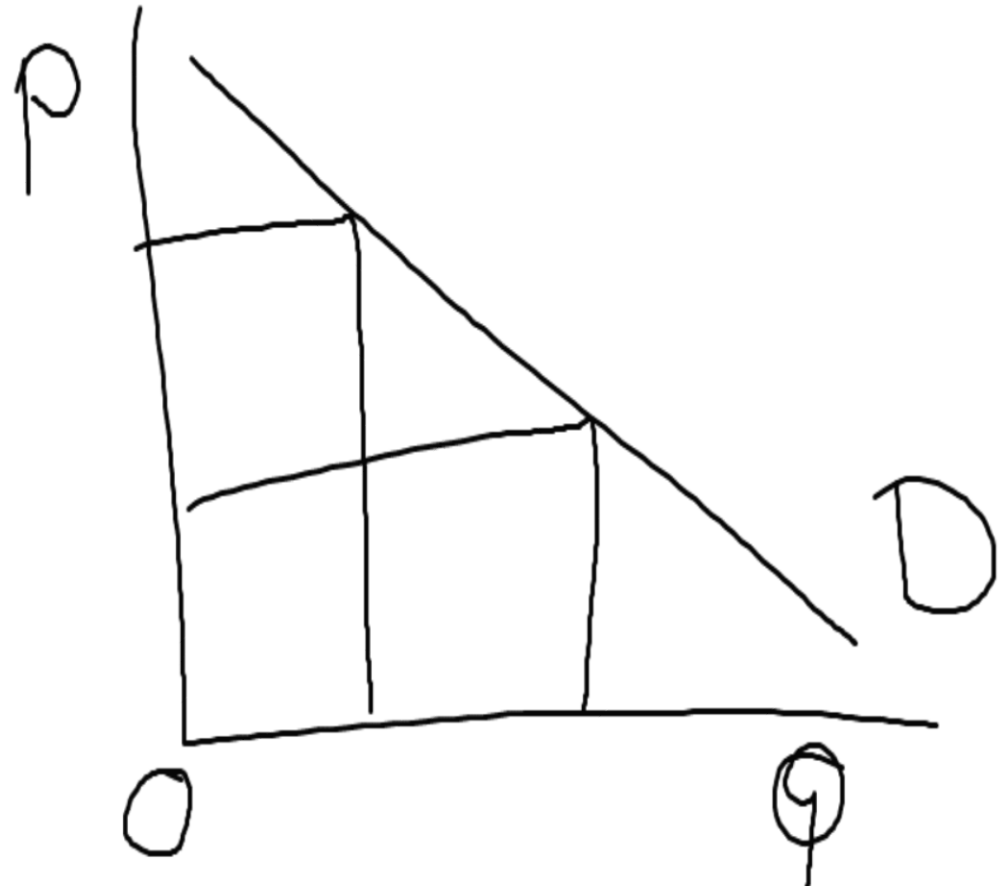


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- The price where the marginal & average costs are equal is the minimum price.
- This means that the producer is making normal profit and that if the price were to go lower than the minimum, losses would result.
- To enable profit maximization, the producer considers the following:
 - Cost
 - Supply curve

The demand curve

- The consumer **maximizes utility** hence resulting in a downward sloping demand curve as shown in the figure.
- NB:
 - Giffen goods or services: are those whose consumption increases with an increase in their price.

