

High Performing Health Systems: (Conceptualizing, Defining, Measuring and Managing

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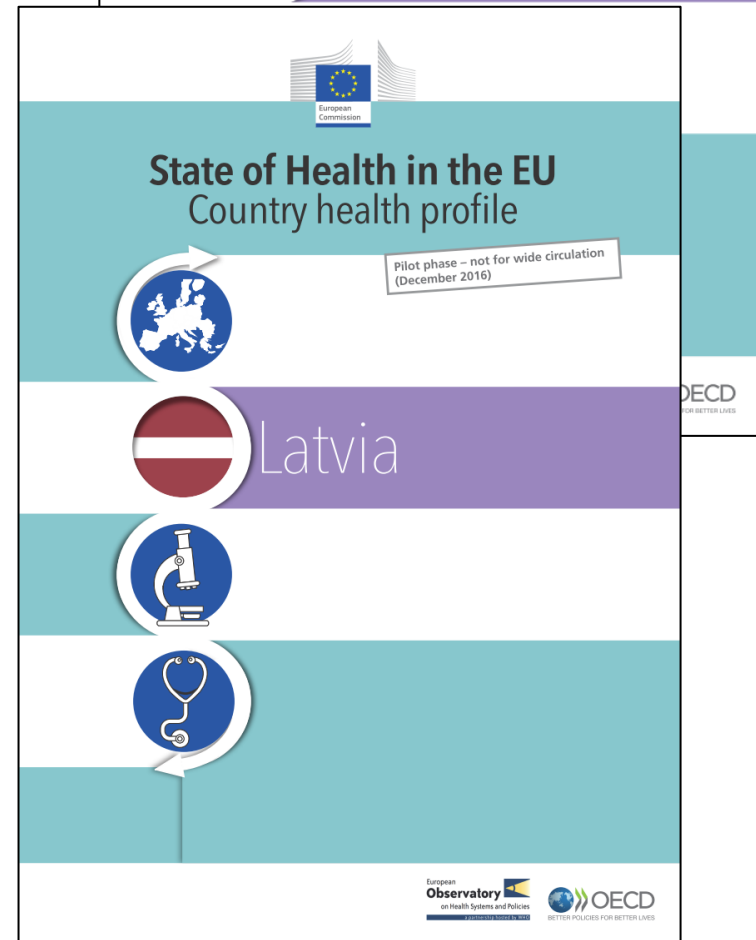
&

European Observatory on Health Systems and Policies

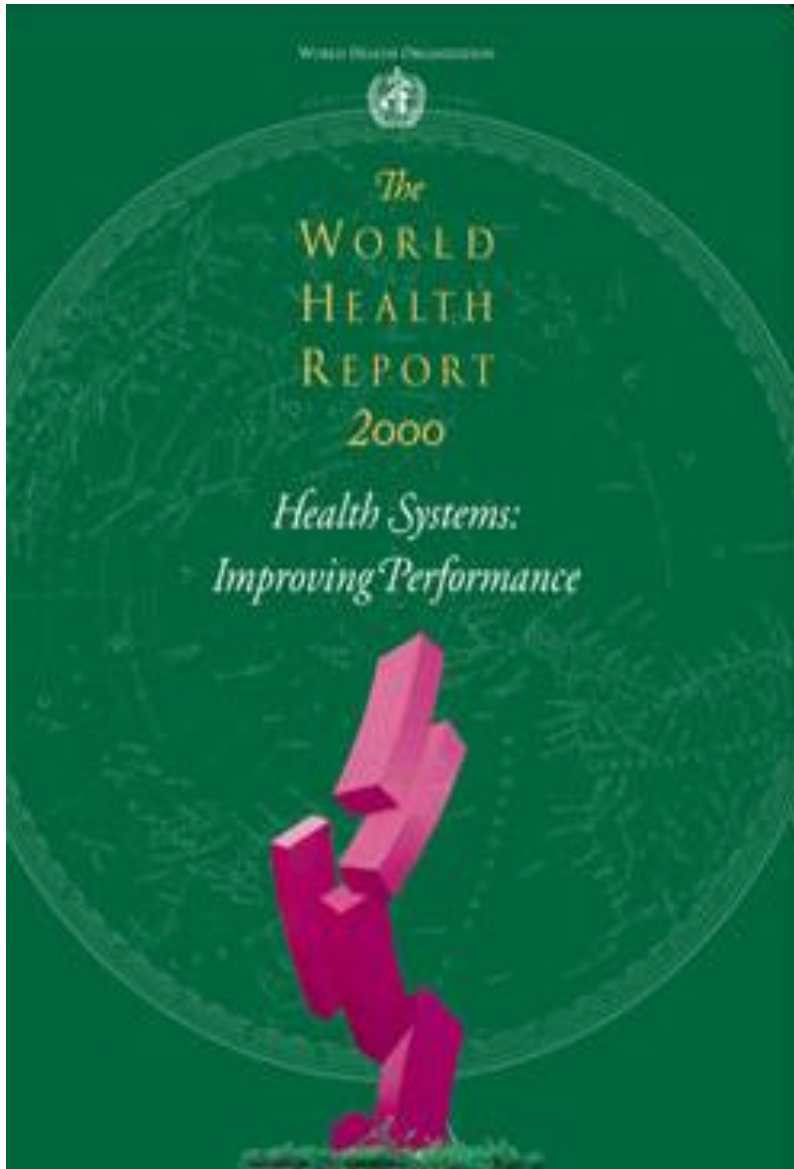
Before we start reforming
to improve performance,

we need to know where
we stand, for that we need
we need to know what we
talk about, how we define,
and how we measure it –

as the European
Commission is now doing
together with the European
Observatory and OECD

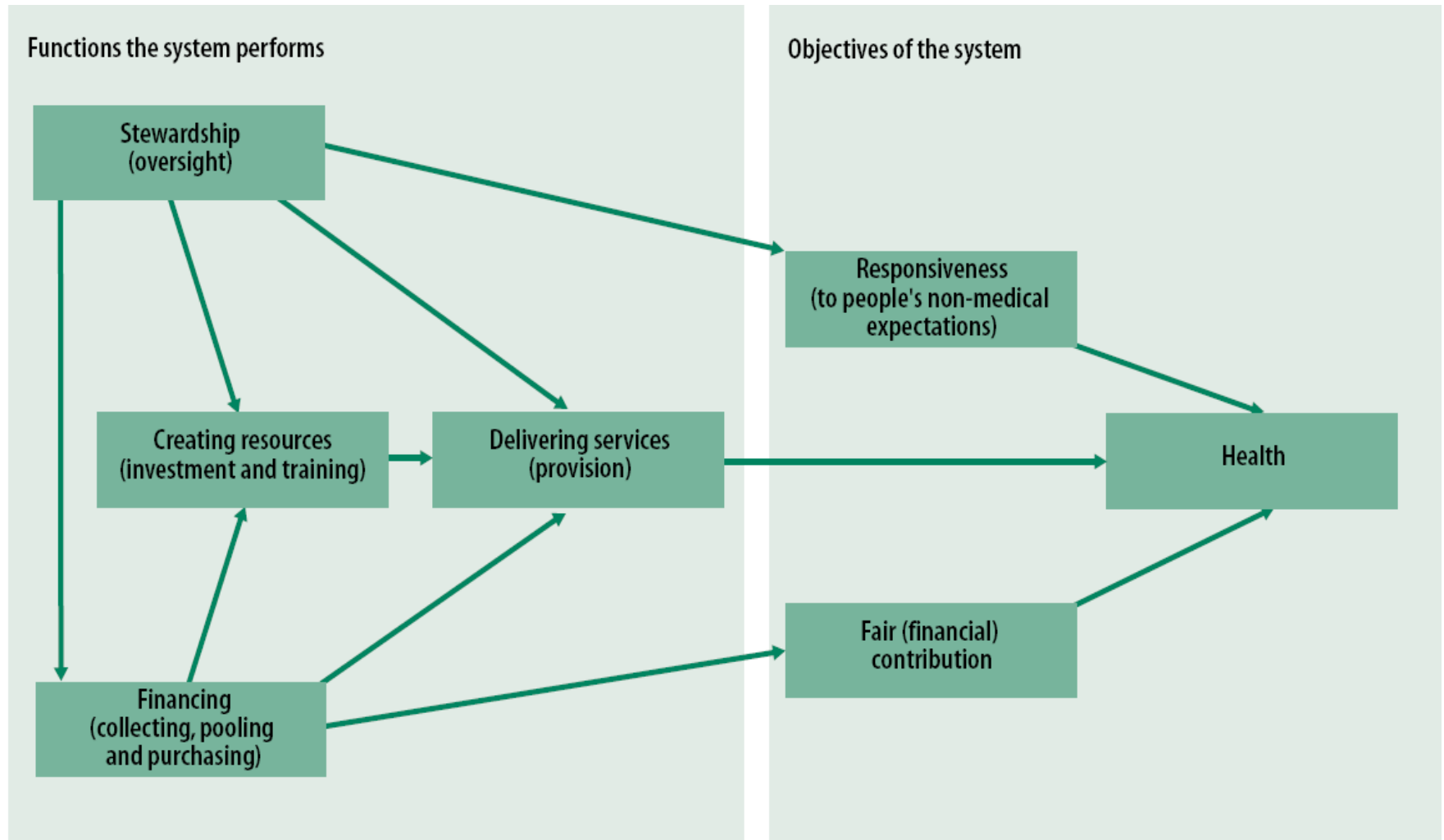


The starting point: 2000 World Health Report

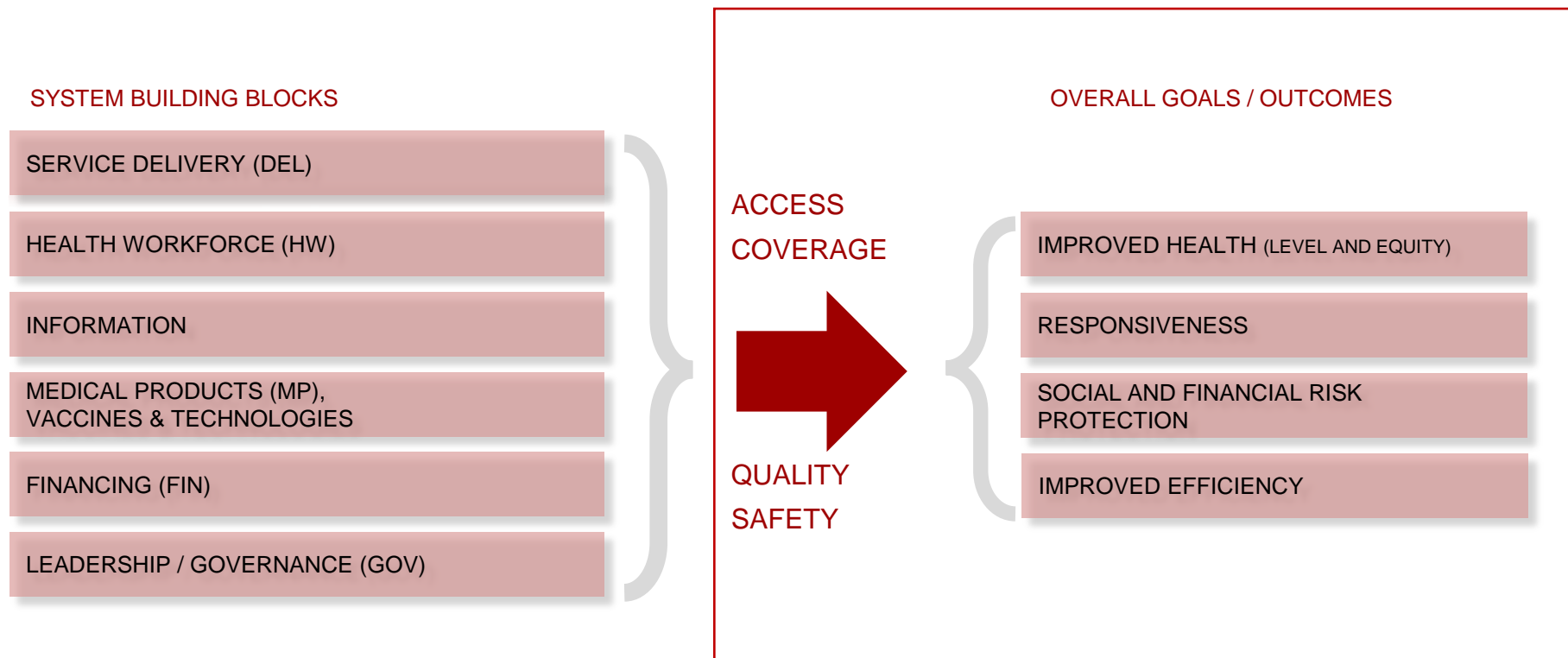


- First attempt to rank performance of 191 national health systems
- Aimed at identifying and measuring performance of member states on 'key health system objectives'
- Examined whether each health system is performing as well as it can, given existing resources
- Based on Murray & Frank framework (2000)

