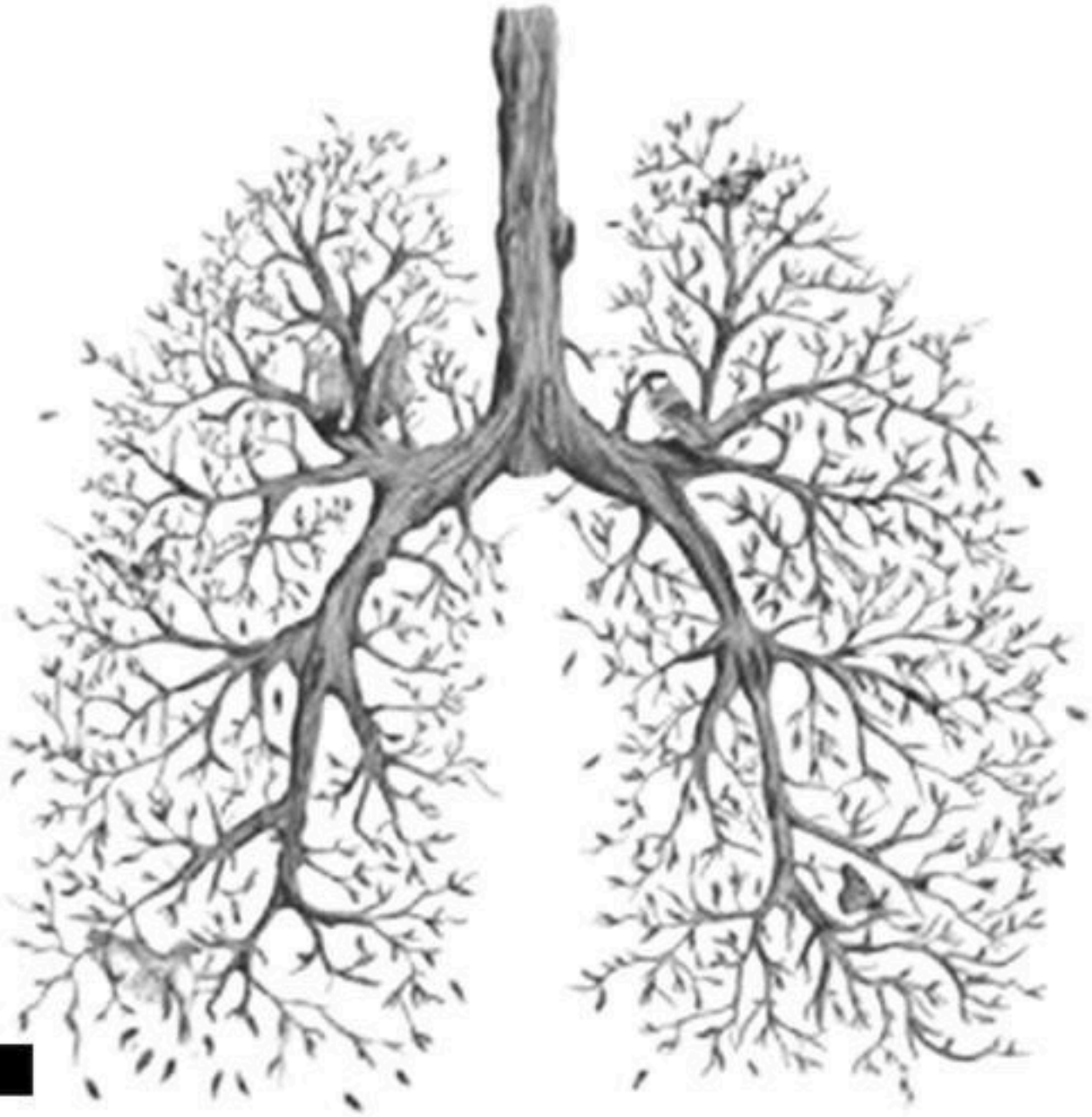


By Mohamed F. Abu Alia



Medical Committee  
The University of Jordan

# Community Medicine



Slides

Sheet

Slide #: 6

Date:

Doctor: Sireen Al-Khalidi



# 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.

# 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.

# 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.**

# 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.
- This is a more **dispersed, fragmented** structure of health care.

