

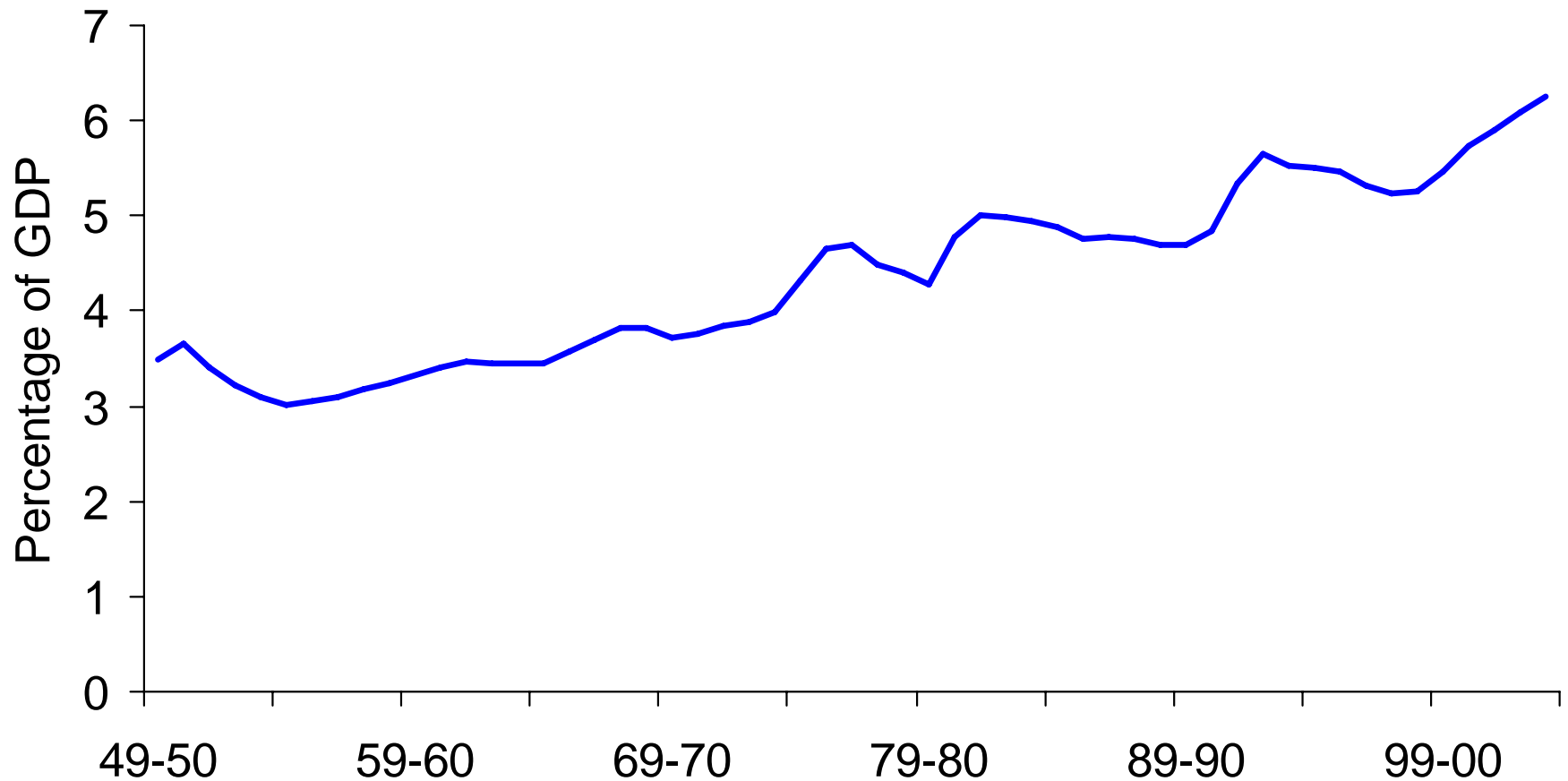
# **Health Care Economics**

**AS Economics Presentation  
2005**

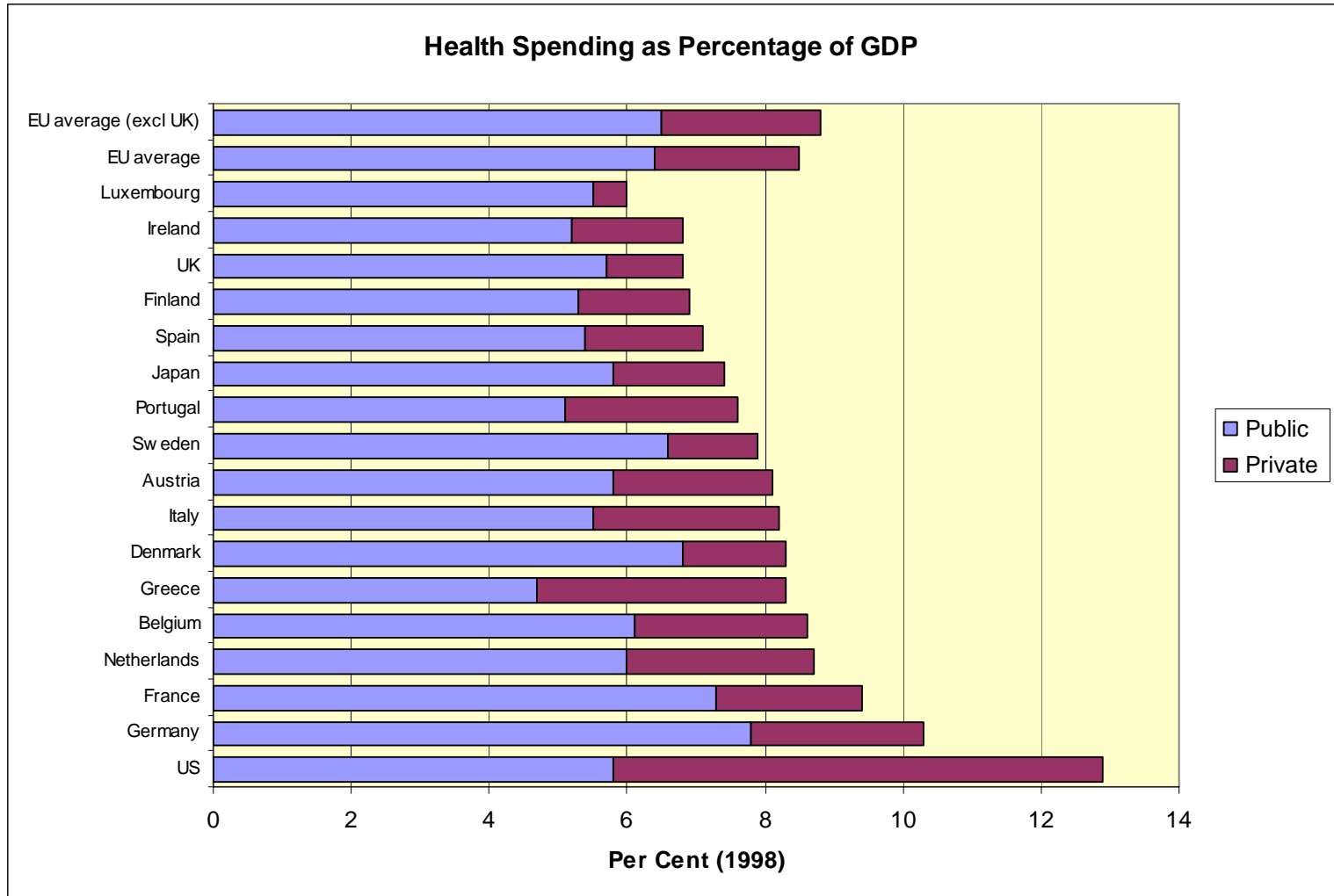
# Health Economics: Key Economic Issues To Consider

- (1) Economic Efficiency Issues
  - Does the health care provided in Britain meet people's changing needs and wants (i.e. do we achieve allocative efficiency?)
  - Is health care provided at the lowest possible cost per treatment (i.e. do we achieve productive efficiency?)
- (2) Equity Issues
  - Are people's basic health needs made available on the basis of clinical need or on an ability to pay for health services?
  - Are health outcomes reasonably equal across localities, regions, ethnic groups, age groups and by gender?
- (3) Does the NHS help to overcome problems of market failure?
  - E.g. externalities in the production and consumption of health care
  - Imperfect information among consumers and providers
- (4) How should health care in Britain be funded?
  - Should it remain funded by the tax system and provided mainly free at the point of need?
  - Or should we make wider use of user charges within the NHS and encourage more private sector health care?