WHO Framework: strategy behind World Health Report 2000

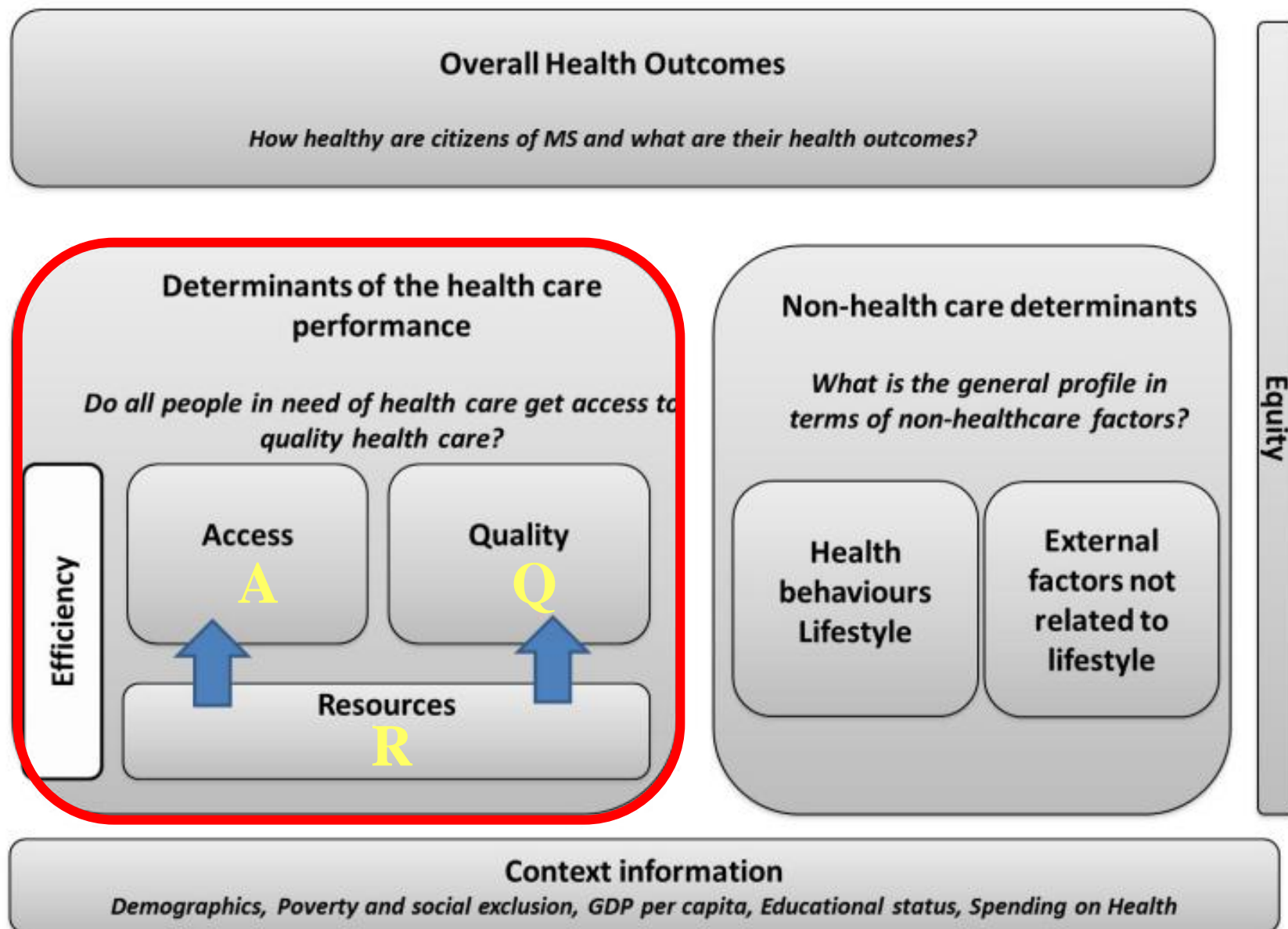


Further development at WHO (2007): “building blocks” and “intermediate goals/ outcomes”



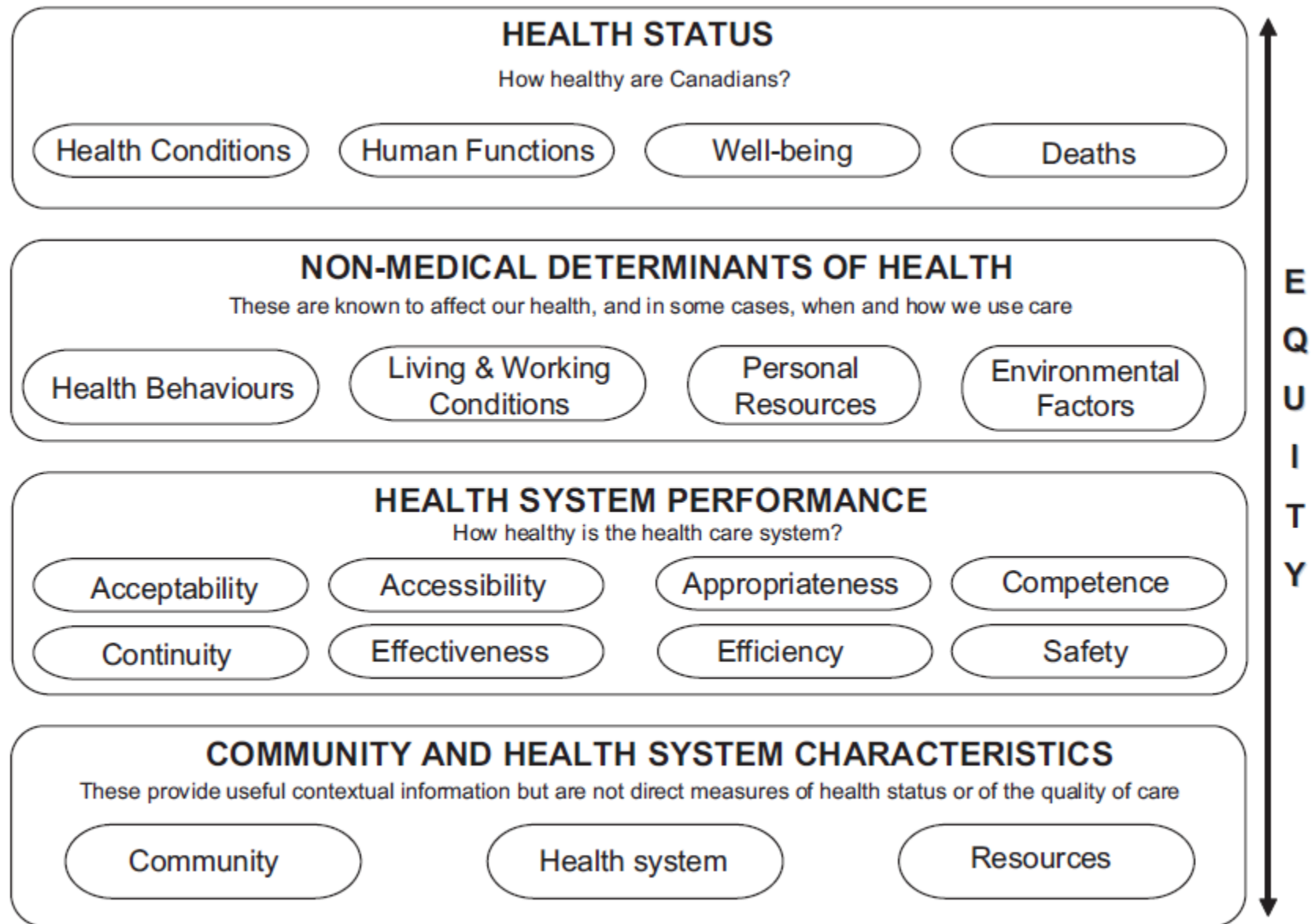
Source: World Health Organization (WHO) (2007) *Everybody's business: Strengthening health systems to improve health outcomes. WHO's framework for action*. Geneva: WHO Document Production Services.

Inspired by OECD, the European Commission's Joint Assessment Framework



Source: Commission services (2013)

Certain elements of this can also be found in the Canadian health indicators framework



Canada's health indicators framework (adapted from [21,22]).

A problem: we use the same terms, but do we mean the same? E.g., is effectiveness = quality?

Let alone that Porter confused us all when he uses “value” for “efficiency” (which makes “value-for-money” meaningless)

WHO	OECD	Commonwealth Fund
Quality: Captured by the average level of health and responsiveness.	Quality: Captured by levels of attainment of health outcomes and responsiveness.	Quality: Captured by the provision of the right (effective), coordinated, safe, patient-centred and timely care.
Equity: Captured by the distribution of health and responsiveness across the population as well as fairness of financial contributions.	Equity: Captured by the distribution of health outcomes, access and financing	Equity: Captured by the distribution of health quality, access, and efficiency.
Access: Captured as a determinant of responsiveness.	Access: Captured as a component of responsiveness.	Access: Captured by the degree of universal participation and affordability of care.

“High performing?”

Difficulties in deciding what to measure and how to operationalize it

Another problem

The logo for The Economist, featuring the words "The Economist" in a white serif font on a solid red rectangular background.

The
Economist

The health of nations

MODERN medicine may be good at gauging the health of patients, but it has proved less successful at taking its own pulse. Assessing the performance of a country's health-care system is no easy task, because deciding what to include – from doctors to drugs to diet – is difficult, and because some chosen criteria, from infant mortality to patient satisfaction, are themselves hard to define. Making comparisons between countries is even trickier, because health-care systems differ radically in their financing and organisation, and in the social goals they set out to achieve.

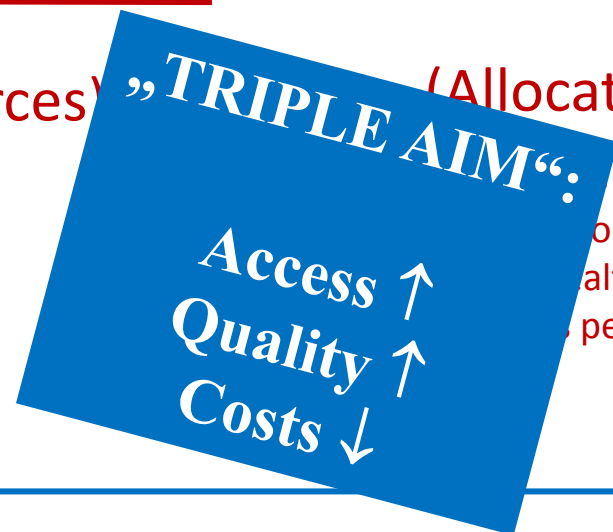
My combined performance framework

(incl. costs/ efficiency and relationship to WHO dimensions)



Inputs (money and/or resources)

Health system performance



(Allocative)

Efficiency
money, i.e.
health and/ or
per input unit)

The framework

(without costs/ efficiency)

*Population-/ system-
wide performance
dimensions*



→ Both population health outcomes and responsiveness are the multiplicative effect of accessability and quality:

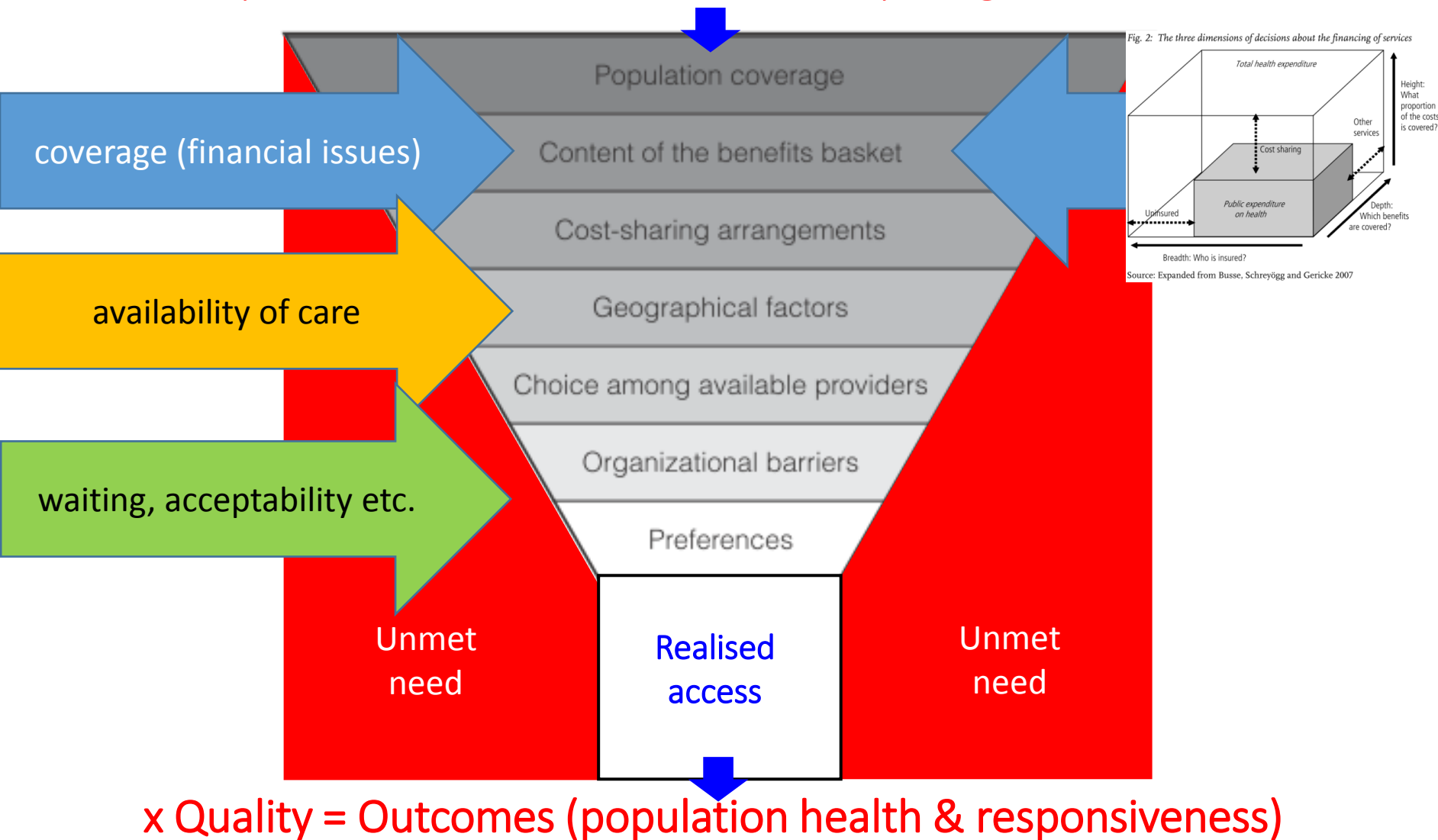
high accessability but bad quality as well as

low accessability but high quality

lead, on the population level, to inferior performance (but pointing to the problem is important for deciding on reform need)

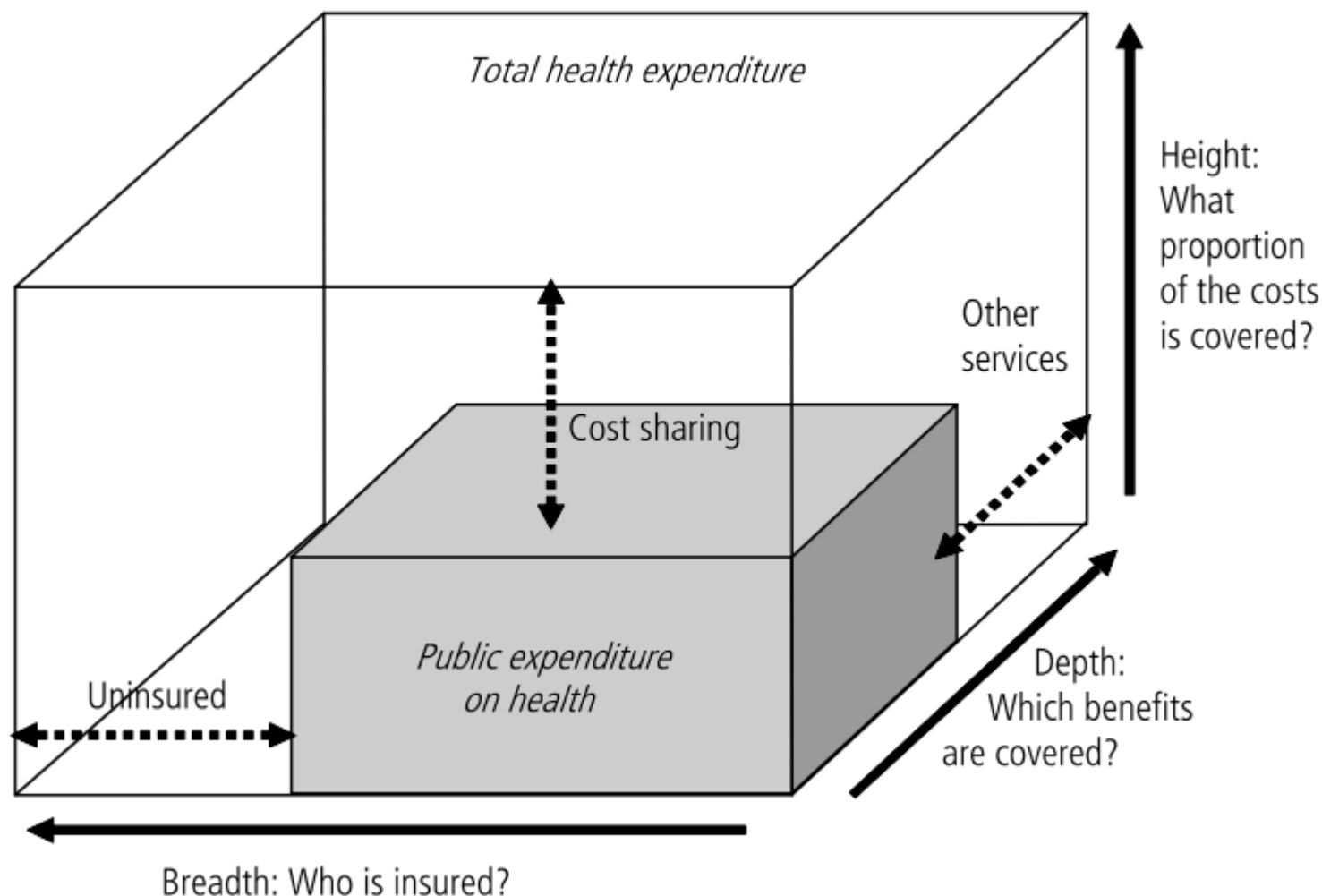
The access(ability) component

Need (by socio-economic status, ethnicity/ migration status etc.)

