

# COMPARATIVE HEALTH CARE SYSTEMS

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EE 474 Health Economics

Semester 2/2019

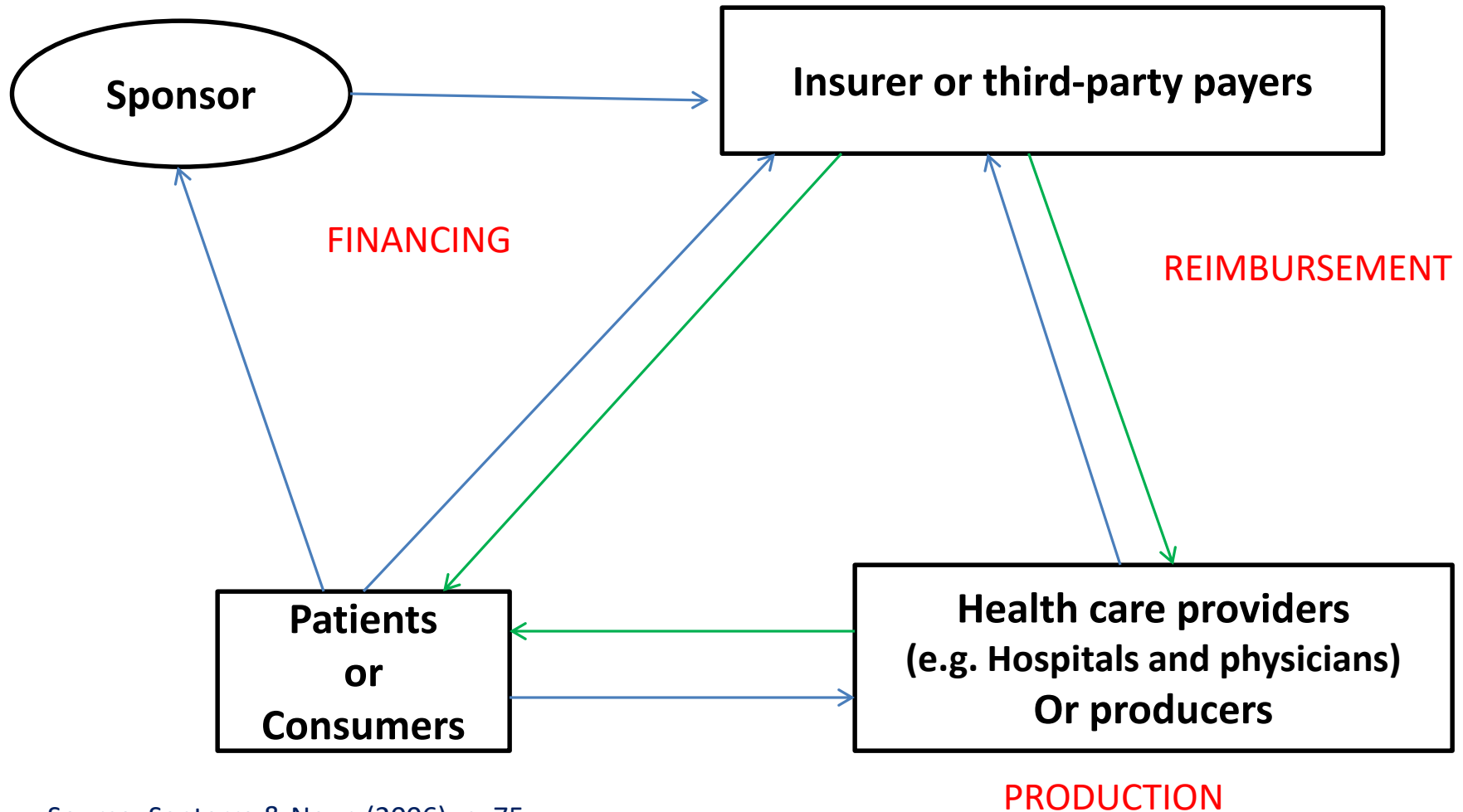
# Topics

- A Model of A Health Care System
- Typology of Health Care Systems
  - Beveridge Model
  - Bismarck Model
  - National Health Insurance
  - Mixed System
- Thailand – Universal Health Coverage Scheme

# Introduction

- This lecture is intended to give you an overview of different health care systems around the world, illustrated by four main distinct models and a case study.
- A health care system consists of the organizational arrangements and process through which a society makes choices concerning the production, consumption, and distribution of health care services. (Santerre & Neun, 2006, p.74).
- Two extremes: Centralized vs. Decentralized systems
- Determining the best structure for a health care system involves the values the society places on a number of alternatives and outcomes, such as choice, uniformity, efficiency, etc.

