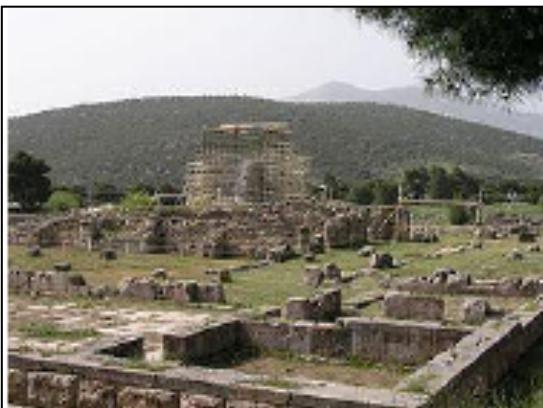


# Supply and Demand in Medical Tourism & Cross-border Healthcare



# Introduction

# History of Medical Tourism



## The asclepieion at Epidaurus ...

was the most **celebrated healing center of the Classical world**, the place where ill people went in the hope of being cured.

To find out the right cure for their ailments, they spent a night in the **enkoimitiria, a big sleeping hall**. In their dreams, the god himself would advise them what they had to do to **regain their health**.

Found in the sanctuary, there was a **guest house for 160 guestrooms**. There are also **mineral springs** in the vicinity which may have been used in healing.

# Definition – Medical Tourism



**Medical tourism** (also called medical travel, health tourism or global healthcare) is a term initially coined by travel agencies and the mass media to describe the rapidly-growing practice of travelling across international borders to obtain health care. It also refers pejoratively to the practice of healthcare providers travelling internationally to deliver healthcare.

(Source: Wikipedia: [http://en.wikipedia.org/wiki/Medical\\_tourism](http://en.wikipedia.org/wiki/Medical_tourism))

# Challenges in Medical Tourism



Information ?  
Transparency?



Safety/Security?  
Communication ?



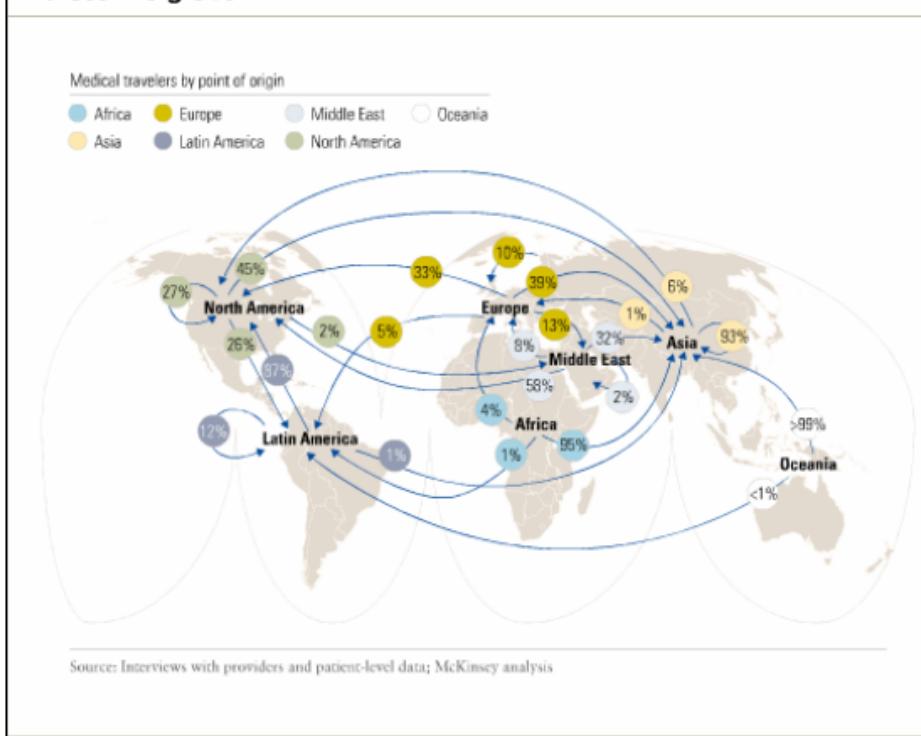
Quality ?  
Organisation?