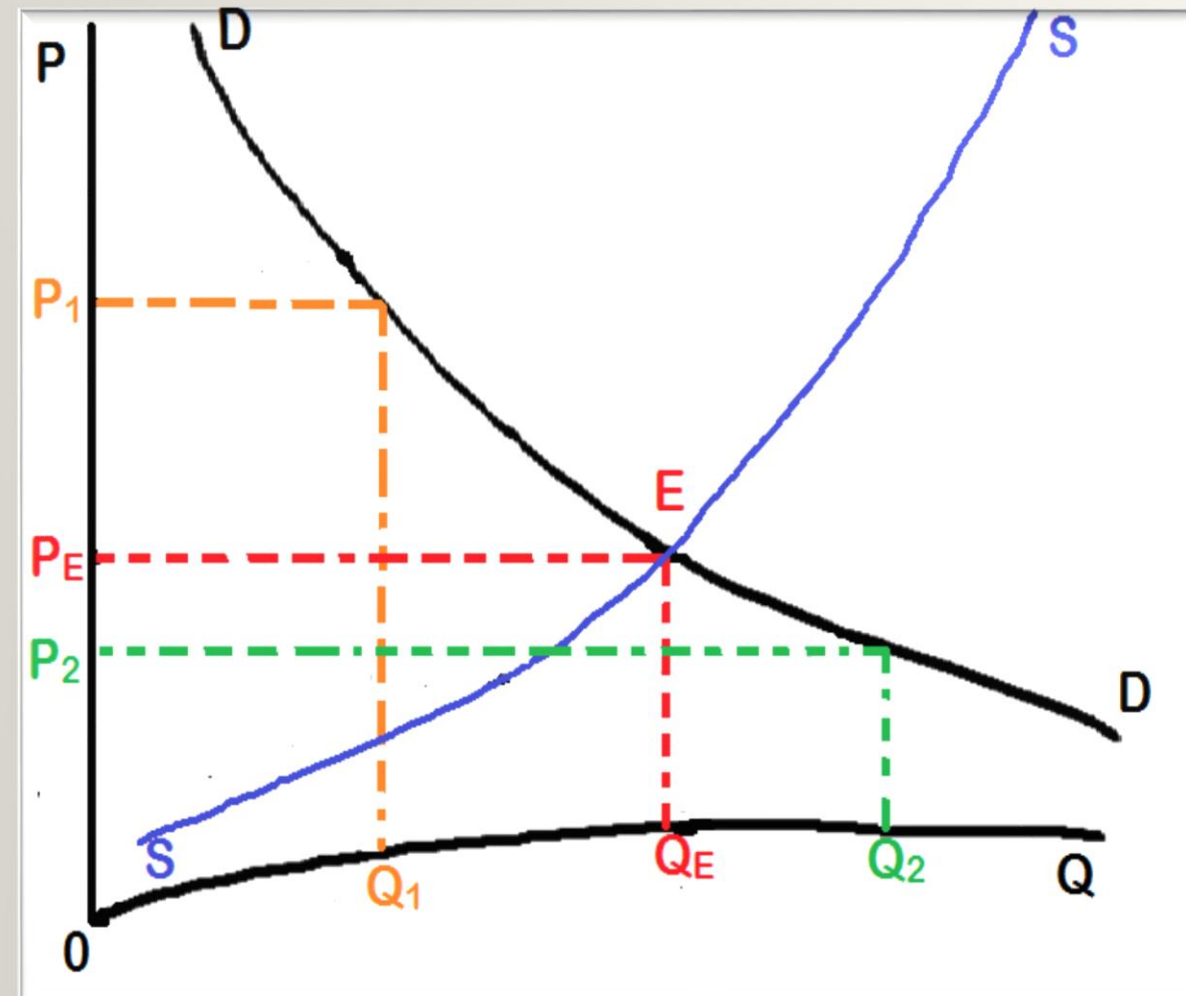


Interactions of supply & demand in the market.

- Movements up & down supply & demand curves entail the following concepts:
 1. Equilibrium point
 2. Shift in supply & demand curve
 3. Elasticity

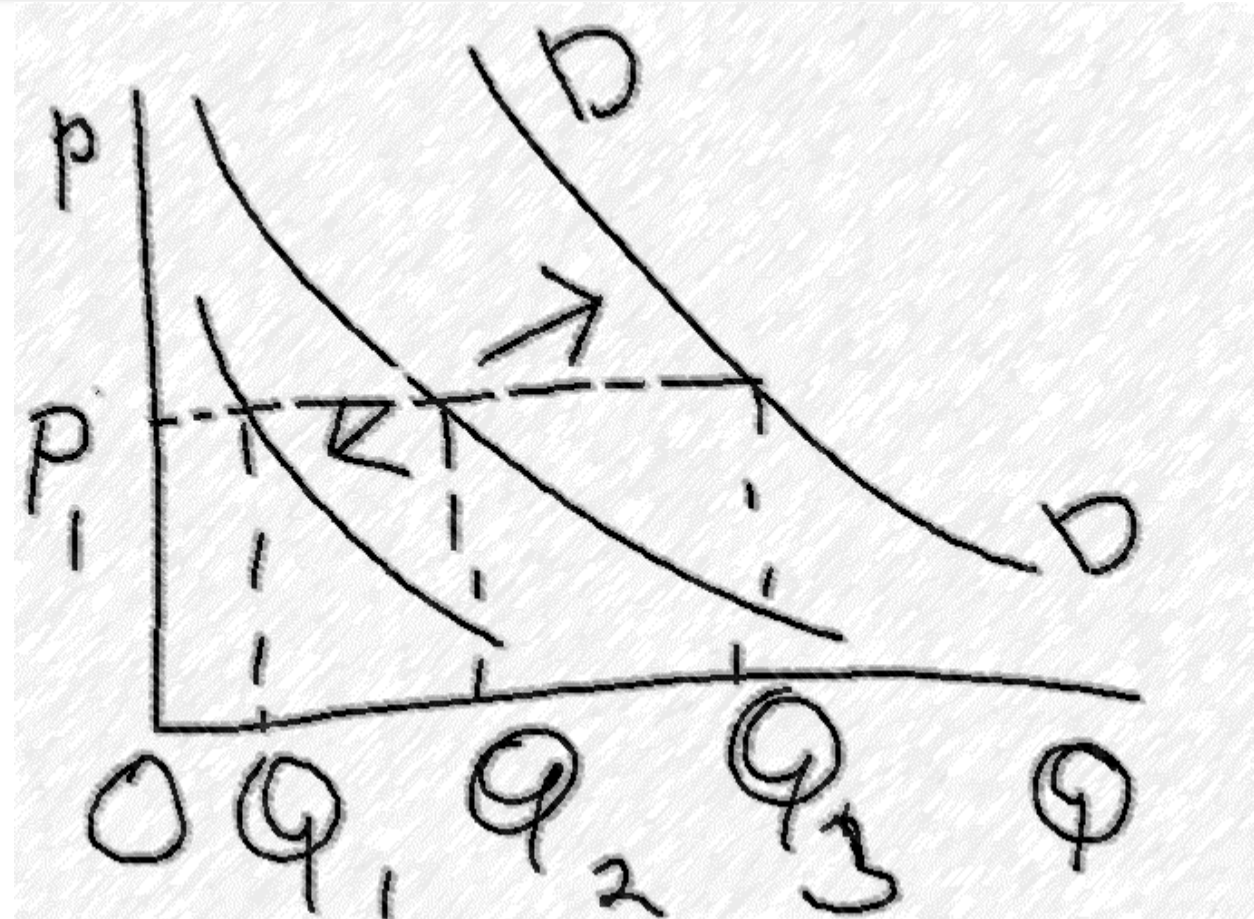
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- At $P_E \rightarrow$ Equilibrium point
 - The market is empty. The supply satisfies the demand.
- $P_1 \rightarrow$ Surplus
 - This occurs because P_1 is higher than P_E . At P_1 , supply exceeds demand and therefore prices move down towards P_E .
- $P_2 \rightarrow$ Shortage
 - This occurs because P_2 is lower than P_E . At P_2 , demand exceeds supply and therefore prices move up towards P_E .