# A Model of A Health Care System



Source: Santerre & Neun (2006), p. 75.

# Types of Reimbursement Schemes

- Variable Payment
  - Fee-for-service basis
  - Retrospective reimbursement
- Fixed Payment (Prospective Payment)
  - Global budget
  - Capitation basis
  - Diagnosis-related-group (DRG) based payment

# Likelihood of a Large Volume of Medical Services

(for different reimbursement and consumer copayment scheme)

## Types of Reimbursement Scheme

|                                 |      | Fixed Payment | Variable Payment |
|---------------------------------|------|---------------|------------------|
| Out-of-pocket price to consumer | Low  | (1)           | (2)              |
|                                 | High | (3)           | (4)              |

# Typology of Contemporary Health Systems

- *National health services* (a.k.a. “**Beveridge Model**”):
  - State provides and finances the health care.
  - Examples: United Kingdom, Denmark, Greece, Italy, New Zealand, Portugal, and Turkey
- *Traditional sickness insurance* (a.k.a. “**Bismarck Model**”):
  - Fundamentally a private insurance market approach with a state subsidy
  - Example: Germany, France, Belgium, Japan
- *National health insurance (NHI) plans*:
  - A national-level single-payer health insurance system
  - Examples: Canada, Finland, Norway, Spain, Sweden, Taiwan
- *Mixed systems*:
  - Contain elements of both traditional sickness insurance and national health coverage
  - Examples: United States, Switzerland

# 1. Beveridge Model: United Kingdom

- **Background:**

- Named after William **Beveridge**, the **National Health Service (NHS)** was established in 1946 and provides health care to all British residents.
- Can be referred to as “**public contracting**” model because government contracts with various health care providers on behalf of the people
- Capital and current budget are allocated from the national level down to the regional and then to the district level.
- Health care workers are paid by the government.
- In addition to the NHS, there is also a private-sector health system. About 11 percent of Britons purchase private health insurance.

# 1. Beveridge Model: United Kingdom

- **Financing:**
  - NHS offers universal health insurance coverage through **general taxation**.
  - NHS provides **global budgets** to **district health authorities (DHAs)**, who is responsible for assessing and prioritizing health care needs of ~300,000 people.
  - **DHAs have contracts with health care providers:**
    - Nongovernmental trusts
    - Community-based primary care givers
    - General practitioner (GP) fundholders: apply for budgets from DHAs.

# 1. Beveridge Model: United Kingdom

- Reimbursement:

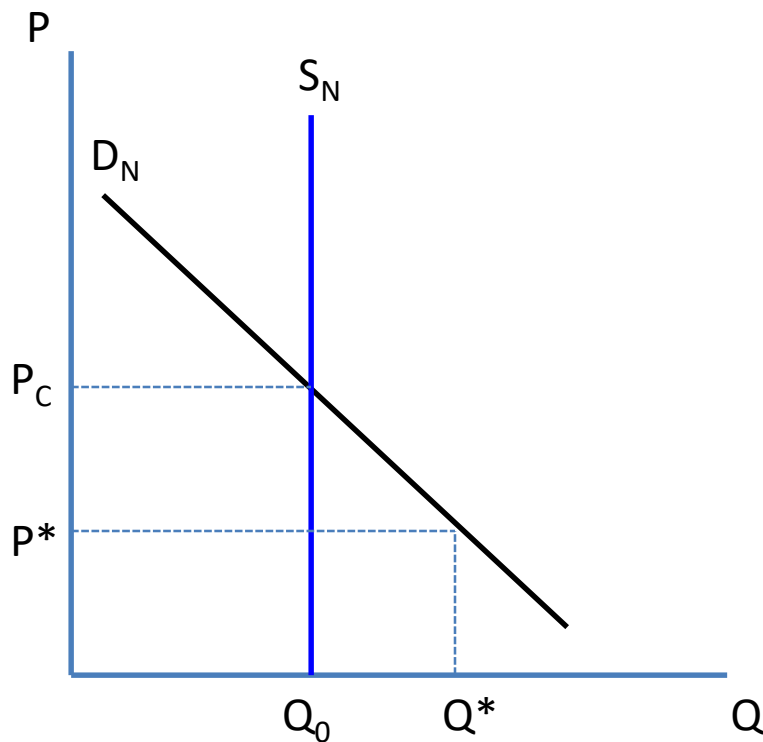
- DHAs are allocated funds by the NHS on a **weighted capitation basis**, which consider age, sex, health risk, and geographical cost differences.
- Independent **community-based family practitioners** contract with the NHS and are paid uniformly on a **capitation basis**.
- All **general practitioners (GP)** are paid on a **capitation basis**.
- All **physician-based hospital physicians and consultants** are paid on a **fixed salary basis**.