# Mc Kinsey – Medical Tourism

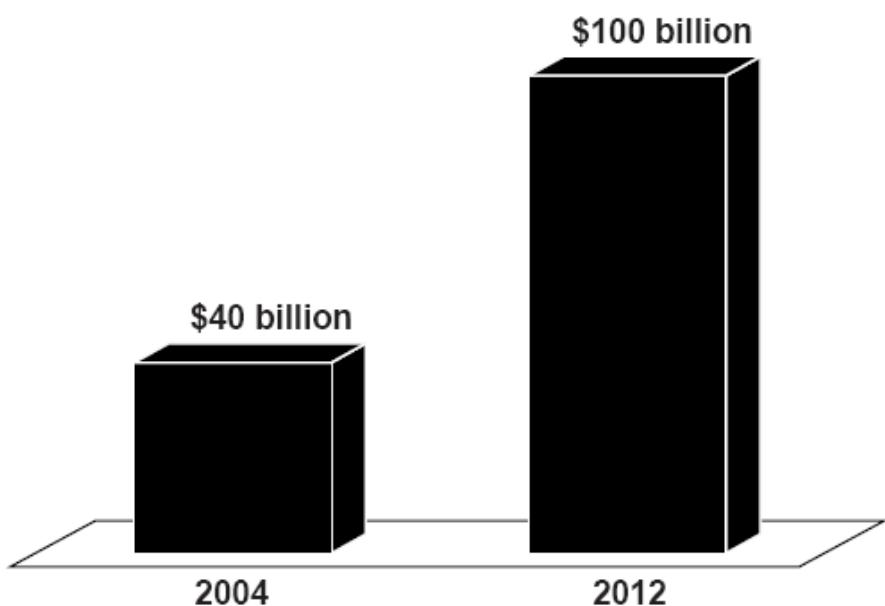


# Medical Tourism - Worldwide

## Across the globe



## Worldwide Medical Tourism Industry (billions of U.S. dollars)



# Controversial Discussions

pro

con

Patients have the right of choice to get the best medical treatment worldwide

It is not ethical to deny medical treatment to anyone

Only rich patients can afford medical treatment abroad

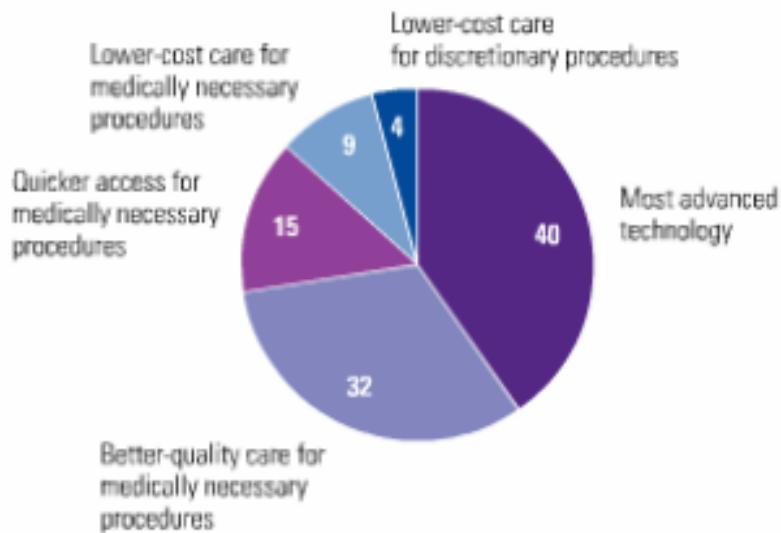
The local population has priority

# Aspects of Medical Tourism



# Driving Forces

# Quality = Main driving factor

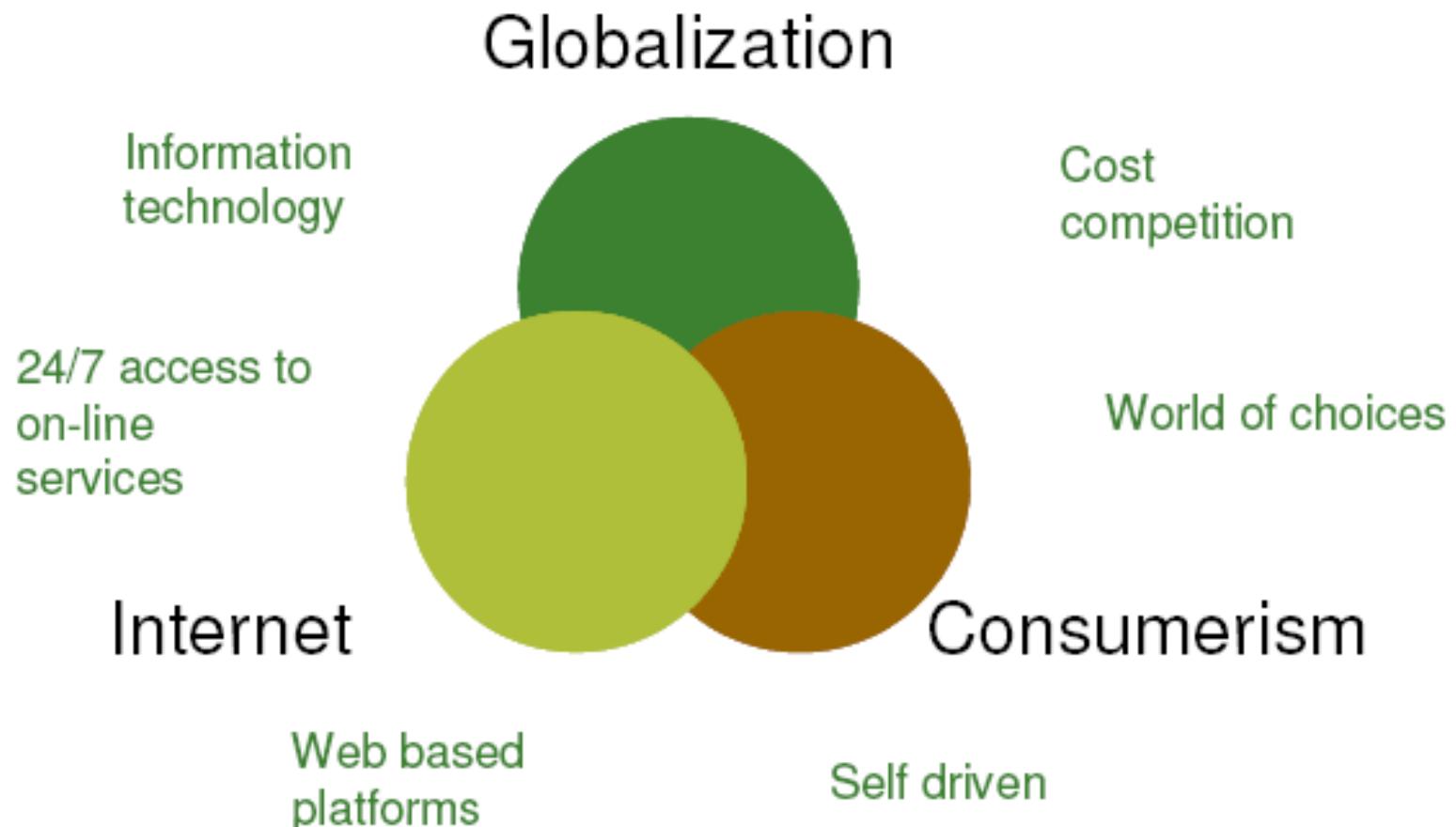


## **Comparative Treatment Cost Estimates**

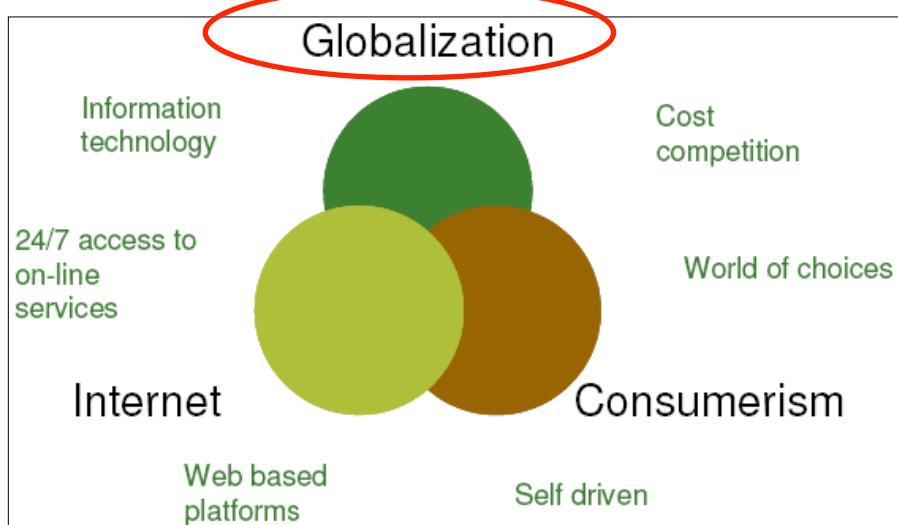


*Even when standardized for quality and other features, treatment costs vary dramatically among different countries.*

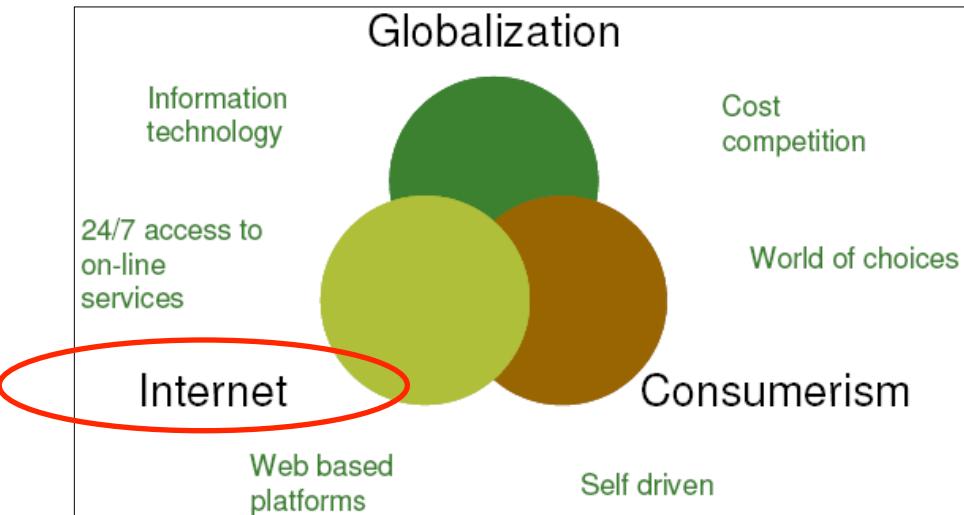
# Driving Forces in Medical Tourism



# Driving Forces in Medical Tourism



# Driving Forces in Medical Tourism

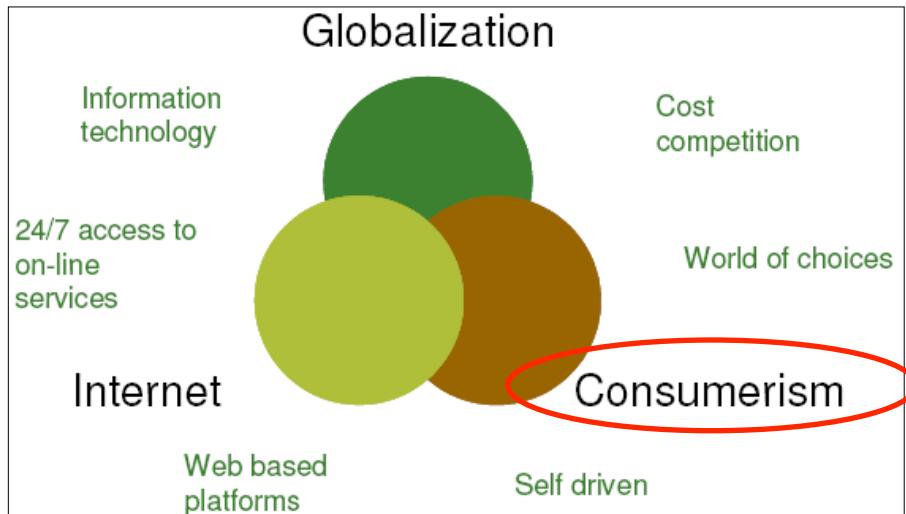




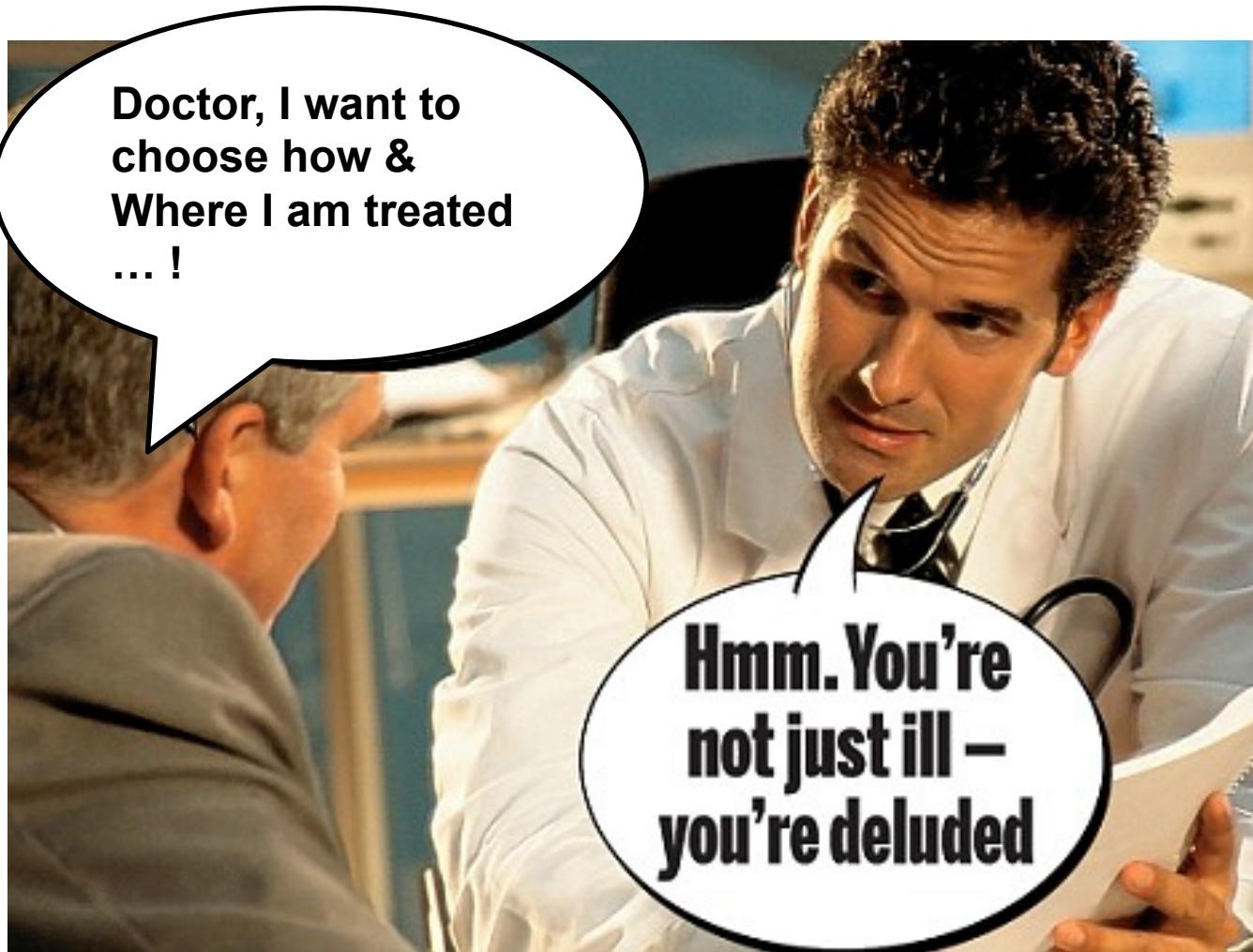
A composite image featuring a man in a white lab coat surfing a massive wave of blue digital data, and another man working at a desk. A blue diamond-shaped callout box contains the text "Web based Health Coach".