# UK Health Spending as a Share of GDP



# Spending on Health – An International Perspective



# Health Care Spending in the UK

- In 1948 the NHS began life with a budget of £437 million (c. £9,000 million at 2001 prices); in year 2001, it received seven times that amount - more than £63,000 million.
- Private health care sector spending of £10,500 million, brings the total UK health care spend to £73,500 million
- A 10 Year NHS Modernisation Programme was launched in July 2000
- The NHS will always face the problem of resource scarcity because demand for health care exceeds the available supply
- The Labour government is committed to significant increases in real spending on health + share of health in total GDP
- The main issues are:
  - The ways to improve the efficiency of health service delivery
  - Policies to reduce obvious health inequalities in the UK
  - The funding options for health care in the long run – should health care continue to be tax funded or should user charges be extended?

# Fundamental Principles of the National Health Service

- The main aim of the NHS is to provide a publicly funded, comprehensive, high quality service available on the basis of clinical need and not ability to pay
- Fundamental building blocks:
  - (1) National universal (comprehensive) service
  - (2) Free at the point of use
  - (3) Medical care not based on ability to pay
- Efficiency and Equity lie at the heart of the issue of health service quality
  - (a) Efficiency: Avoiding a waste of resources, in particular of equipment, supplies, ideas
  - (b) Equity: Providing health care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographical location and socio–economic status.

# Funding the NHS

- In 2003/04 an estimated 74 per cent of the NHS was financed through general taxation, with 21 per cent from National Insurance contributions and 5 per cent from charges and other receipts
- Hospitals can also use private finance for NHS capital projects, under the Private Finance Initiative, which aims to promote commercial partnership between the public and private sectors. This involves new NHS facilities being designed, built, maintained and owned by the private sector, which then leases them back to the NHS
- Public spending on health in the UK will increase from £66.3 billion in 2002/03 to £107.2 billion in 2007/08
- This will result in the proportion of UK GDP spent on health services increasing from 7.6 per cent to 9.2 per cent over this five-year period.

