Health systems -- overview

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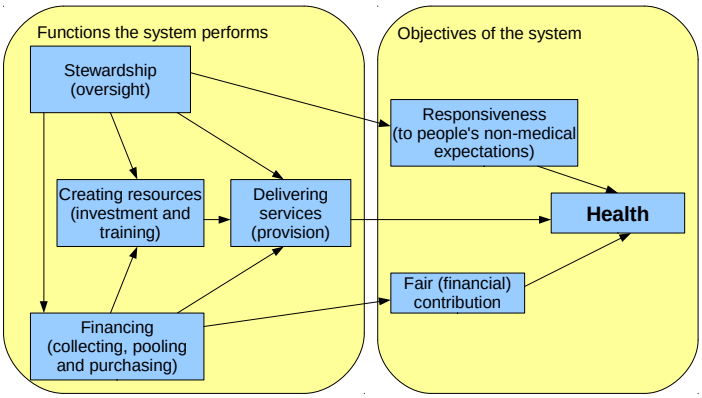
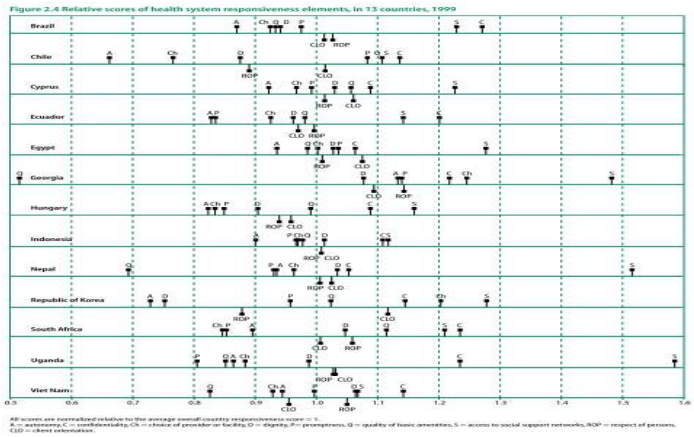
Definition of health systems

- WHO (2000)
  - In today's complex world, it can be difficult to say exactly what a health system is, what it consists of, and where it begins and ends. This report **defines** a ***health system*** to include all the activities whose primary purpose is to promote, restore or maintain health.
  - **Formal health services**, including the professional delivery of personal medical attention, are clearly within these boundaries. So are **actions by traditional healers**, and **all use of medication**, whether prescribed by a provider or not. So is **home care** of the sick, which is how somewhere between 70% and 90% of all sickness is managed. Such **traditional public health activities** as health promotion and disease prevention, and other **health-enhancing interventions like road and environmental safety improvement**, are also part of the system. Beyond the boundaries of this definition are those activities whose primary purpose is something other than health – education, for example – even if these activities have a secondary, health-enhancing benefit. Hence, the general education system is outside the boundaries, but **specifically health-related education is included**. So are actions intended chiefly to improve health indirectly by influencing how non-health systems function – for example, **actions to increase girls' school enrolment or change the curriculum to make students better future caregivers and consumers of health care**.

Health system scheme by WHO (2000)



Relative scores of health systems responsiveness elements, 1999 (WHO, 2000)



Health systems and welfare states typology (Arts, 2002)

- Health systems are closely related with overall social welfare strategy.
- Esping-Andersen's 3 types of welfare state are well known.

Table 1 An overview of typologies of welfare states

	Types of welfare states and their characteristics	*Indicators/dimensions*
Esping-Andersen (1990)	1. *Liberal:* Low level of decommodification; market-differentiation of welfare 2. *Conservative:* Moderate level of decommodification; social benefits mainly dependent on former contributions and status 3. *Social-democratic:* High level of decommodification; universal benefits and high degree of benefit equality	• Decommodification • Stratification
Leibfried (1992)	1. *Anglo–Saxon (Residual):* Right to income transfers; welfare state as compensator of last resort and tight enforcer of work in the market place 2. *Bismarck (Institutional):* Right to social security; welfare state as compensator of first resort and employer of last resort 3. *Scandinavian (Modern):* Right to work for everyone; universalism; welfare state as employer of first resort and compensator of last resort 4. *Latin Rim (Rudimentary):* Right to work and welfare proclaimed; welfare state as a semi-institutionalized promise	• Poverty, social insurance and poverty policy