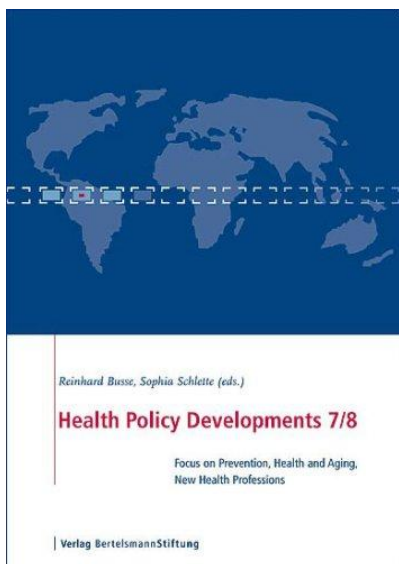


The first Coverage Cube was born 10 years ago ...

Fig. 2: The three dimensions of decisions about the financing of services

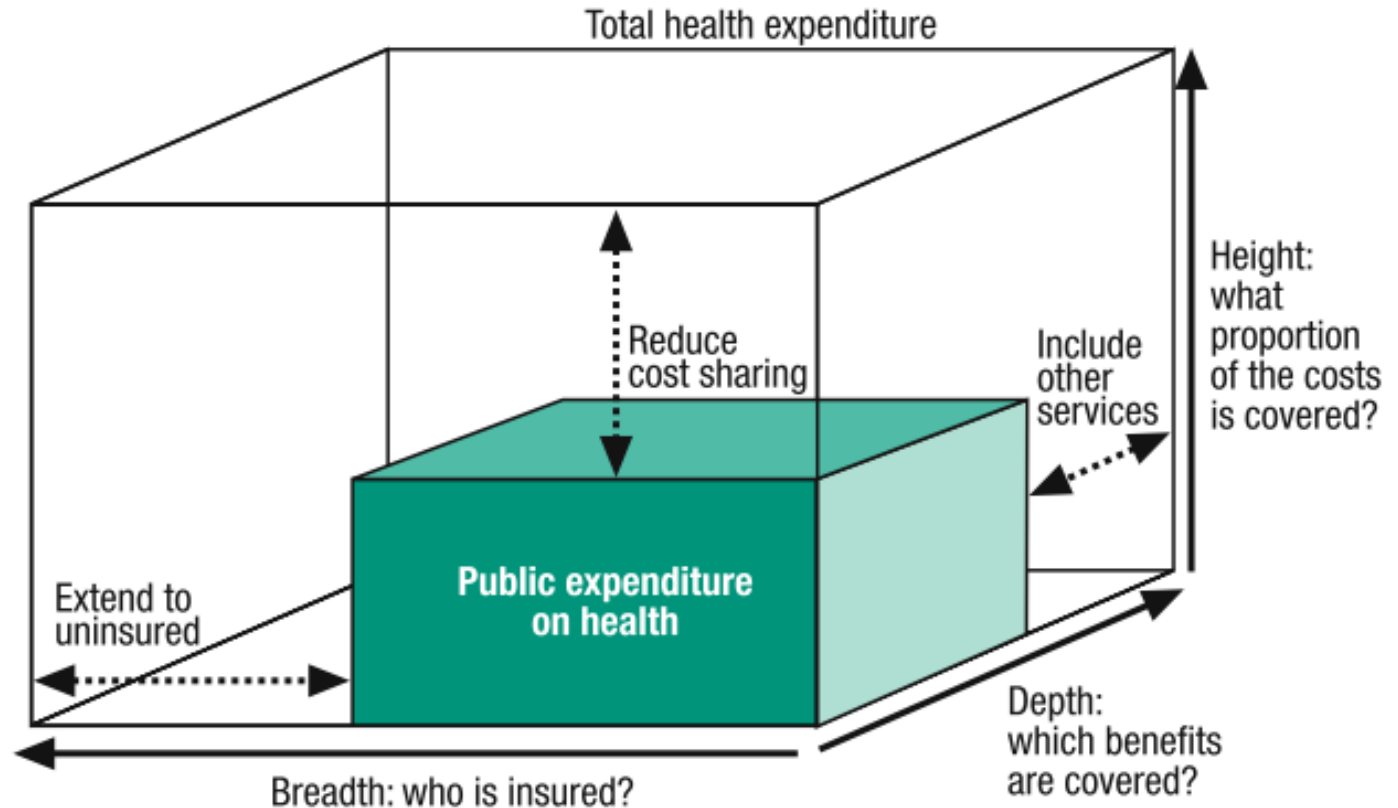


Source: Expanded from Busse, Schreyögg and Gericke 2007



... picked up by WHO only a year later ...

Figure 2.2 Three ways of moving towards universal coverage¹⁷



The World Health Report 2006

Primary Health Care

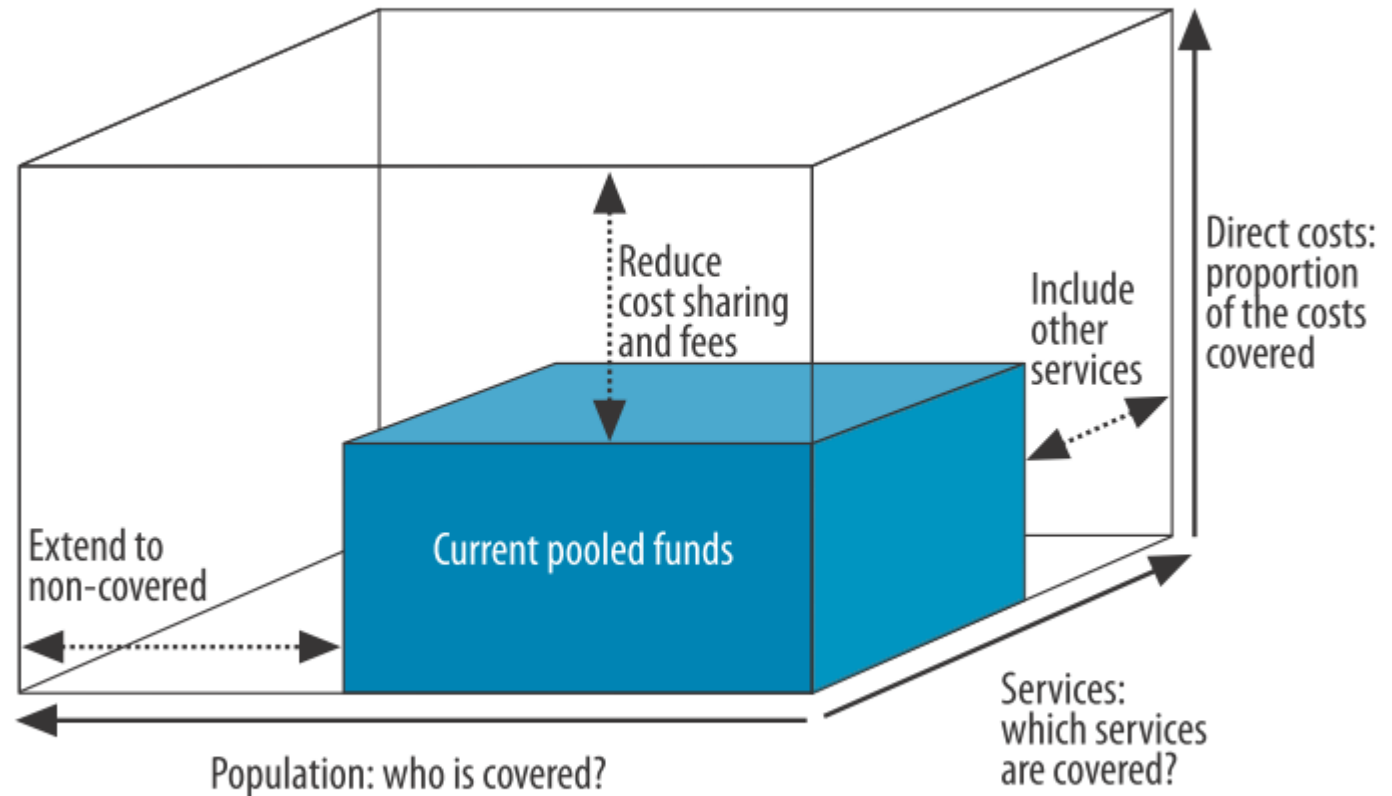
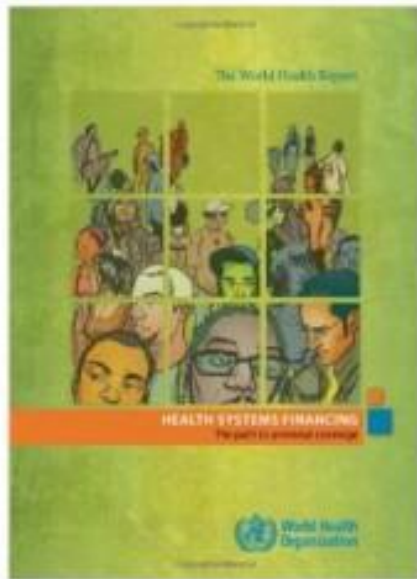
**Now
More
Than
Ever**



World Health Organization

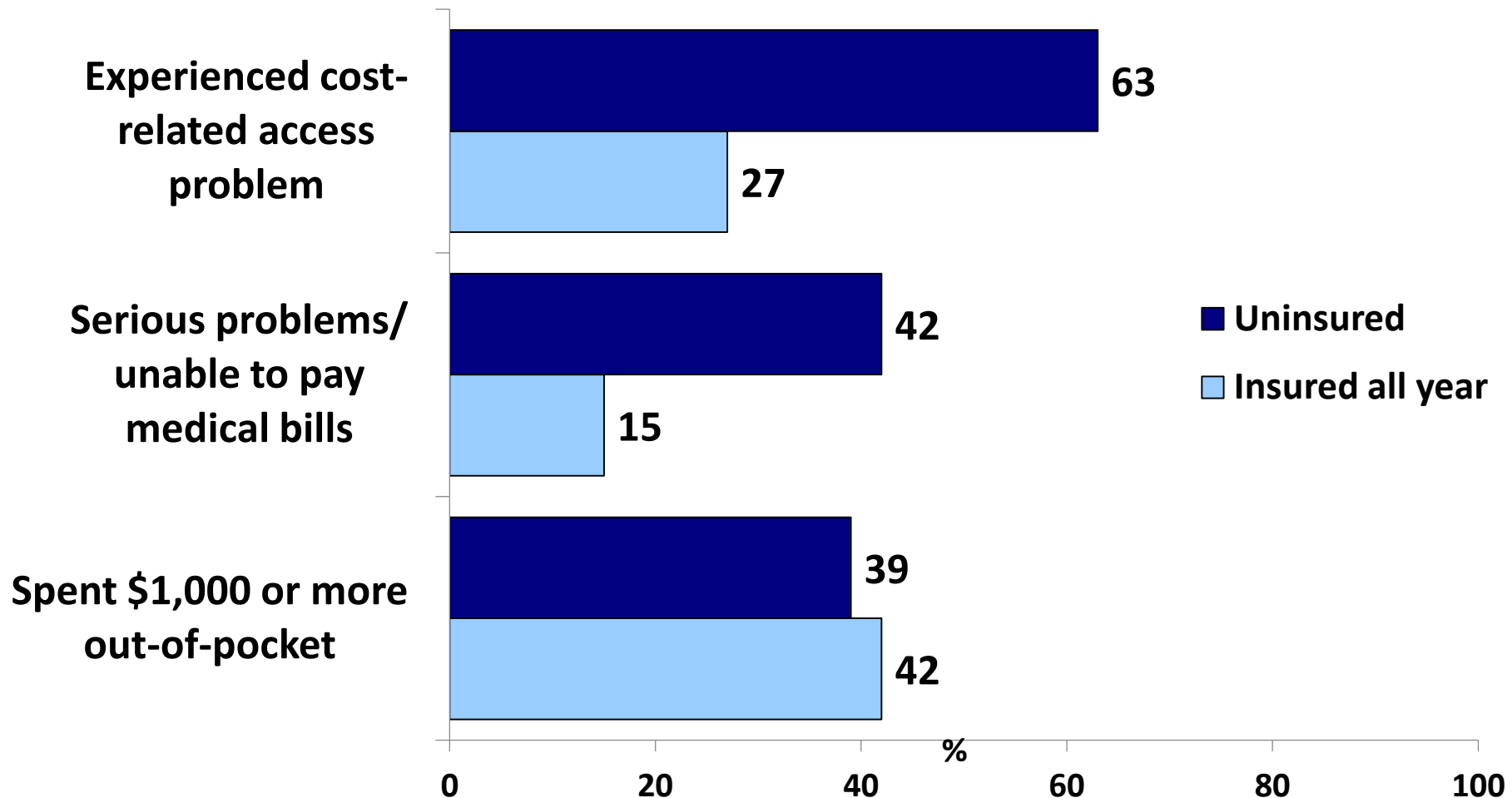
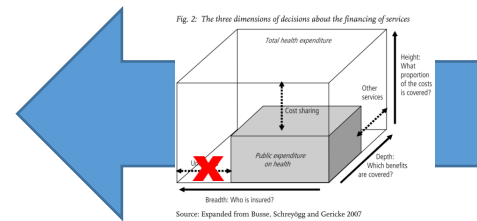
... and again in 2010

