Health Care Systems

© Can Stock Photo - csp10962869

Dr. Sireen Alkhaldi, BDS, MPH, DrPH
Community Health / First Semester 2018/2019
Department of Family and Community Medicine
Faculty of Medicine/ The University of Jordan

Reference: material in this slides has been adapted from **Understanding Health Policy, A Clinical Aproach. T. Bodenheimer, 4th edition.**

Learning Objectives of this lecture:

By the end of this lecture, you are going to:

1. **Understand the definition, elements, and components of a health care system.**
2. **Identify the goals of health systems.**
3. **Describe the components of health care delivery system.**
4. **Describe the Jordan health system, organization, financing, and expenditures.**

What is a Health Care System?

What is a System?

- System: “a set or arrangement of things connected or related to form a unity or organic whole”.
- System: “a collection of components organized to accomplish a specific function or a set of functions”.

✓ The environment of the system is defined as all of the factors that affect the system and are affected by it.

What is a Health Care System?

A Health Care System: "the complete network of agencies, facilities, and all providers of health care in a specified geographic area."

(Mosby's Medical Dictionary, 8th edition. © 2009, Elsevier.)

What is a Health Care System?

The term is usually used to refer to the system or program by which health care is made available to the population and financed by government, private enterprise, or both.

What is a Health Care System?

Every country has a health system, however fragmented it may be among different organizations or however unsystematically it may seem to operate.

Integration and oversight do not determine the system, but they may greatly influence how well it performs.

Goals of a Health Care System

The goals for health systems, according to the World Health Report (WHO, 2000), are:

1) **Good health (improving health)**
2) **Responsiveness to the needs and expectations of the population**
3) **Fair financial contribution.**
4) **Efficient to achieve the best outcomes possible given available resources and circumstances**

What is a Health Care Delivery System?

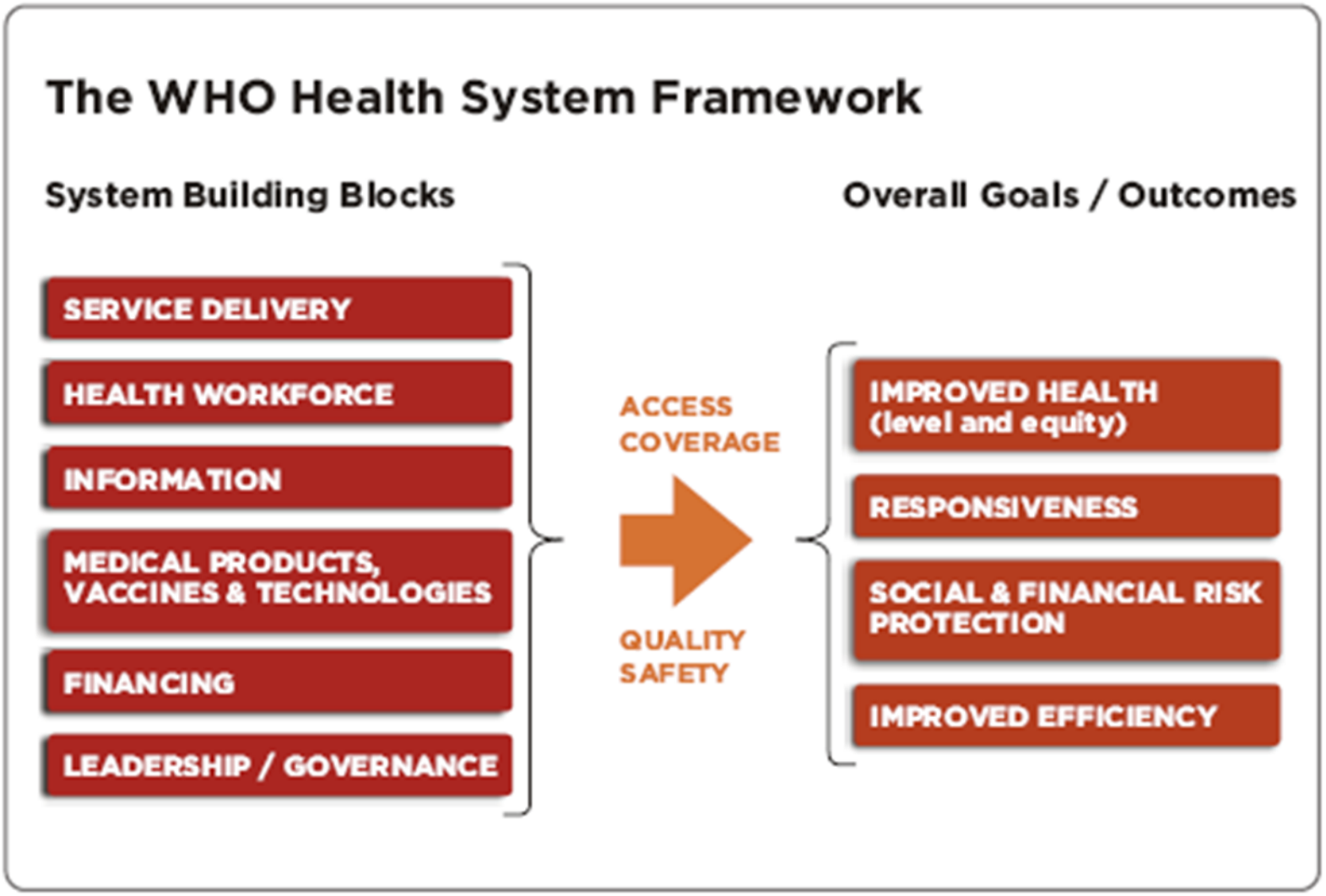
Three major components that make up the Health Care Delivery System are:

1. Facilities
2. Practitioners
3. Entities (Provide the financial and regulatory functions for the facilities and practitioners, e.g. government)

Key components of a well functioning health system

Figure 1.2 The dynamic architecture and interconnectedness of the health system building blocks

Figure 1.1 The building blocks of the health system: aims and attributes (5)



Why Study Health Systems?

- Health systems are one of the several determinants of health, and high-performing health systems can improve the health of populations.
- The way Health Systems are designed, managed, and financed affects people's lives and livelihoods.
- Preventable deaths and disability is disproportionately borne by the poor.
- Responsibility of health system performance lies on the government.

Why Study Health Systems?

- The difference between a well-performing health system and one that is failing (falling short of their performance potential) can be measured in death, disability, impoverishment, humiliation and despair.
- In the Health Systems perspective we get out of the "health" box, in thinking that only medical services and technologies are important; rather, in Systems perspective, we address inequalities in income and housing, seatbelt laws, safe roads, antismoking legislation, firearm legislation, workplace safety all help to maintain good health.

Levels of Health Care

One concept is essential to understanding the "topography" of any health care system, is the organization of care into **primary**, **secondary**, and **tertiary** levels.

1. Primary Care:

Primary Care is the usual point at which an individual enters the health care system.

It involves common health problems (eg, sore throat, sprained ankle, or hypertension) and preventive measures (e.g., vaccinations) that account for 80%-90% of visits to a physician or other caregivers.

Its major task is the early detection and prevention of disease. This level of care contains the routine care of individuals with common health problems and chronic illnesses that can be managed in the home or through periodic visits to an outpatient facility.

Primary care, cont.

Care givers at this level are **general practitioners (PG's)** who's main responsibility is ambulatory care.

They can be located in community and neighborhood health centers, hospital outpatient departments, physicians' offices, and school and college health units.

2. **Secondary or acute care**

It involves problems that require more specialized clinical expertise. Entry into the system at this level is either by direct admission to a health care facility or by referral.

Providers in this level are physicians in specialties such as internal medicine, pediatrics, neurology, psychiatry, obstetrics and gynecology, and general surgery.

Secondary-level physicians are located at hospital-based clinics and they provide care to **hospitalized patients**.

3. Tertiary Care:

Includes highly specialized technical services for the treatment of **rare complex diseases**.

Providers of tertiary care are sub-specialists in a particular clinical area such as cardiac surgeons, immunologists, and pediatric hematologists .

They are located at a few tertiary care medical centers and highly specialized units of general hospitals; for example, a coronary care unit.

Entry into the health care system at this level is gained by referral from either the primary or secondary level.