# 1. Beveridge Model: United Kingdom

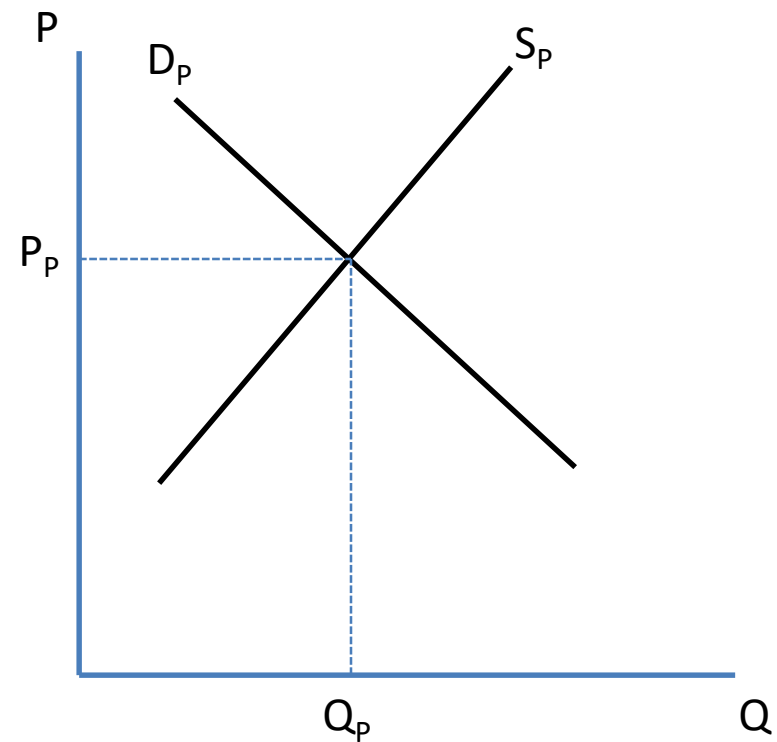
- **Production:**

- The **general practitioner (GP)** serves as the **gatekeeper**. Consultants are specialists, and patients must be referred to them by GPs.
- Up to 1990, almost all hospitals were publicly owned and most doctors were employees of the NHS.
- Some services are not entirely free:
  - Private hospital rooms extra
  - Small surcharge for drug prescriptions filled outside hospital.
  - Copayments: Dental care & eyeglasses
- **Specialty care is rationed** through waiting lists and limits on the availability of new technologies.
  - **Rationing of coverage** through **National Institute for Health and Clinical Excellence (NICE)**.

# A Model of Rationed Health Care and Private Markets



NHS



Private Market

## 2. Bismarck Model: Germany

- Background:

- This model is also known as “Sickness fund” or Social Health Insurance (SHI) – government mandated health care
- The German health care system is based on programs laid out by Bismarck in 1883.
- Legislation required workers in various occupations to enroll in autonomous sickness insurance funds, which are private not-for-profit insurance companies. There are about 200+ localized sickness funds.
- Characterized by the "three S's"- social solidarity (provision of equal access to health care), subsidiarity, and self-governance.
- Individuals with income beyond a given ceiling may choose the private health system. (~ 10% of the population)

## 2. Bismarck Model: Germany

- **Financing:**
  - Costs are divided equally between employer and employee.
  - Employees' shares collected as payroll taxes at rates proportional to their gross wages.
  - Since the funding is based on wages, if wages fail to grow at the same rate as costs of health care, funding issues will arise.
  - Premiums of unemployed and their dependents comes from former employers and other public sources.
  - Sick funds are responsible for collecting funds from employers and employees and reimbursing hospitals and physicians.