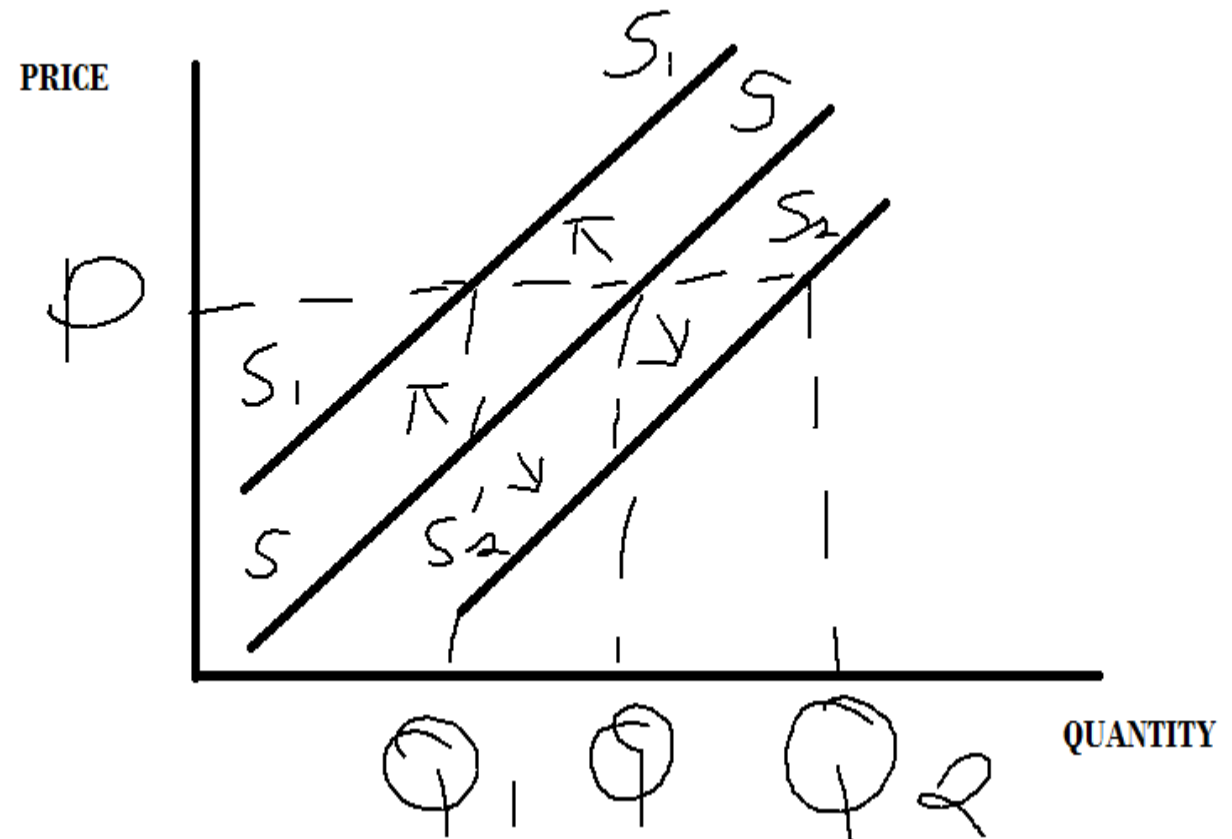
Shift in demand curve

- Causes of a shift to the right, i.e., increase in demand at the same:
 - Rise in income of the consumer
 - Rise in price of a substitute
 - Fall in price of a complementary good
- Causes of a shift to the left, i.e., decrease in demand at the same price:
 - Fall in income of the consumer
 - Fall in price of a substitute
 - Rise in price of a complementary good



Shift of supply curve

- Causes of a shift to the right, i.e., increase in supply at the same:
 - Technological advances that increase production efficiency
- Causes of a shift to the left, i.e., decrease in supply at the same price:
 - Increase cost of resources required to produce the commodity



Concept of elasticity: Definitions

- Elasticity is the responsiveness of the quantity demanded if the **price of the product is changed**.
- Cross elasticity is the effect of demand on one item that is explained by the **change of the price of another item**.
- Income elasticity of demand is the responsiveness of the quantity demanded for an item to a **change in the income of the consumers**.
- Price elasticity of demand is the responsiveness of the quantity demanded for an item to a **change in its price**.

The role of the state in the market

- Regulation and maintenance of the rules of the ‘game’ between demand and supply.
- Occasionally the government can become a consumer or a supplier of the commodities.

MACROECONOMICS & MICROECONOMICS

- Macroeconomics is a branch of economics concerned with aggregate/ system/ large – scale/ general economic processes. It deals in economic issues affecting the whole economy as an analytical unit.
 - This entails GDP, GNP, per capita income etc. and how these are accumulated, assessed, measured & used.
- Microeconomics, on the other hand, deals with unit level analysis. This entails, production at the level of the firm & consumption at the level of the individual and the household.

Application of concepts of economics to the health sector

- In the production process, the final output is organization of health care/ service system.
- The market is comprised of the distribution of health services. It is at this level that supply and demand interact.
- Consumption is done by individuals or households
- The GDP/ GNI, contributes to the national accounts.

Peculiarities and precautions when applying the economic model to the health sector

- The assumption of full knowledge is countered by consumer ignorance.
- Profit motive is not expected to be dominant.
- Freedom of entry & exit is restricted by training requirements, licensing & other regulations.
- The production process is labor intensive.

Cont.

- Joint production: a single process may produce more than 1 output e.g. the same patient can be a recipient of treatment as well as a subject of research
- Price is not always fixed by the market through competition. Monopoly pricing is a feature.
- Uniformity of products is not always assured.

Important issues to raise in Health Economics

■ HEALTH

- What is it? How is it measured? How is it valued (relative to other goods)? What are its determinants?

■ HEALTH CARE SYSTEM

- How does it perform as a whole? What are the features of supply and demand (inputs, processes and outcomes) compared to other health systems?

■ FINANCE

- What are the needs and demands? How much should we spend? How should it be raised? What are the implications of equity/ efficiency?