Classification of welfare states by Arts (2002)

Table 2 Classification of countries according to seven typologies

	Type				
	I	*II*	*III*	*IV*	*V*
Esping-Andersen (Decommodification)	*Liberal* • Australia • Canada • United States • New Zealand • Ireland • United Kingdom	*Conservative* • Italy • Japan • France • Germany • Finland • Switzerland	*Social-democratic* • Austria • Belgium • Netherlands • Denmark • Norway • Sweden		
Leibfried	*Anglo–Saxon* • United States • Australia • New Zealand • United Kingdom	*Bismarck* • Germany • Austria	*Scandinavian* • Sweden • Norway • Finland • Denmark	*Latin Rim* • Spain • Portugal • Greece • Italy • France	
Castles & Mitchell	*Liberal* • Ireland • Japan • Switzerland • United States	*Conservative* • West-Germany • Italy • Netherlands	*Non-Right Hegemony* • Belgium • Denmark • Norway • Sweden		*Radical* • Australia • New Zealand • United Kingdom

Coverage of health services by social health insurance schemes (Polikowski, 2002)

Health services covered in all six countries	Controversial health services	Countries not covering the controversial service[b]
Medical care	Dental care	CH, IL
Hospital care	Chiropractic	F, IL, LUX, NL
Outpatient care	Non-medical psychotherapy	CH
Medical psychotherapy	Outpatient dietary advice	D, F, LUX, NL
Rehabilitation services	Outpatient ergotherapy (occupational therapy)	F
Selected preventive services	Spas (balneotherapy)	NL
Maternity services	Home help	CH, F
Outpatient physiotherapy	Visual aids	NL
Outpatient speech therapy		
Prescription drugs		
Laboratory tests and investigations		
Therapeutic aids and appliances		
Nursing home care		
Home care		
Transport		
Services abroad		

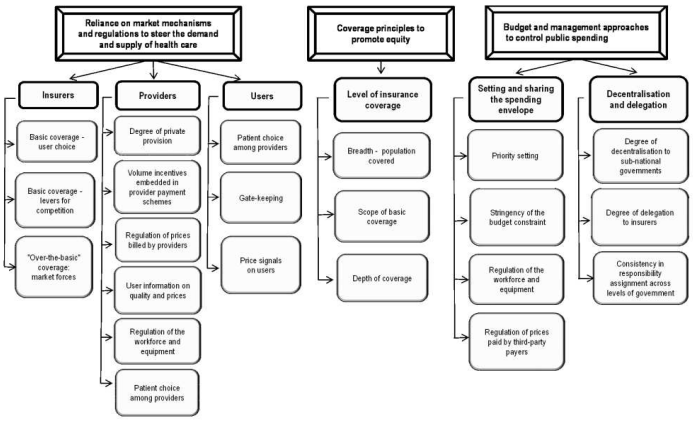
[a]France (F), Germany (D), Israel (IL), Luxembourg (LUX), Netherlands (NL), Switzerland (CH).
[b]Or providing coverage in very restricted circumstances.