## 2. Bismarck Model: Germany

- **Reimbursement:**

- The Sickness Funds pay **negotiated lump-sum funds on a capitation basis** (=capitation payment x # of insured individuals) to **regional associations** of ambulatory physicians.
- The regional associations reimburse physicians for services based on a **fee schedule**, determined through negotiation between the regional associations and physicians.
  - i.e. **Ambulatory providers** are paid on a **fee-for-service basis**.
- The Sickness Funds also **negotiate fixed prices for various procedures** (based on diagnosis-related group: DRG)
  - Incentive for hospitals to save resources and specialize in certain procedures.
- **Hospital-based physicians** are paid on a **salary basis**.

## 2. Bismarck Model: Germany

- **Production:**
  - Medical services are produced primarily in the private sector.
  - Public hospitals control over 50% of all hospital beds in the country. The remaining are managed by private not-for-profit and for-profit hospitals.
  - Office-based physicians are normally prohibited from treating patients in hospitals, and most hospital-based physicians are not allowed to provide ambulatory care (outpatient care) services.
  - Benefit package is mandated, but small copayments were added in 2006.

### 3. National Health Insurance: Canada

- **Background:**
  - Known as **Medicare** (not the U.S. Medicare for the elderly).
  - Each provincial government administers **a comprehensive and universal program** that is partially supported by grants from the federal government.
  - **Single payer** of all bills, with low administrative costs.
  - **General guidelines:** coverage must be universal, comprehensive, and portable.
  - Canadians can have **supplemental insurance** for things that are not covered by the NHI.

### 3. National Health Insurance: Canada

- **Criteria and Conditions:**

- *Public administration:*

- Administration carried out on a nonprofit basis by a public authority.

- *Comprehensiveness:*

- All medically necessary services must be covered.

- *Universality:*

- All insured persons must be entitled to public health insurance coverage on uniform terms and conditions.

- *Portability:*

- Coverage must be maintained when an insured person moves or travels within Canada or travels outside the country.

- *Accessibility:*

- Reasonable access by insured persons to medically necessary services must be unimpeded by financial or other barriers.

### 3. National Health Insurance: Canada

- **Financing:**
  - NHI program in each province is financed through taxes.
  - The federal government provides up to 40% in direct cost sharing and gives hospital construction grants to provinces.
  - Private insurance is available for some forms of health care, but private coverage is prohibited for services covered by the NHI.
  - No marketing expenses, no administrative costs, no allocation for profits → strategies to keep costs low!

### 3. National Health Insurance: Canada

- **Reimbursement:**
  - There are **no copayment** for most medical services.
  - **Reimbursement exclusively takes place between the public insurer (the government) and the health care providers.**
  - Cost control is attempted primarily through **fixed global budgets** for hospitals and **predetermined fees** for physicians.
  - **No extra billing** by medical practitioners or dentists and **no user charges** by hospitals for insured health services under the terms of the health care insurance plan.

### 3. National Health Insurance: Canada

- **Production:**
  - Medical services are produced in the **private sector**.
  - Most hospitals in the private sectors are operated on a **not-for-profit basis** and owned by either **charitable or religious organizations**.
  - Patients have **free choice in the selection of providers**.

## 4. Mixed System: United States

- Background:
  - In “*The Healing of America: A Global Quest for Better, Cheaper, and Fairer Health Care*,” T.R. Reid argues that the U.S. health care system has elements of all of different health care systems in it.
    - Veterans: UK’s Beveridge model
    - Americans age 65+ on Medicare: Canada’s NHI
    - Working Americans who get insurance on the job: Germany’s Bismarck model
    - The rest who have no health insurance: “out-of-pocket” model – more prevalent in developing countries
      - The number of uninsured people are likely to decrease as a result of recent health care reform in 2010.

