

COMPARATIVE HEALTH CARE SYSTEMS

EE 474 Health Economics

Semester 2/2021

Topics

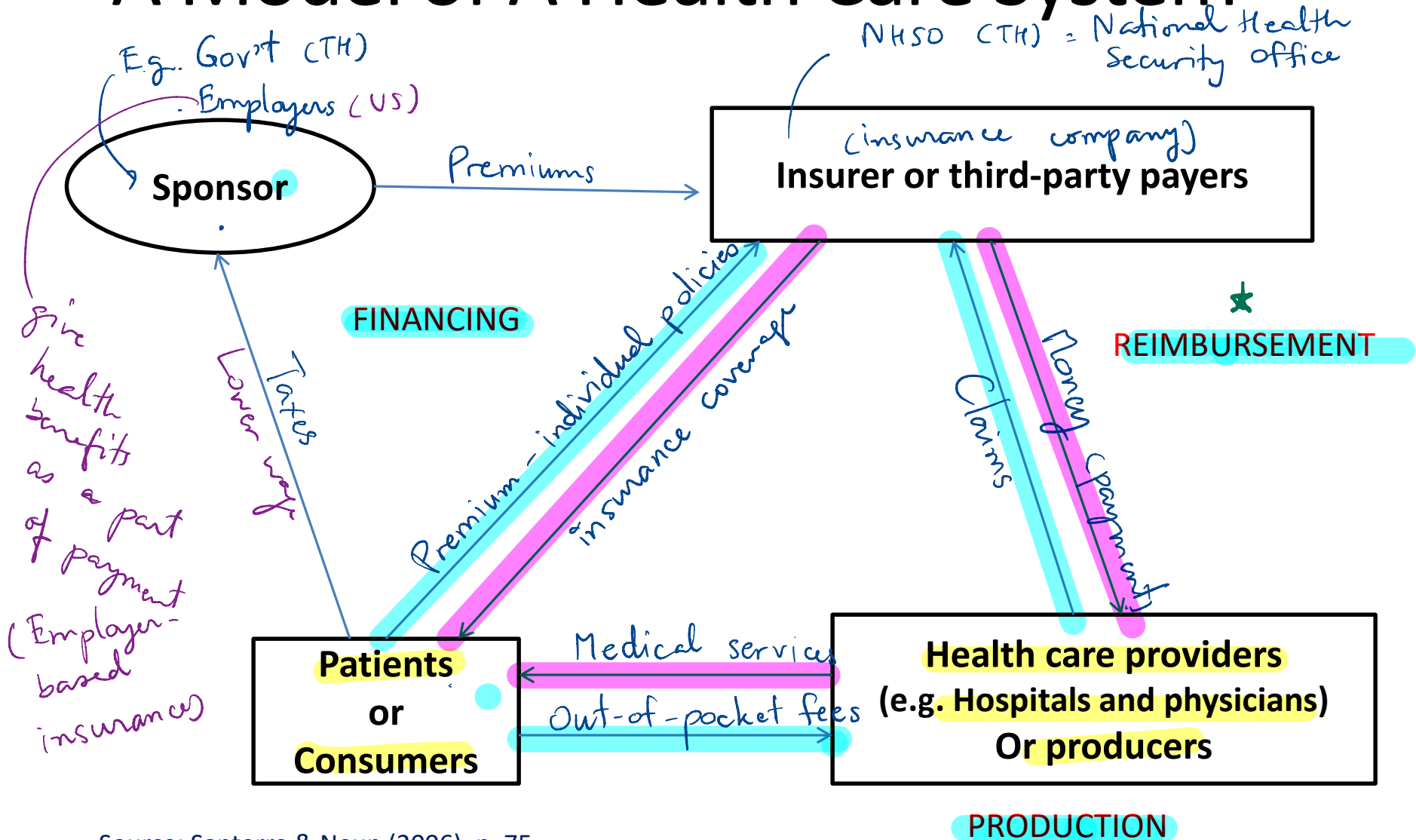
- A Model of A Health Care System
- Typology of Health Care Systems
 - Beveridge Model
 - Bismarck Model
 - National Health Insurance
 - Mixed System
- Thailand – Universal Health Coverage Scheme

Introduction

dynamic process.

- 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).
China *USA*
- 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



Types of Reimbursement Schemes

• Variable Payment

✓ ➤ Fee-for-service basis ^{of oop} → pay after getting the services.
→ pay according to fee schedule

✓ ➤ Retrospective reimbursement → pay after services (eg. pay out-of-pocket first & reimburse later).

