Health System Performance Assessment: how well do European countries perform ?

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What is Health System Performance Assessment (HSPA)?

„a country-specific process

of monitoring, evaluating, communicating and reviewing

the achievement of high-level health system goals

based on health system strategies“

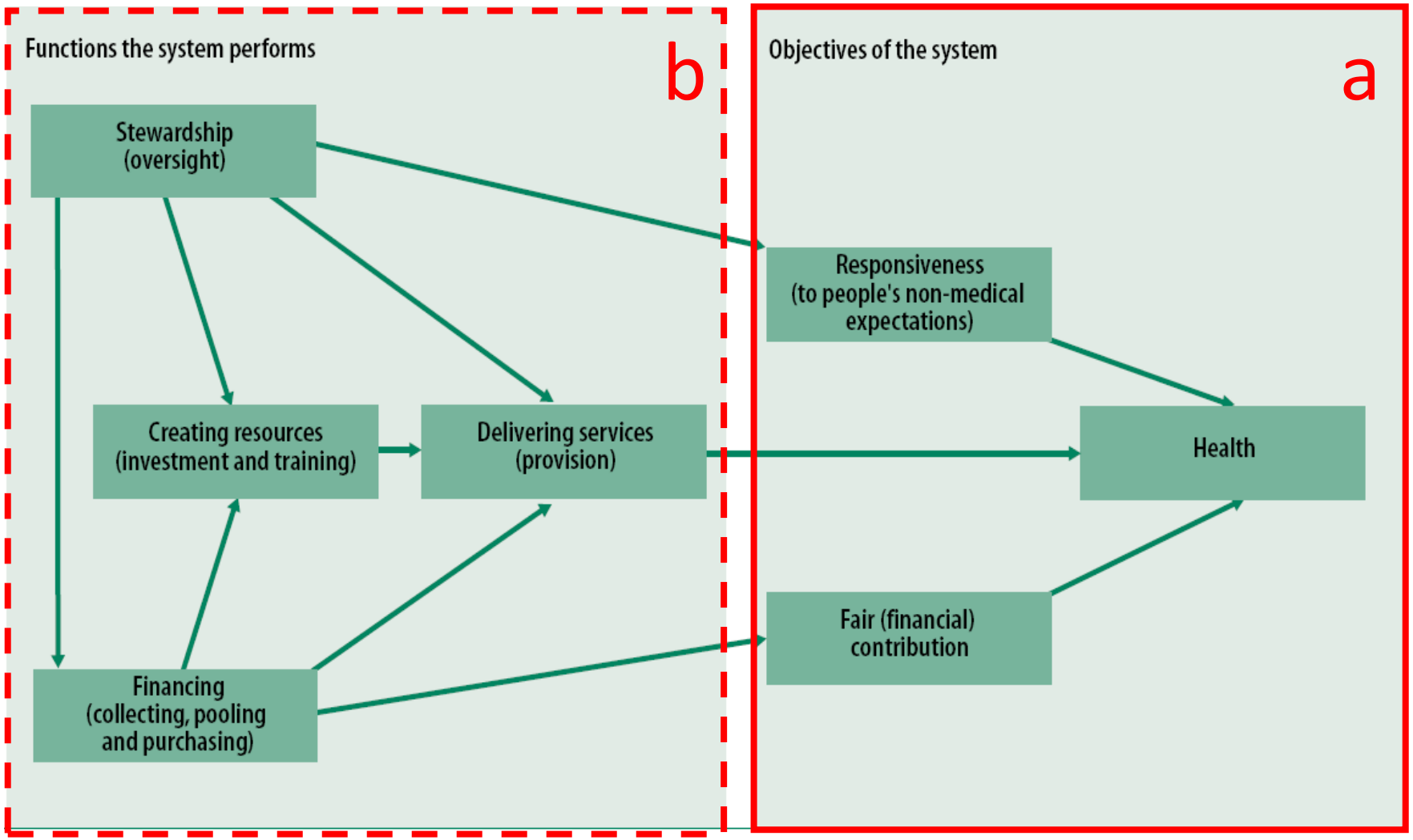
(WHO Regional Office for Europe, 2013)

