Health systems – overview

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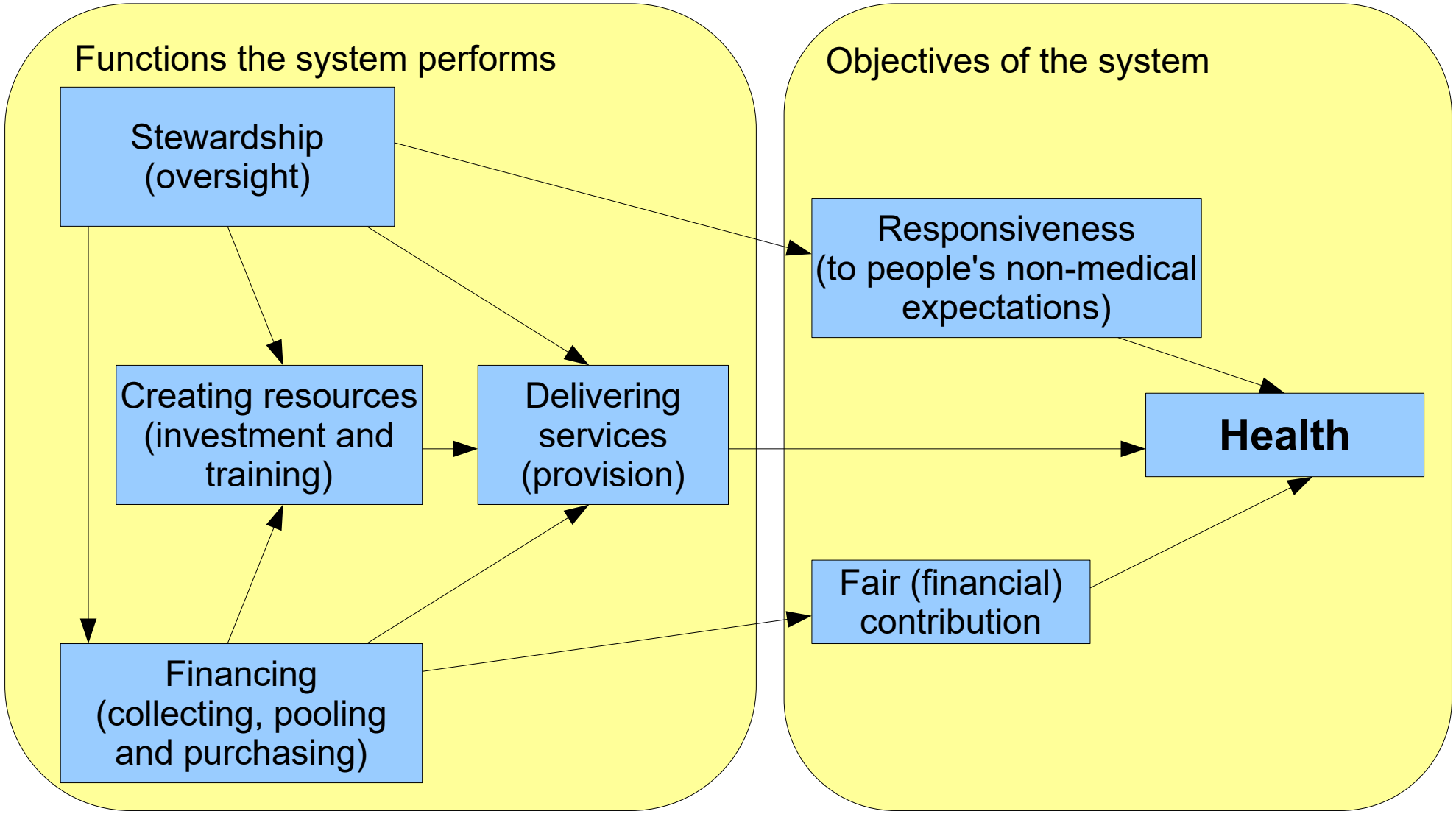
Definition of health systems