## 4. Mixed System: United States

- **Financing:**

- Health care in the U.S. are financed through a **combination of private and public** health insurance (Medicare and Medicaid).
- Private health insurance is largely **employment-based insurance**. The rest belongs to some types of **managed care plan** (e.g. Health Maintenance Organizations: HMOs).
- **Medicare** is a uniform, national public health insurance programs for **aged and disabled individuals**.
- **Medicaid** provides coverage for certain **economically disadvantaged groups**.
  - Later on, the **Children's Health Insurance Program (CHIP)** was established to provide health insurance to children in low-income families.

## 4. Mixed System: United States

- **Reimbursement:**
  - **Multi-payer system** in which a variety of third-party payers (the federal and state government, commercial health insurance companies, Blue Cross/Blue Shield) are responsible for reimbursing health care providers.
  - Common form of reimbursement is **fee-for-service**.
  - Since 1983, **Medicare reimbursement** (and most state Medicaid) are based on **diagnosis-related group (DRG)** – payment categories based on the characteristics of the patients, diagnosis, and treatment.

## 4. Mixed System: United States

- **Production:**

- The U.S. health care system is very diversified in terms of production.
- **Primary care** physicians are mostly in the **private for-profit sector** and operated in group practice.
- **Hospital services** are provided largely by **not-for-profit organizations** (~70% of hospital beds are in not-for-profit hospitals).
- 70% of **nursing home** (long term care) are organized on a **for-profit basis**.

## 4. Mixed System: United States

- Patient Protection and Affordable Care Act (PPACA) of 2010:
  - It requires most U.S. citizens and legal residents to have health insurance, the so-called *individual mandate*.
  - It assesses a fee against employers with 50 or more full-time employees that do not offer coverage as a premium tax credit.
  - It expands Medicaid to all non-Medicare eligible individuals under age 65 with incomes up to 133% of the Federal Poverty Level (FPL) with a benchmark benefit package.
  - It creates a state-based program, through which individuals and small businesses (up to 100 employees) can purchase qualified coverage.
  - By 2020, the PPACA is expected to insure at least 32 million of the 50 million currently uninsured

# A comparison of Health Care Systems

| Feature                             | “Beveridge”<br>(e.g. UK)                         | “Bismarck”<br>(e.g. Germany)                                                     | NHI<br>(e.g. Canada)                                                        | Mixed System<br>(e.g. US)                                                              |
|-------------------------------------|--------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| <b>Coverage</b>                     | Near universal                                   | Near universal                                                                   | Universal                                                                   | ~84%                                                                                   |
| <b>Financing</b>                    | - General taxes<br><br>- Single-payer system     | - Payroll and general taxes<br>- Single-payer system*                            | - General taxes<br><br>- Single-payer system                                | -Voluntary premiums or general taxes<br>- Multi-payer System                           |
| <b>Reimbursement</b>                | - Salaries and capitation payments to physicians | - Fixed payments to hospitals<br>- Negotiated point-fee-for-service to physician | - Global budgets to hospitals<br>- Negotiated fee-for-service to physicians | - Mostly fee-for-service to physician<br>- Prospective payment for Medicare & Medicaid |
| <b>Consumer out-of-pocket price</b> | Negligible                                       | Negligible                                                                       | Negligible                                                                  | Positive, but generally small                                                          |
| <b>Production</b>                   | Private but public contract                      | Private                                                                          | Private                                                                     | Private                                                                                |
| <b>Physician choice</b>             | Limited                                          | Unlimited                                                                        | Unlimited                                                                   | Relatively Limited                                                                     |