• Fixed Payment (Prospective Payment)

total fixed ← Global budget

pay before getting services.

per head ← Capitation basis

payment ✓ Diagnosis-related-group (DRG) based payment

group of disease

eg. 500 baht/person.

Province - 5 mill ppl. → budget = 5m × 500 baht
= 2,500,000,000 = 2.5 bn.

Likelihood of a Large Volume of Medical Services

(for different reimbursement and consumer copayment scheme)

		Types of Reimbursement Scheme	
		Fixed Payment - capitation - Global budget	Variable Payment - retrospective reim. - fee-for-service
Out-of-pocket price to consumer (co-payment)	Low	Low likelihood (1)	High likelihood (2) CSMBS
	High	Very low likelihood (3)	Moderate likelihood (4)

lower volume of med service

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 “*Social health insurance*”
 - 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, *Thailand*
- UC in Thailand.*

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**. * *fixed*
- 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. *↑ gate keeper*

1. Beveridge Model: United Kingdom

- Reimbursement:** *how health care providers get \$ back.*
 - DHAs are allocated funds by the NHS on a **weighted capitation basis**, which consider age, sex, health risk, and geographical cost differences. *adjusted*
 - Independent **community-based family practitioners** contract with the NHS and are paid uniformly on a **capitation basis**. *Primary care*
 - All **general practitioners (GP)** are paid on a **capitation basis**.
 - All **physician-based hospital physicians and consultants** are paid on a **fixed salary basis**. *More advanced health care.*

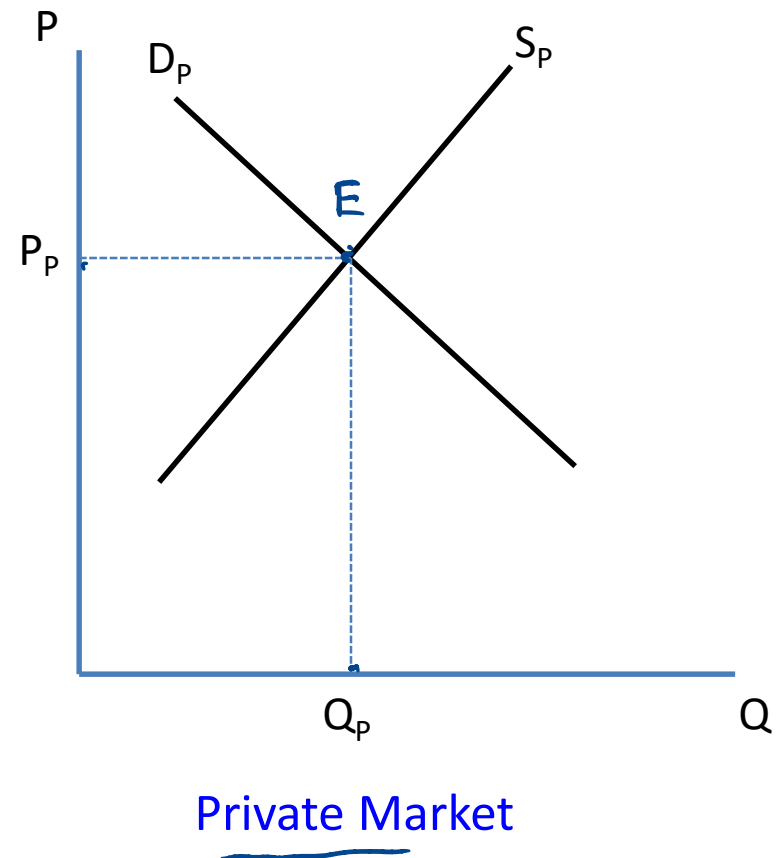
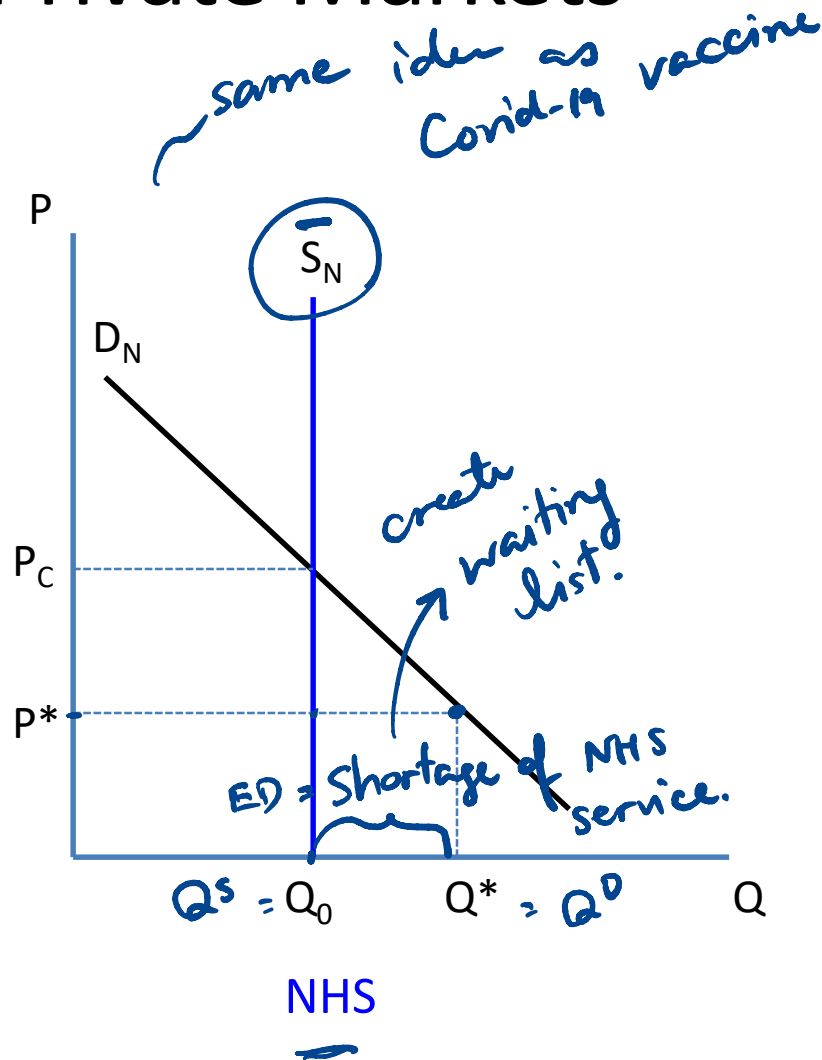
1. Beveridge Model: United Kingdom