Health System in Jordan: How it is organized

- Jordan has one of the most modern health care infrastructures in the Middle East.
- Jordan's health system is a complex amalgam of three major sectors: Public, private, and donors.
- The public sector consists of two major public programs that finance as well as deliver care: the Ministry of Health (MOH)

  Royal Medical Services (RMS).

  Jordan University Hospital (JUH) in Amman

  King Abdullah Hospital (KAH) in Irbid

  United Nation Relief Works Agency (UNRWA)

Overall Health Care System in Jordan

The Private sector:

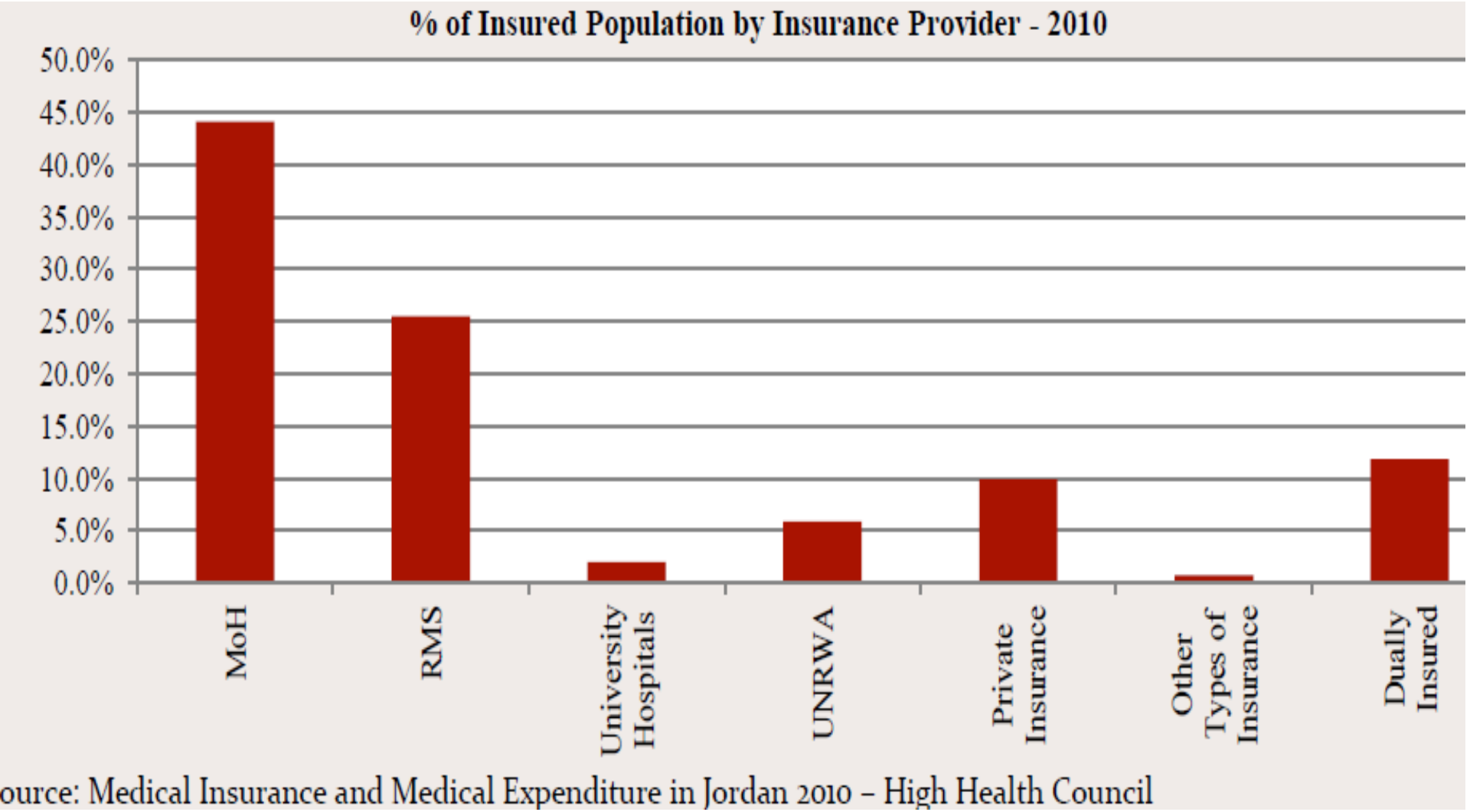
1. Not – for Profit Hospitals : runs 9 hospitals
2. Private Hospitals :49 hospitals

Jordan Health Care System

Ministry of Health: is the major institution financer and provider of health care services in Jordan.