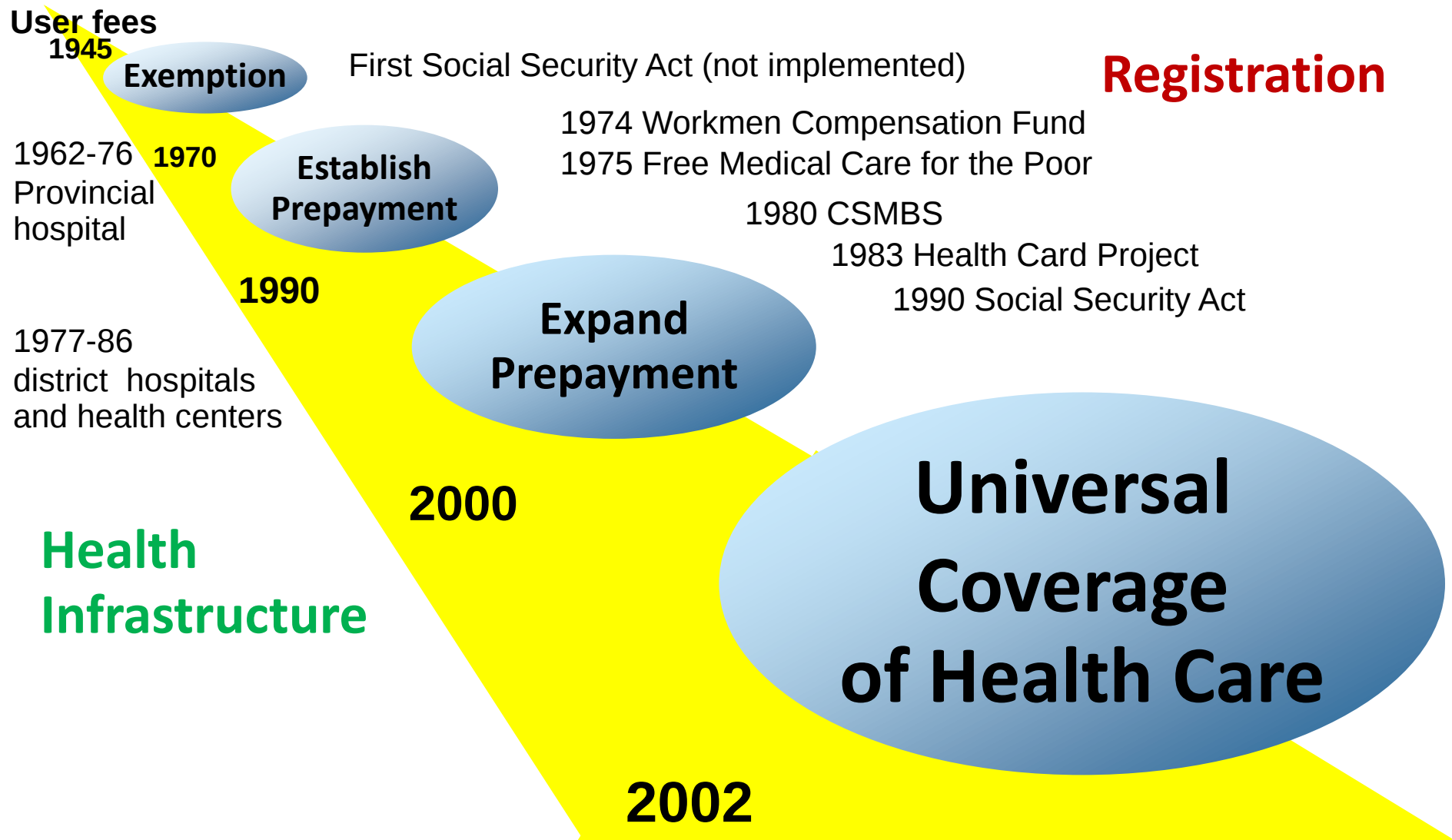
# A CASE STUDY OF THAILAND

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# Overview

- Health care system in Thailand is based on a “pluralistic” approach.
  - Multiple public health schemes
  - Different sources of funding.
- The country adopted to Universal Health Coverage in late 2001.
  - This action is based on egalitarian ideology.
- Ministry of Public Health is the major health service provider.
  - ~70% of hospital beds are in public hospitals.
  - Private health facilities are concentrated in Bangkok and other large cities.