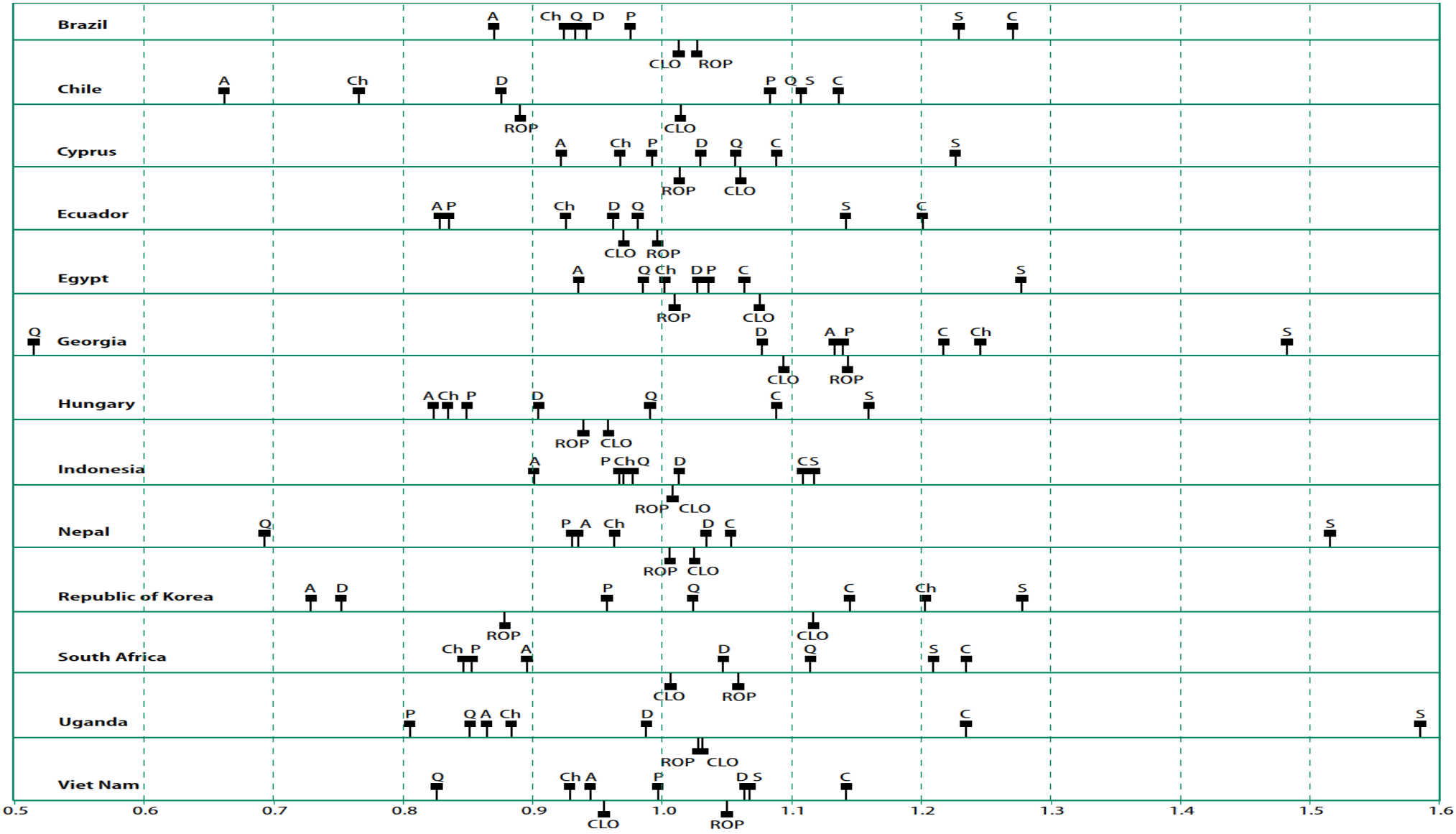
- WHO (2000)
  - In today's complex world, it can be difficult to say exactly what a health system is, what it consists of, and where it begins and ends. This report **defines** a ***health system*** to include all the activities whose primary purpose is to promote, restore or maintain health.
  - **Formal 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)

Figure 2.4 Relative scores of health system responsiveness elements, in 13 countries, 1999



All scores are normalized relative to the average overall country responsiveness score = 1.
A = autonomy, C = confidentiality, Ch = choice of provider or facility, D = dignity, P= promptness, Q = quality of basic amenities, S = access to social support networks, ROP = respect of persons, CLO = client orientation.