Fig. 1. Three dimensions to consider when moving towards universal coverage

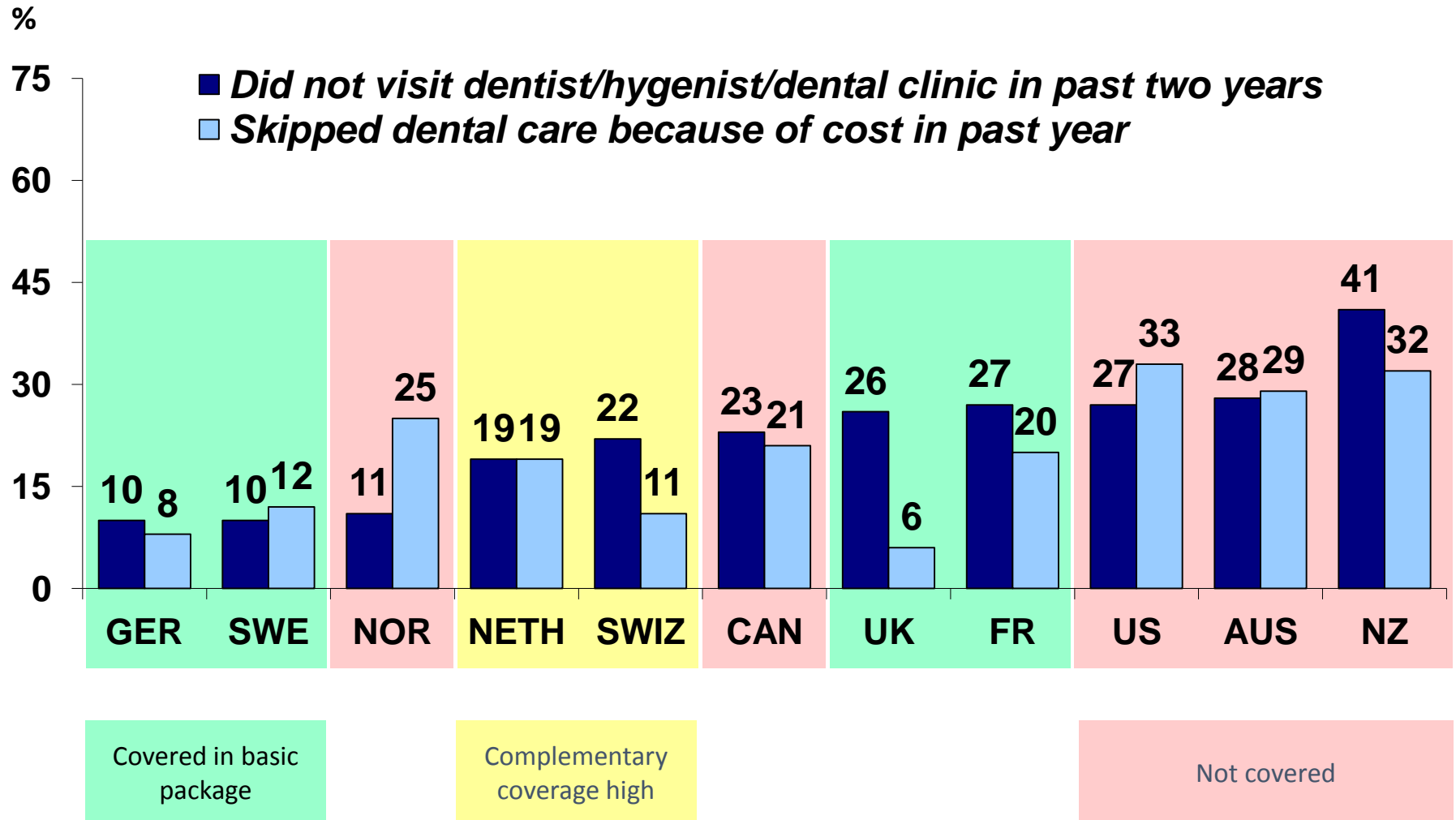
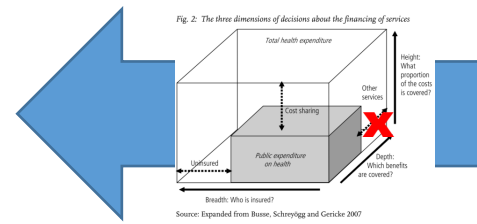


Source: Adapted from (9, 10).

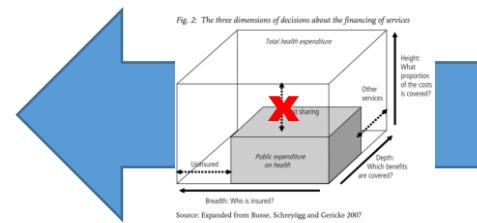
1st dimension/ population coverage:
the importance is known usually by U.S. data;
here: access problems in 2012 for U.S. adults



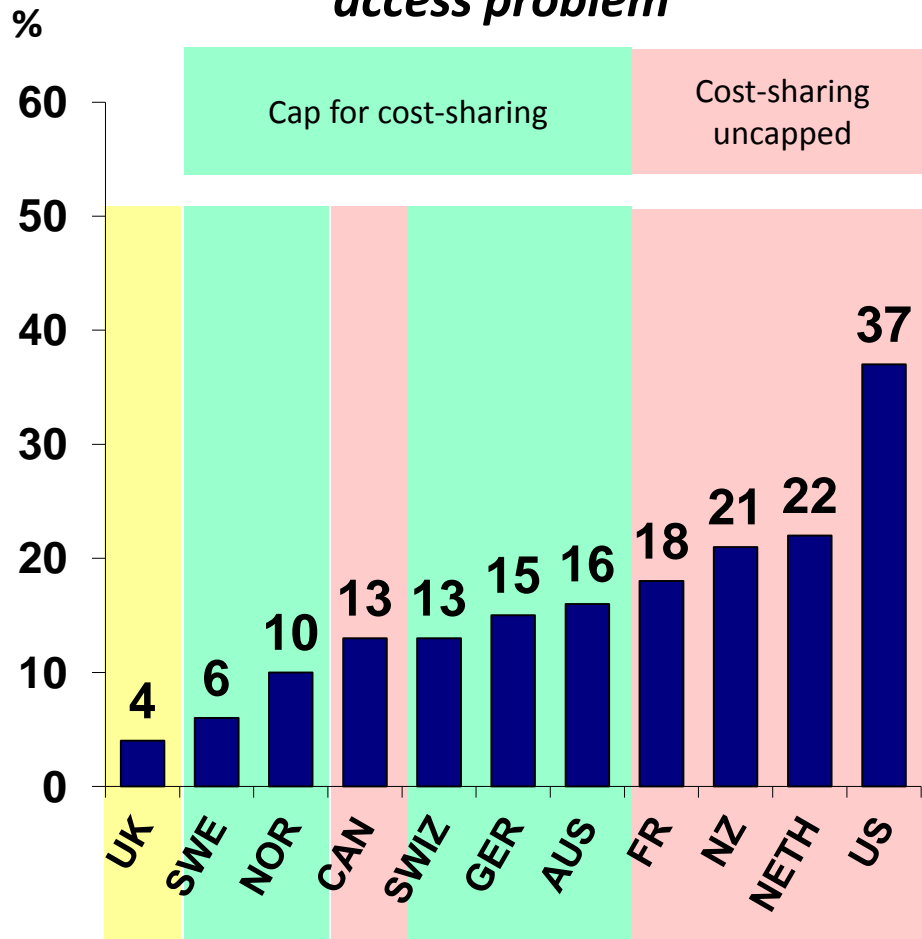
2nd dimension/ covered benefits also matter: e.g. gaps in dental care



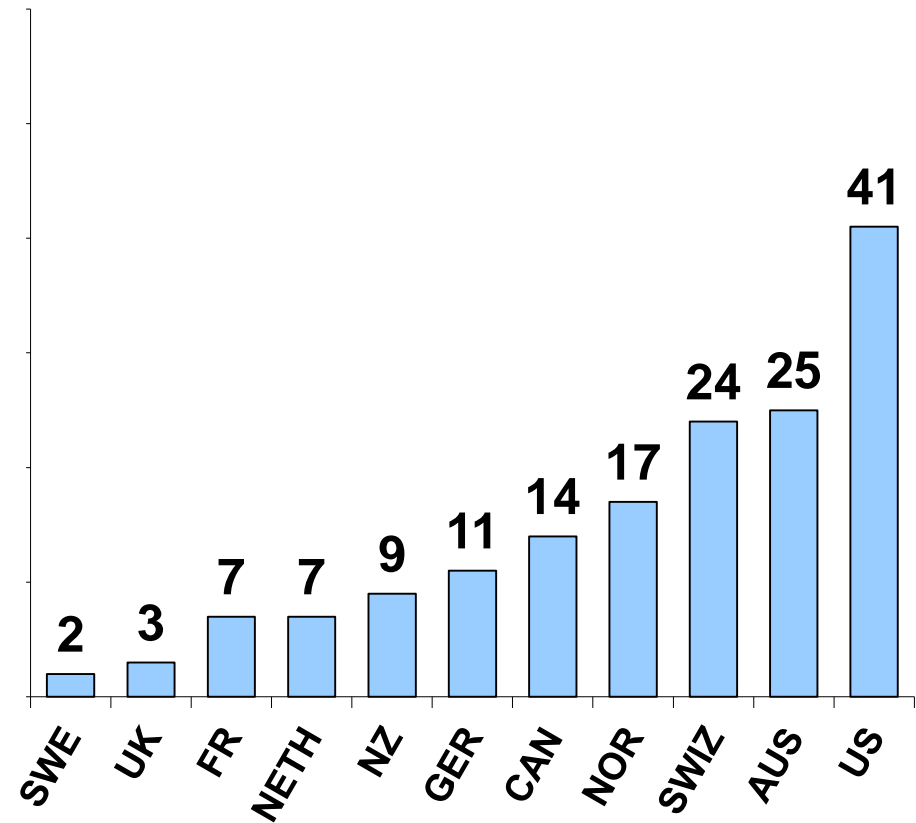
3rd dimension/ cost-sharing: size and protection mechanisms are important



Experienced cost-related access problem*



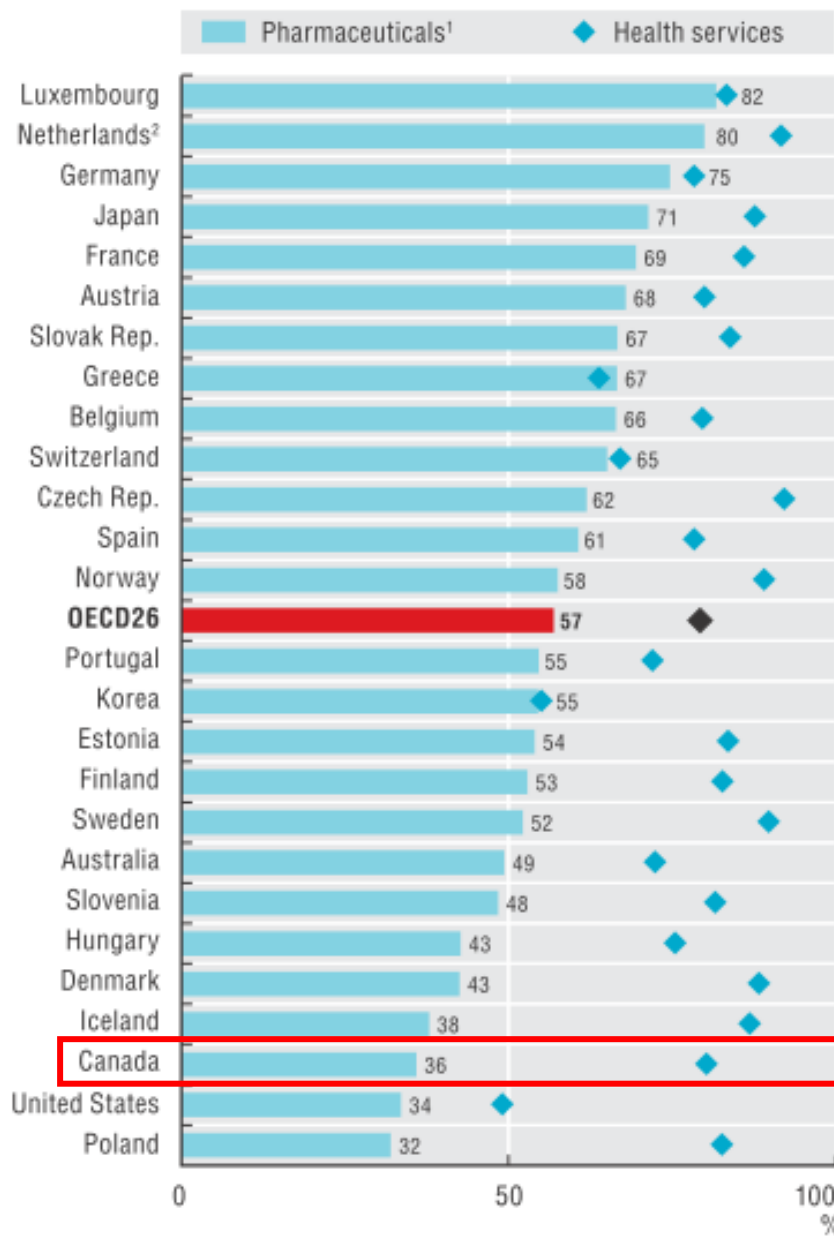
Spent US\$1,000 or more out-of-pocket



* Did not fill/skipped prescription, did not visit doctor with medical problem, and/or did not get recommended care.

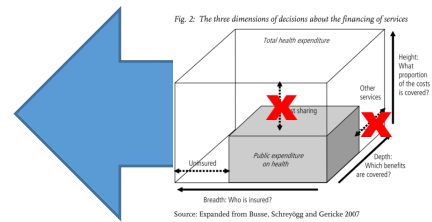
Source: modified from 2013 Commonwealth Fund International Health Policy Survey in Eleven Countries.

Usually a combination of 2nd & 3rd dimension: large coverage gaps for pharmaceuticals (in comparison to health services)



1. Includes medical non-durables.
2. The shares for the Netherlands are overestimated as they include compulsory co-payments by patients to health insurers.