Web based  
Health Coach

# Driving Forces in Medical Tourism



# Driving Forces in Medical Tourism



# Cost Comparison

**Medical Tourism Sample Surgery Cost Chart**

Surgery	USA	Colombia	Costa Rica	India	Jordan	Korea	Mexico	Singapore	Thailand
Heart Bypass	\$144,000	\$14,630	\$25,000	\$8,500	\$10,000	\$24,000	\$20,000	\$13,500	\$24,000
Angioplasty	\$57,000	\$7,106	\$13,000	\$8,500	\$5,000	\$19,600	\$16,000	\$7,500	\$7,000
Heart Valve Replacement	\$170,000	\$10,450	\$20,000	\$1,100	\$12,000	\$36,000	\$30,000	\$13,500	\$22,000
Hip Replacement	\$50,000	\$8,360	\$12,500	\$8,000	\$8,000	\$16,450	\$13,125	\$11,100	\$14,000
Hip Resurfacing	\$50,000	\$10,500	\$12,000	\$8,000	\$8,000	\$20,900	\$12,800	\$12,100	\$16,000
Knee Replacement	\$50,000	\$7,106	\$11,500	\$7,000	\$7,000	\$17,800	\$10,650	\$10,800	\$12,000
Spinal Fusion	\$100,000	\$14,500	\$15,000	\$12,000	\$10,000	\$17,350	\$7,000	\$18,300	\$11,000
Dental Implant	\$2,000-10,000	\$1,672	\$1,000	\$700	\$500	\$3400	\$910	\$1,900	\$3,000
Lap Band	\$30,000	\$6,500	\$8,500	\$7,500	\$5,000	\$9,500	\$8,430	\$12,000	\$12,000
Breast Implants	\$10,000	\$2,600	\$3,500	\$4,500	\$3,000	\$11,000	\$8,000	\$5,400	\$3,700
Rhinoplasty	\$8,000	\$1,677	\$5,500	\$3,500	\$2,500	\$4,000	\$4,165	\$1,700	\$3,400
Face Lift	\$15,000	\$3,305	\$5,900	\$7,000	\$3,000	\$3,000	\$7,200	\$4,000	\$6,600
Hysterectomy	\$15,000	\$1,845	\$5,500	\$5,500	\$2,500	\$9,000	\$6,675	\$4,000	\$5,000

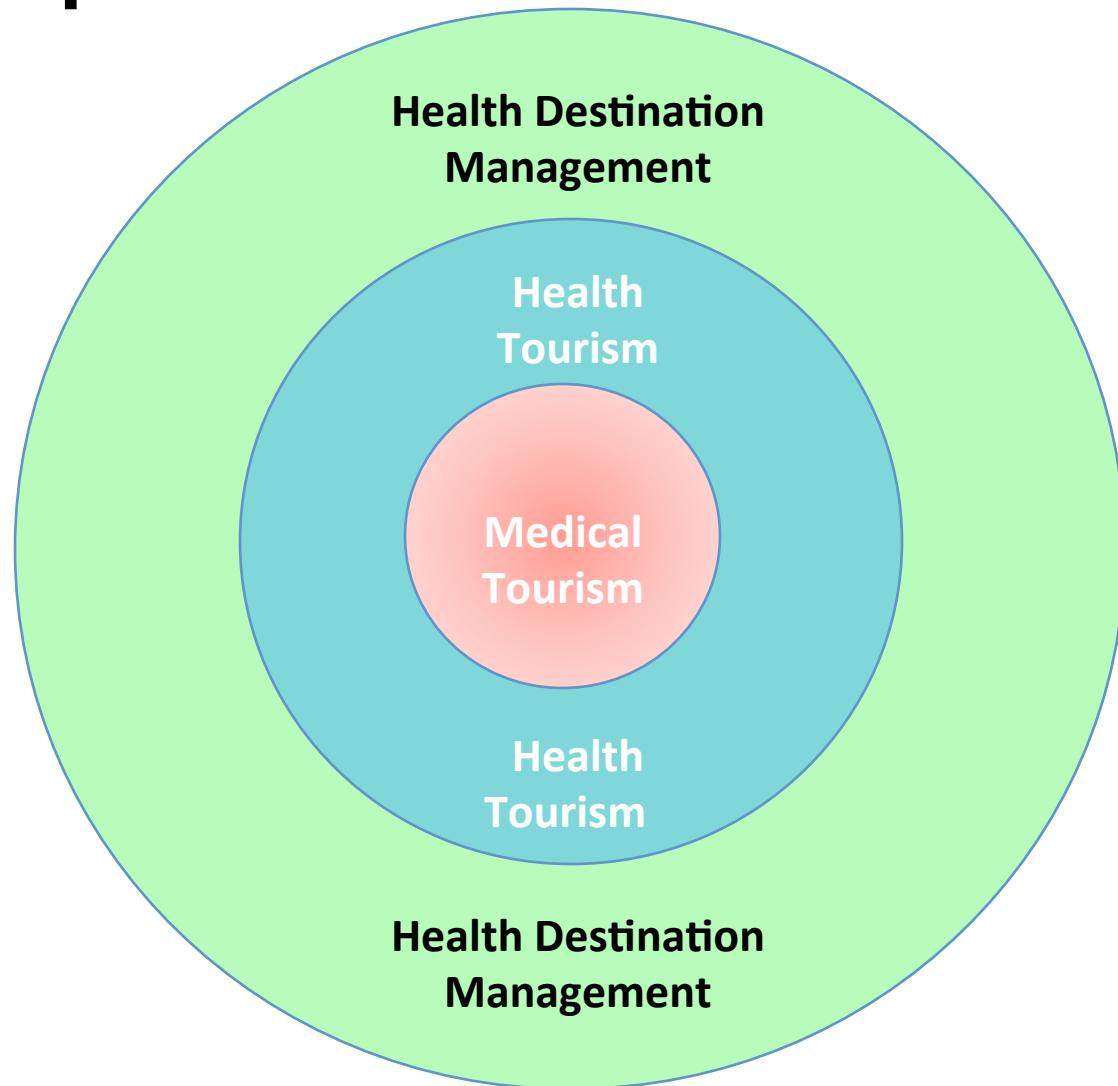
Updated July 2009

Transplants:	Asia	Latin America	United States
Kidney Transplant	\$43,550	\$30,000	Up to: \$150,000
Liver Transplant	\$134,000	\$75,000	Up to: \$315,000

Updated July 2009

# **Basic Concepts & Terminology**

# Concepts of Health- & Medical Tourism





# Definition – Medical Tourism

Services typically sought by travelers include **elective procedures** as well as complex **specialized surgeries** such as joint replacement (knee/hip), cardiac surgery, dental surgery, and cosmetic surgeries.

However, virtually **every type of health care**, including psychiatry, alternative treatments, convalescent care and even burial services are available.

As a practical matter, providers and customers commonly use **informal channels of communication-connection-contract**, and in such cases this tends to mean **less regulatory or legal oversight** to assure quality and less formal recourse to reimbursement or redress, if needed

(**Source:** Wikipedia: [http://en.wikipedia.org/wiki/Medical\\_tourism](http://en.wikipedia.org/wiki/Medical_tourism))