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		

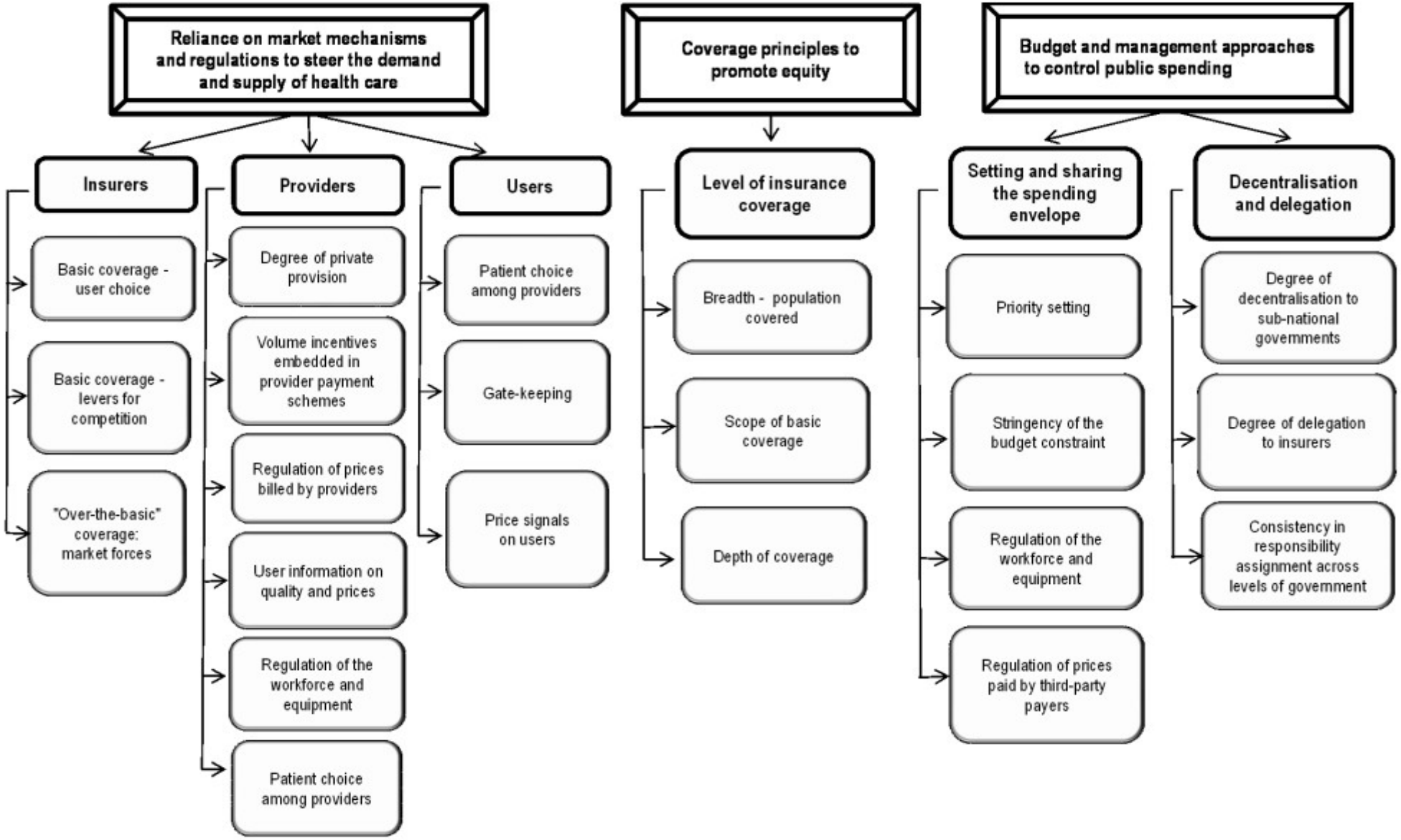
[a]France (F), Germany (D), Israel (IL), Luxembourg (LUX), Netherlands (NL), Switzerland (CH).
[b]Or providing coverage in very restricted circumstances.