- (MOH) provides primary, secondary and tertiary health care services.
- Primary Health Care services are mainly delivered through an extensive primary health care network consisting of :
  - 84 comprehensive health centers
  - 368 primary health care centers
  - 227 village Clinics
  - 422 MCH Centers and 369 oral health clinics.

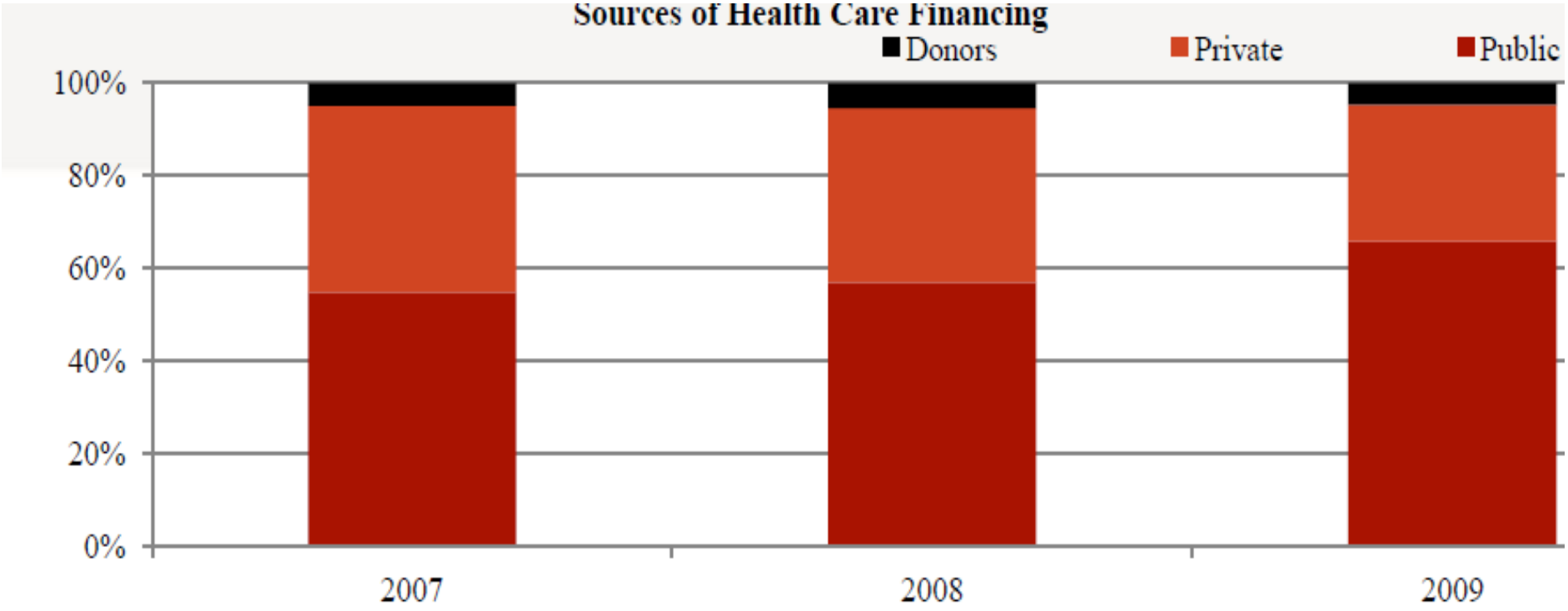
Insured population in Jordan



ource: Medical Insurance and Medical Expenditure in Jordan 2010 – High Health Council