■ ALLOCATING RESOURCES

- What are the costs and benefits of different interventions? What are the priorities?

CONT.

- **FUNDAMENTAL ECONOMIC QUESTION AND CRITERIA**
 - What goods: allocative efficiency
 - For whom: equity
 - Method of production: technical efficiency
 - Carrying out agreed activities using the least possible resources or carrying out the maximum possible activities
- **SERVICE DELIVERY ISSUES**
 - Efficiency of different delivery mechanisms e.g. public/ private mix.
 - Budget payment systems
 - Decentralization

Allocative & Technical Efficiency

- Economics is a science of efficiency in the use of scarce resources.
- Efficiency requires full employment of the available resources and full production.
- Full employment means all available resources should be employed, whereas full production means that employed resources are providing maximum satisfaction.
- Full production implies 2 kinds of efficiency:
 - Allocative efficiency
 - Productive/ technical efficiency
- Full efficiency means producing the ‘right amount’ (allocative efficiency) of goods & services in the ‘right way (productive efficiency)

Allocative efficiency

- This means that scarce resources are used optimally for producing the combination of goods and services most wanted by the consumers.
- The market condition required for allocative efficiency is that the market price is equal to the marginal cost of supply, i.e., $P = MC$, i.e., the value the consumers place on a good or service (reflected in the price they are willing to pay) equals the cost of the factor resources used up in producing it.

Productive/ technical efficiency

- This means that the least costly production techniques are used to produce the most wanted goods & services.
- A firm is productively efficient when it is operating at the lowest point on its average cost curve, i.e., unit costs have been minimized. This occurs where the price is equal to the minimum average total cost (ATC).
- Productive efficiency exists when producers minimize wastage of resources.
- In the health sector, this involves maximization of the health outcome for a given cost.

INTRODUCTION TO HEALTH CARE FINANCING

BY: PROF. WANG'OMBE



INTRODUCTION

- Health care provision as a market system.
- In this system, the following need to be financed:
 - Production
 - Consumption

What are the features of a good health financing system?

- Provides **sufficient funding** for the health care needs of the community.
- Involves **redistribution** whereby the rich contribute more than the poor.
- Arranges for each person to make a **fair contribution**.
- Has **controls** to ensure that the community is able to prevent health care costs that are using up an excessive proportion of the government budget.

Sources of finance

- Exchequer/ taxes/ budget provision → For both the producer and the consumer.
- Out of pocket (OOP) pay – outs → For the consumer to pay services at the point of use
- Health insurance → for the consumer and producer
- Third party payer grants and donations for both consumer and producers
- Loans: for producers
- Private capital: for producers

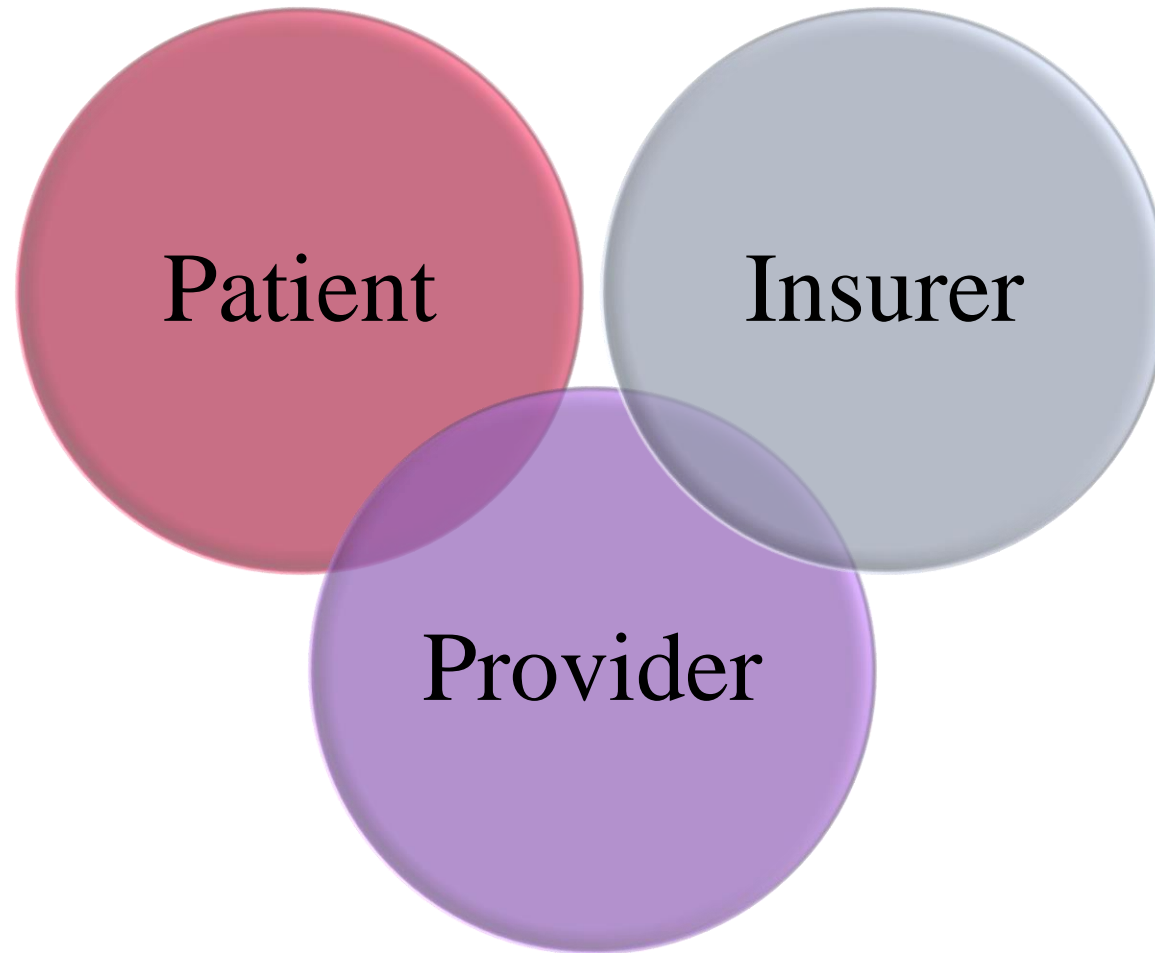
Out of pocket expenditure/ user fees/ user charges

- Regarding OOP as a source of finance, the demand curve is to be considered.
- OOP expenditure is for:
 - Income generation, i.e., to generate revenue
 - Management of consumer/ patient behavior
- The concept of elasticity has to be applied.