Country-specific health services (Polikowski, 2002)

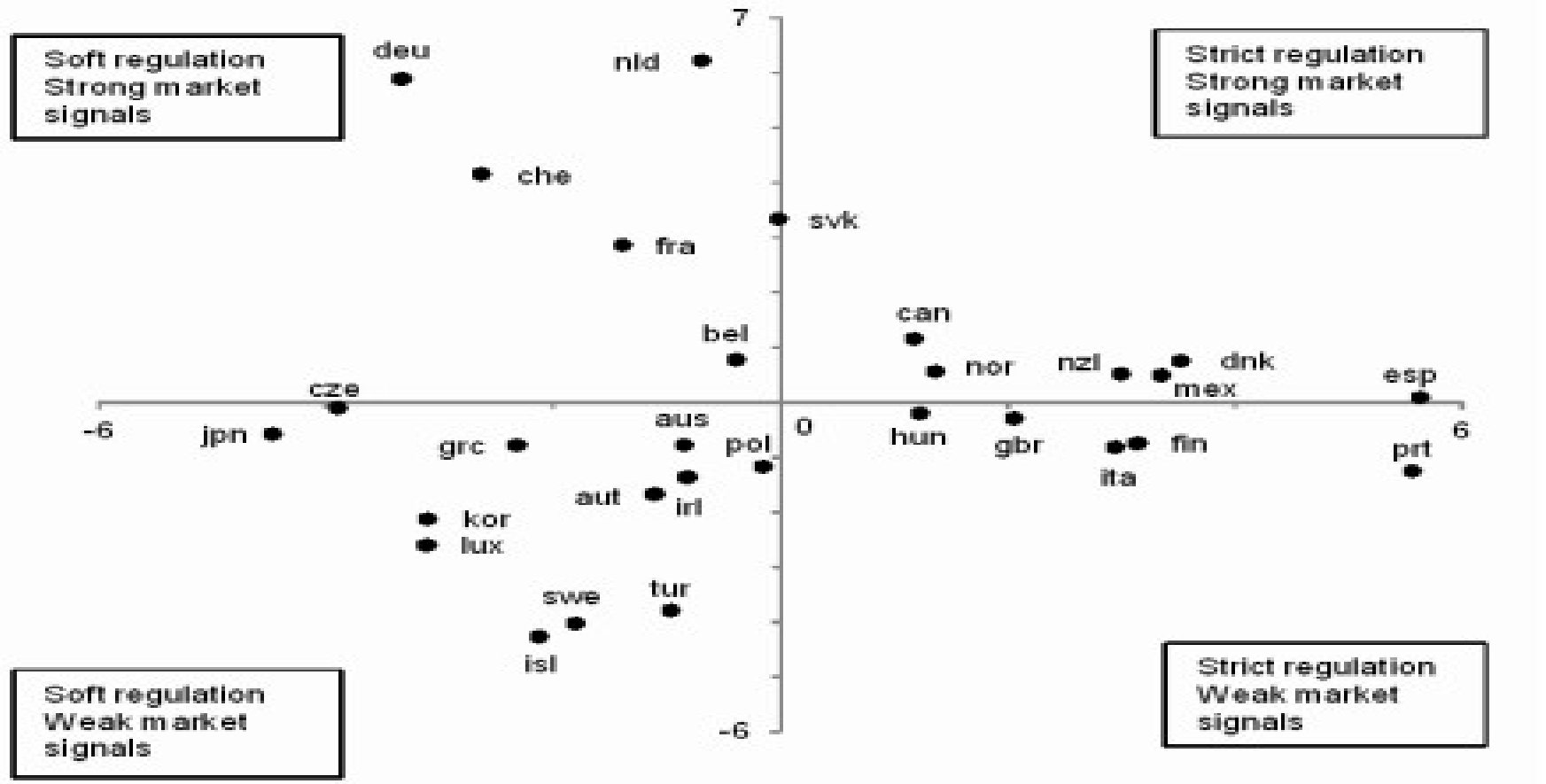
Country	Services covered in only one country	Services covered in all countries but one
Switzerland	Multiple sleep latency test, maintenance of wakefulness test, actigraphy Play and paint therapy with children Psychodrama	Heart–lung transplantation and pancreas transplantation alone Penile implants and 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)