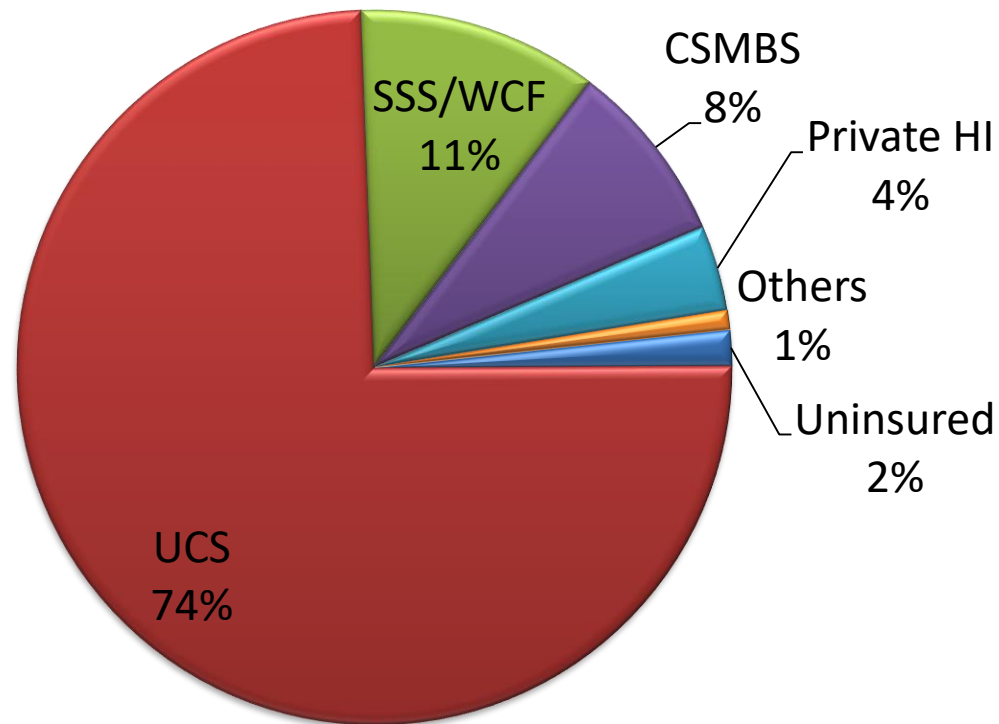
# Historical development



# Current Public Health Schemes

- **Public employees**
  - Civil Servant Medical Benefit Scheme (CSMBS):  
Employee benefit schemes
- **Private employees**
  - Workmen compensation fund (WCF)
    - For work-related illness
  - Social Security Scheme (SSS):
    - For non-work-related illness
    - Contributed jointly by employees, employers, and the government
- **The rest (people uncovered by CSMBS or SSS)**
  - Universal Coverage Scheme (UC):

# Health Care Coverage 2011



Source: Health and Welfare Survey, 2011 (NSO, Thailand)

# Financing

| Schemes | Nature                                                                                        | Financing Model                                                |
|---------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| CSMBS   | Fringe benefits, tax-based system                                                             | Public reimbursement model                                     |
| SSS     | Social health insurance, compulsory contributions from employer, employee, and the government | Public contracted model with both public and private hospitals |
| UCS     | Entitlement, tax-based system, managed by <a href="#">NHSO</a>                                | Public contracted model, capitation 2,100 THB in 2007          |

# Reimbursement

| Schemes | Reimbursement                                                                                                                                                                                                   |
|---------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSMBS   | Retrospective fee-for-services<br>IP -> DRG reimbursement in April 2007                                                                                                                                         |
| SSS     | Capitation for OP and IP services<br>Additional payments for utilization rate, OP (chronic conditions), IP workload (DRG), fee schedule for high cost services, and fixed amount for AE, dental care, maternity |
| UCS     | OP, PP - Capitation<br>IP - DRG weighted global budget<br>Accident/Emergency and High Cost OP – point system,<br>Accident/Emergency and High Cost IP –DRG weighted global budget                                |

# Production

| Scheme | Benefit Package                                                                                                                                     | Service Providers                                                                                                                                         |
|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| CSMBS  | Comprehensive package including OP, IP, and private ward in public hospitals                                                                        | Free choice of public facilities<br>Access to private hospitals only in case of emergency                                                                 |
| SSS    | Comprehensive package including OP, IP, maternal care, dental care                                                                                  | Contracted public and private hospitals with 100-bed or above                                                                                             |
| UCS    | Comprehensive package including prevention and promotion services (PP) and accredited alternative medicines with an exclusion list of some services | Contracted public and private hospitals and requiring all hospital to establish one primary care unit (PCU) for every 10,000-15,000 registered population |