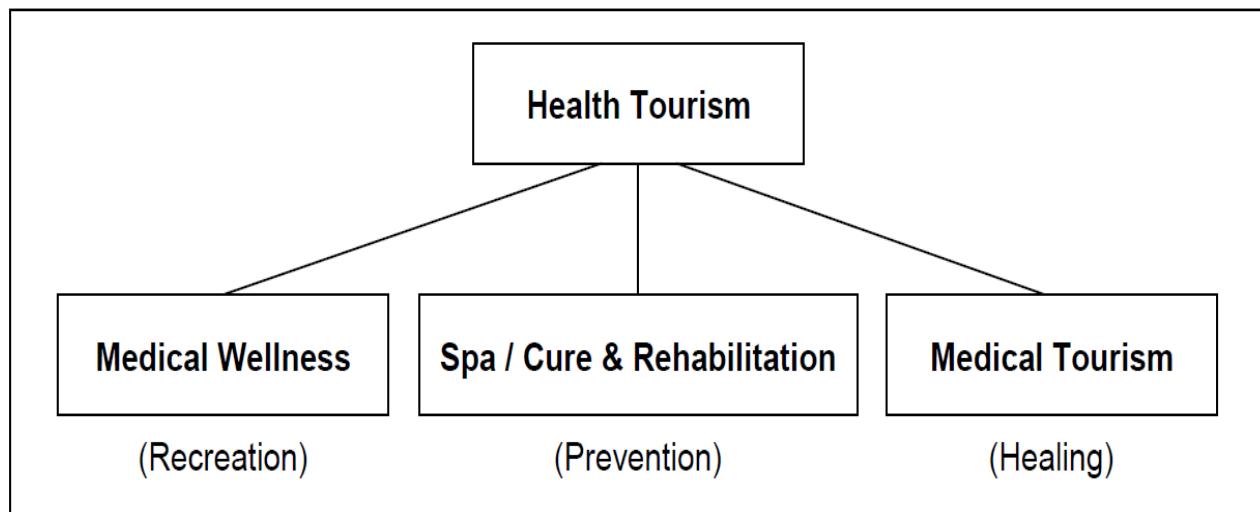
# Definition – Health Tourism



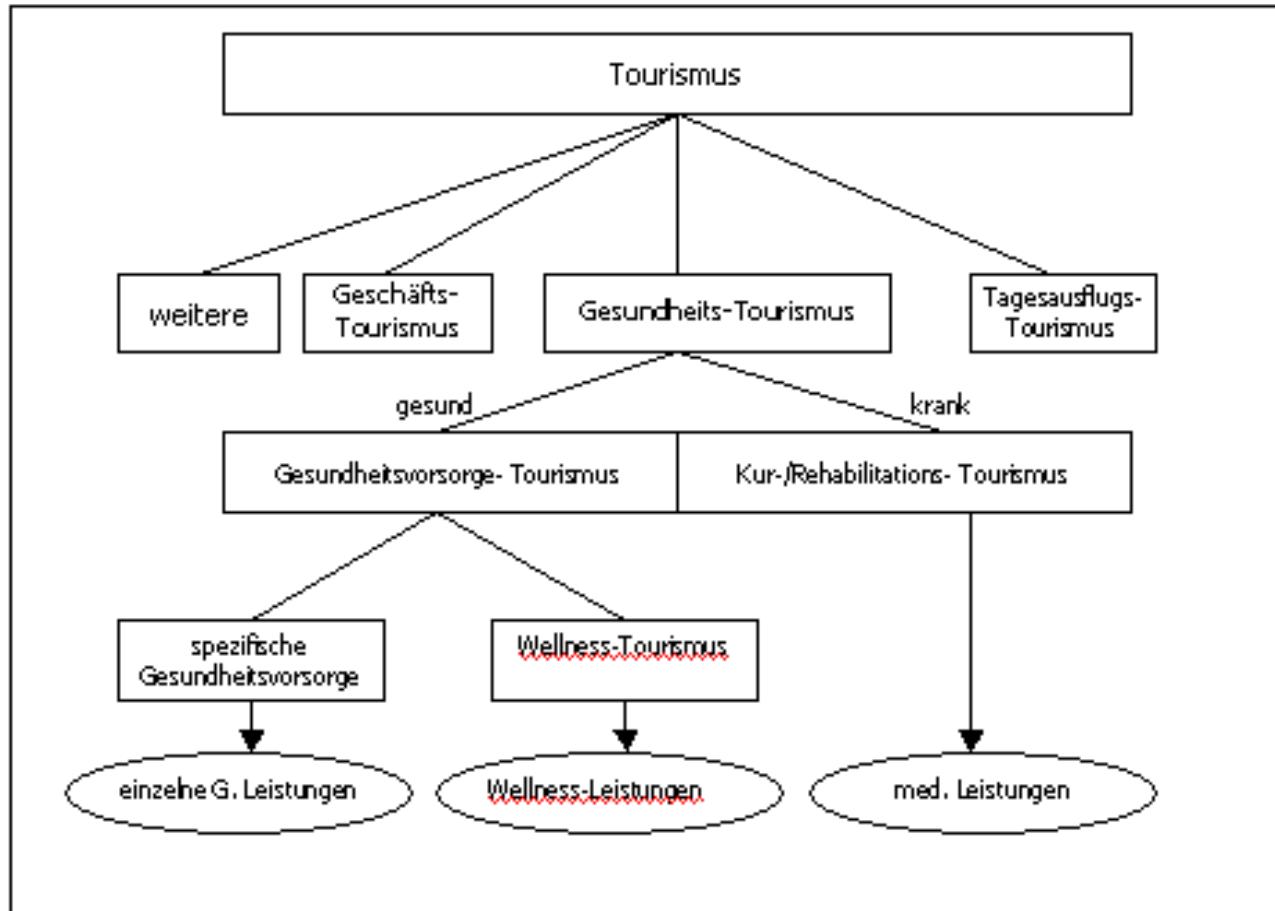
**Health Tourism.** Travel undertaken to enjoy a more salutary environment, to seek out alternative therapeutic treatments, or to visit a health spa.

**Source:** Travel Industry Dictionary

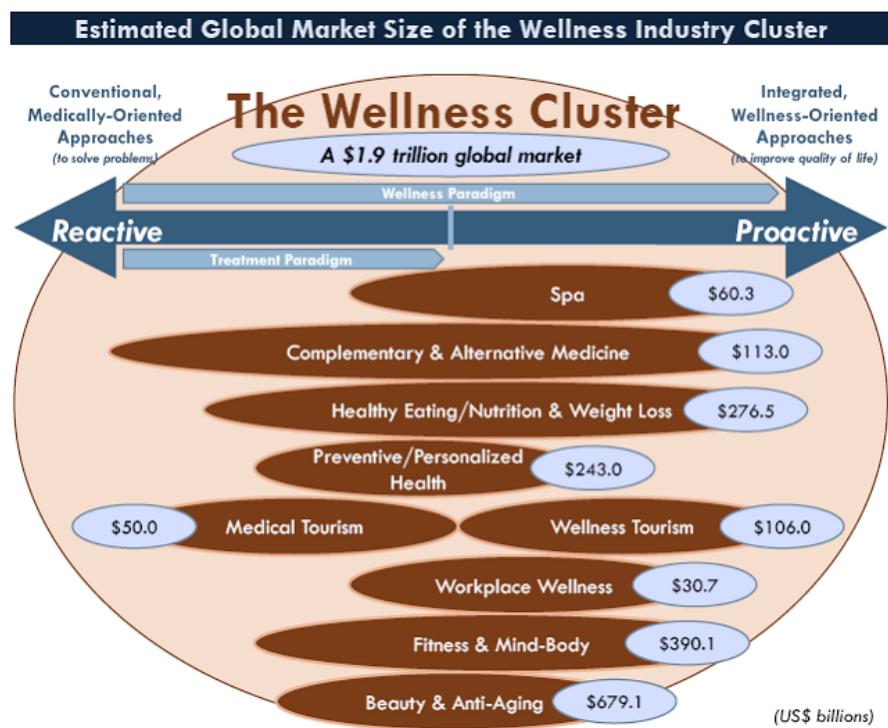
# Definition – Health & Medical Tourism



# Definition – Health & Medical Tourism



# Definition – Wellness



## Wellness (by Halbert Dunn)

In his book, *High-Level Wellness*, Halbert Dunn viewed wellness not as a static state of being “unsick,” but rather as an ongoing process or a “direction in progress toward an ever higher potential of functioning. He defined wellness as: “an integrated method of functioning which is oriented to maximizing the potential of which an individual is capable. It requires that the individual maintain a continuum of balance and purposeful direction within the environment where he is functioning.

		Offers	Motivation	Examples	Providers
Not indication-oriented (Diagnosis not relevant)	I	Primary Prevention	Disease prevention Health promoting Lifestyle	Nutrition, Sport, Wellness	All providers (Guidelines of Health Insurances)
	II	Performance	Reaching Goals	Meditation, Marathon	Medical a/o Psychological Training Providers
	III	Attractiveness	Improving Attractiveness	Dermabrasion Peeling	Medical / Cosmetic Providers
Not indication-oriented (Diagnosis relevant)	IV	Secondary / Tertiary Prevention	Early Detection Prevention of Disease (aggravation & recurrence)	Medical Training	Medical Therapy in cooperation with Tourism Providers
	V	Rehabilitation	Restoration of Health	Specific Rehabilitation	Medical Institution
	VI	Treatment Alleviation	Treatment of a Disease	Treatment in Center of Excellence	Medical Institution

# Cross-border Healthcare in Europe



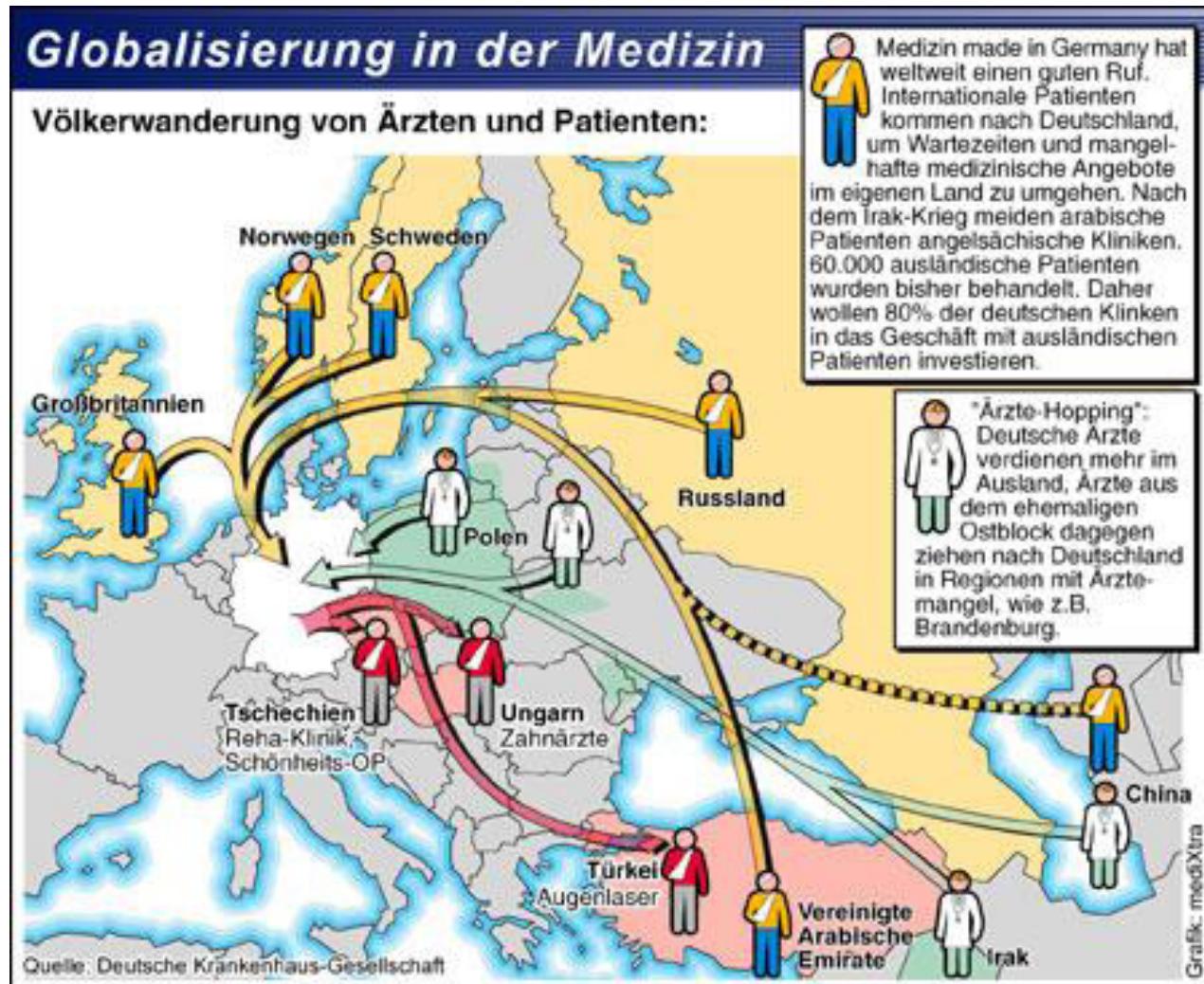
# EU Cross-border Healthcare Directive

## Three reasons to act

1. Clarify the right to seek cross-border healthcare
2. Make cross-border healthcare safer and better quality
3. Boost cooperation to tackle common challenges together, prepare the future, and make better health systems for their patients and professionals

On 2 July 2008, as part of the Renewed Social Agenda, the Commission adopted a draft Directive on the application of patients' rights in to cross-border healthcare, which provides a Community framework for safe, high quality and efficient cross-border healthcare.

# Globalisation in Healthcare



# Eurobarometer Flash

Flash EB Series #210

## Cross-border health services in the EU

Conducted by  
The Gallup Organization, Hungary  
upon the request of the

Health and Consumer Protection Directorate-General (DG SANCO), Health Strategy Unit (C5)



EUROBAROMETER

The survey covered all 27 Member States of the European Union (EU) on a randomly selected sample of over 27,200 individuals of at least 15 years of age. The interviews were conducted by telephone between May 26 and 30, 2007.