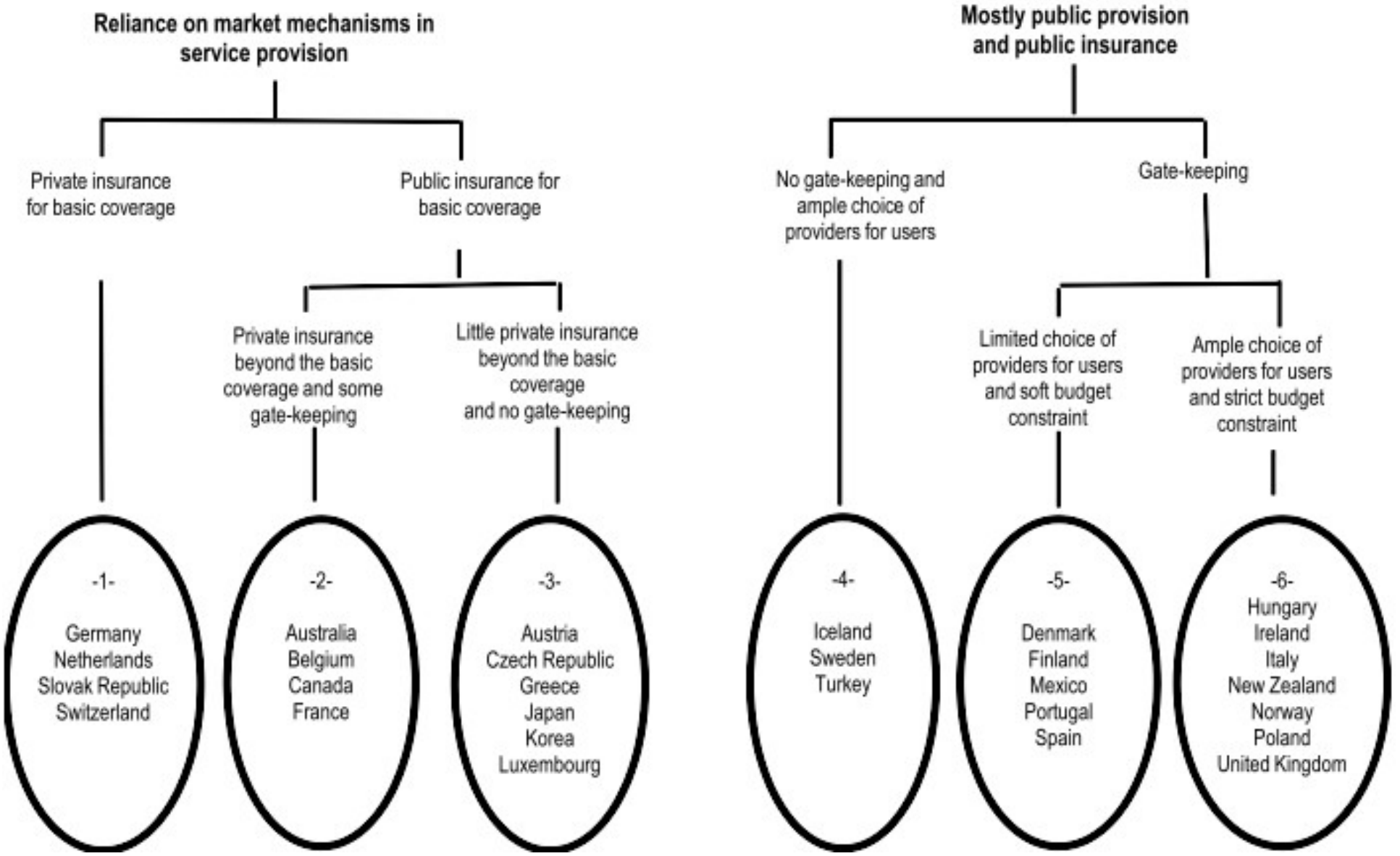
5. A key contribution of this paper is to provide an empirical characterisation of health care systems, which goes beyond classifications based on a few institutional features and recognises the complexity of health institutions and complementarities across them.