Table 1: Jordan National Health Accounts Main Indicators

Main Indicators	2009
Total Population	5,980,000
Total Health Care Expenditures (JD)	1,610,352,435
Per Capita Health Care Expenditures (JD)	269.3
Gross Domestic Product (GDP) (JD)	16,912,200,000
Gross National Product (GNP) (JD)	17,340,500,000
Per Capita GDP (JD)	2828.1
Health Care Expenditures As Percent Of GDP	9.52%
Health Care Expenditures As Percent Of GNP	9.29%
Percent Of Government of Jordan Budget Allocated To Health	10.52
Sources Of Health Care Financing (Percent Distribution) . Public . Private . Donors	 65.75 % 29.47 % 4.77 %
Distribution Of Health Expenditure . Public . Private . UNRWA . NGOs	 69.17 % 29.80 % 0.59 % 0.43 %
Public Health Expenditure As Percent Of GDP	6.59 %
Private Health Expenditure As Percent Of GDP	2.93 %
Total Expenditure on Pharmaceuticals (JD)	449,395,115
Per Capita Pharmaceutical Expenditure (JD)	75.15
Pharmaceutical Expenditure As Percent of GDP	2.66 %
Pharmaceutical Expenditure As Percent of Total Health Expenditure	27.91 %



Source: High Health Council / Ministry of Health

Table 6.4: Population Formal Coverage (%) by Source (2006-2010)

Source of Coverage	2006 (3)	2008(4)	2010
Civil Insurance	26.4	34	35
RMS Insurance	25	26	27
University hospitals	2.4	2.3	2.3
Private firms and corporations	9.2	9	10
UNRWA	9	8.5	8
Total % insured/covered	**72**	**78.8**	**82.3**
Uninsured/uncovered	**28**	**21.2**	**17.7**
Total	**100**	**100**	**100**

Sources: -Public Health Expenditure Study, 2004.
-General Directorate of Health Insurance, MOH.
-High Health Council. Jordan Health Strategy 2008-2012.
-Jordan News Agency, 9/8/2011:http://www.petra.gov.jo/Public_News/Nws
- RMS Annual report 2010

Two contrasting approaches…

Two contrasting approaches can be used to organize a health care system around these levels of care:

(1) The carefully structured regionalized health care (The Dowson Model).

(2) A more free-flowing model.

1. The Highly Structured System (the Dowson model)

It is based on the concept of **regionalization**:

The Organization and coordination of all health resources and services within a **defined area**.

This model emphasizes the primary care base. This model is typical for the British National Health Services (NHS), most European countries, and health maintenance organizations (HMO's) in the United States.

National means that all the population is covered.

Patient Flow in the Highly Structured System

- Patient flow moves in a stepwise fashion across the different levels. Except in emergency situations.
- All patients are first seen by GP's, who may then steer the patients toward more specialized levels of care through a formal process of referral. This is called **Gatekeeping.**
- Patients may not refer themselves to a specialist.
- **GP's comprise two-thirds of physicians in the UK.**
- **Around 9% of GDP is spent on health (least expensive and efficient).**

The Structured Model: Planning with population focus

- Planning of physicians and hospital resources occurs with a population focus:

1. **GP groups** follow the primary-secondary-tertiary care structure and provide care to a population of 5000-50,000 persons, depending on the number of GP's in the practice.
2. **District hospitals** are local facilities equipped for basic inpatient services, and have a catchment area population of 50,000 – 500,000 persons.
3. **Tertiary care hospitals** serve as a referral centers and handle highly specialized inpatient care needs for a population of 500,000 – 5 million persons.

2. The Free-Flowing Model

An alternative model allows for more fluid roles for caregivers, and more free-flowing movement of patients, across all levels of care.

This model tends to place higher value on services at the **tertiary care** than at the primary care base (people prefer to go directly to tertiary level care).

This is a more **dispersed, fragmented** structure of health care, which is typical for the United States health care system.

The Free-Flowing Model

- Insured patients in the United States are traditionally able to refer themselves and **enter the system directly at any level**.
- Instead of having a designated primary care physician (PCP), patients in the US are used to taking their symptoms directly to the specialist they choose.
- Physicians in the US have less clear defined roles.
- **Only 13% of physicians in the US are general or family practitioners**.
- **More than 17% of GDP is spent on Health (very expensive health care).**
- Many people are underinsured or uninsured…..

Which Model is Right?