# 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.**

# 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** (eg, 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).

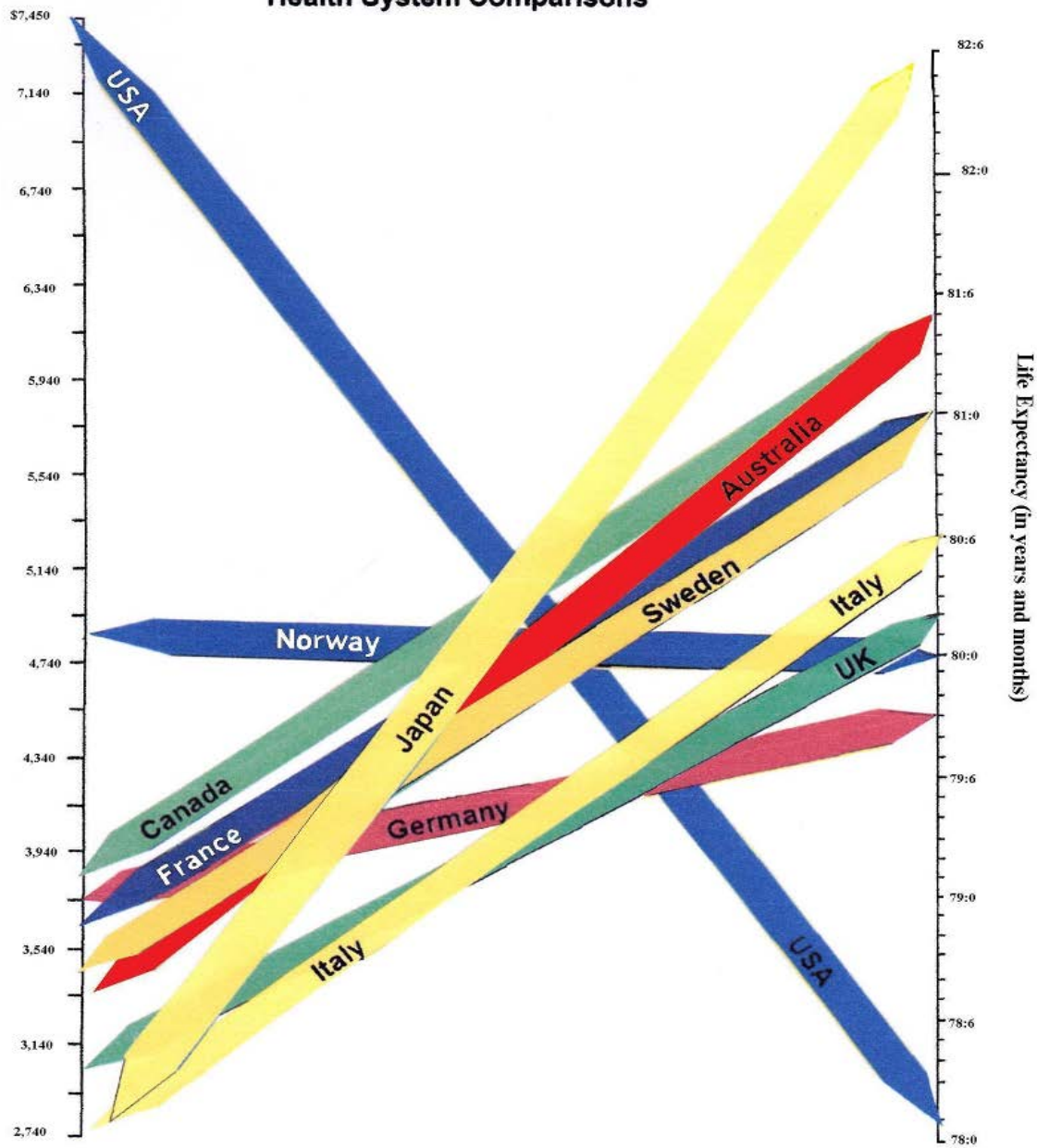
- This is due to the less integrated care.
- On the other hand, the Free-Flowing model promotes **flexibility** and **convenience** in the availability of facilities and personnel. The emphasis on specialization and technology is compatible with values and expectations in the US (patients value direct access to specialists and autonomy in selecting caregivers).