- 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**

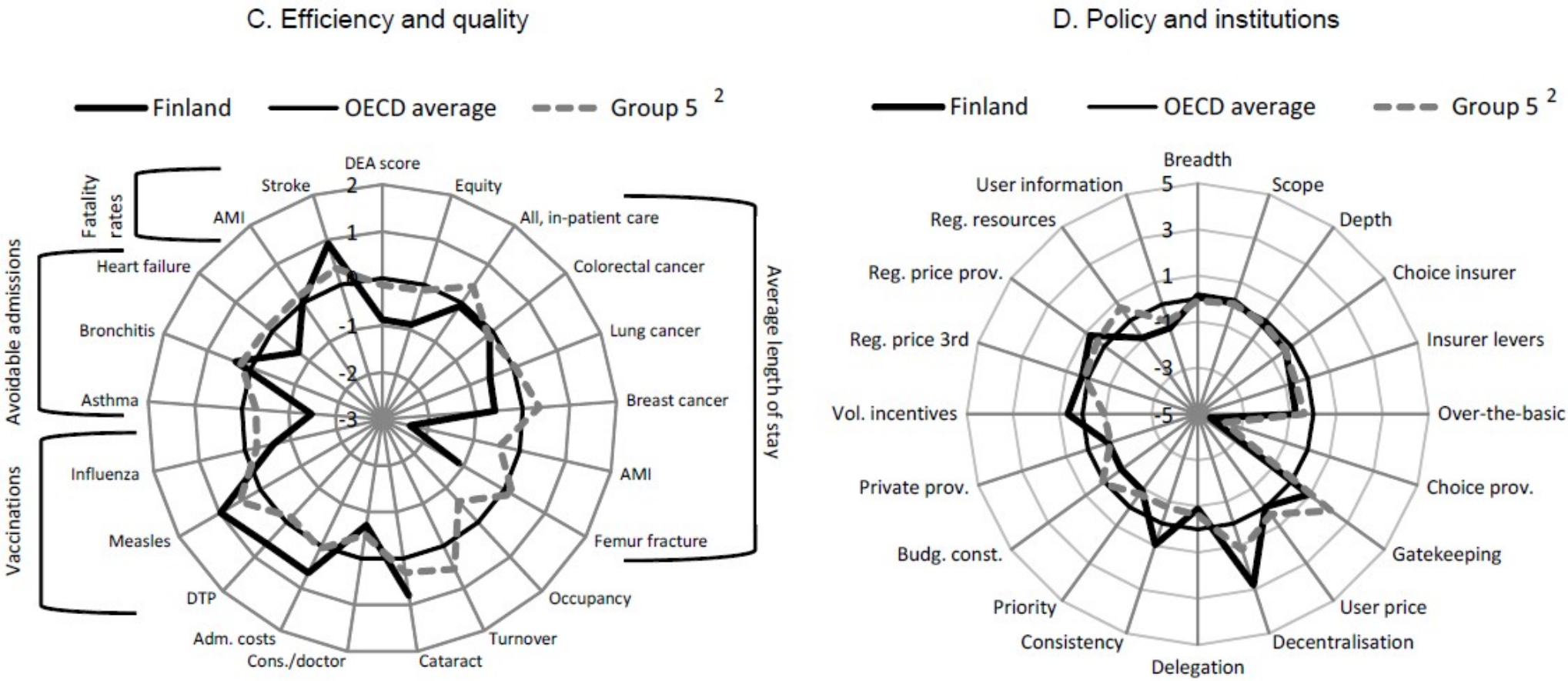
Group 1	Germany, Netherlands, Slovak Republic, Switzerland
Group 2	Australia, Belgium, Canada, France
Group 3	Austria, Czech Republic, Greece, Japan, Korea, Luxembourg
Group 4	Iceland, Sweden, Turkey
Group 5	Denmark, Finland, Mexico, Portugal, Spain
Group 6	Hungary, Ireland, Italy, New Zealand, Norway,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