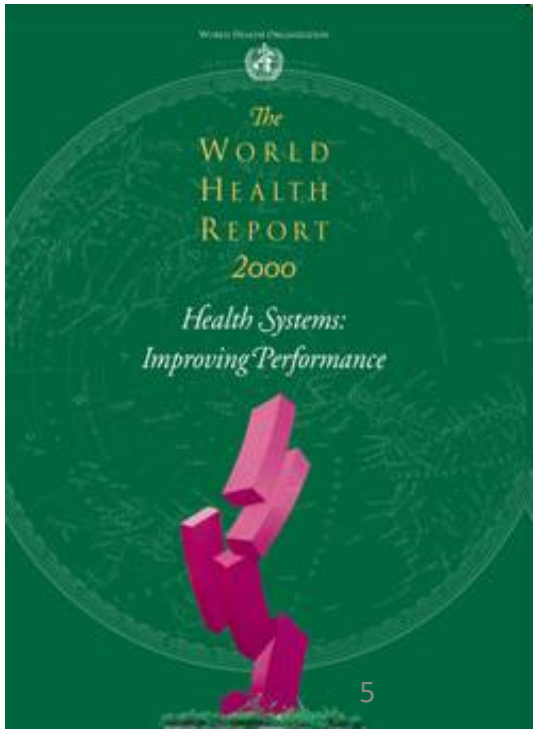
Why do we need HSPA?

Health policy-making and reform require, first and foremost, a sound understanding of how a health system is performing.

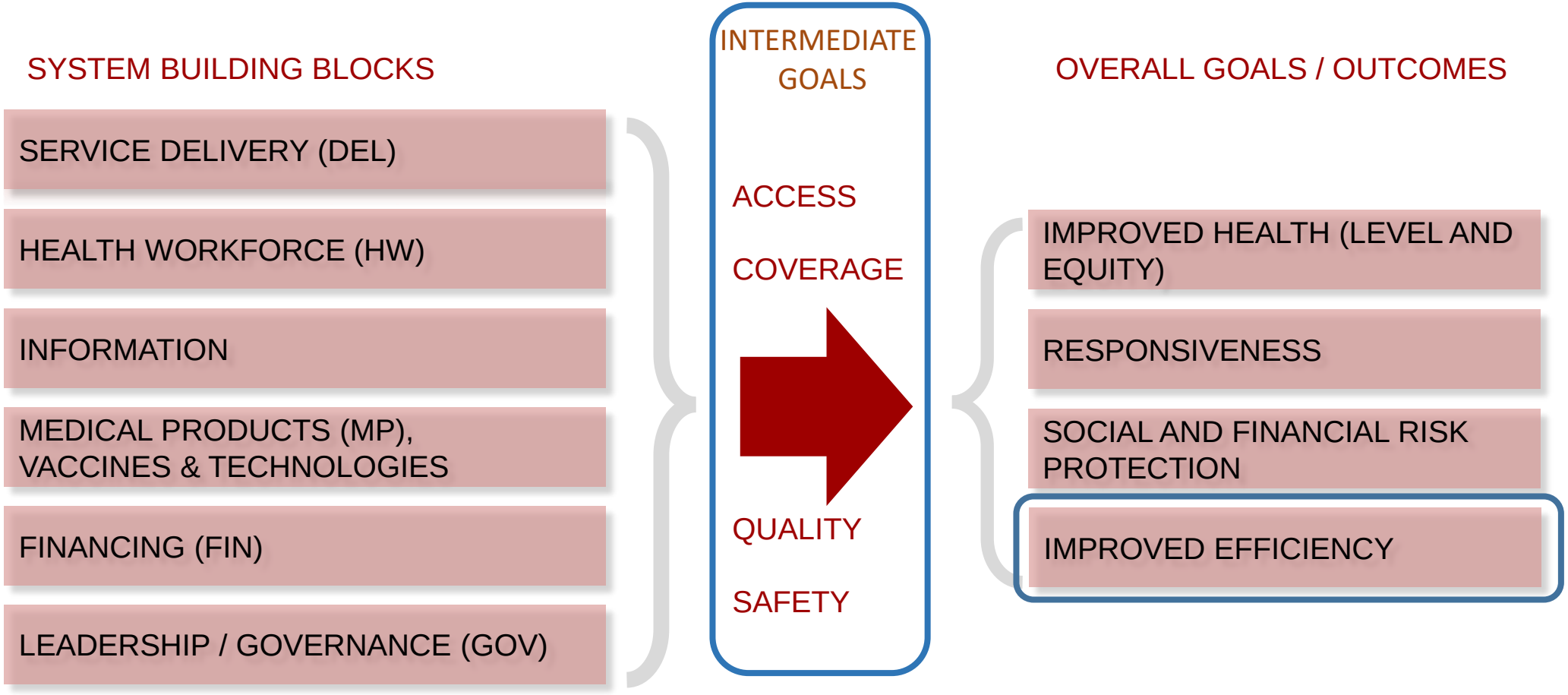
Assessing the performance of a health system effectively is the first step to improving it.