# Economic and Social Importance of Health Care (1)

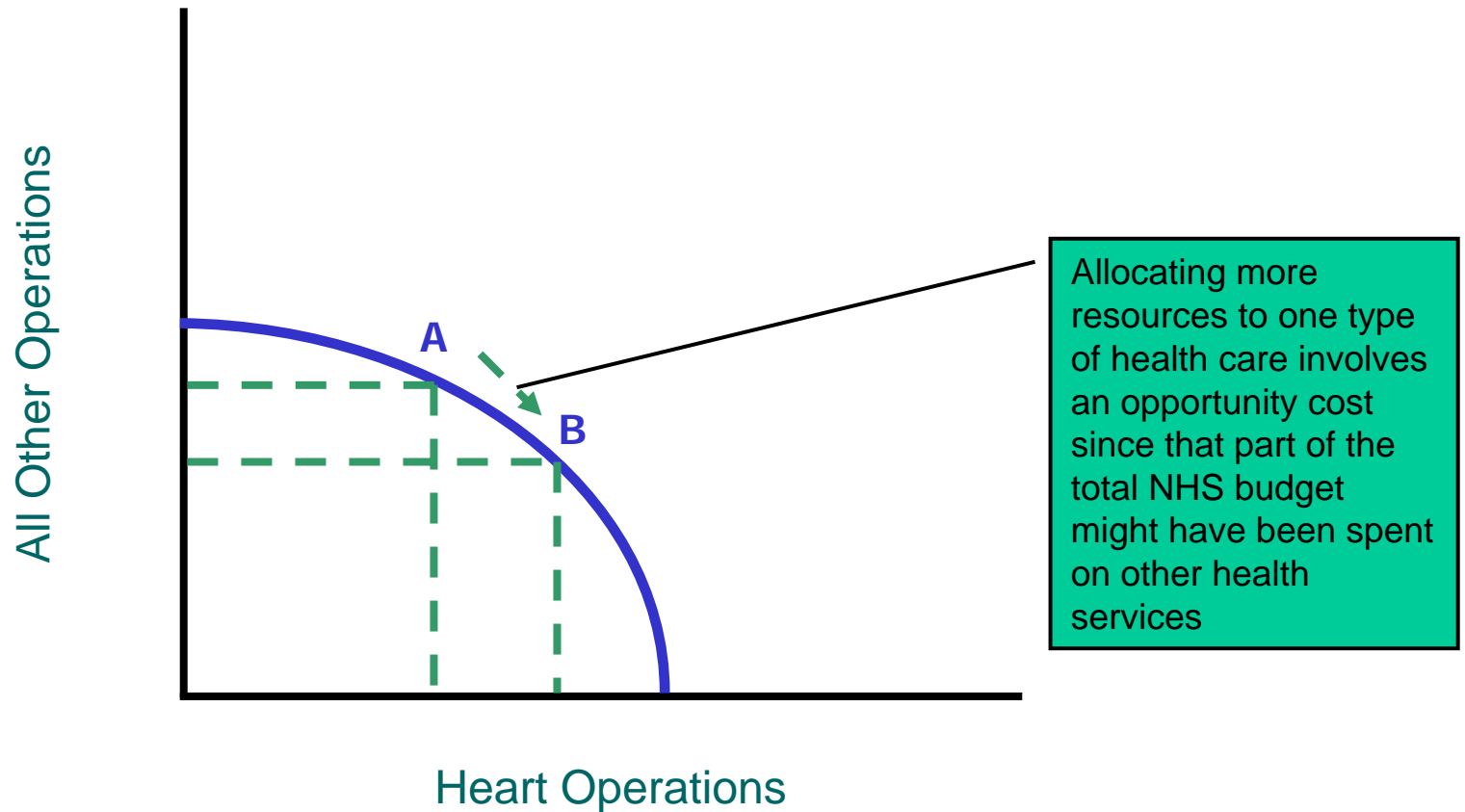
- (1) Quality of Life and Poverty:
  - Health and well-being in childhood affect educational attainment with consequences for people throughout their lives. Ill health in adulthood is associated with poverty.
- (2) Employment
  - The NHS is the largest employer in UK. We spend one in every 14 pounds of our nation's income on public and privately funded health care.
  - After social security payments, health is the biggest single component of government expenditure. 15 per cent of our tax and National Insurance Contributions (NICs) go to pay for the health service



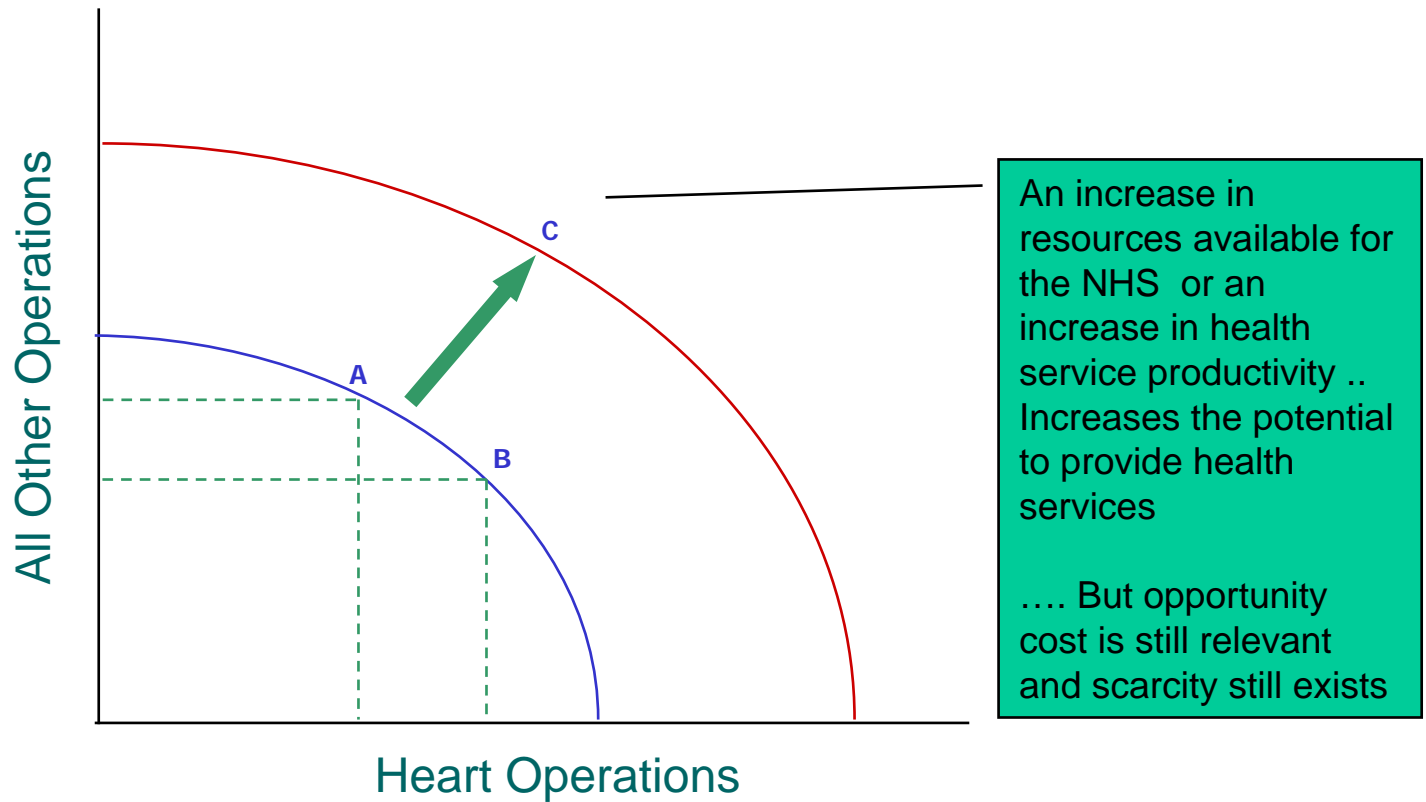
# Economic and Social Importance of Health Care (2)