More details on the survey are available in the final chapter of this report.

In order to assess cross-border healthcare from the citizens' perspective, the European Commission Directorate General for Health and Consumer Protection sought to poll citizens from all EU countries about their experiences and expectations concerning patient mobility.

# Eurobarometer Survey

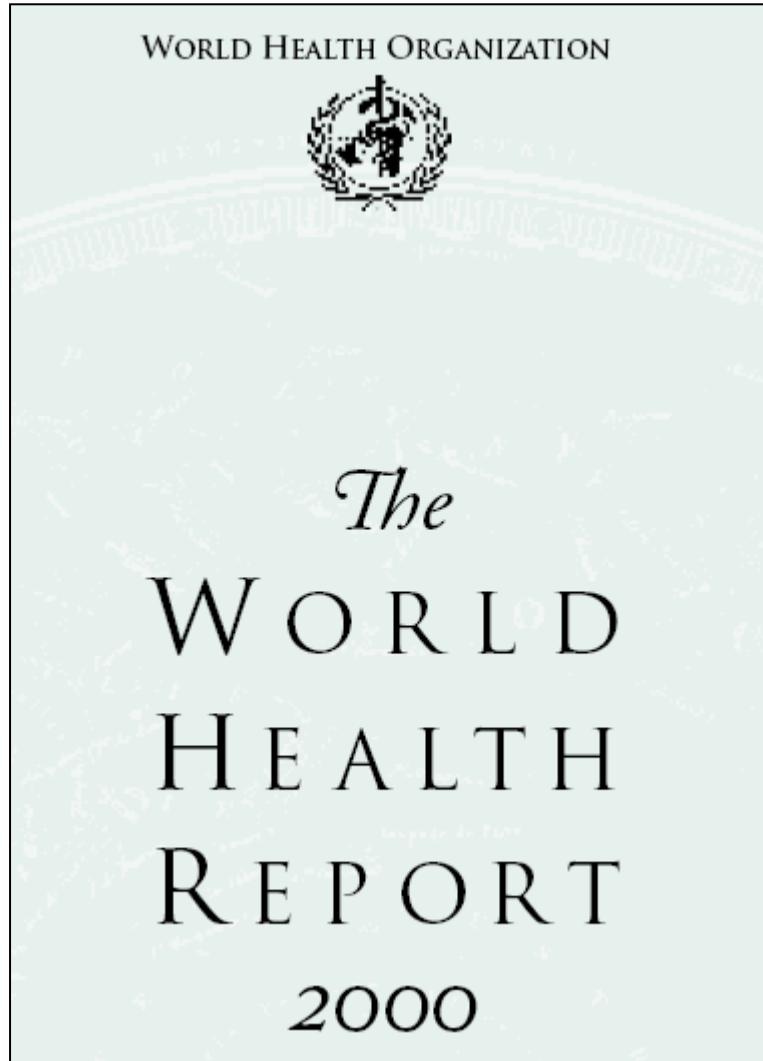
Table 3a. Q3. Preparedness to travel to another MS to receive treatment, by country

**QUESTION: Q3. Would you be willing to travel to another EU country to receive medical treatment?**



# International Comparison of Healthcare Systems

# WHO – World Health Report



Die Weltgesundheitsorganisation hat eine Rangordnung der Gesundheitssysteme ihrer 191 Mitgliedsländer aufgestellt.[3] Verglichen wurde anhand der oben genannten Ziele – Gesundheitsniveau, Bedürfnisorientierung und Finanzierungsgerechtigkeit – auf der Grundlage von Daten aus dem Jahr 1997.

Die Studie ergab folgende Platzierungen:

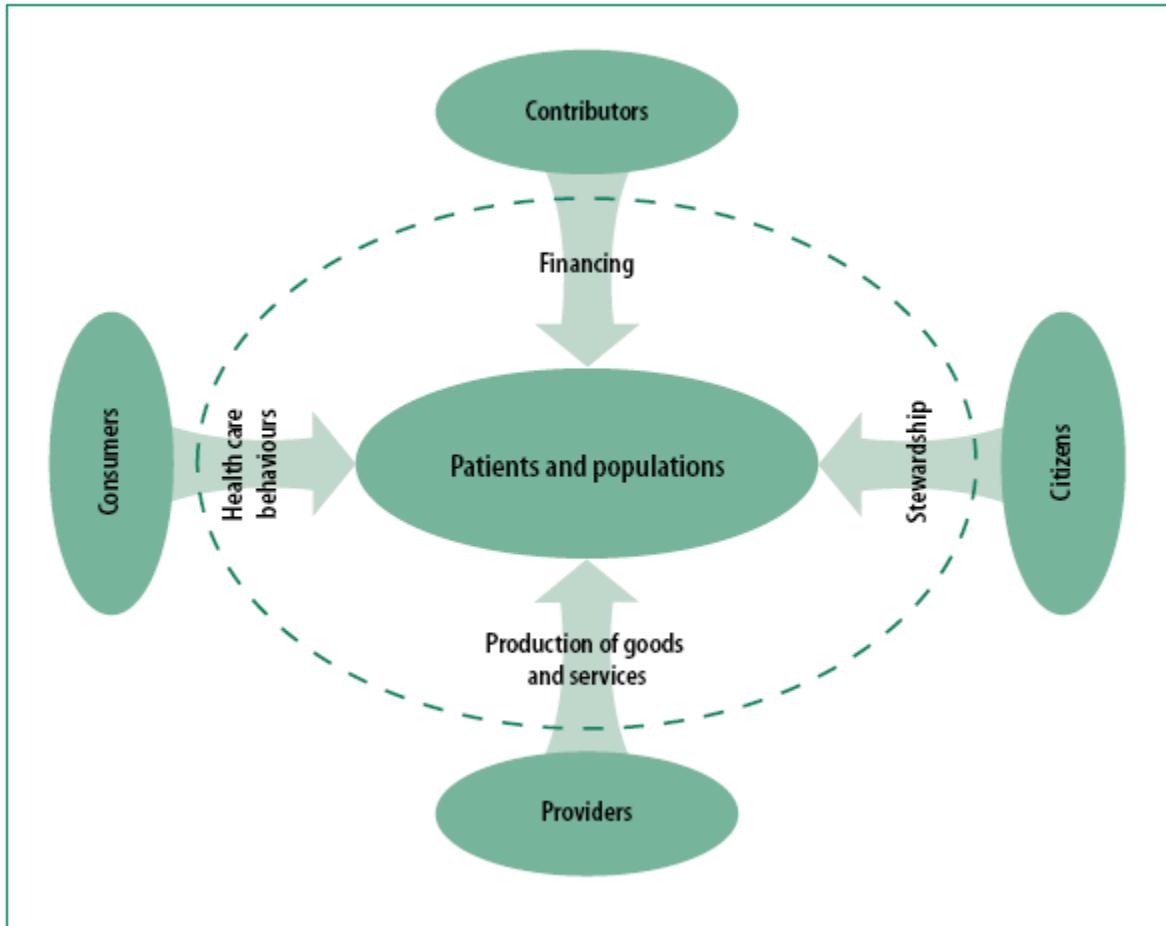
# WHO - Ranking

OVERALL PERFORMANCE				
Rank	Uncertainty Interval	Member State	Index	Uncertainty Interval
1	1 – 5	France	0.994	0.982 – 1.000
2	1 – 5	Italy	0.991	0.978 – 1.000
3	1 – 6	San Marino	0.988	0.973 – 1.000
4	2 – 7	Andorra	0.982	0.966 – 0.997
5	3 – 7	Malta	0.978	0.965 – 0.993
6	2 – 11	Singapore	0.973	0.947 – 0.998
7	4 – 8	Spain	0.972	0.959 – 0.985
8	4 – 14	Oman	0.961	0.938 – 0.985
9	7 – 12	Austria	0.959	0.946 – 0.972
10	8 – 11	Japan	0.957	0.948 – 0.965
11	8 – 12	Norway	0.955	0.947 – 0.964
12	10 – 15	Portugal	0.945	0.931 – 0.958
13	10 – 16	Monaco	0.943	0.929 – 0.957
14	13 – 19	Greece	0.933	0.921 – 0.945
15	12 – 20	Iceland	0.932	0.917 – 0.948
16	14 – 21	Luxembourg	0.928	0.914 – 0.942
17	14 – 21	Netherlands	0.928	0.914 – 0.942
18	16 – 21	United Kingdom	0.925	0.913 – 0.937
19	14 – 22	Ireland	0.924	0.909 – 0.939
20	17 – 24	Switzerland	0.916	0.903 – 0.930
21	18 – 24	Belgium	0.915	0.903 – 0.926
22	14 – 29	Colombia	0.910	0.881 – 0.939
23	20 – 26	Sweden	0.908	0.893 – 0.921
24	16 – 30	Cyprus	0.906	0.879 – 0.932
25	22 – 27	Germany	0.902	0.890 – 0.914

26	22 – 32	Saudi Arabia	0.894	0.872 – 0.916
27	23 – 33	United Arab Emirates	0.886	0.861 – 0.911
28	26 – 32	Israel	0.884	0.870 – 0.897
29	18 – 39	Morocco	0.882	0.834 – 0.925
30	27 – 32	Canada	0.881	0.868 – 0.894
31	27 – 33	Finland	0.881	0.866 – 0.895
32	28 – 34	Australia	0.876	0.861 – 0.891
33	22 – 43	Chile	0.870	0.816 – 0.918
34	32 – 36	Denmark	0.862	0.848 – 0.874
35	31 – 41	Dominica	0.854	0.824 – 0.883
36	33 – 40	Costa Rica	0.849	0.825 – 0.871
37	35 – 44	United States of America	0.838	0.817 – 0.859
38	34 – 46	Slovenia	0.838	0.813 – 0.859
39	36 – 44	Cuba	0.834	0.816 – 0.852
40	36 – 48	Brunel Darussalam	0.829	0.808 – 0.849
41	38 – 45	New Zealand	0.827	0.815 – 0.840
42	37 – 48	Bahrain	0.824	0.804 – 0.845
43	39 – 53	Croatia	0.812	0.782 – 0.837
44	41 – 51	Qatar	0.812	0.793 – 0.831
45	41 – 52	Kuwait	0.810	0.790 – 0.830
46	41 – 53	Barbados	0.808	0.779 – 0.834
47	36 – 59	Thailand	0.807	0.759 – 0.852
48	43 – 54	Czech Republic	0.805	0.781 – 0.825
49	42 – 55	Malaysia	0.802	0.772 – 0.830
50	45 – 59	Poland	0.793	0.762 – 0.819
51	38 – 67	Dominican Republic	0.789	0.735 – 0.845
52	41 – 67	Tunisia	0.785	0.741 – 0.832
53	47 – 62	Jamaica	0.782	0.754 – 0.809
54	50 – 64	Venezuela, Bolivarian Republic of	0.775	0.745 – 0.803
55	41 – 75	Albania	0.774	0.709 – 0.834