(1) “Performance” needs (a) an understanding about systems’ objectives and (b) which elements (e.g. “functions”) contribute to achieving them





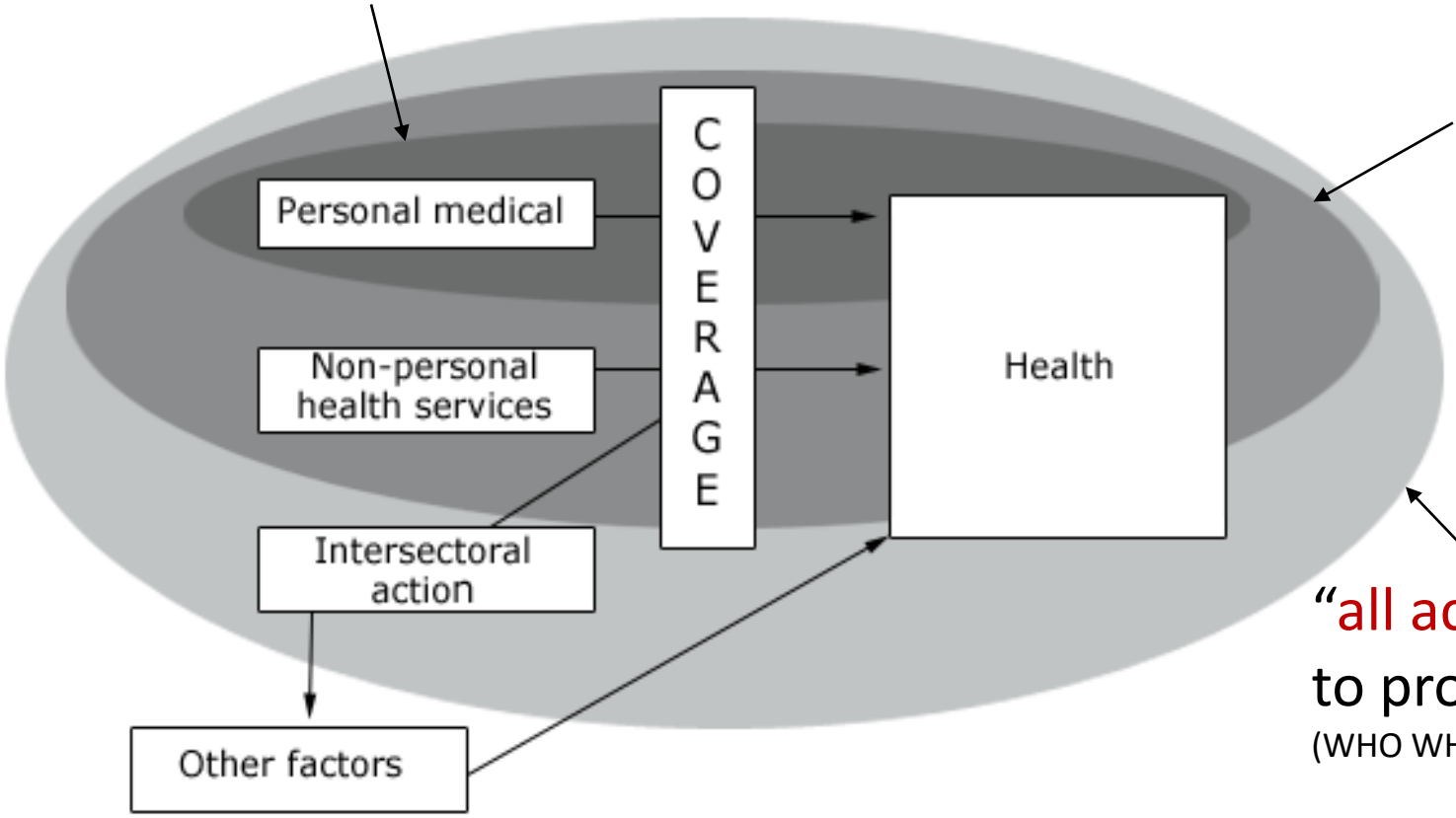
As linking goal outcomes to functions (or building blocks) directly is difficult, intermediate outcomes were added, where results can be better attributed (and influenced)