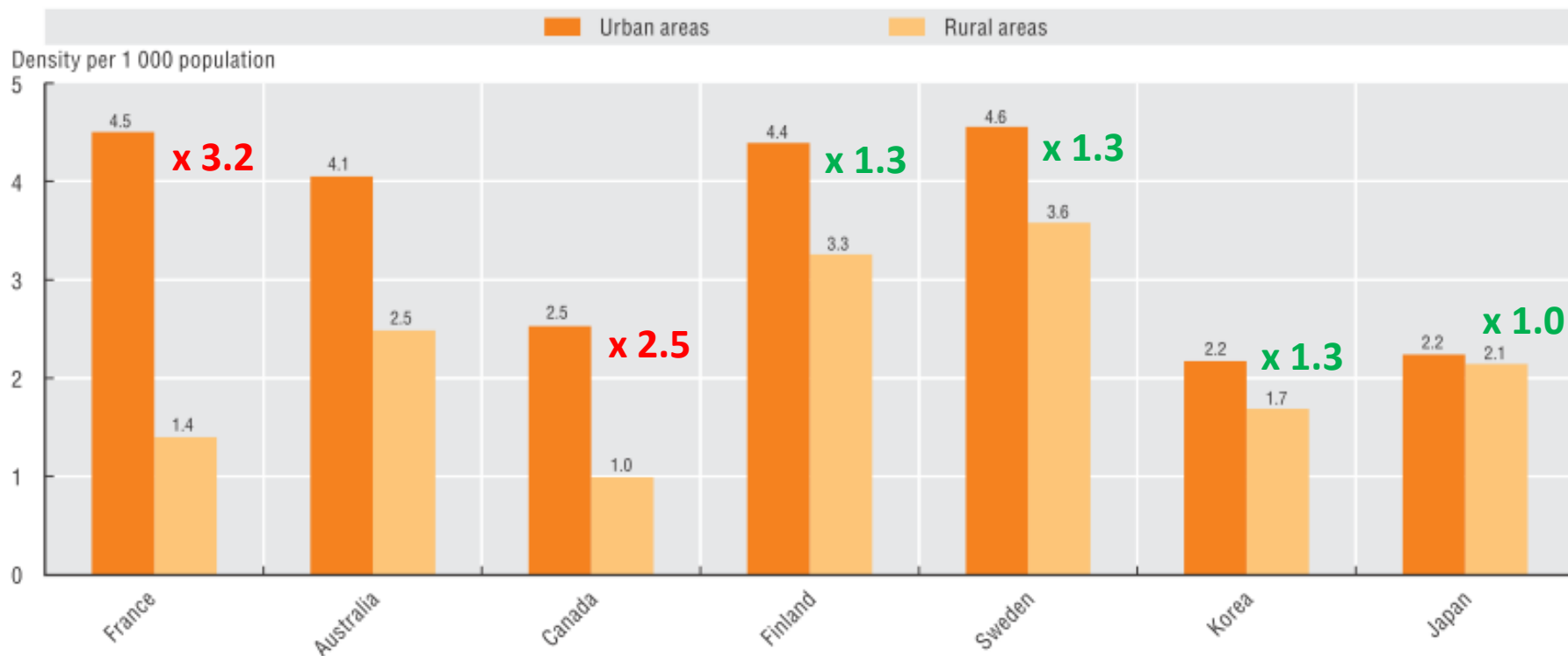
Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>.



availability of care

Urban-rural discrepancies are vary drastically between countries – with definite scope to learn from another

7.10. Physicians density in predominantly urban and rural regions, selected countries, 2013 (or nearest year)

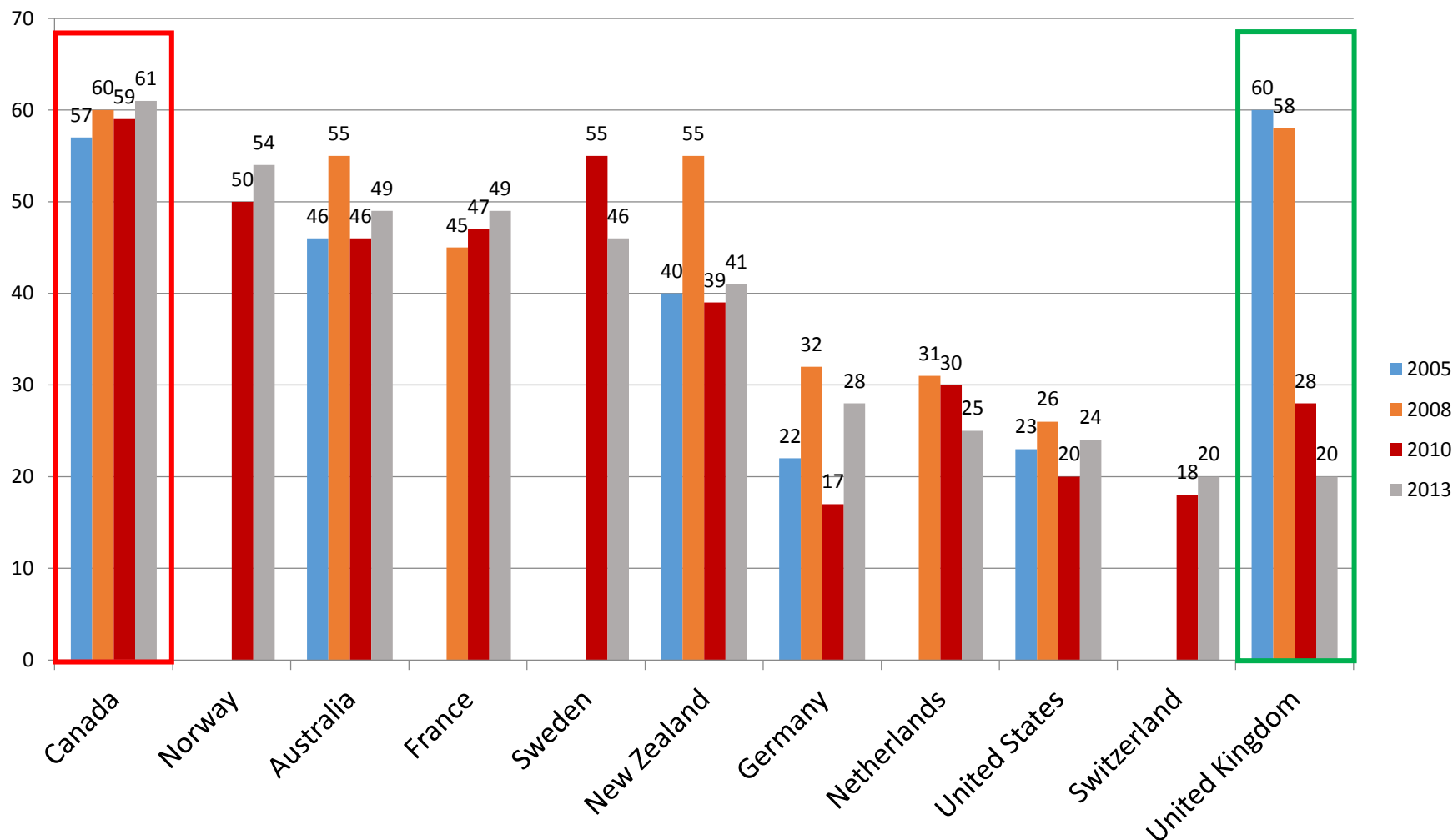


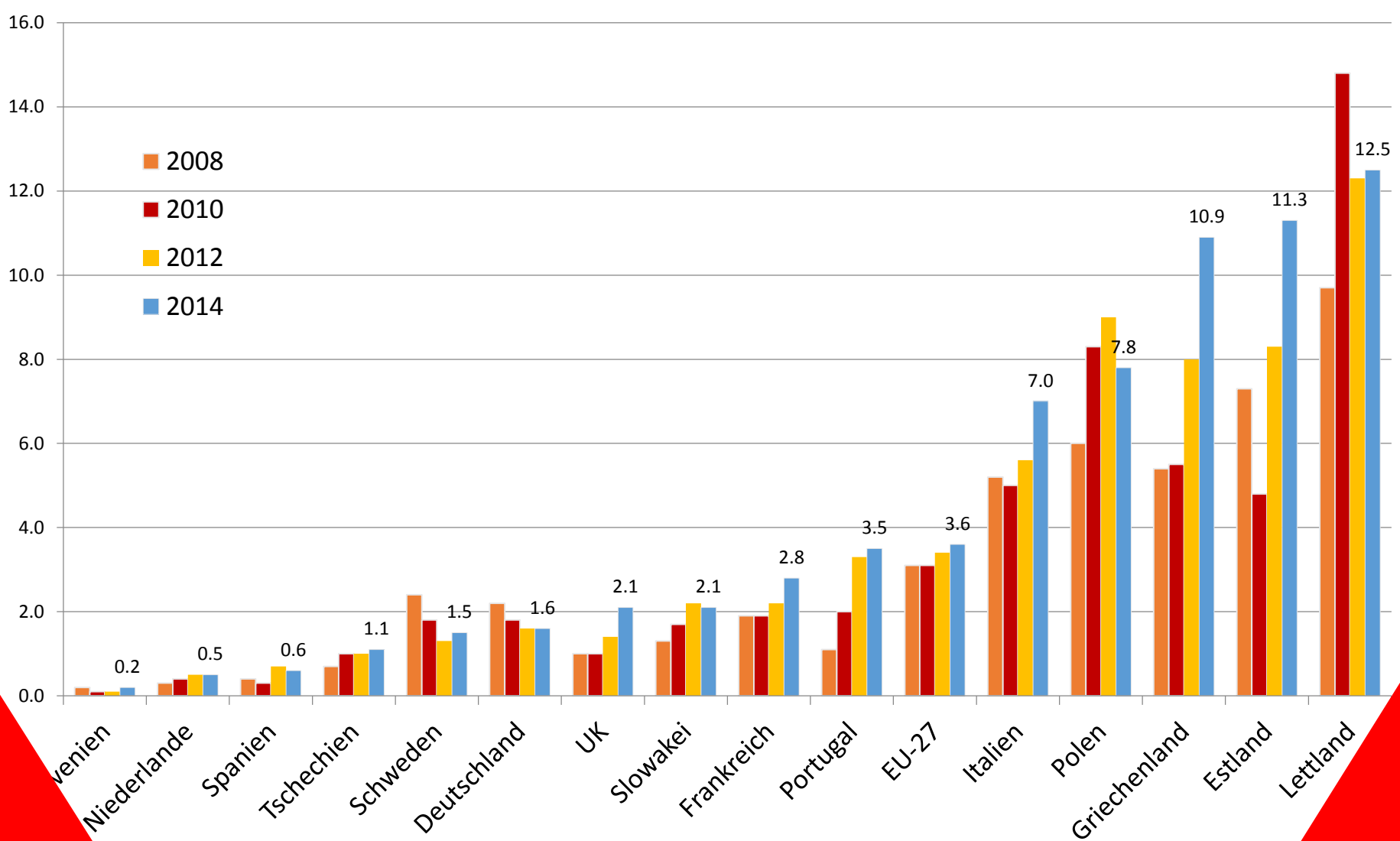
Note: The classification of urban and rural regions varies across countries.

Source: Australia: AIHW National Health Workforce Data Set (NHWDS) 2013; Canada: Scott's Medical Database, 2013, Canadian Institute for Health Information; France: RPPS médecins au 1er janvier 2015; Other: OECD Regions at a Glance 2015.

waiting, acceptability etc.

Waiting (here: >4 weeks for a specialist appointment) is a general problem, but some countries see improvements and others not