The structured model is characterized with:

- **Continuity of care**: sustaining a patient-caregiver relationship over time, which is associated with greater **use of preventive services** (e.g., regular source of care results in better control of hypertension and less reliance on emergency care).
- **Comprehensiveness**: the ability of the GP to manage a wide range of health care needs, in contrast to specialty care which focuses on a particular organ.
- **Coordination:** through referral and follow-up, the primary care provider integrates services delivered by other caregivers.
- **Patient satisfaction and better patient outcomes**, as a result of **compliance with medications**, and **reduced hospitalization** and **decline of overall costs**.

Which Model is Right?

The Free-Flowing model is partially blamed for the **high cost** of health care in the US, and **quality of care** also suffers.

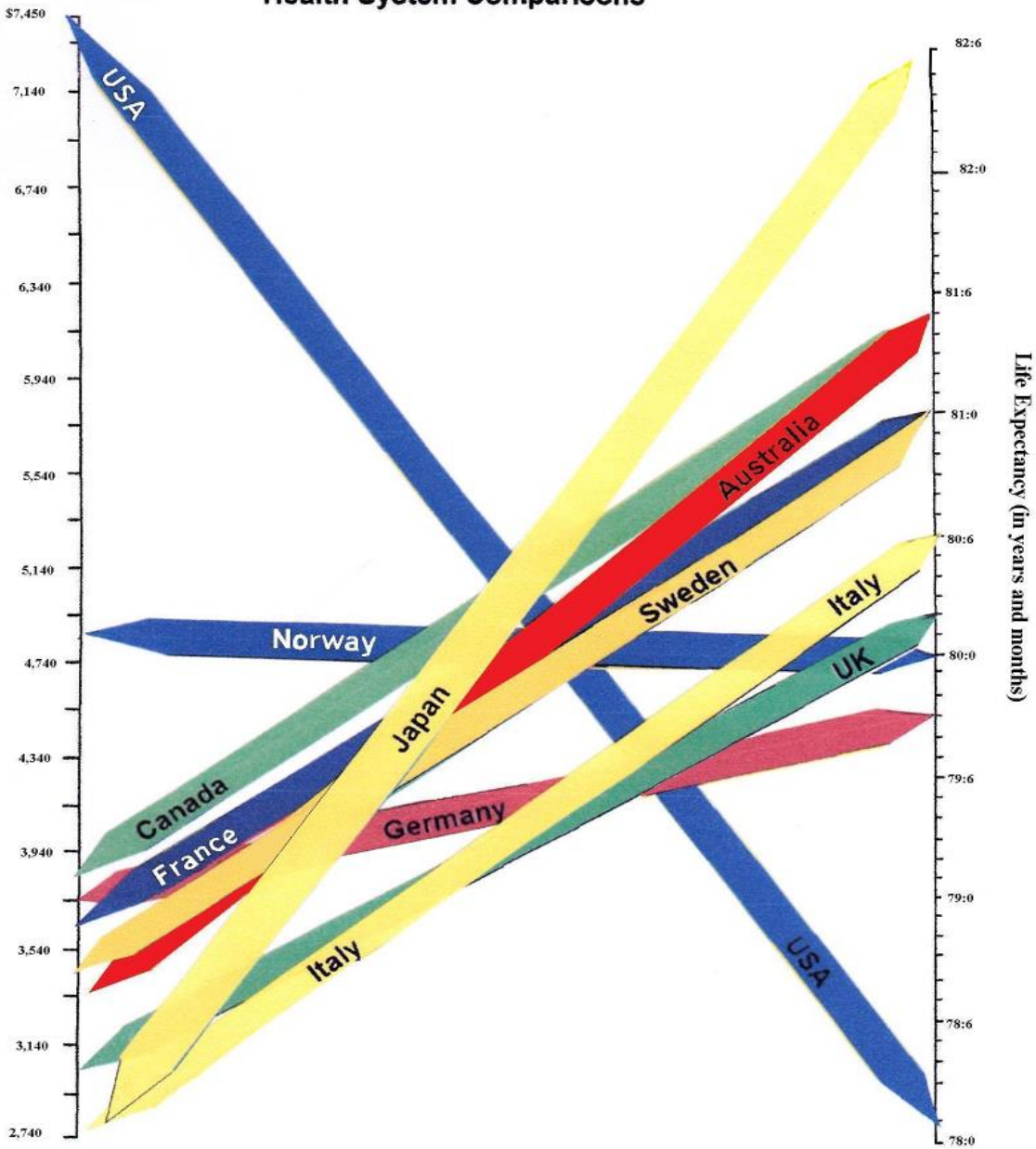
(eg, when many hospitals perform small numbers of surgical procedures such as coronary artery bypass grafts, mortality rates are higher than when such procedures are regionalized in a few higher-volume canters).