Health insurance: Review of the basics on private insurance

- In private insurance, a private investor (insurer) sells the ability to provide cover/ protection against unexpected expenditure in case of illness to an individual or a household through pooling of risks.
- The insurer becomes the third party linking the patient & the health care provider.

Cont.



Cont.

- The functions of pooling of risks are:
 - Generation of profit for the insurer
 - Provision of enough finance to pay for all possible claims during the insurance period
- For the risk pool to function, the premiums for the insurance must be able to cover the expected benefits, administration costs, profit margin as well as acts as a reserve just in case a bigger than expected claim is made.
- Insurance premium is calculated as follows:
 - $$\frac{\text{Expected benefits} + \text{Administration costs} + \text{Reserve} + \text{Profit}}{\text{number of people insured}}$$

The active components of the formula will be affected by the following classic factors that threaten all insurance products:

Adverse selection

Moral hazard

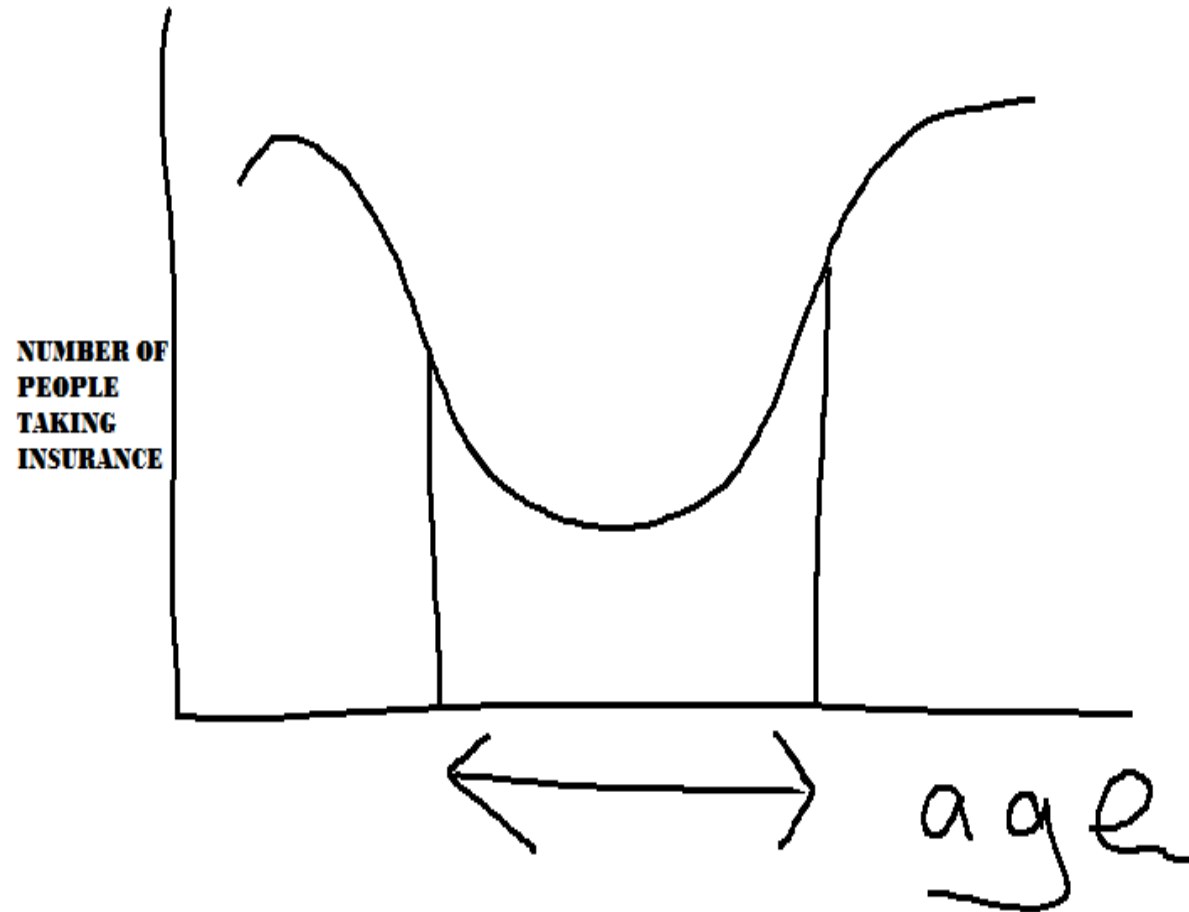
Cost escalation

Administrative costs

I. Adverse selection

- This refers to situations in which an insurance company extends insurance coverage to an applicant whose actual risk is substantially higher than that known by the company. There is therefore an informational asymmetry between the insurer and the insured.
- An insurance plan is affected by adverse selection when it is dominated by **more insured people who are likely to claim during the insurance period**. The dominance may be in numbers of the insured persons or in the sizes of the claims or in both.

Cont.



How to overcome adverse selection

- The government can institute legislations that require everyone to buy policies. This serves to broaden the pool & prevents a situation where only high risk individuals would buy the policies.
- Insuring whole families so as to spread the risk involved in insuring the oldest person.
- Ensuring older people pay higher premiums especially when they take up the insurance plan during their old age.
- Developing exclusion & inclusion criteria for the insurance plans, for instance:
 - Lifestyle, Occupation, Chronic acquired medical conditions, Genetic diseases etc.