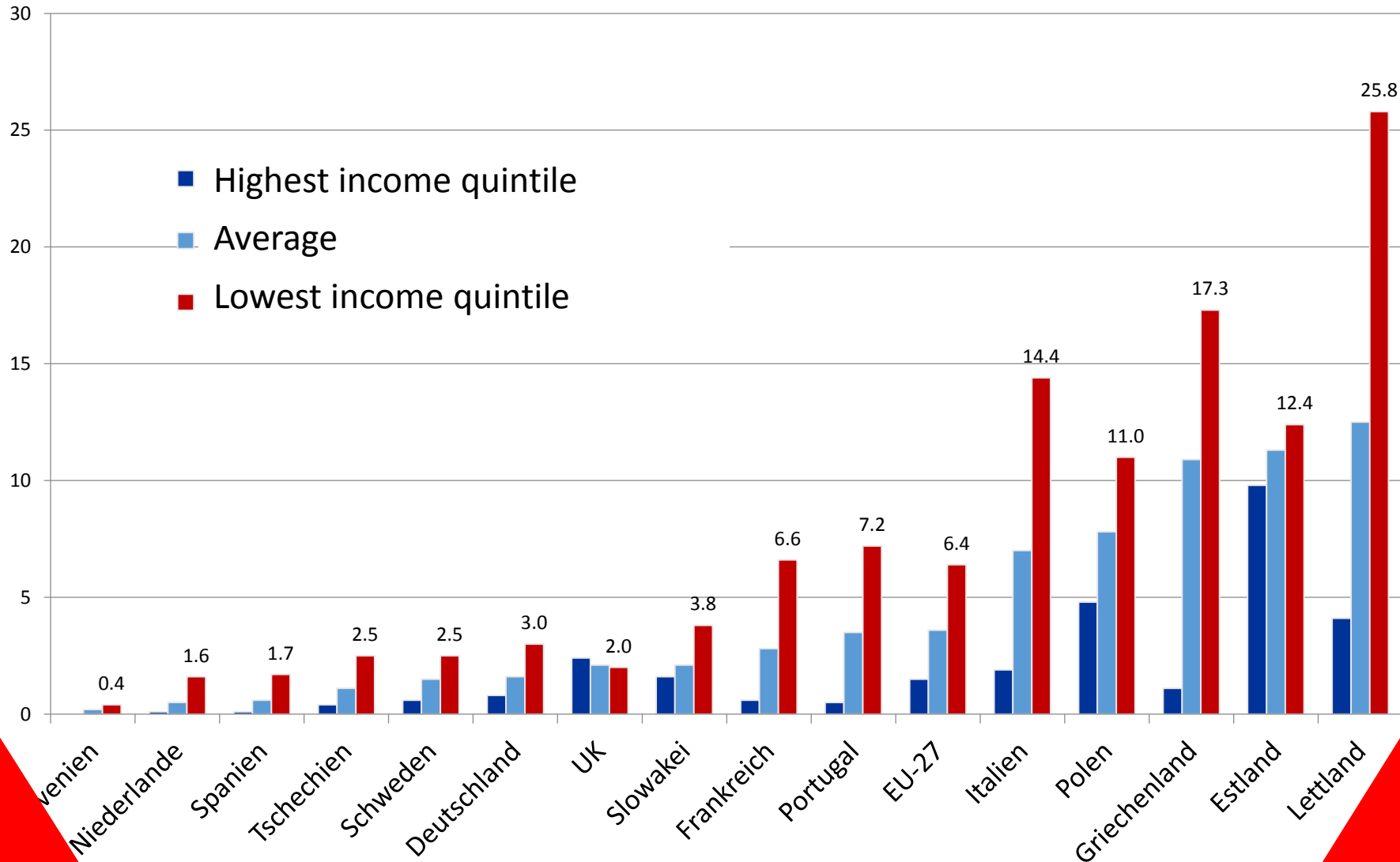


Unmet need in EU-27
(for costs, distance, waiting), 2008-2014

Unmet
need

Own elaboration, data: EU-SILC, 2015

Unmet
need



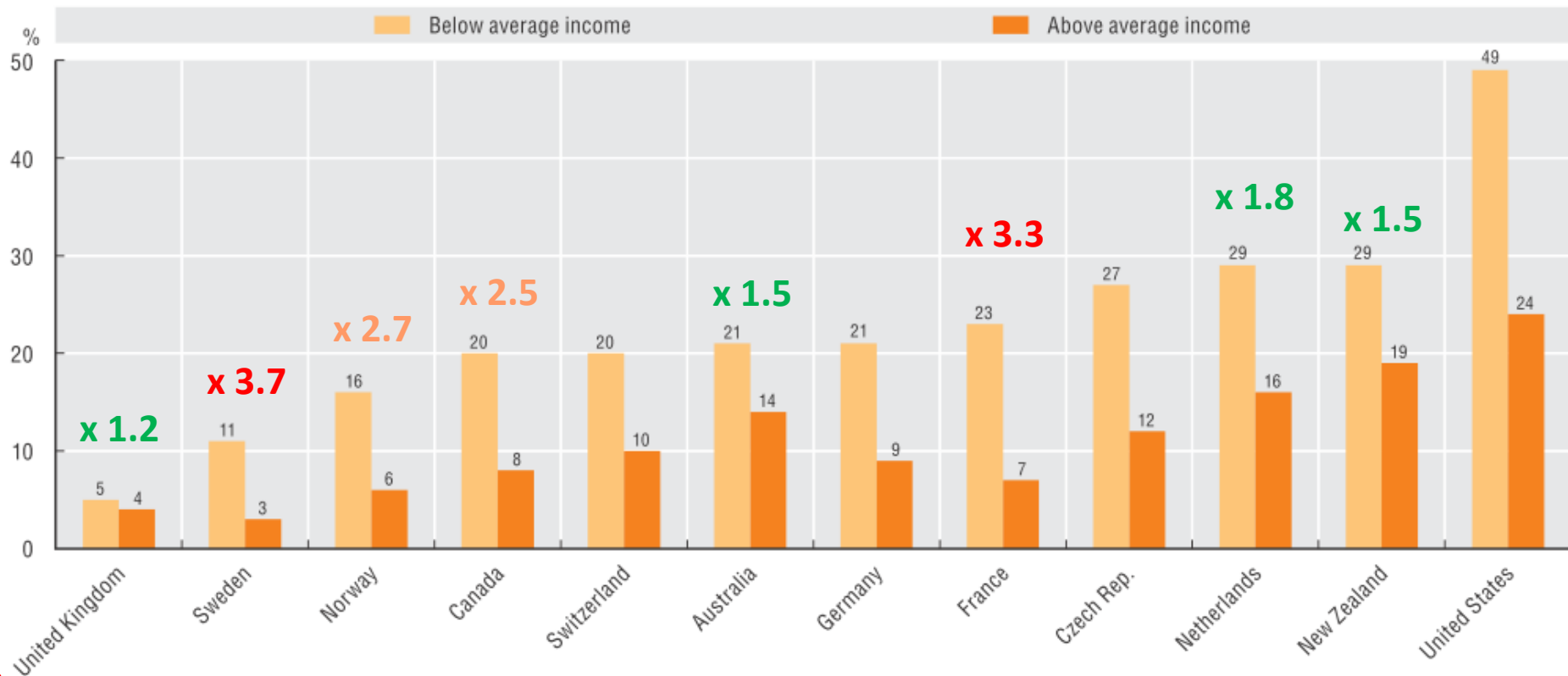
Unmet need in EU-27 by income quintiles (for costs, distance, waiting), 2014

Unmet
need

Own elaboration, data: EU-SILC, 2015

Unmet
need

7.6. Unmet care needs due to cost, by income level, 2013



Source: Either did not visit doctor when they had a medical problem, did not get recommended care or did not fill/skipped prescription.

Source: 2013 Commonwealth Fund International Health Policy Survey, complemented with data from the national survey for the Czech Republic (2012).

*Unmet need in selected countries
(for cost reasons), by income level, 2013*

Unmet
need

Unmet
need

Inequity of physician visits by income (and equal need) in many countries – and a real problem in certain ones with poor seeing GPs and rich seeing specialists

Realised
access

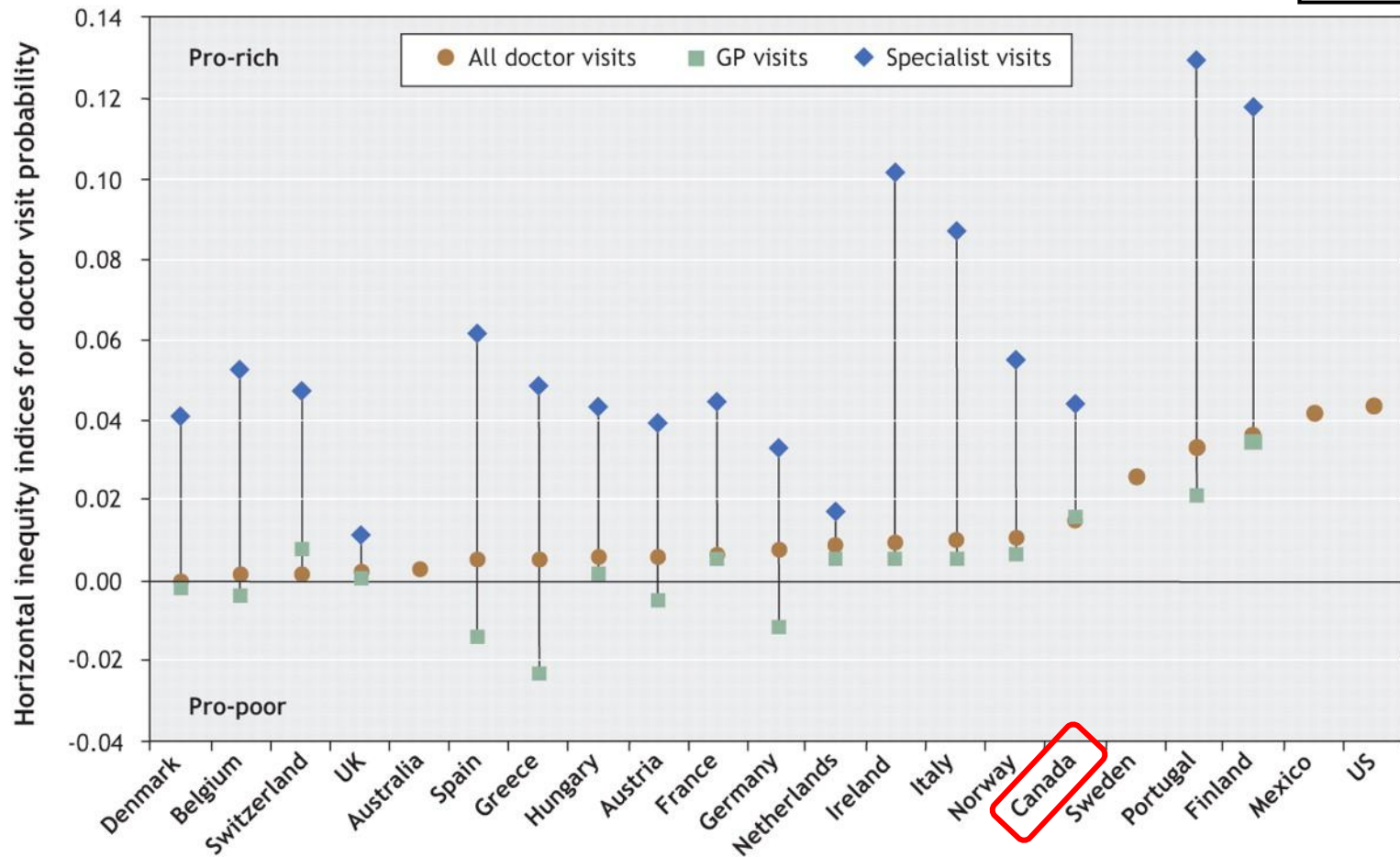


Table 1.3. Access to care



The condensed
OECD report card
for Access: does it
really tell us much?

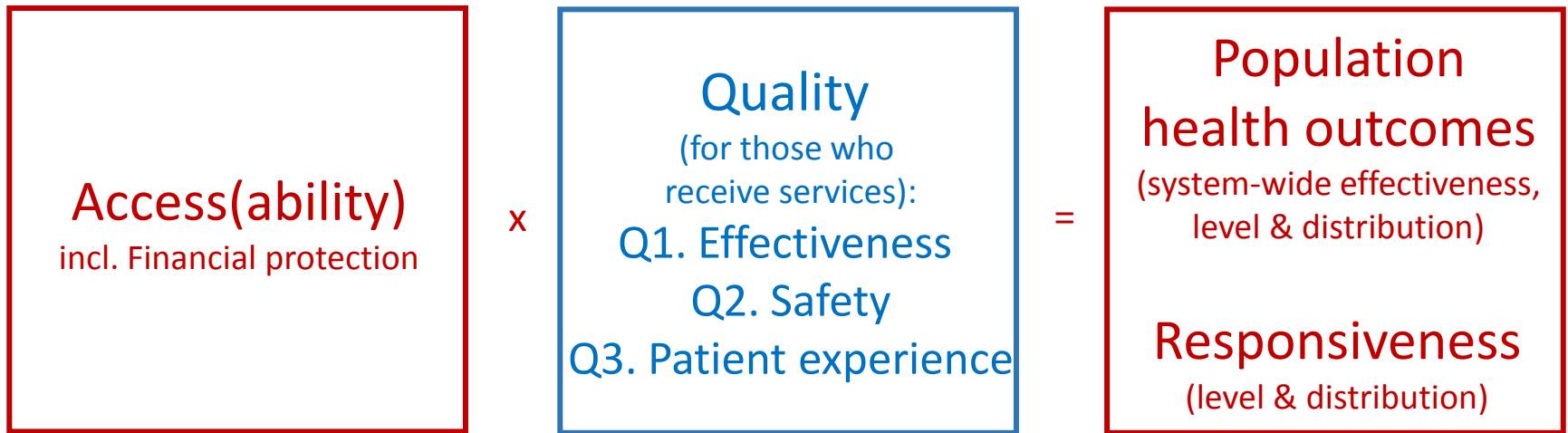
(and maybe Canada
is overrated)

- Top third performers (or between 95% and 100% for health care coverage)
- Middle third performers (or between 90% and 95% for health care coverage)
- Bottom third performers (or less than 90% for health care coverage)

Note: Countries are listed in alphabetical order. The number in the cell indicates the position of each country among all countries for which data is available. For out-of-pocket medical expenditure, unmet care needs and the waiting times indicators, the top performers in terms of access are countries with the lowest expenditure as a share of household consumption, the lowest unmet care needs or lowest waiting times.

Indicator	Health care coverage	Share of out of pocket medical expenditure in household consumption	Unmet medical care needs*	Unmet dental care needs*	Waiting times for cataract surgery - median	Waiting times for knee replacement - median
Australia	1	22	n.a.	n.a.	8	12
Austria	1	18	1	2	n.a.	n.a.
Belgium	1	20	11	8	n.a.	n.a.
Canada	1	11	n.a.	n.a.	2	4
Chile	1	28	n.a.	n.a.	13	8
Czech Rep.	1	7	5	4	n.a.	n.a.
Denmark	1	14	7	10	4	1
Estonia	2	12	21	19	9	13
Finland	1	18	19	11	10	7
France	1	3	15	15	n.a.	n.a.
Germany	1	5	9	5	n.a.	n.a.
Greece	3	32	23	20	n.a.	n.a.
Hungary	1	30	14	9	1	6
Iceland	1	21	18	22	n.a.	n.a.
Ireland	1	22	17	17	n.a.	n.a.
Israel	1	16	n.a.	n.a.	3	3
Italy	1	22	20	21	n.a.	n.a.
Japan	1	9	n.a.	n.a.	n.a.	n.a.
Korea	1	34	n.a.	n.a.	n.a.	n.a.
Luxembourg	1	5	4	3	n.a.	n.a.
Mexico	1	30	n.a.	n.a.	n.a.	n.a.
Netherlands	1	2**	1	1	n.a.	n.a.
New Zealand	1	9	n.a.	n.a.	7	5
Norway	1	16	8	15	12	10
Poland	2	13	22	13	14	14
Portugal	1	29	16	23	6	11
Slovak Rep.	2	22	11	6	n.a.	n.a.
Slovenia	1	7	n.a.	n.a.	n.a.	
Spain	1	26	3	18	11	
Sweden	1	26	11	14	n.a.	
Switzerland	1	33	6	12	n.a.	
Turkey	1	1	n.a.	n.a.	n.a.	n.a.
United Kingdom	1	3	9	7	4	2
United States	3	14	n.a.	n.a.	n.a.	n.a.