- This is due to the less integrated care.
- On the other hand, the Free-Flowing model promotes **flexibility** and **convenience** in the availability of facilities and personnel. The emphasis on specialization and technology is compatible with values and expectations in the US (patients value direct access to specialists and autonomy in selecting caregivers, and not being on the waiting list).

Which Model is Right?

- International comparisons of health systems have indicated that nations with **greater primary care** orientation tend to have more **satisfied patients and better performance on health indicators** such as infant mortality and life expectancy.
- Within the US, states with greater supply of primary care physicians, but not specialists, have lower mortality rates.

Health System Comparisons

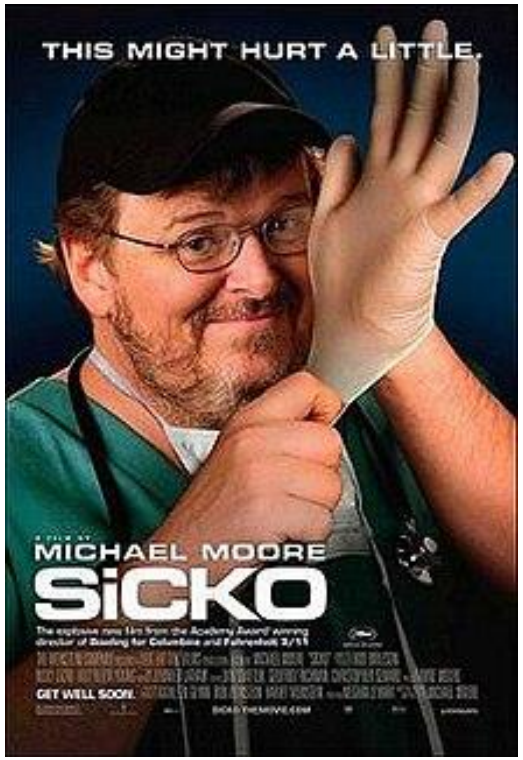


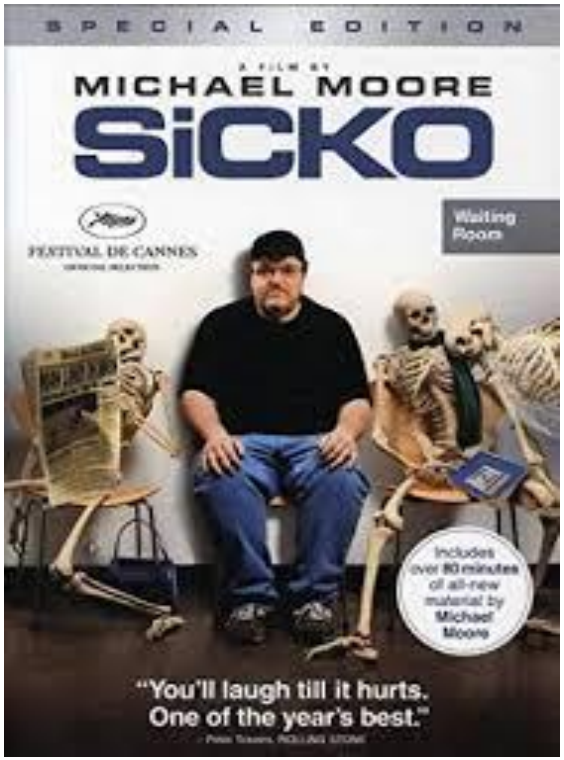
Data Sources

Organisation for Economic Co-operation and Development. "OECD Health Data 2008: How Does Canada Compare" (PDF). Retrieved 2009-01-09.

Oecd.org. "OECD Health Data 2009 - Frequently Requested Data". Retrieved 2011-08-06.

For more information about health systems, I recommend watching the documentary film “Sicko” for Michael Moore





https://www.youtube.com/watch?v=9CDLoyXarXY