II. Moral hazard

- This is a situation where the insured people tend to over – use services since they are insured. The presence of the insurance cover may encourage over – consumption in volume and value of services.
- Moral hazard refers to additional health care that is purchased when persons become insured. These purchases are inefficient since they represent health care that is worth less to consumers than it costs to provide.
- At the root of moral hazard is informational asymmetry where the party engaging in over – consumption of services has more information about their intentions & situation than the insurer.

How to overcome moral hazard

- Limiting the number of claims that can be made annually.
- Introducing co – payment whereby the insurer and the insured each pay a percentage of the cost.
- Giving incentives to those who don't claim so as to discourage careless claiming. These may include:
 - Non – claim bonuses
 - Premium reduction

Cont.

- Covering only the procedures that are carried out by specialists and leaving out the frivolous ones.
- Limiting the number of facilities that the claimant can visit under the insurance cover.
- Introducing assessors who evaluate the reality and validity of the event that necessitated the claim e.g. road traffic accident

III. Cost escalation

- An insurance scheme is likely to be affected by cost escalation when health care providers adopt the tendency to charge higher prices because the clients are insured or recommend the more expensive services in avoidance of cheaper ones which are equally effective.
- Cost escalation may also be as a result of clients who request for the latest and most expensive services.

How to overcome cost escalation

- Limit the number of specialized diagnostic procedures that the insurance firm can cover.
- Introducing co – payment.

Cont.

- Negotiating the prices of procedures & services beforehand with the health care providers. This may involve coming up with a list of professionals or hospitals that have negotiated and arrived at an agreement with the insurance company.
- An example of an agreement between the insurance firm and the health care providers is:
 - For an MRI, the maximum price that the insurance can cover is X Kshs. at facility M. In any other facility apart from the ones listed, the insurance can cover up to a particular maximum amount. To increase the maximum prices, review meetings are held to upscale the premiums.
 - Health care providers pledge by counter – signing to assist in ensuring that the procedures sought after are legitimate.
 - New procedures and products must be discussed by professional panels before being introduced into the list of procedures & products that are covered.

IV. Administration costs

- An insurance scheme is affected by administration costs only if they become too large in proportion to other costs with the effect of reducing the financial capacity of the scheme to meet its obligations for paying claims. This implies inefficiency in running the firm or poor performance in cost control.
- When administrative costs go up, premiums will be more expensive.

How to overcome administration costs

- Proper business organization
- Minimizing costs by watching wastes, purchases and all the things included in costing during the process of producing their unit of output, i.e., the policy

Cont.

- The main observation and conclusion in the Kenyan situation in respect to private health insurance is that **it covers only a few people and it is only available in urban areas.**
- Factually, it is estimated to cover between 800,000 to 1 million people.

What hinders the popularity of private insurance amongst Kenyans?

Perspective of the insurer:

- Apparent high magnitude of risks coupled with an inability to assess the actual magnitude
- Asymmetry of epidemiological information about the risks
- Poor infrastructure, i.e., lack of equipped hospitals in most remote, rural areas.
- Poor population

Perspective of consumer (patient, community or general population)

- Poverty
- Lack of information
- Public provision of health care that is cheaper and affordable
- Lack of trust in private insurance.

How the challenges experienced by private insurance firms has been overcome:

1. **Devolution of health care** hence increasing the likelihood of improved infrastructure at county level. This will enable the insurance firms to expand geographically and will also ensure that the premiums are not unreasonably expensive.
2. **Creation of awareness** about the running of insurance firms amongst the consumers.
3. Social, as opposed to private, health insurance e.g. NHIF.

SOCIAL HEALTH INSURANCE

- This plan is termed social as it is based on the element of solidarity, i.e., it includes everybody and health insurance becomes part of a social obligation.
- It uses a social operational framework and is centered on the public health system while using the national organizational main frame.
- Opting out as an exclusion criteria does not apply and pricing is not the determinant of membership.

Common characteristics of social health insurance

- The solidarity element may mean that it is all inclusive, i.e., coverage is on the basis of citizenship.
- Compulsory insurance: this is possible because premium collection can be enforced.
- Services are developed on basis of need (as opposed to demand)
 - The burden of disease is used to determine the improved access to health care.
 - Priority is given to the disease that heavily affects the population.
- There is social (community) involvement in the aspects of financing, management and accountability.

Major issues: finance

- Market price vs ability to pay
- Proportionate premiums
- Inclusion of the indigents and chronic illnesses (adverse selection?)
- How to overcome moral hazard, cost escalation and administration costs
 - Government to pay for premiums?

Packages/ benefits/ services

- Inpatient care
- Outpatient care
- Preventive care
- Disease control

Issues about effectiveness that we should worry about as we plan for social health insurance

- How the funds can be made adequate for all the needs
 - ‘Sin – tax’ imposed on tobacco smokers and alcoholics
- The system’s adequacy to meet the health needs of the population.
 - Capacity to provide the needed care – personnel, technology & know – how
 - It is hoped that with the current health devolution, this capacity is likely to be arrived at.

ASSIGNMENT

Review the NSHI proposal using the following guidelines

- Rationale behind the proposal
- Propose design:
 - Financing
 - Delivery of services (equity issues)
 - Social participation (management, law etc.)
- Show how the proposal deals with adverse selection, moral hazard, cost escalation and administration costs
- Comments and the way forward – how can devolution be accommodated
- c/f NHIF benefit package

NATIONAL SOCIAL HEALTH INSURANCE IN KENYA

PROF. WANG'OMBE



Social insurance as a method of health financing

- Social health insurance is one of the public sources of health financing meant to help the common citizen avoid catastrophic expenses in the form of medical expenses.
- It is conventionally financed by imposing mandatory insurance payments on employed workers as a percentage of their wages, by imposing a similar or somewhat higher payroll tax on their employees and a standard fee from the self employed along with other sources.
- It pays off part of the medical expenses from a known health provider.
- The NSHI in Kenya came up with a proposal for health insurance reforms to ensure access to quality healthcare to all Kenyans

Rationale of the NSHI proposal.