# 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.

# What Resources are Needed?

## Balancing the Mix of Resources:

- The provision of health care involves putting together a considerable number of resource inputs to deliver an extraordinary array of different service outputs.
- Figure 4.1 identifies three principal health system inputs: **human resources, physical capital, and consumables**. It also shows how the financial resources to purchase these inputs are of both a **capital investment and a recurrent cost**.
- As in other industries, investment decisions in health are critical because they are generally **irreversible**: they commit large amounts of money to places and activities which are difficult, even impossible, to cancel, close or scale down.

# What Resources are Needed?

Figure 4.1 Health system inputs: from financial resources to health interventions

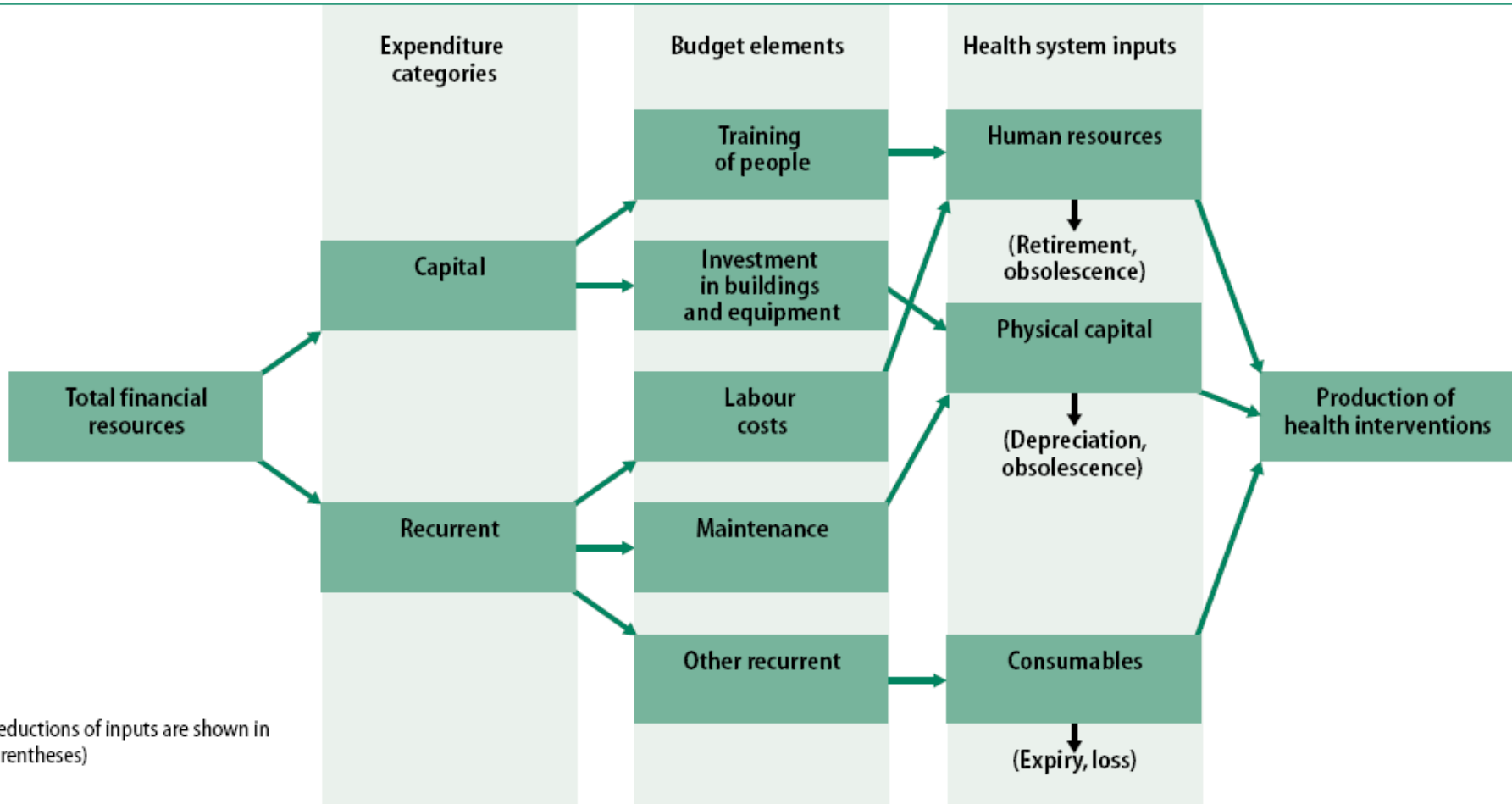
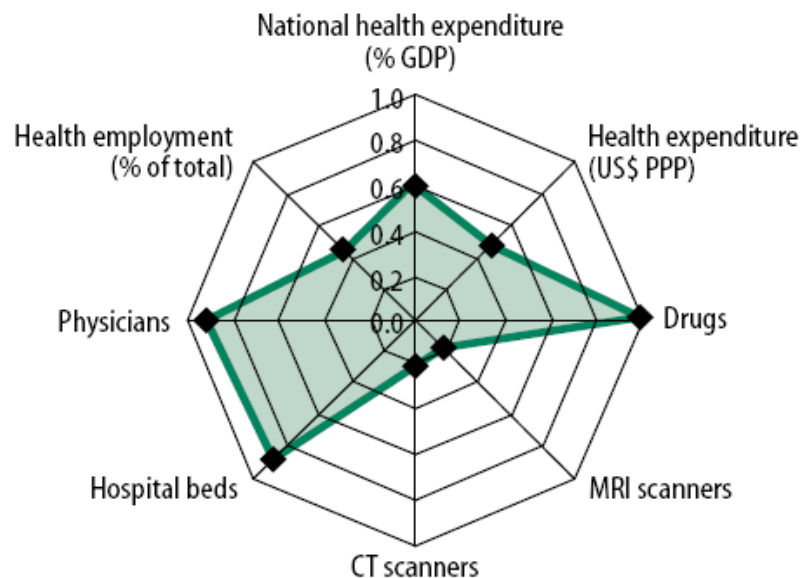
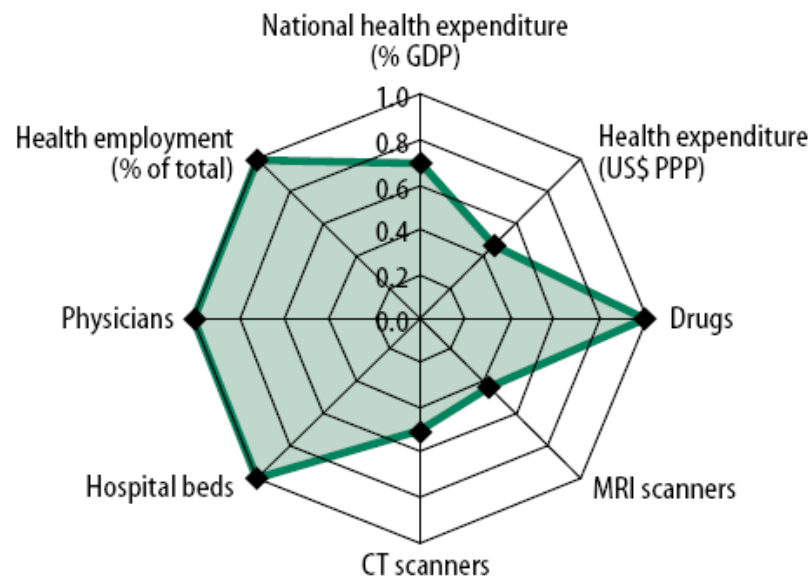