Country-specific health services (Polikowski, 2002)

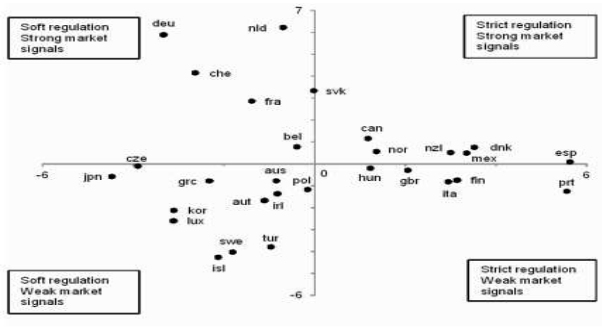
Country	Services covered in only one country	Services covered in all countries but one
Switzerland	Multiple sleep latency test, maintenance of wakefulness test, actigraphy Play and paint therapy with children Psychodrama	Heart–lung transplantation and pancreas transplantation alone Penile implants and revascularisation as surgical treatments for erectile impotence Artificial insemination (except for cervical sterility) In vitro fertilization with transfer of the embryo
France	Treatment of obesity by intragastric balloon Hip protectors to prevent hip fractures	Breath test with natural ^{13}C for assessment of *Helicobacter pylori* elimination Telemetric electrocardiogram recording Telephone supervision of patients with pacemaker Percutaneous peripheral perfusion of limbs (chemotherapy) with hyperthermia for treatment of malignancies Sterilisation of the spouse of a female patient Surgical correction of anisometropia Ultrasonic aerosols Transcutaneous electroneurostimulation Bone density measurement
Germany	Omentectomy in surgery for obesity[b] Electroneuromodulation of sacral roots in treatment of urinary incontinence	Non-surgical removal of endometrium Embolisation of facial haemangiomas Laser treatment of telangiectatic naevus and of condylomata acuminata
Luxembourg	Allogeneic grafting of a cultured human skin equivalent Intra-articular injection of an artificial lubricant in treatment of osteoarthritis Keratotomy with excimer laser for myopia	Haemodialysis at home Enteral tube feeding and parenteral nutrition at home Insulin pump for continuous infusion Rehabilitation treatment of cardiopathy Curative resectomy of epileptic foci Cryoneurolysis Orthoptic treatment Positron emission tomography
Israel	Climatic therapy in the Dead Sea In vitro fertilization for single parent mothers	

[a]Abstracted from the explicit component of the Swiss catalogue ('particular services').
[b]Medical treatment is not covered.

Tree structures for indicators on health policies and institutions (Joumard, 2010)



Classification of countries by 2 principal components (Joumard, 2010)



1. The axes of the chart correspond to the first two factors of the PCA, i.e. those that explain the greatest part of the cross-country variance of the policy instruments. The values on the horizontal (resp. vertical) axis correspond to the correlation coefficients with the first (resp. second) factor of the PCA.
2. The values on the horizontal axis (resp. vertical) correspond to weighted averages of the policy instruments, the weights being determined by the eigenvector associated with the first (resp. second) factor of the PCA.

Source: OECD Survey on Health Systems Characteristics 2008-09.

6 healthcare models (Joumard, 2010)

5. A key contribution of this paper is to provide an empirical characterisation of health care systems, which goes beyond classifications based on a few institutional features and recognises the complexity of health institutions and complementarities across them.

- Using cluster analysis, six groups of countries sharing broadly similar institutions have been identified (Table 1): one group of countries relies extensively on market mechanisms in regulating both insurance coverage and service provision; two groups are characterised by public basic insurance coverage and extensive market mechanisms in regulating provision, but differentiated by the use of gate-keeping arrangements and the degree of reliance on private health insurance to cover expenses beyond the basic package; a group where the rules provide patients with choice among providers, with no gate-keeping but extremely limited private supply; and two groups of heavily regulated public systems, separated by differing degrees of the stringency of gate-keeping arrangements and of the budget constraint. Sensitivity analysis shows that the clusters identified are fairly robust.

Table 1. **Groups of countries sharing broadly similar institutions**

Group 1	Germany, Netherlands, Slovak Republic, Switzerland
Group 2	Australia, Belgium, Canada, France
Group 3	Austria, Czech Republic, Greece, Japan, Korea, Luxembourg
Group 4	Iceland, Sweden, Turkey
Group 5	Denmark, Finland, Mexico, Portugal, Spain
Group 6	Hungary, Ireland, Italy, New Zealand, Norway, Poland, United Kingdom

6 healthcare models shown as tree structure (Joumard, 2010)