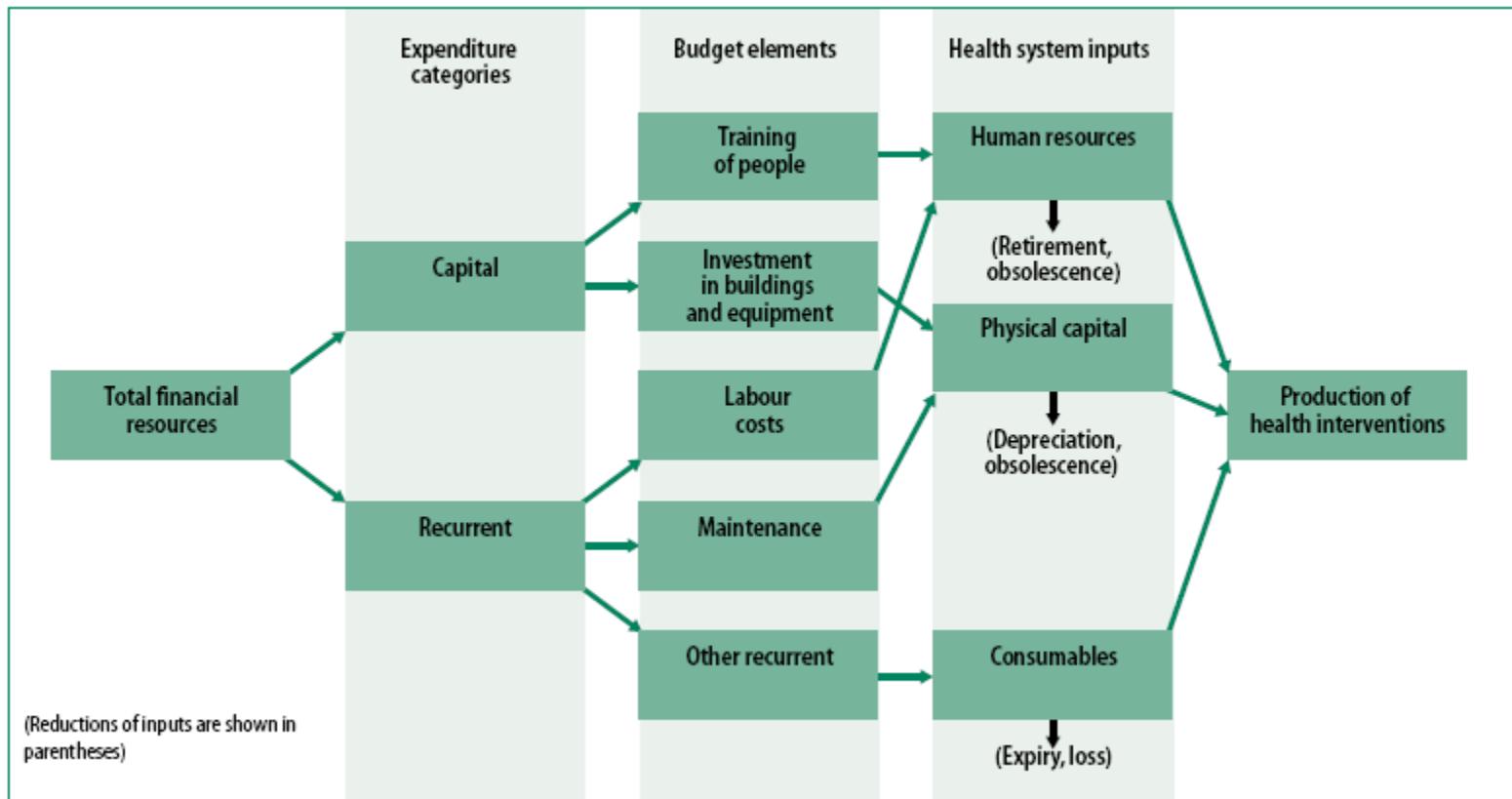
# Multiple Roles of People in Health Systems

Figure 3.1 The multiple roles of people in health systems



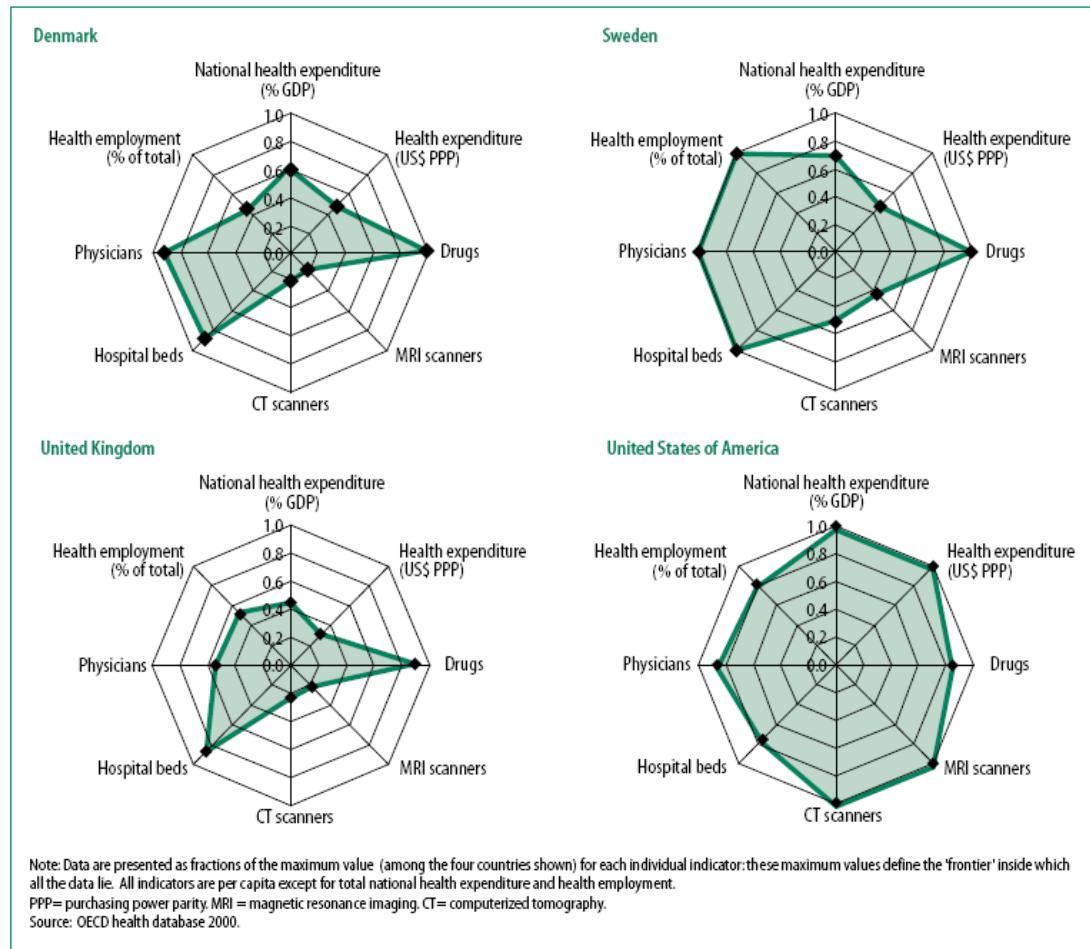
# Health Systems Input

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

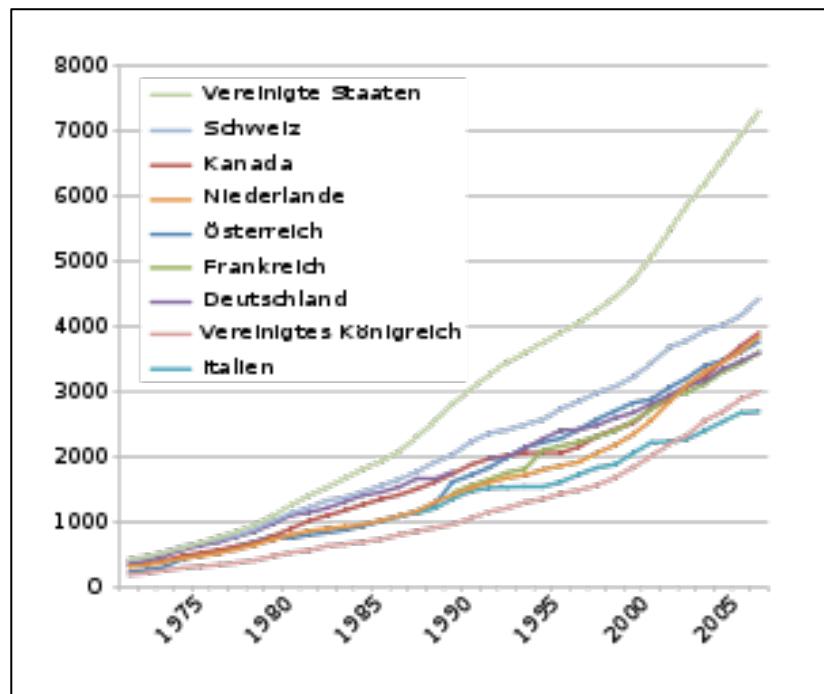


# Health Systems Input Comparison

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



# Ausgaben im Gesundheitssystemen



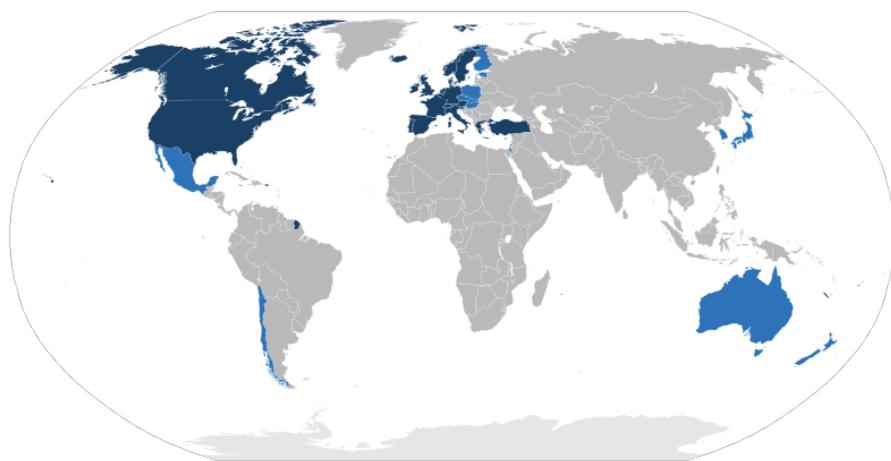
Anstieg der Kosten im Gesundheitssystem im Zeitraum von 1970 bis 2007 in verschiedenen Ländern

(in USD/Kopf der Bev., Quelle: OECD)

Im Durchschnitt der OECD-Mitgliedsländer wachsen die Gesundheitsausgaben stärker als die Wirtschaftskraft. Die Pro-Kopf-Ausgaben stiegen von 1990 bis 2005 um über 80 %, während die Bruttoinlandsprodukte (BIP) pro Kopf nur um 37% wuchsen.