Figure 4.2 Health systems input mix: comparison of four high income countries, around 1997

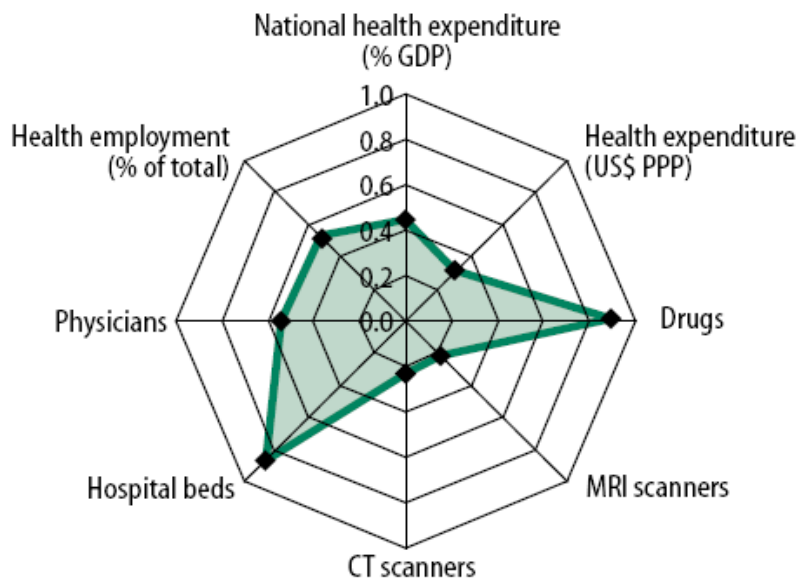
Denmark



Sweden



United Kingdom



United States of America

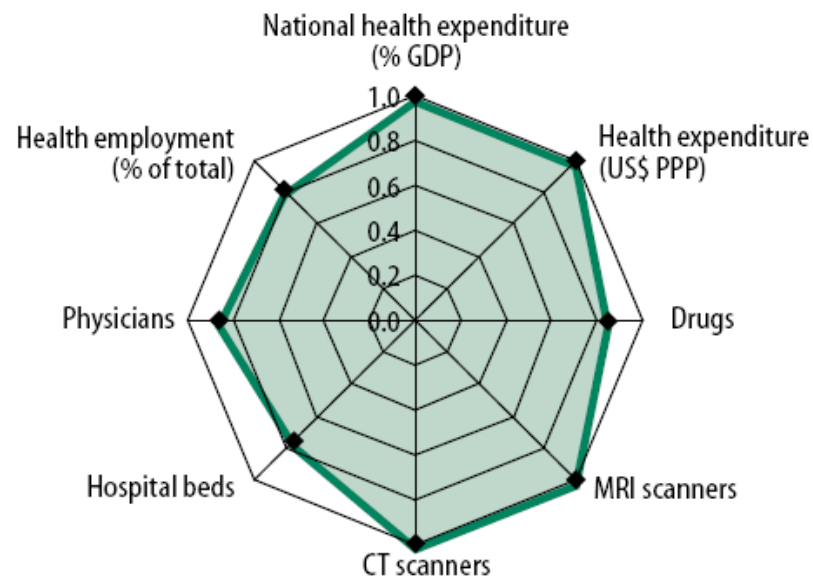
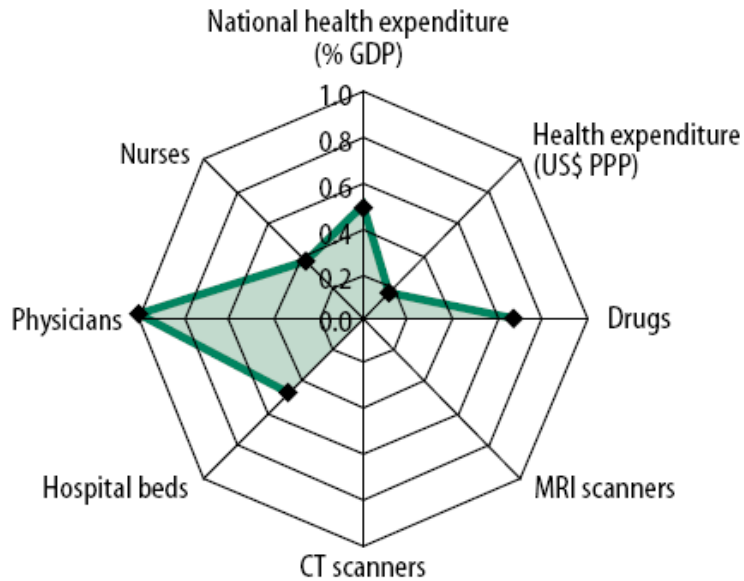
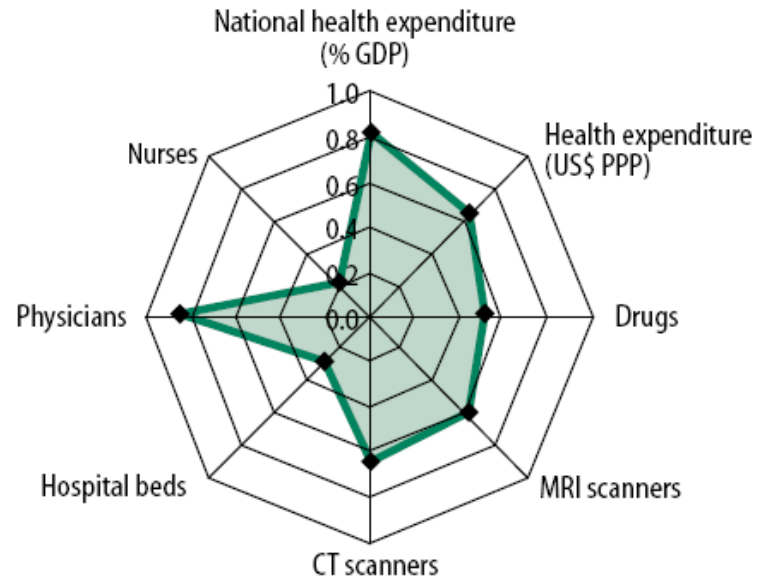