- The prior high cost of healthcare made obtaining health services difficult for the regular citizen.
- NSHI would increase health service utilization which had suffered under the cost sharing model.
- The ideal situation should be the position where the government, through the NSHI and tax financed Ministry of Health expenditure, is carrying 75% of the national health expenditure burden while private health expenditure would be reduced to 25%.

The proposal of NSHI was informed by:

- Prior cost sharing system that was expensive to citizens and government.
- Higher expenditure of income by citizens led to higher levels of poverty.
- Pooling of risks and contributions enabled availability of cheap healthcare i.e. the rich subsidizing the poor, the young subsidizing the old and the healthy subsidizing the sick.
- New NSHI would enable people to pay for treatment before illness occurs.
- Increasing health services utilization and promote good health seeking behavior by reducing out of pocket expenditure.
- Revenue that would otherwise be channeled to the ministry of health to finance an archaic cost sharing system would be used to renovate and improve health infrastructure.

Sources of financing

- Government contribution for those unable to pay from gross expenditure of about 11 billion Kenya shillings
- Payroll harmonization for public sector employees; 7 billion shillings.
- The self employed contributing Kshs. 400 to 800 per head; 10 billion shillings.
- NHIF contributions from formal employment; 12 billion shillings.
- Donations and grants as well as airport tax of 5 US dollars per ticket; 1 billion shillings.
- Concessionary loans sought from organizations such as the European Investment Bank, International Development Agency and the African Development Fund. Loans with low interest rates, grace period and long repayment periods
- Prudent investment by NSHIF.
- Informal sector contributions through SACCOS and Co-operatives.
- Other contributions such as women and youth groups, Jua kali artisans association, matatu welfare organizations, churches, NGOs and community based organizations.

Delivery of services

- Formulation and monitoring of national policies and regulations.
- Inspection and oversight of health plans and providers.
- Pooling and management of system's revenue.
- Regulation and policy making authority over benefits package, premium payments and co-payments.

Community/social participation

- Social participation aims to;
 - Cover and involve more people in the proposed plan.
 - Ensure efficiency and better coordination of resources.
 - Introduce more relevant goals and strategy to the insurance fund.
 - Foster self reliance and local capacity.
- This is done by;
 - Large scale public formal consultations with involvement of elected officials.
 - Intensive ongoing involvement of small groups of patients in developing services around a common medical condition.
 - Empowering and remunerating members of the community to act as advocates, health workers and community development workers.

Solutions to classical issues plaguing insurers in social health insurance

- **ADVERSE SELECTION:** This is dealt with by the use of standardized health plans that are cheap and reduce the chances for people to choose health plans that suit their specific needs e.g. mental illness which require additional charges.
- **MORAL HAZARD:** By placing incentives that would limit the insured from making claims such as cost sharing systems and extrapolation from NHIF reimbursements as well reducing rates for paying inpatient services after 7 days of admission.
- **COST ESCALATION:** Ensuring consistent quality management procedures that are a prerequisite to registration as a health provider in the NSHI plan.
- **ADMINISTRATIVE COSTS:** These are maintained/managed by drawing up yearly plans of administrative overheads such as cost of staff, buildings, utilities and ensure that the costs do not exceed 8% of total expenditure in NSHIF.

ACCOMODATING DEVOLUTION

- Since decentralization occurred there has been more access to decision space over Human resources for health and essential medicine and medical supplies management at county levels compared to previous national levels that would basically leave the common mwananchi in the dark.
- This opens avenues for the proposed NSHI proposed plan to bring quality healthcare services to the doorstep of individuals and communities in need.
- The proposed plan would allow for targeted recruitment and deployment of health workers as well as procurement of medical supplies to satiate the various medical needs of citizens within a county.
- In addition, community participation in healthcare would be more applicable considering how close to the ground the insurance fund could be, helping in identification and solving the specific medical problems facing the county.

ECONOMICS OF DISEASE

BY. PROF. WANG'OMBE

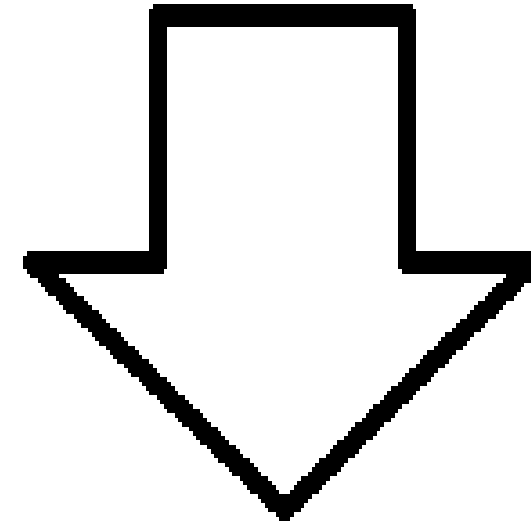
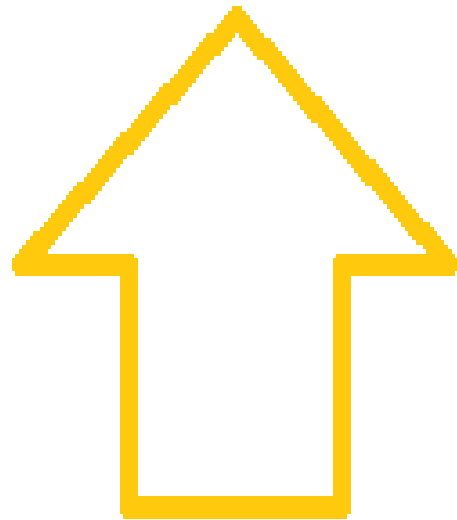


The concept of cost revisited

- Definition of cost: Expended (pay – out) resources used to achieve results
- Cost can also be described as the loss of resources or welfare because of the negative effects or impacts at the personal or group level.
- A disease imposes cost from its morbidity and mortality effects on the individual and the community and their responses.