*Health-service only
performance dimensions
– usually the focus when clinicians talk about the issue*



Time to relook at Responsiveness – an expanded version to the original WHO concept

Respect for persons

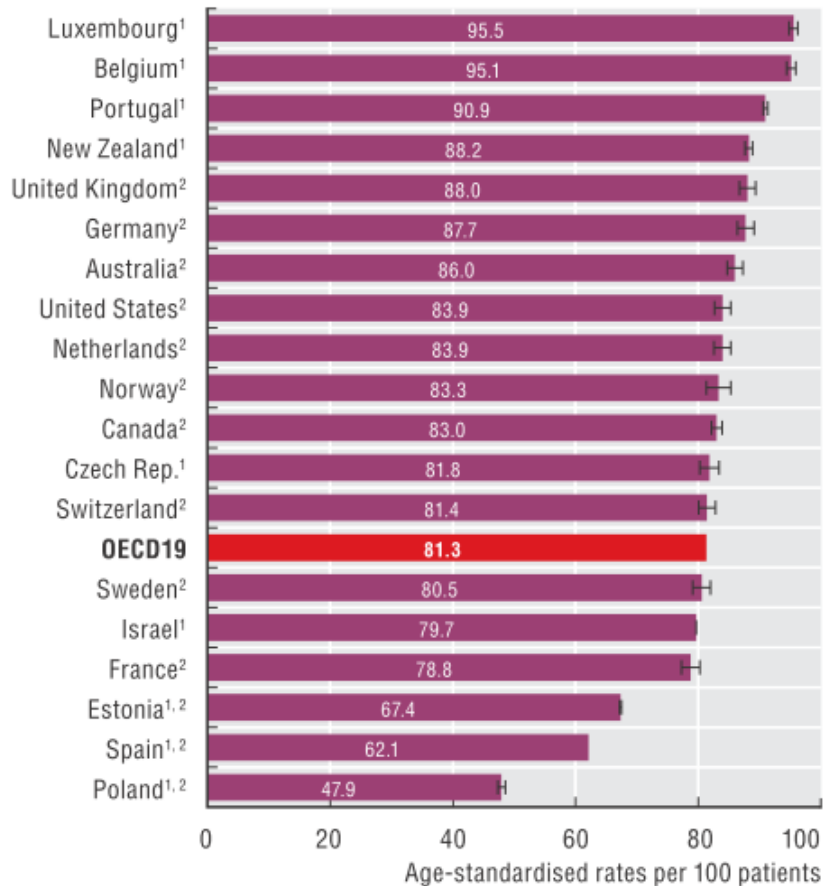
- Dignity
- Autonomy/ Participation
- Confidentiality
- Clear communication
- **added: Trust**

Client/ patient orientation

- Choice of provider
- Prompt attention
- Quality of basic amenities
- Access to social support
- **added: Koordination**

Autonomy/ participation

8.42. Doctor involving patient in decisions about care and treatment, 2013 (or nearest year)



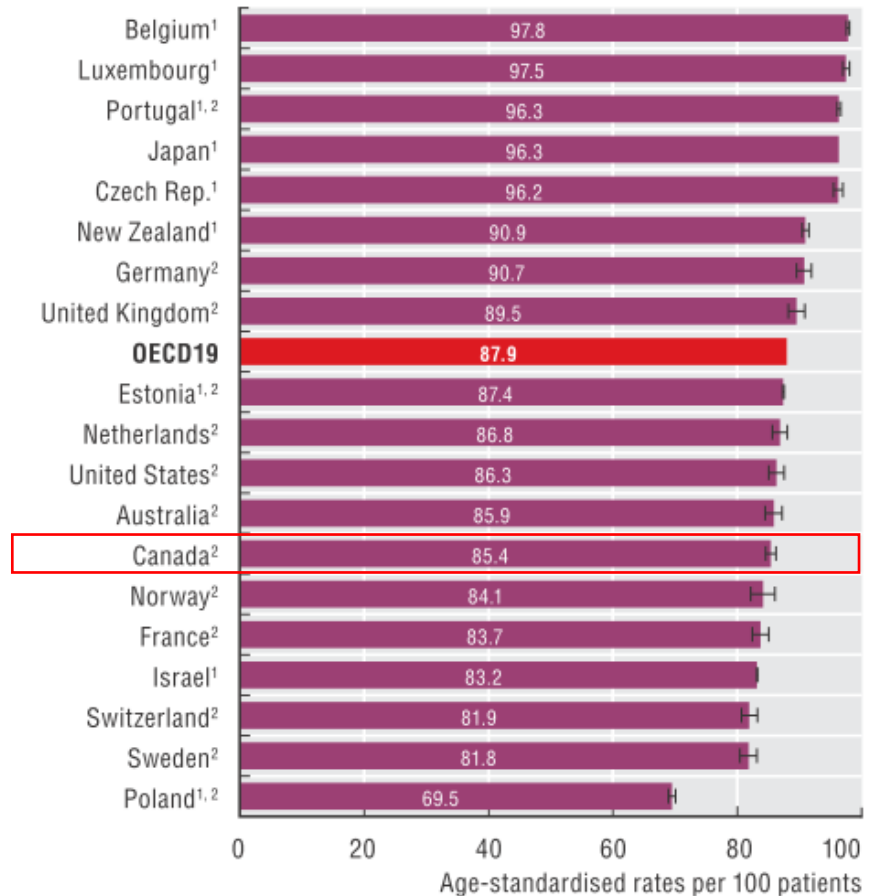
Note: 95% confidence intervals represented by H.

1. National sources. 2. Data refer to patient experiences with regular doctor.

Source: Commonwealth Fund International Health Policy Survey 2013 and other national sources.

Clear communication

8.40. Doctor providing easy-to-understand explanations, 2013 (or nearest year)

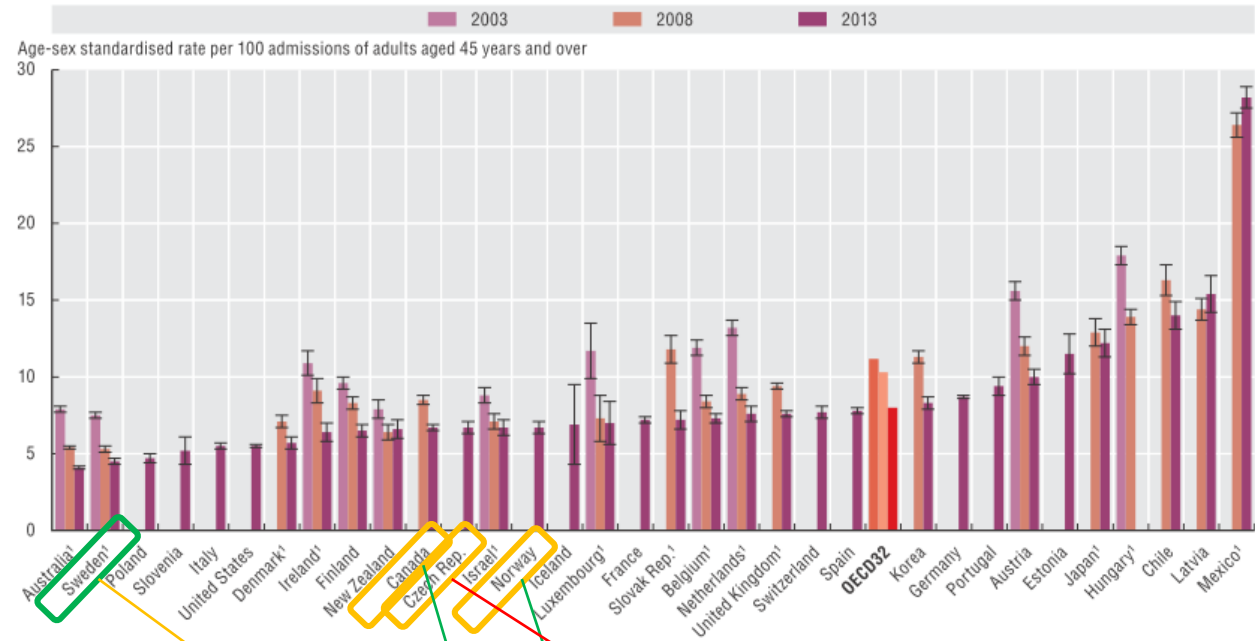


Note: 95% confidence intervals represented by H.

1. National sources. 2. Data refer to patient experiences with regular doctor.

Source: Commonwealth Fund International Health Policy Survey 2013 and other national sources.

8.10. Thirty-day mortality after admission to hospital for AMI based on admission data, 2003 to 2013 (or nearest years)



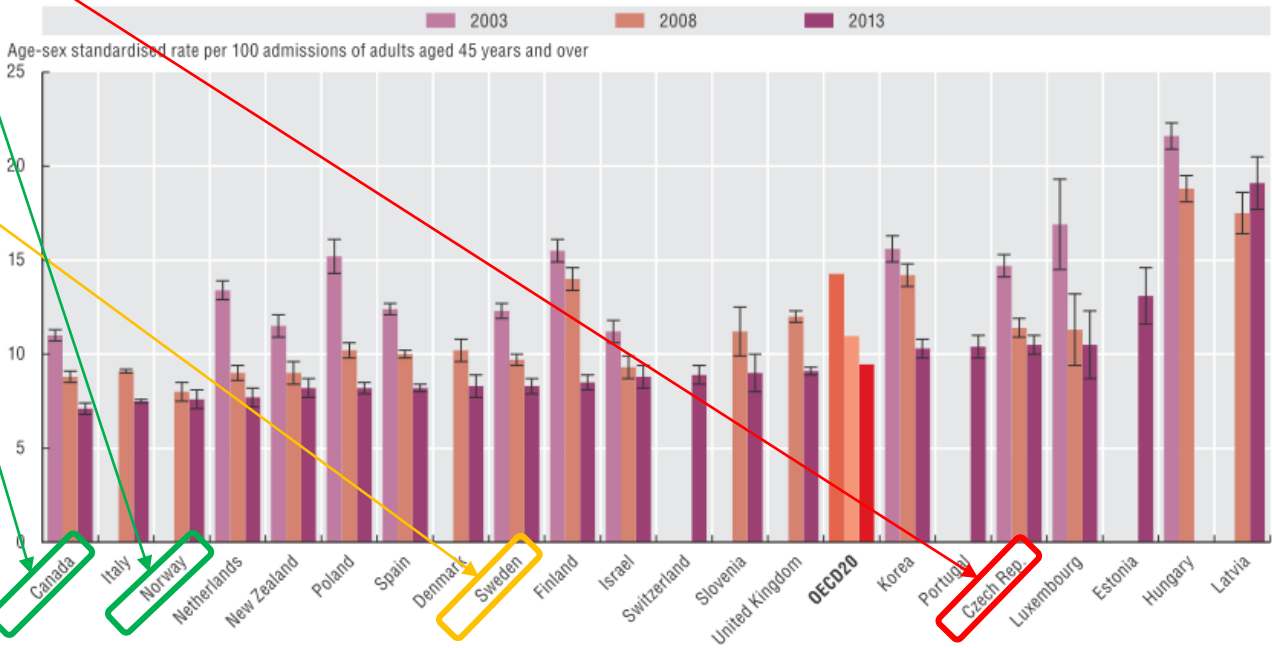
Just an example demonstrating how carefull you need to be ... AMI letality of hospitalised cases

Note: 95% confidence intervals represented by H. Three-year average for Iceland and Luxembourg.

1. Admissions resulting in a transfer are included.

Source: OECD Health Statistics 2015, <http://dx.doi.org/10.1787/health-data-en>

8.11. Thirty-day mortality after admission to hospital for AMI based on patient data, 2003 to 2013 (or nearest years)



... and taking 30 days follow-up into account

Table 1.4. Quality of care



Health at a Glance 2015
OECD INDICATORS




OECD

The condensed
OECD report card
for Quality: does it
really tell us much?

*(and Canada is
partly underrated,
e.g. AMI)*

- Top third performers
- Middle third performers
- Bottom third performers

Note: Countries are listed in alphabetical order. The number in the cell indicates the position of each country among all countries for which data is available. For the indicators of avoidable hospital admissions and case-fatality rates, the top performers are countries with the lowest rates.

Indicator	Asthma and COPD hospital admission	Diabetes hospital admission	Case-fatality for AMI (admission-based)	Case-fatality for ischemic stroke (admission-based)	Cervical cancer survival	Breast cancer survival	Colorectal cancer survival
Australia	29	17	1	20	11	5	3
Austria	28	29	27	8	19	19	7
Belgium	16	20	19	20	16	12	4
Canada	18	10	11	26	12	8	13
Chile	6	27	31	16	25	23	n.a.
Czech Rep.	12	23	11	22	13	22	21
Denmark	26	14	7	17	5	11	18
Estonia	27	n.a.	28	29	8	25	22
Finland	10	15	9	4	6	4	7
France	7	21	17	13	n.a.	n.a.	n.a.
Germany	21	25	25	8	15	15	10
Greece	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Hungary	31	11	30	22	n.a.	n.a.	n.a.
Iceland	14	4	15	14	7	10	n.a.
Ireland	32	16	8	24	20	20	19
Israel	19	9	11	6	10	7	2
Italy	2	1	5	7	3	15	12
Japan	1	18	29	1	4	9	4
Korea	24	30	24	2	2	14	1
Luxembourg	9	19	16	17	n.a.	n.a.	n.a.
Mexico	5	31	32	31	n.a.	n.a.	n.a.
Netherlands	11	6	20	12	16	16	11
New Zealand	30	22	10	14	14	12	15
Norway	17	7	11	5	1	2	13
Poland	20	28	3	n.a.	24	24	23
Portugal	3	8	26	27	18	6	16
Slovak Rep.	23	26	17	28	n.a.	n.a.	n.a.
Slovenia	8	13	4	30	23	18	17
Spain	15	3	23	24	n.a.	n.a.	n.a.
Sweden	13	12	2	8	9	1	6
Switzerland	4	2	22	11	n.a.	n.a.	n.a.
Turkey	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
United Kingdom	22	5	20	19	22	21	20
United States	25	24	5	3	21	2	9

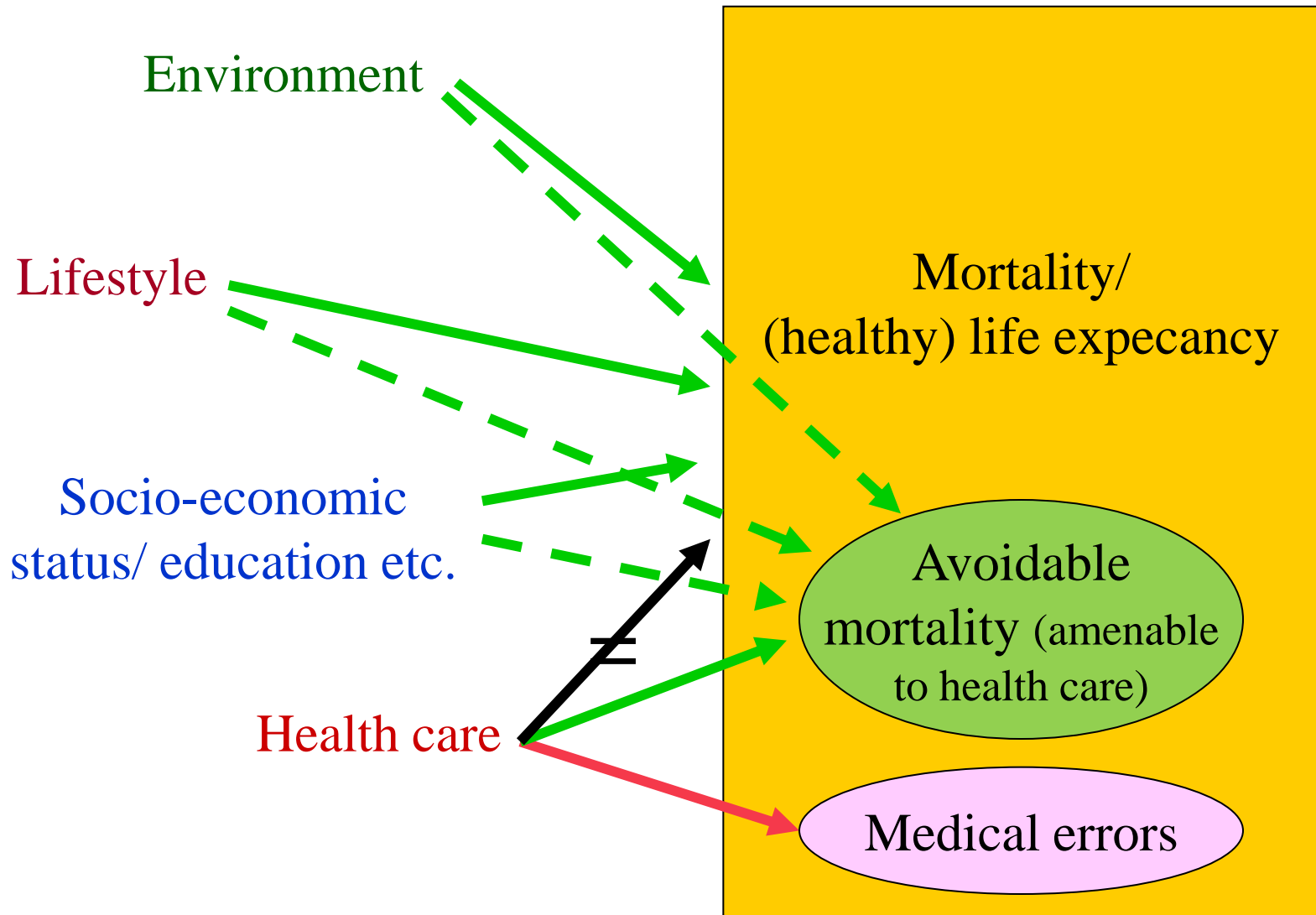
*The area with
the least agreement
but highest
political relevance*



Inputs (money and/or resources)

(Allocative)
Efficiency
(value for money, i.e.
population health and/ or
responsiveness per input unit)

How can we calculate the health system contribution to health?