Figure 4.3 Health systems input mix: comparison of four middle income countries, around 1997

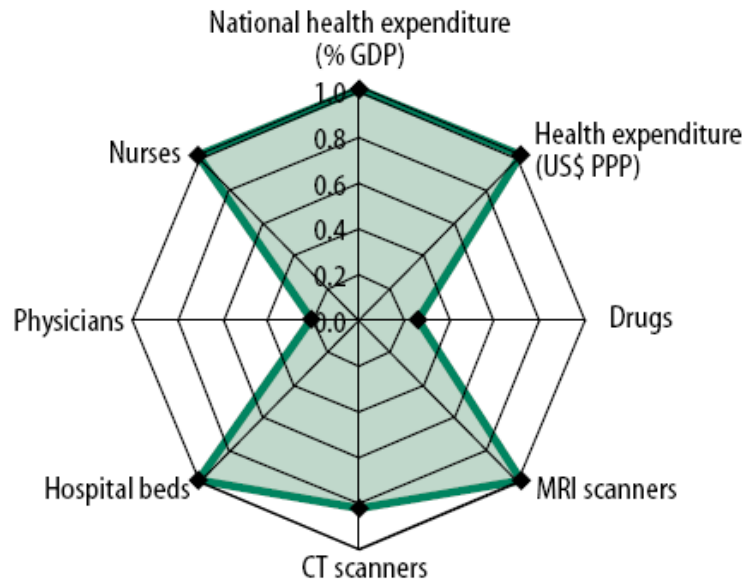
Egypt



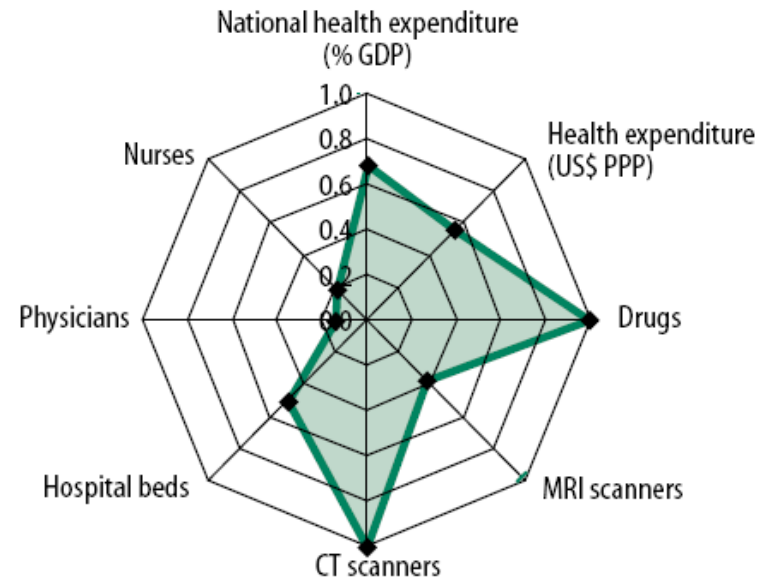
Mexico



South Africa



Thailand



# HOW FINANCING WORKS

Health financing is a key to effective interaction between providers and citizens.

**The purpose of health financing is to make funding available, as well as to set the right financial incentives for providers, to ensure that all individuals have access to effective public health and personal health care.**

This means reducing or eliminating the possibility that an individual will be **unable to pay** for such care, **or** will be **impoverished** as a result of trying to do so.

# HOW FINANCING WORKS

To ensure that individuals have access to health services, three interrelated functions of health system **financing** are crucial:

**(1) revenue collection**

**(2) pooling of resources**

**(3) purchasing of interventions**