• 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)**.

oop. }

A Model of Rationed Health Care and Private Markets



2. Bismarck Model: Germany → SSS "Social Security"

• 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**. contributions by employees, employers, gov't.
- 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. *~ compulsory*
- 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.
- **Sickness funds** are responsible for **collecting funds** from employers and employees and **reimbursing hospitals and physicians**.

2. Bismarck Model: Germany

"OPD"

• 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**.

↑
outpatient care

OPD

hospitals

doctors

2. Bismarck Model: Germany

- Production:

- Medical services are produced primarily in the private sector. *for IPD = inpatient.*
- 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. *due to financial problems asso. rising costs, aging popⁿ . . .*

3. National Health Insurance: Canada

Taiwan

- **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:**

autonomous of.

- ✓ *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!**
opposite to private insurance

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.

(lump-sum payment)

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**.

↘ differ from NHS

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 VA hospitals.
- ✓ ➤ **Americans age 65+ on Medicare**: Canada's NHI
- ✓ ➤ **Working Americans who get insurance on the job**: Germany's Bismarck model Employer-based insurance.
- **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.

"near poor" who are unemployed, and age < 65.

➤ **Medicaid** → "Poor" families & disadvantaged children

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. (determined by % of state poverty line)
 - 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.

high
likelihood
of ↑
utilization
↓
rising
cost

4. Mixed System: United States

Profit → R&D, innovation*
↳ reduce accessibility

- **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

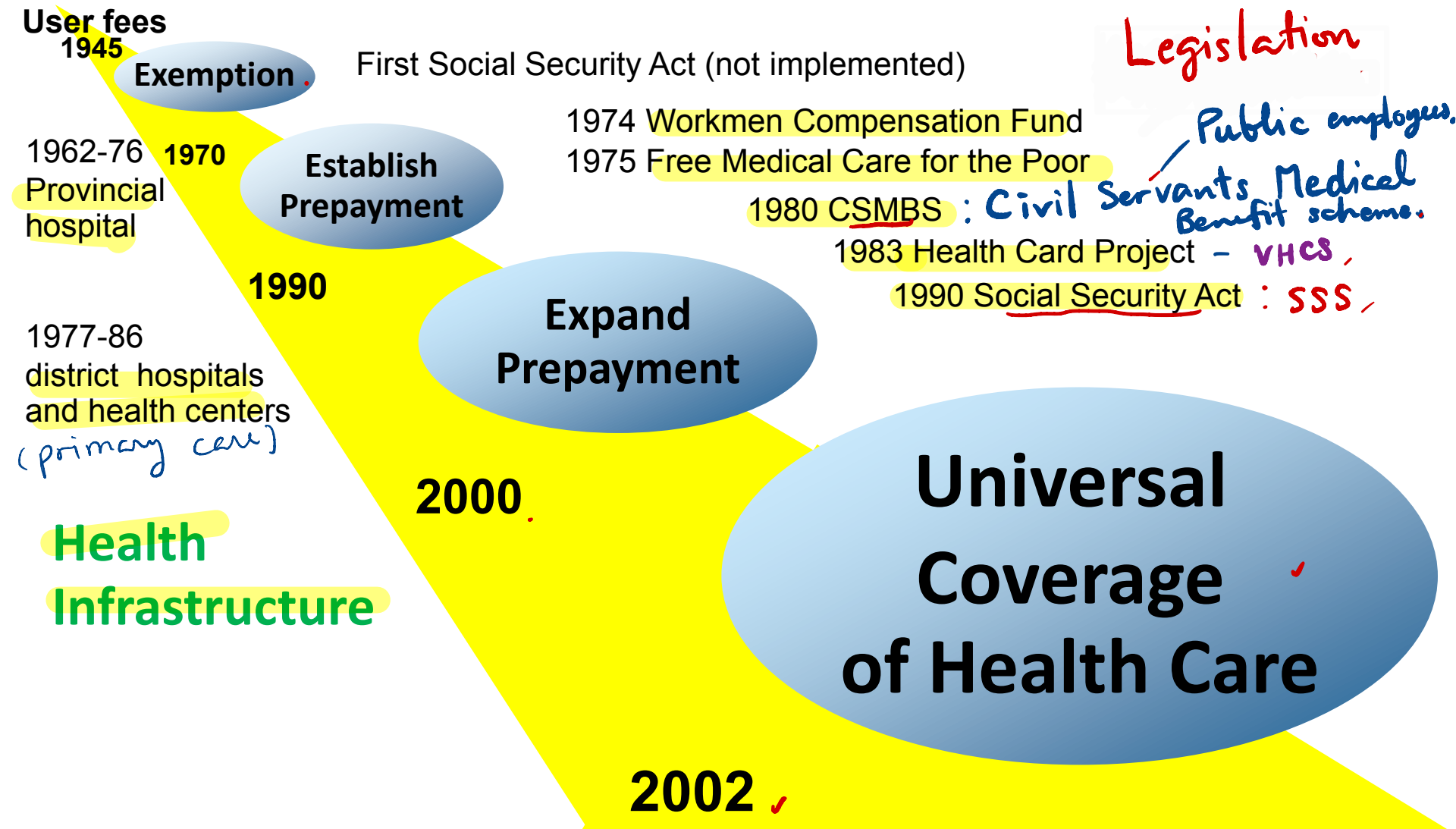
Feature	"Beveridge" (e.g. UK)	"Bismarck" (e.g. Germany)	NHI (e.g. Canada)	Mixed System (e.g. US)
Coverage	Near universal	Near universal	Universal	~84%
✓ Financing	- General taxes - Single-payer system	- Payroll and general taxes - Single-payer system*	- General taxes - Single-payer system	- Voluntary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

A CASE STUDY OF THAILAND

Overview

- Health care system in Thailand is based on a “pluralistic” approach.
 - Multiple public health schemes : CSMBS, SSS, UC
 - Different sources of funding.
- The country adopted to Universal Health Coverage in late 2001.
 - This action is based on egalitarian ideology. *equal*
- Ministry of Public Health is the major health service provider.
 - ~70% of hospital beds are in public hospitals. *rival but not excludable.*
- Private health facilities are concentrated in Bangkok and other large cities. *ODP* →

Historical development



Before 2002

After 2002

CSMBS
(govt employees + family)

CSMBS

SSS
(private workers)

SSS

LIC (low-income)

VHCS (Voluntary health card scheme)

Uninsured
(OOP)

UCS

(30-baht scheme)