The concept of avoidable mortality (AVM; also „amenable to health care“)

- Deaths from certain causes that should not occur in the presence of timely and effective health care
- Introduced by David Rutstein in the 1970s (originally for quality assurance purposes)
- Walter Holland published European Community Atlas of ‘Avoidable Deaths’ in 1988; intends to provide warning signals of potential shortcomings in health care delivery
- Mackenbach et al. argue that associations between AVM and health care services are rather weak and inconsistent. Most health care measures only reflect quantity and not quality. Many studies use insufficient set of covariates.
- Nolte and McKee (2002) reviewed list of amenable causes of death

Now to a concept ... and to data ...

Decrease in avoidable mortality
per 100.000 persons aged 0-74,
2000-2011/14:

Austria -54 (-42%)

Denmark -55 (-40%)

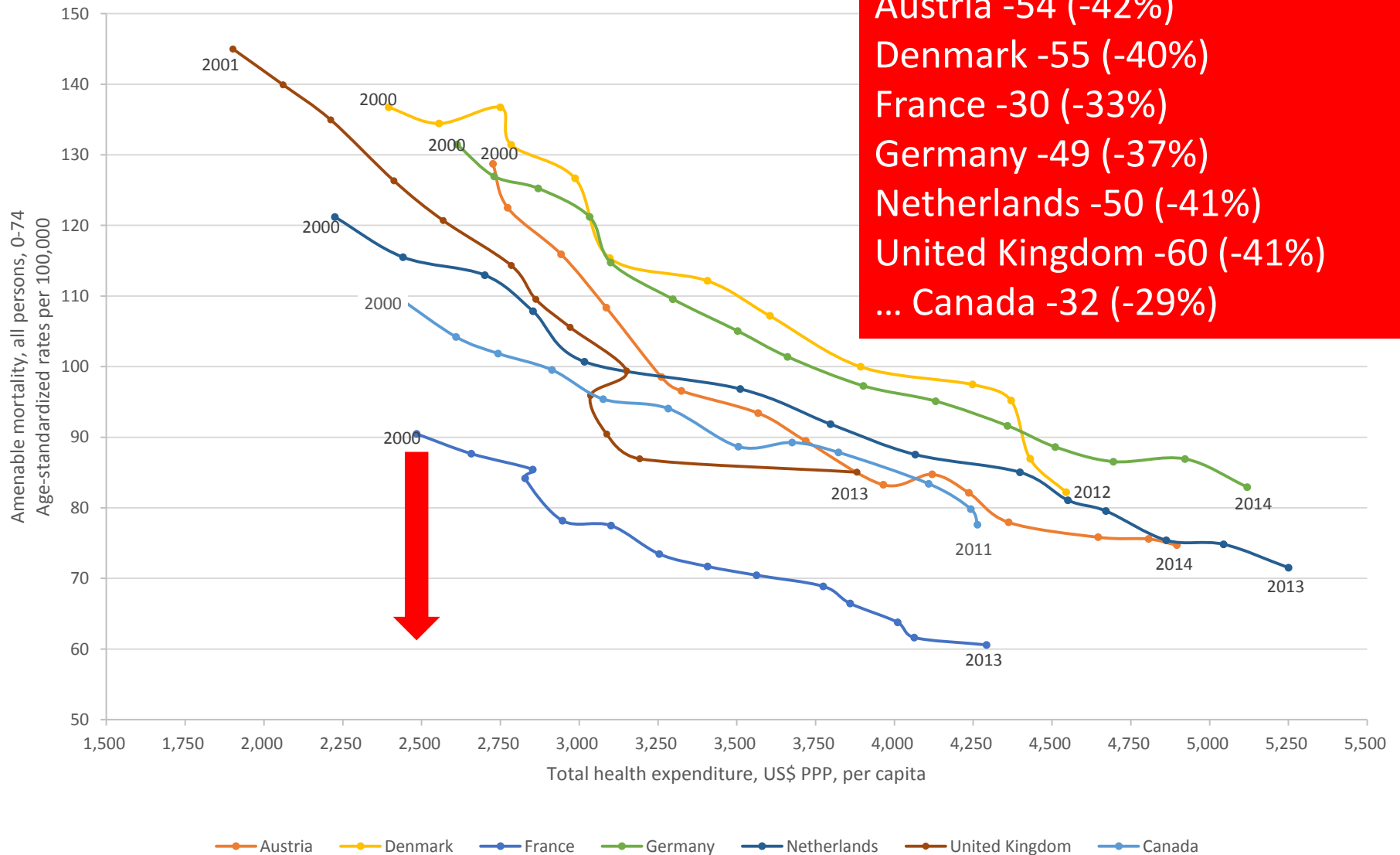
France -30 (-33%)

Germany -49 (-37%)

Netherlands -50 (-41%)

United Kingdom -60 (-41%)

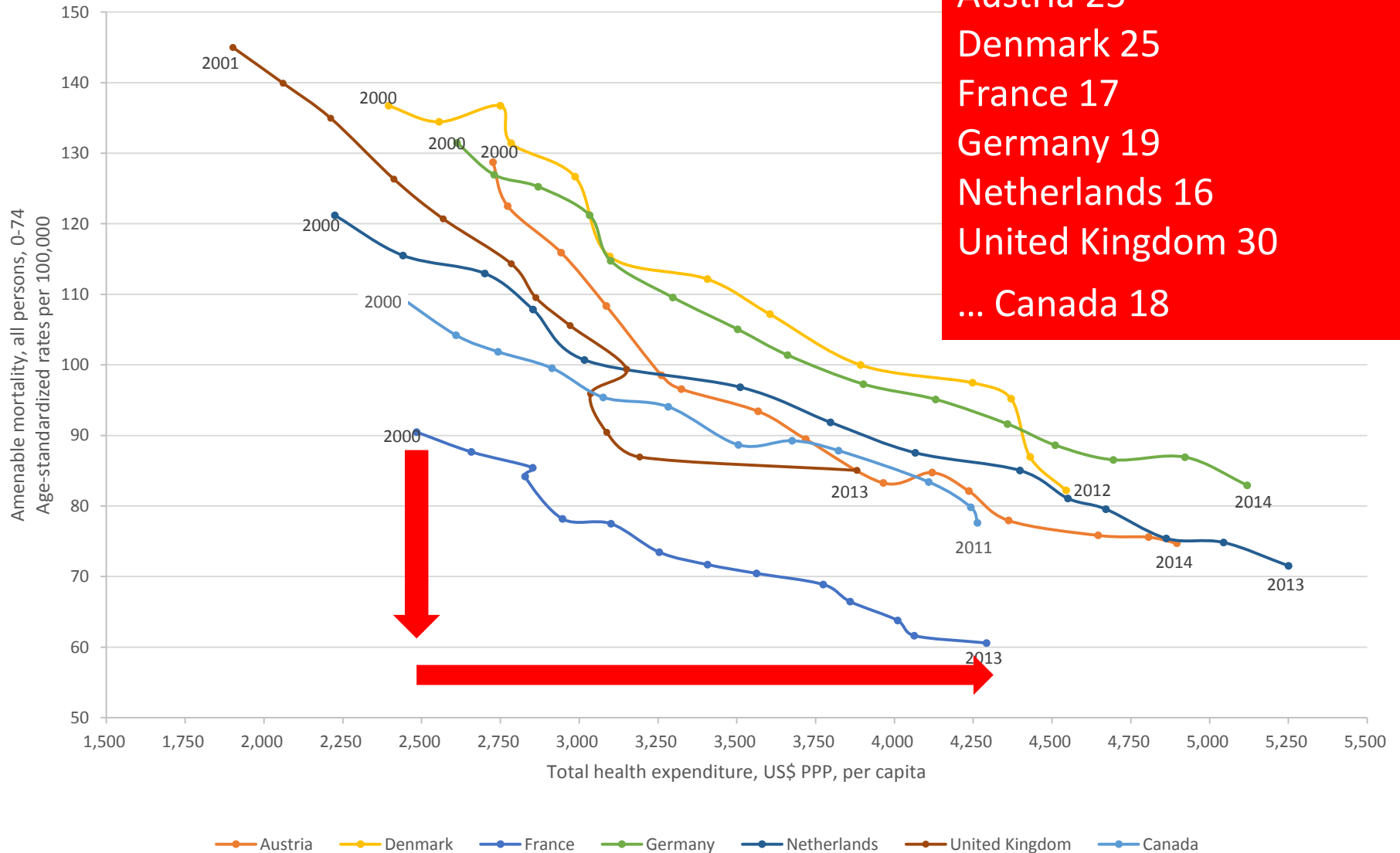
... Canada -32 (-29%)



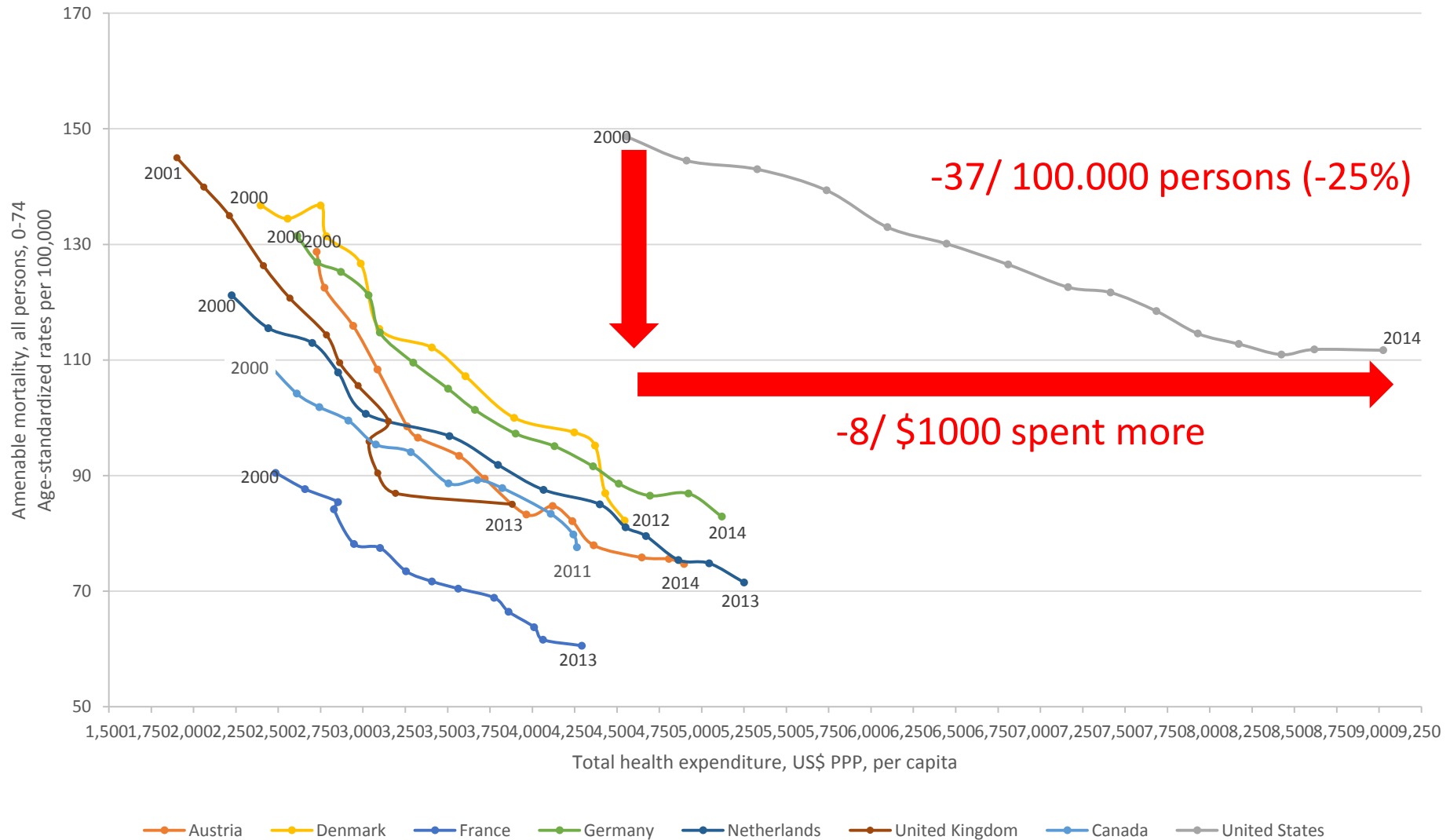
Now to a concept ... and to data ...

Incremental cost-effectiveness (death rate decrease per \$1000 spent more):

Austria 25
Denmark 25
France 17
Germany 19
Netherlands 16
United Kingdom 30
... Canada 18



... and now including the U.S.



In summary,

- to make health systems “high-performing”, we need to agree what we mean,
- how we define and measure “performance” with its various dimensions, and
- who will be responsible for which component.
- Managing for improvement should always take a population-/system-perspective (rather than looking at patients only), and
- costs per “performance improvement” should be considered as well.

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