- (3) Health and Productivity:
  - The health service also affects the productivity of UK business. Almost half of all NHS spending is for people of working age. Ill health imposes a significant restriction on the productive potential (LRAS) of the UK economy.
  - Around 2 per cent of working days are lost due to short-term sickness, while more than 7 per cent of the UK's working age population is unable to work due to long-term sickness or disability at a cost of over £12 billion a year in welfare benefits
  - Workplace absence cost British business over £10 billion in 1999
- (4) Health and Economic Growth
  - If average life expectancy could be increased by five years (i.e. to Japanese levels) then UK real GDP could be between £3 billion and £5 billion a year higher.

# Scarcity of Resources and the PPF



# Scarcity of Resources and the PPF



# Fundamental Problems Facing the NHS

- Persistent resource crises
  - Consequence of under-funding and under-investment over many years – affecting the quality and quantity of the capital stock available to health providers
  - Hospital waiting lists
  - Delays in receiving appointments to see consultants
  - Delays in emergency treatment
- Problems in recruiting sufficient well qualified staff
  - Excessive hours for NHS staff
- Wide disparities in the quality of care and range of care from region to region and between local health authorities
- Doubts as to whether the NHS is meeting changing consumer preferences – too much clinical autonomy in the hands of health service professionals?

# Health Care Rationing – An Inevitable Process

- Rationing occurs because demand for health care always outweighs supply
- In a free market, markets match supply and demand by altering pricing
- This form of rationing relies on the fact that incomes are unequal and that those on low incomes will be the first to be priced out of the market
- Rationing in the NHS is inevitable - no amount of resources could possibly meet all of our demands for health care when the NHS system is based on the fundamental principle of being free at the point of need

# The Rationing Process in the NHS

- How does the NHS ration health resources?
  - Government rationing: Ministers and Parliament decide on the overall size of the NHS budget thus dictating the type and volume of care the NHS can provide
  - The National Institute for Clinical Excellence (NICE) contributes to rationing decisions by advising the NHS on clinical and economic benefits and costs of certain health care interventions.
  - Health authorities and primary care groups allocate money to particular disease/treatment areas
  - Treatment decisions for individuals are made at the clinical level by health care professionals
  - All countries use waiting lists to ration demand
  - Private health care uses the price mechanism to ration health care e.g. through private health insurance