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



Country profile as 2 radarcharts

Finland



Note: Country groups have been determined by a cluster analysis performed on policy and institutional indicators. In Panels A and C, data points outside the average circle indicate that the group or the country under scrutiny performs better than the OECD average. In Panels B and D, data points outside the average circle indicate that the level of the variable for the group or the country under scrutiny is higher than the average OECD country. In Panels A and C, data represent the deviation from the OECD average and are expressed in number of standard deviations. In Panels B and D, data shown are simple deviations from the OECD average. Each indicator is defined in Annex 3.

1. Group 2: Australia, Belgium, Canada, France
2. Group 5: Denmark, Finland, Mexico, Portugal, Spain

Evaluating health systems quality in relation to SDGs

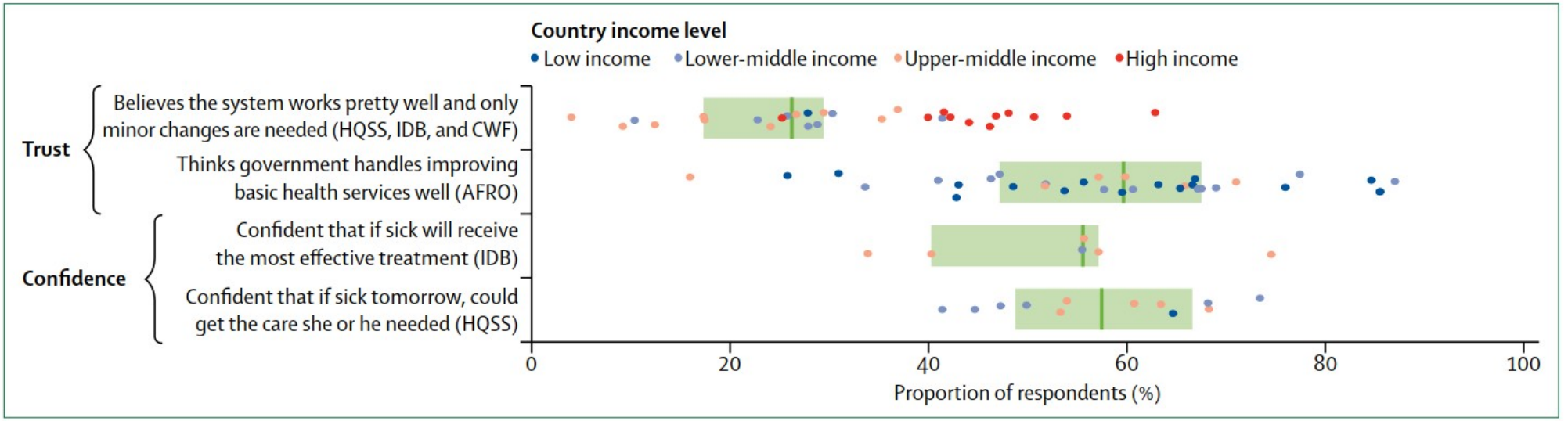


Figure 7: **Confidence and trust in health systems in 45 low-income and middle-income countries (LMICs) and 11 high-income countries**
Dots represent country-specific means, vertical bars indicate median performance across countries, and boxes delineate the IQR. High-income countries do not contribute to the illustrated medians. Data are from the surveys indicated. AFRO=Afrobarometer survey done in 34 African countries (2011–13). HQSS=Commission-led internet survey done in 12 LMICs (2017). IDB=nationally representative phone survey on primary care access, use, and quality done by the Inter-American Development Bank in six Latin-American and Caribbean LMICs (2013). CWF=International Health Policy Survey done by the Commonwealth Fund in 11 high-income countries (2013). Indicators are defined in appendix 1; country specific means are shown in appendix 2.