Lagen die Gesundheitsausgaben 1970 durchschnittlich noch bei 5% des BIP, war der Anteil 1990 auf 7% angewachsen und stieg bis zum Jahr 2005 weiter auf 9%.

# OECD



Die OECD wurde 1961 als **Nachfolgeorganisation der Organisation für europäische wirtschaftliche Zusammenarbeit (OEEC)** und des Marshallplans zum Wiederaufbau Europas gegründet, die seit dem 16. April 1948 agierten.

Heute versteht sich die OECD als **Forum, in dem Regierungen ihre Erfahrungen austauschen, best practice identifizieren und Lösungen für gemeinsame Probleme erarbeiten**. In der Regel ist peer pressure der wichtigste Anreiz für die Umsetzung der erarbeiteten Empfehlungen.

Häufig werden im Rahmen der OECD auch **Standards und Richtlinien** erarbeitet, gelegentlich auch rechtlich verbindliche Verträge.

# OECD

Exhibit ES-1. Overall Ranking

Country Rankings
1.00-2.33
2.34-4.66
4.67-7.00

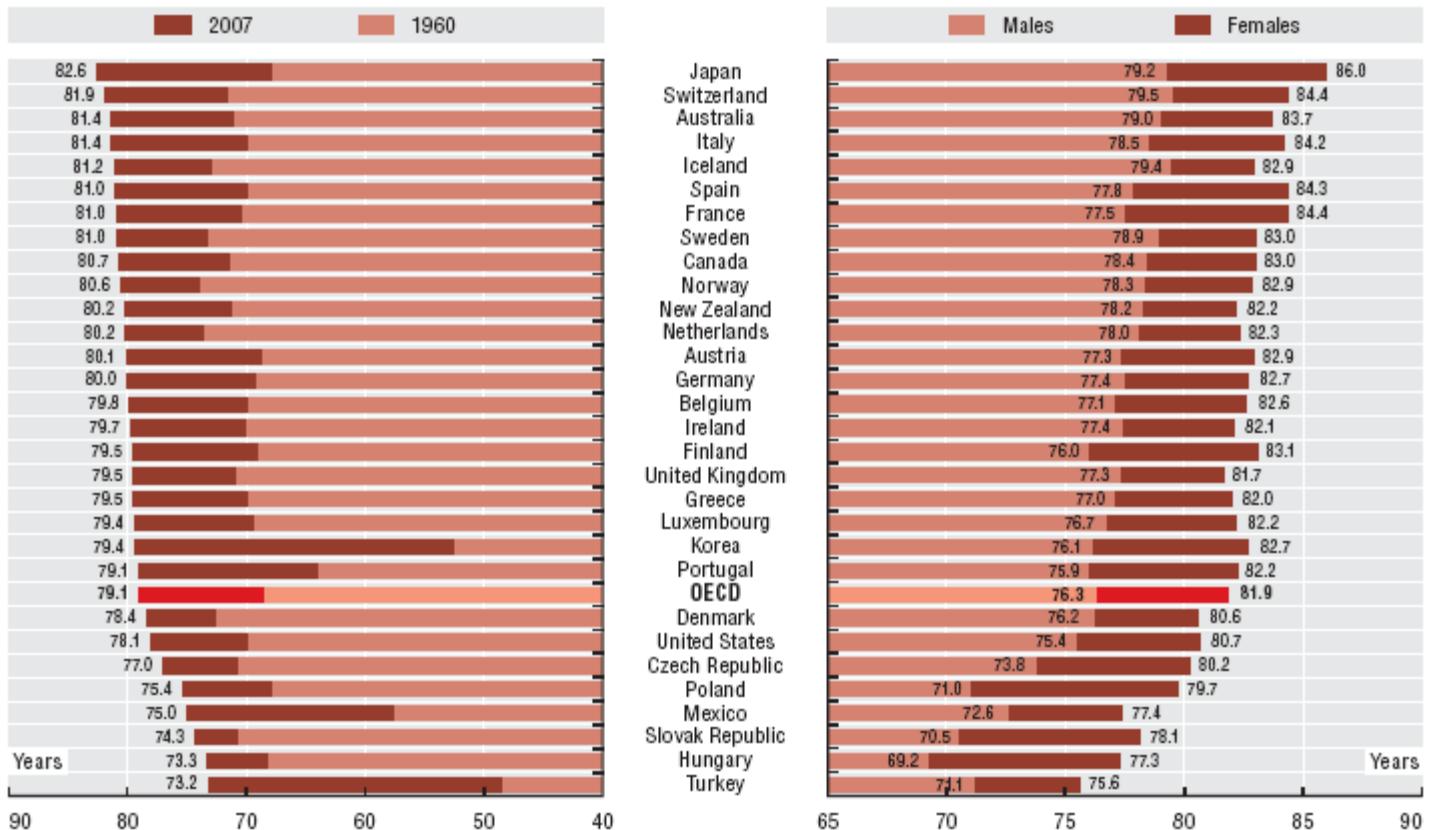


	AUS	CAN	GER	NETH	NZ	UK	US
OVERALL RANKING (2010)	3	6	4	1	5	2	7
Quality Care	4	7	5	2	1	3	6
Effective Care	2	7	6	3	5	1	4
Safe Care	6	5	3	1	4	2	7
Coordinated Care	4	5	7	2	1	3	6
Patient-Centered Care	2	5	3	6	1	7	4
Access	6.5	5	3	1	4	2	6.5
Cost-Related Problem	6	3.5	3.5	2	5	1	7
Timeliness of Care	6	7	2	1	3	4	5
Efficiency	2	6	5	3	4	1	7
Equity	4	5	3	1	6	2	7
Long, Healthy, Productive Lives	1	2	3	4	5	6	7
Health Expenditures/Capita, 2007	\$3,357	\$3,895	\$3,588	\$3,837*	\$2,454	\$2,992	\$7,290

Note: \* Estimate. Expenditures shown in \$US PPP (purchasing power parity).

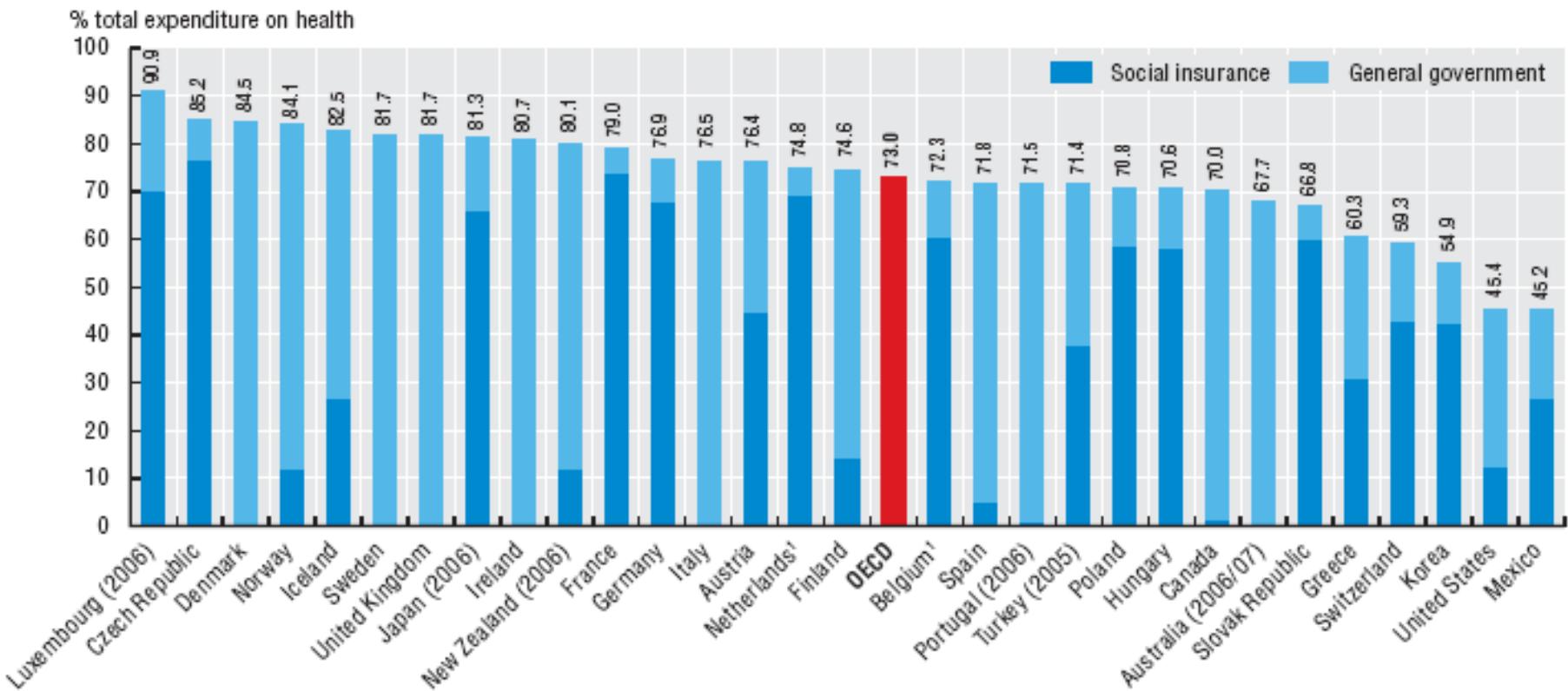
Source: Calculated by The Commonwealth Fund based on 2007 International Health Policy Survey; 2008 International Health Policy Survey of Sicker Adults; 2009 International Health Policy Survey of Primary Care Physicians; Commonwealth Fund Commission on a High Performance Health System National Scorecard; and Organization for Economic Cooperation and Development, OECD Health Data, 2009 (Paris: OECD, Nov. 2009).