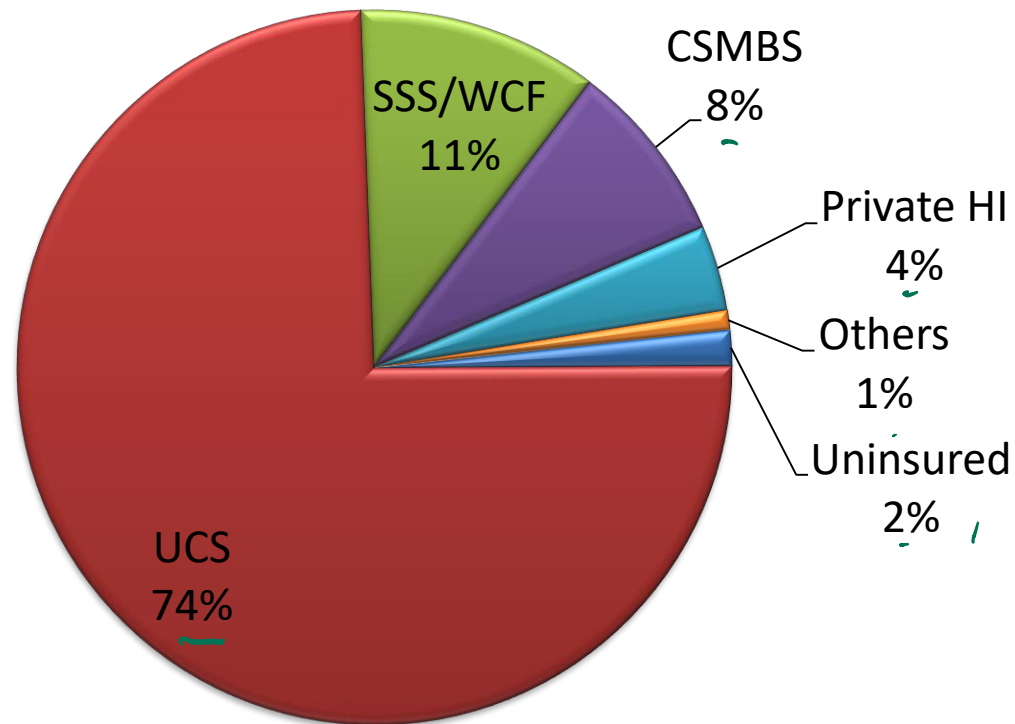
a.k.a

Gold-card scheme.

Current Public Health Schemes

- **Public employees** + their spouse + parents + children (< 20)
 - Civil Servant Medical Benefit Scheme (CSMBS): \approx VA (USA)
Employee benefit schemes . Beveridge
- **Private employees**
 - Workmen compensation fund (WCF) } SSS \sim Bismarcke
 - 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): \sim NHI (Taiwan, Canada).
 - Migrant worker's health card ; private insurance.

Health Care Coverage 2011



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

Financing → how we fund health care exp.

Ministry of Public Health

Schemes	Nature	Financing Model
1. CSMBS	<u>Fringe</u> benefits, <u>tax</u> -based system	<u>Public</u> reimbursement model
2. SSS Social Security office	<u>Social</u> health insurance, compulsory <u>contributions</u> from <u>employer</u> , <u>employee</u> , and the <u>government</u>	<u>Public</u> contracted model with both <u>public</u> and <u>private</u> hospitals
3. UCS	Entitlement, <u>tax</u> -based system, managed by <u>NHSO</u>	<u>Public</u> contracted model, capitation 2,100 THB in 2007

National Health Security office
(1 Purchaser)

Reimbursement

- how health care providers get the money back from financing.

Schemes	Reimbursement
✓ CSMBS	<p><u>Retrospective fee-for-services</u> → OP (not fixed) → large spending</p> <p><u>IP</u> → <u>DRG</u> reimbursement in April 2007 <u>Diagnosis-Related group (DRG)</u></p>
✓ SSS (fixed payment)	<p><u>Capitation</u> for <u>OP and IP services</u></p> <p>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,</p>
✓ UCS fixed →	<p>OP, PP - <u>Capitation</u></p> <p>IP - <u>DRG weighted global budget</u> (fixed amount adjusted by disease group).</p> <p>Accident/Emergency and High Cost OP – point system, Accident/Emergency and High Cost IP – DRG weighted global budget</p>

OP = Out-patient ; IP = In-patient ; PP = Prevention & Promotion

Production - health care delivery.

Scheme	Benefit Package	Service Providers
✓ CSMBS	Comprehensive package including OP, IP, and private ward in public hospitals	Free choice of public facilities 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

limited choice

VC
1. Primary &
2. secondary ✓