Source: Kruk ME et al. 2018. “High-Quality Health Systems in the Sustainable Development Goals Era: Time for a Revolution.” The Lancet Global Health 6 (11): e1196–1252. https://doi.org/10.1016/S2214-109X(18)30386-3 .

Terms and indicators for national health systems quality

Box 1. **Intermediary objectives of national health policies, plans and strategies**

Quality
Health-care quality is the extent to which health services provided to individuals and patient populations improve desired health outcomes, consistent with current professional knowledge.[7]

Equity
Equity in health is a measure of the degree to which health policies can fairly distribute well-being in the population. It can also refer to the absence of systematic or remediable differences in health status or access to health care.[8]

Efficiency
Efficiency refers to the capacity to produce maximum output for a given input.[8]

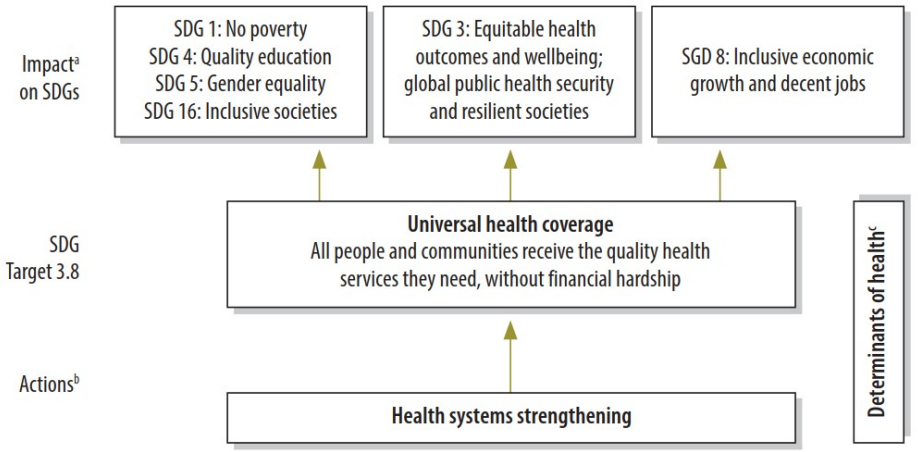
Accountability
Accountability results from processes in the health system that ensure health-care actors[a] to take responsibility for what they are obliged to do and are answerable for their actions.[8]

Resilience
Health system resilience is the capacity of health-care actors,[a] institutions and populations to prepare for and respond to crises, maintain core functions in time of crisis; and, informed by lessons learnt during the crisis, reorganize if needed.[9]

Sustainability
Sustainability refers to the potential for maintaining beneficial outcomes for an agreed period of time at an acceptable level of resource commitment.[8]

[a] Health-care actors are individuals or groups with an interest in the health system, including patients and their families, nurses, physicians, laboratorial technical staff, and other external entities such as regulators, insurance companies and health-care organizations.

Fig. 1. **How health system strengthening contributes to sustainable development goals through universal health coverage**



SDG: sustainable development goal.
[a] A health impact can be positive or negative. A positive impact is an effect which contributes to good health or improvement in health status. A negative impact causes or contributes to ill health.[8]
[b] Action refers to interventions that aim at strengthening a health system. [c] Whether people are healthy or not, is determined by their circumstances and environment. The determinants of health include the social and economic environment, the physical environment, and the person's individual characteristics and behaviours.[10]

Source: Kieny MP et al. 2017. "Strengthening Health Systems for Universal Health Coverage and Sustainable Development." Bulletin of the World Health Organization 95 (7): 537–39. https://doi.org/10.2471/BLT.16.187476 .

Assignment for 22 June 2023

- Please select one country.
- Investigate the health/medical care system, including various aspects such as finance and insurance, planning, human resources, and so on.
- Summarize the system.
- Explain it within 15-20 minutes with discussion (within 30 minutes in total).