# Five Factors Putting Financial Pressures on the NHS

- Developments in medical technology
  - New drugs (often very expensive) including drugs that reduce the “risk” of disease rather than the symptoms of illness – e.g. statins to lower cholesterol or anti-hypertensives to reduce the likelihood of strokes
  - Pharmaceutical spending is 13% of total spending on health care
  - New surgery options + cost of after care
- Increased costs of staffing in the NHS (a labour intensive industry)
- Growing health problems
  - Diseases associated with affluence
  - Illnesses associated with an increase in relative poverty
- Long term change in age structure of the population
  - The cost of health care rises dramatically for older patients
- Increasing expectations of patients and their families

# Demographic Change and the NHS

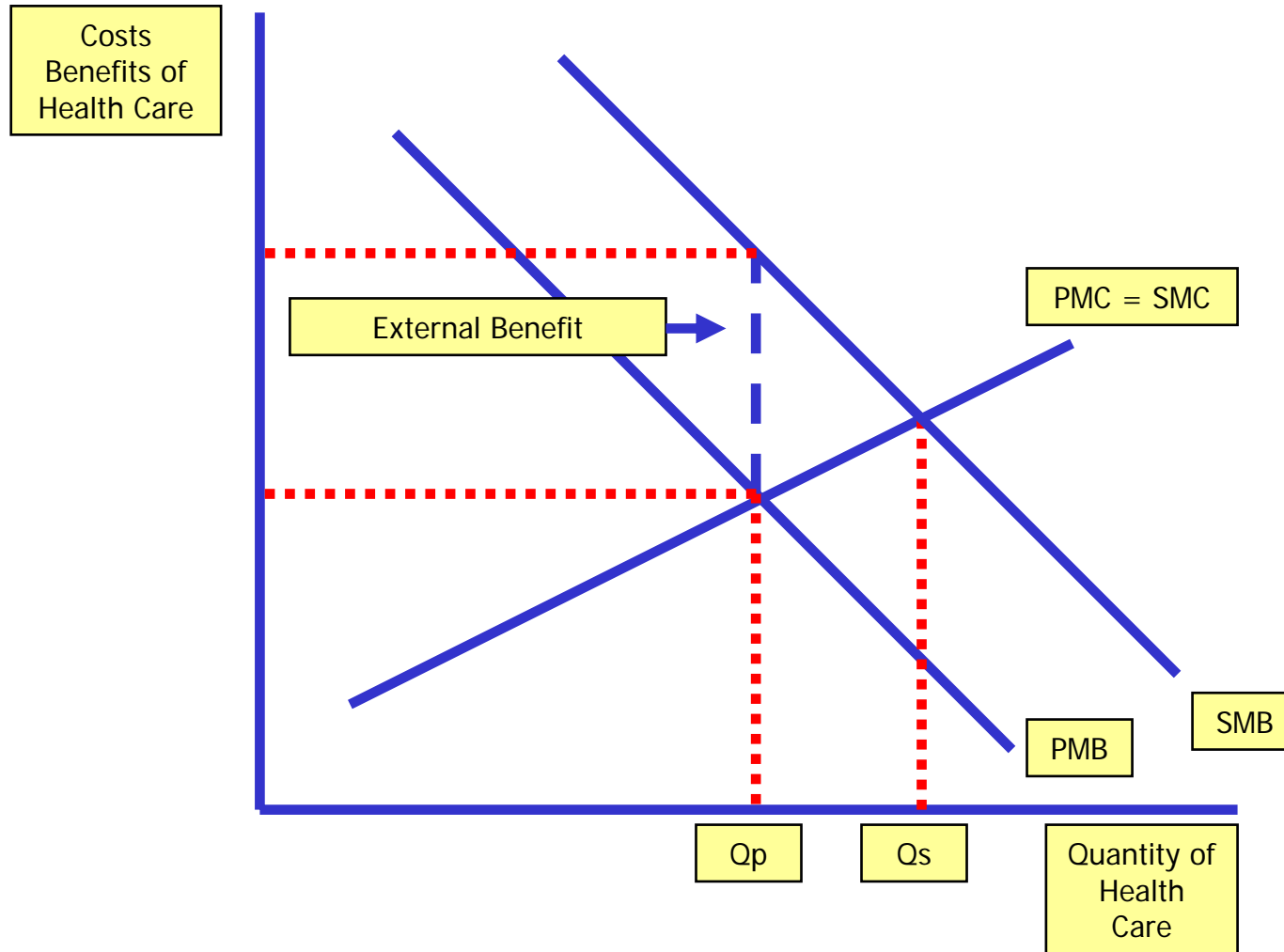
- The UK population is growing slowly and it is ageing
- The medical conditions that account for the majority of the burden of disease in the UK are primarily related to old age – e.g. cancer and coronary heart disease (CHD)
- Spending on health varies significantly with age. The beginning and end of life are the most expensive
- On average, around a quarter of all the health care someone consumes in their lifetime is consumed in the last year of their life.
- Just over a third of all spending on hospital and community health services is for people who are over the age of 65
- Over the next 20 years, the UK population is projected to increase by around 5 million. The number and proportion of elderly people will rise as the baby boom generations reach older age and mortality rates fall