Main cost components

**CONTROLLED DISEASE IS RUN
BY PAY - OUTS EXPENDED**



**UNCONTROLLED DISEASE
RESULTS IN LOSSES**

Control systems & inputs

- Cure: morbidity cases, identification treatment
- Prevention: vector control and interruption of human vector contact, environment
- Promotion: improving peoples practices, behavior and perceptions

SUPPORT SYSTEM: The role of the public health system

- Curative care: medicines, personnel & infrastructure
- Preventive program (Public health measures)
 - Health education, vector control, environmental improvements, medicines, personnel & infrastructure

The role of the population/ household

- Treatment: medicines (drugs + traditional & herbal therapy)
- Prevention: environmental improvements, mosquito nets, prophylaxis
 - Clear bushes, bury cans to avoid breeding mosquitoes outside the house
 - This is a kind of out of pocket expenditure that people incur
- (All the inputs call for direct resources outlay – direct costs)
 - Direct means, cash is needed to buy drugs and mosquito nets etc.

UNCONTROLLED DISEASE

- The uncontrolled disease imposes heavy indirect costs on society through morbidity and mortality, i.e.,
- Mortality generates losses of productive lives (loss of human capital) and the productivity attributable to it
- Morbidity imposes indirect costs through the loss of productive time from work and deterioration of human capital
 - Many people are working sick, even if they were to work for the firm for the usual 8 hours their productivity is equivalent to 2 hours of full productivity.
- E.g. loss of school time and learning capacity

Methodology

- For the direct cost the monetary value of the enumerated inputs is included.
- For the indirect costs; the monetary value is attached to losses that are created by the presence and effect of the disease (monetary value is attached to the loss of time and life)

Implications of the cost of disease

- Opportunity cost of resources used to control the disease
- The lost and under – developed human capital
- Lost potential productivity

Cont.

- Low level under – development trap
 - Low productivity → working sick
 - Areas that have a high prevalence of malaria in Kenya and in Brazil are found to have a lot of cassava since it is not labor intensive to cultivate
 - Poor education → poor quality human capital
 - Children don't go to school either because they are sick or because they are taking care of their sick parents.
 - Labor substitution
 - Resources are spent on people who are sick
 - In the long run, the community remains poor

ASSIGNMENT

- Identify an infectious disease (*not malaria*).
- Describe its etiology.
- Describe its control system.
- Identify its cost structure and methodology for calculating the costs.
- Describe developmental implications of the costs of the particular disease.

HEALTH & DEVELOPMENT

BY: PROF. WANG'OMBE



THE BROAD ISSUES

- What is the relation between health & growth?
 - The change over time of the GDP is a marker of economic growth.
 - There is a positive relation of good health and improved GDP.
- Aren't there better ways of producing good health than investing in health care?
- What is the relationship between spending on health care & good health?

CONT.

- Check the “life expectancy and mortality rates by country development category (1995 – 2000) in the report of the commission on macroeconomics and health (WHO, 2001)
- Read about the role of disability adjusted life years & quality adjusted life years in the indices given in the table.

HEALTH & GROWTH

- What is health?
- What is growth?
- What is the impact of economy on health?
- What is the impact of improved health on the economy. i.e., the population question?
 - Resources are used on the dependent population (children) hence increasing the dependency ratio. This slows development as the opportunity cost steps in.
 - Our population structure is predominantly composed of the dependent population (under 15).

Health care and health

- Health services are a means and not an end in themselves (discuss)
 - Health is the main objective
 - Health services are an input to the process of producing health.
 - But note that it is a result of inter - sectoral work
 - Discuss how health is related to development and how inputs from other sectors contribute to the improvement of the economic sector.
 - Discuss how poor health affects human capital as a factor of production.

Health expenditure and health

- Spending on health does not necessarily mean good health – what are the questions?
 - Are we spending on the right input? Disease control vs. disease prevention
 - Allocative vs. technical efficiency
- The higher the level of income the more you want to invest in health
- At higher levels of income health expenditure is likely to impact more on quality to life e.g. mobility of patients or reduced suffering) rather than mortality

KEY LINKAGES OF HEALTH AND DEVELOPMENT

- Health is a priority goal in its own right as well as a central input
- A few health conditions are responsible for high proportion health deficit: HIV/AIDs, malaria, TB, childhood infectious diseases, maternal and prenatal conditions, micronutrient deficiencies.
- HIV/AIDs as a special pandemic which requires unique attention
- Investments in reproductive health including family planning and access to contraceptives
 - **Why emphasize:**
 - To reduce the dependency ratio
 - To encourage efficiency in child care at household level which portends good economic growth. This is because they can be educated well hence improving human capital.

Cont.

- The level of spending on health is inadequate to address the health challenges. The estimate for minimum per capita health expenditure requirement is between \$40 to and \$60 (WHO 2001)
- More resources are needed for the health sector. Even with efficiency in the utilization of new funds the developing countries will still need external assistance because the additional finance that would be generated locally will still fall short.
- The new funding needs to appropriately target the special pandemic conditions and the poor and vulnerable groups.
 - Choose correctly.

SUMMARY OF THE COURSE

- EoY: 5 – 10 MCQs
- 1 SAQ
- Specific applications already discussed
 1. Production of medical services and efficiency questions
 2. Health care financing, user fees issues (cost – sharing) and the consumption model
 3. Health insurance
 4. Cost of disease
 5. Health & development

REFERENCES

- WHO site, health economics.



“IT IS ONLY BY PLACING GOD AT THE CENTER OF
EVERYTHING THAT WE CAN MAKE SENSE OF LIFE”

- MATTHEW KELLY