# Life Expectancy (OECD)



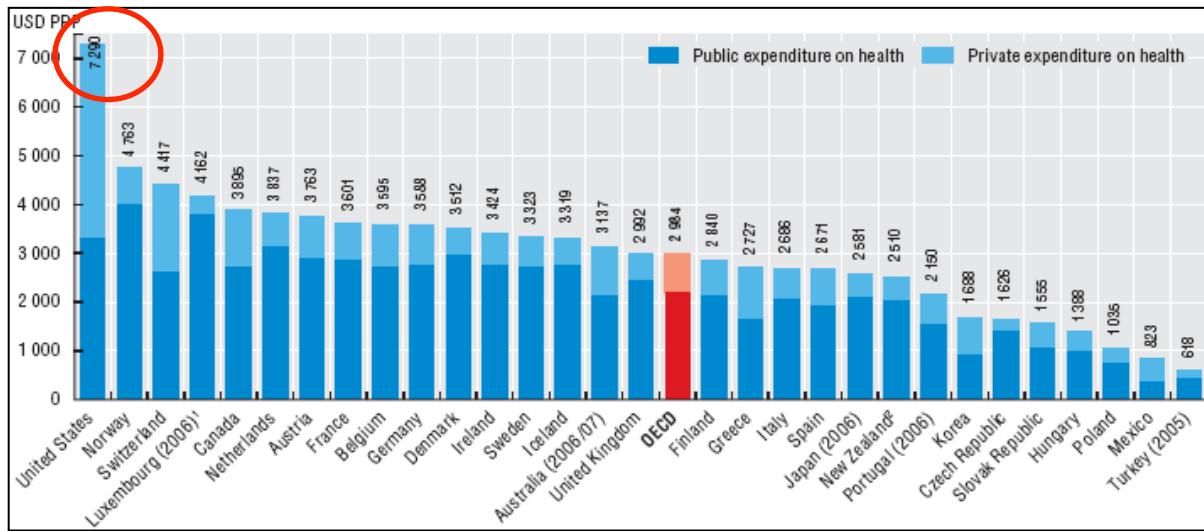
Source: *OECD Health Data 2009*, OECD <http://www.oecd.org/health/healthdata>)

# Public vs. Private Healthcare Spending



Source: *OECD Health Data 2009*, OECD (<http://www.oecd.org/health/healthdata>)

# Health Expenditure



Health expenditure per capita varies widely across OECD countries.

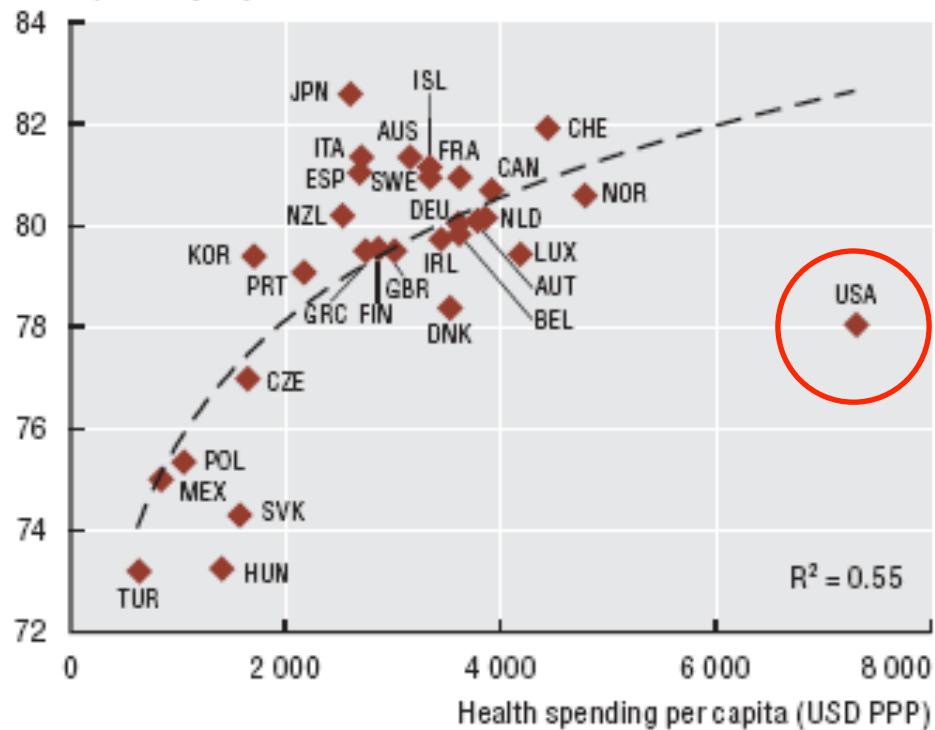
The United States spends almost two-and-a-halftimes the OECD average

1. Health expenditure is for the insured population rather than resident population.
2. Current health expenditure.

Source: OECD Health Data 2009, OECD (<http://www.oecd.org/health/healthdata>)

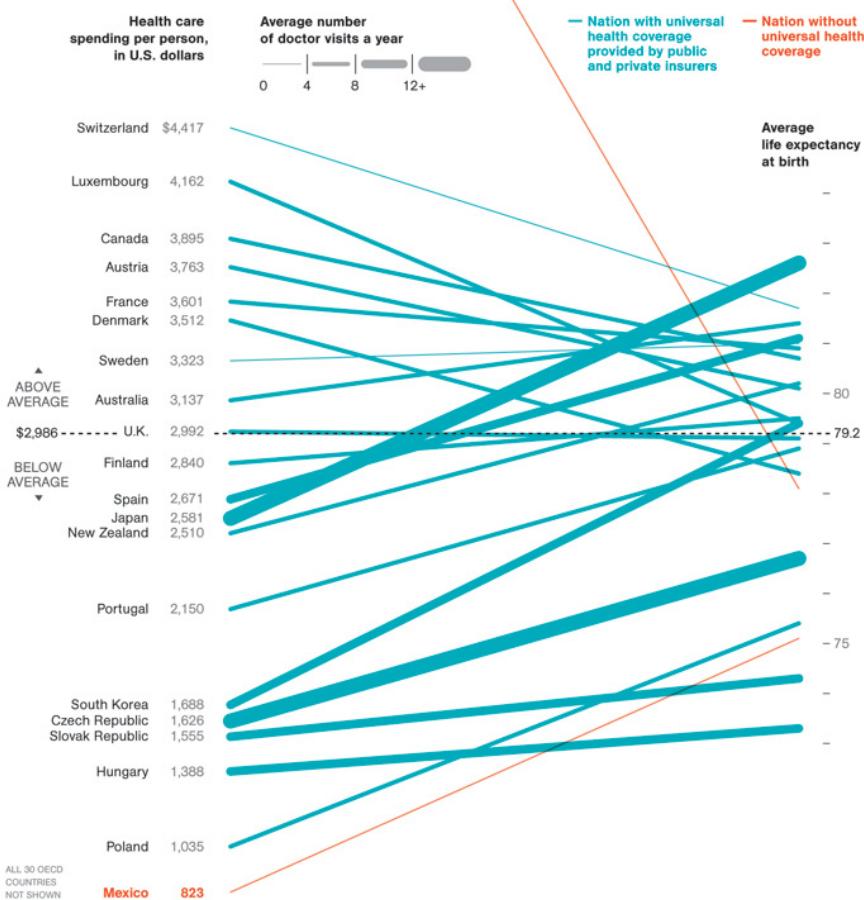
# Health Spending ~ Life Expectancy

Life expectancy in years



**Higher health spending per capita** is generally associated with **higher life expectancy**, although this link tends to be less pronounced in countries with higher spending.

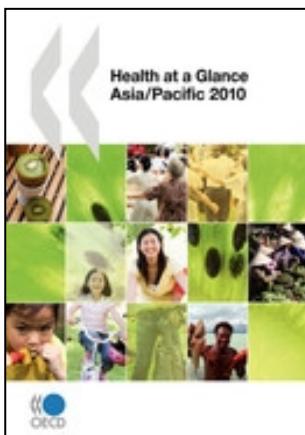
Other factors also influence life expectancy...



# OECD – Health at a Glance



This special edition of Health at a Glance focuses on health systems across the 27 European Union member states as well as Iceland, Norway, Switzerland and Turkey.



This first edition of Health at a Glance: Asia/Pacific presents a set of key indicators of health status, the determinants of health, health care resources and utilisation, and health care expenditure and financing across 27 Asia/Pacific countries.

# Chapter 1. Health Status

Life expectancy and healthy life expectancy at birth  
Life expectancy and healthy life expectancy at age  
Mortality from all causes  
Mortality from heart disease and stroke  
Mortality from cancer  
Mortality from transport accidents  
Suicide  
Infant mortality  
Infant health: Low birth weight  
Self-reported health and disability  
Incidence of selected communicable diseases  
HIV/AIDS  
Cancer incidence  
Diabetes prevalence and incidence  
Dementia prevalence

# Chapter 2. Determinants of Health

Smoking and alcohol consumption among children

Nutrition among children

Physical activity among children

Overweight and obesity among children

Supply of fruit and vegetables for consumption

Tobacco consumption among adults

Alcohol consumption among adults

Overweight and obesity among adults

# Chapter 3. Health Care Resources, Services and Outcomes

- Practising physicians
- Practising nurses
- Childhood vaccination programmes
- Influenza vaccination for older people
- Medical technologies: CT scanners and MRI units
- Hospital beds
- Hospital discharges
- Average length of stay in hospitals
- Cardiac procedures (coronary angioplasty)
- Cataract surgeries
- Hip and knee replacement
- Screening, survival and mortality for cervical cancer
- Screening, survival and mortality for breast cancer

# Chapter 4. Health Expenditure and Financing

- Health expenditure per capita
- Health expenditure in relation to GDP
- Health expenditure by function
- Pharmaceutical expenditure
- Financing of health care
- Trade in health services