# Market Failure in Health Care

- Market Failure: A failure to achieve a socially efficient allocation of scarce resources
- Imperfect information among health care providers and consumers
  - Consumers tend to under-value the benefits of health care – due to information failure
  - Health providers (doctors, consultants etc) have more specialised information than consumers – asymmetric information
- Externalities arising from health care provision
  - Health services are merit goods providing positive externalities for people who consume them
  - The private sector may under-provide and under-consume health care services
- Inequalities in access to basic health care
  - Significant regional and local differences in quality and quantity of health care available (i.e. so-called “postcode prescribing”)
  - Millions of people are dependent on the NHS – they have no hope of being able to fund private health insurance

# Positive Externalities from Health Care



# Inequalities in Health Care in the UK

- King's Fund Report (2001) found significant inequalities in health care in the UK
- Inequalities between
  - Regions
  - Ethnic groups
  - Socio-economic groups
  - Gender
- The burden of ill health in Britain today does not fall equally across society
- Some people face a far higher risk than others of suffering from avoidable illnesses such as heart disease, cancer, depression and diabetes and average life expectancy

# Health Care Spending and Funding

- In 2000, the UK spent £66.7 billion on health care, just over 7% of Gross Domestic Product (GDP) or £1,100 for every man, woman and child in the UK
- 86% (£57.1 billion) of this came from public funds
- Over the past 40 years, total spending on health has increased by an average of 3.9% a year in real terms
- As a result, health care spending as a share of GDP has increased by around 75% over this period
- 30% of public expenditure on health and social care in England goes to acute hospital services, 11% to social care for the elderly and 10% is spent on drugs prescribed by GPs
- In the UK, 83 per cent of health spending is publicly funded. This is high by international standards – the EU average is 75 per cent

# The Main Funding Options for Health Care

- (1) General Taxation
  - Taxation revenues, incorporating both direct and indirect tax receipts, collected by government
- (2) Social Insurance Schemes
  - Social insurance: earnings-related employee contributions and/or employer payroll taxes
- (3) Out of Pocket Payments
  - Out-of-pocket payments are made directly by patients for the use of health services, in either the public or private sector
- (4) Private Health Insurance Schemes:
  - Private medical insurance is taken out by individuals or by employers on their behalf

# Key Principles for Health Care Funding

- Economic Efficiency
  - The extent to which a given level of health care is delivered at the lowest possible cost (productive efficiency) and if it creates minimum distortions and disincentives in the rest of the economy
- Equity
  - The extent to which access is based on clinical need and contributions relate to ability to pay
- Choice
  - The ability to meet public expectations of choice and responsiveness in the health service

# The Case for Tax Funded Health Care

- (1) Low administrative costs in collecting the funding
- (2) Revenue drawn from a wide-base (millions of taxpayers) who pay mainly through a progressive system of direct taxation
  - Higher income taxpayers are therefore paying more towards the general provision of health care
- (3) User charges might discourage people from seeking treatment at all
- (4) The need for health care cannot always be planned – making private provision difficult to predict and insure against

# “Out of Pocket Payments” or “User Charges”

- User charges require patients to pay for all or part of the cost of a treatment
- With user charges, households would freely choose their pattern of consumption and the supply of health care would adjust to the pattern of preferences
- Demand for treatments would be linked to the private benefit to the patient
- Some user charges already exist
  - Dental treatment
  - Eye examinations
  - Prescriptions
- User charges might be extended for non-clinical services
  - Single maternity rooms
  - Bedside digital television / internet services
  - Visits to GPs