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.

(2) “Performance” needs an agreement about which activities are part of the “health system” (and which are not)

“The health care system, not including public health activities or other wider issues”
(Hurst & Hughes 2001)



“combined functioning of public health and personal health care services” that are under the “direct control of identifiable agents, especially ministries of health”
(Arah, 2006)

“all activities whose primary purpose is to promote, restore or maintain health”
(WHO WHR2000)

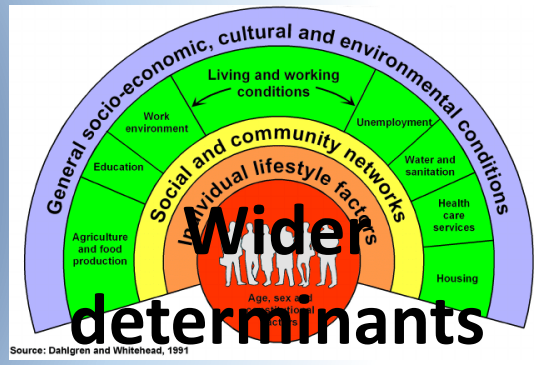
Source: Murray, CL. and Evans, DB. (2003) Health systems performance assessment: Debates, Methods and Empiricism. Geneva: World Health Organization.

Pros and Cons of different health system boundaries in HSPA

+ Closer to concept of UHC
+ Accountability
+ Clarity in areas of action

+ More holistic view
+ Accounts for interactions

Health system boundaries

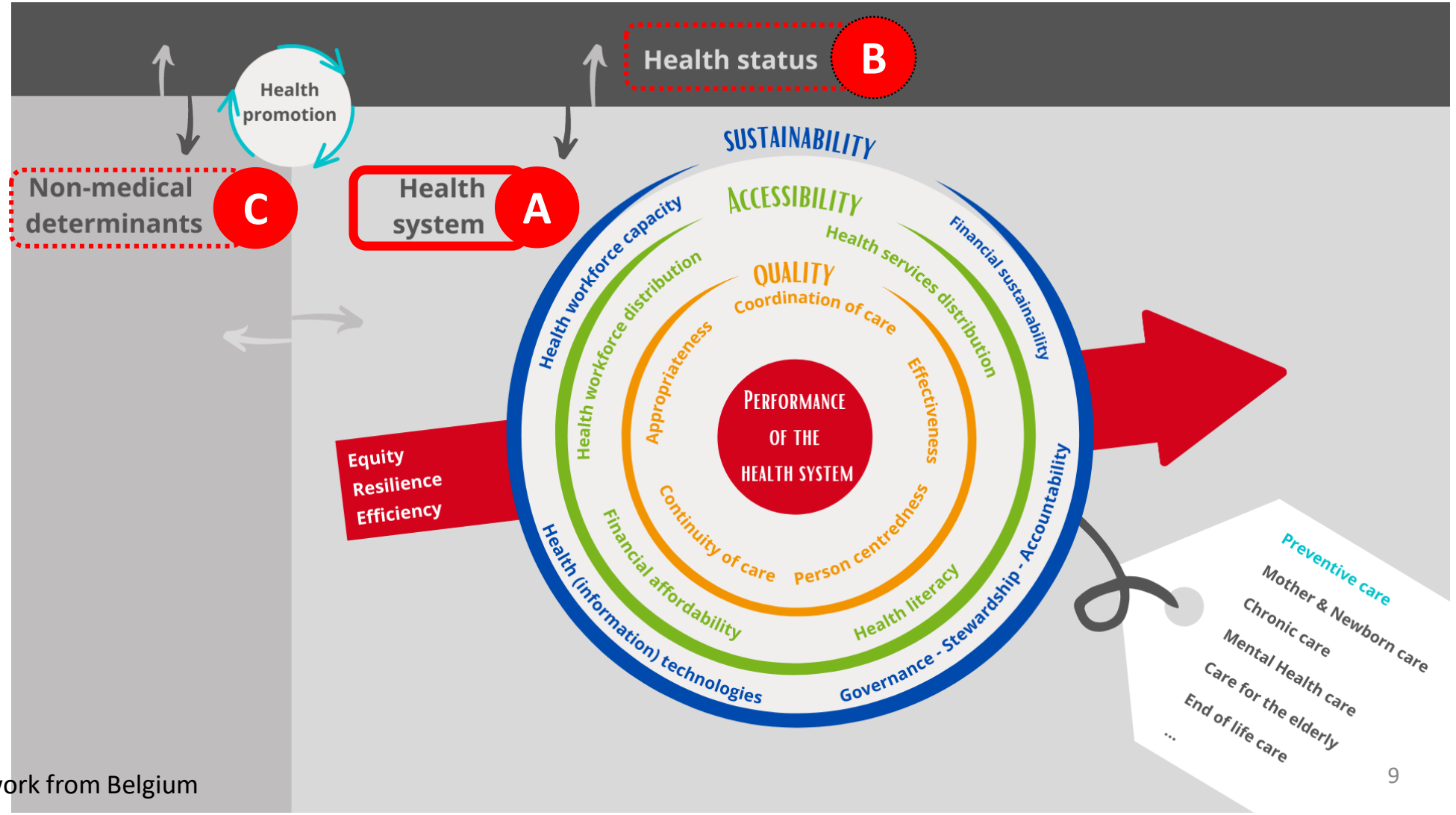


- **Exclusion of (most) determinants**
- **Hard to measure effect on outcomes**

- **Slow change**
- **Lack of clarity on roles**
- **Hard to assign responsibility**

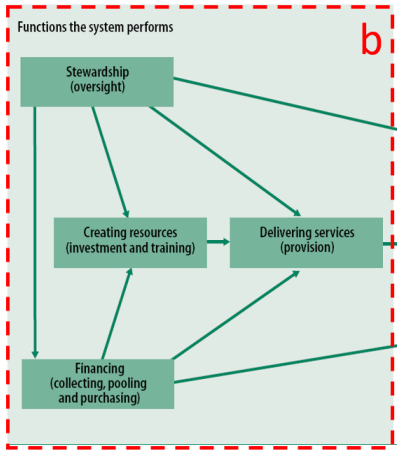
Adapted from Papanicolas & Smith, 2010

In balance, I suggest that we need (A) HSPA, (B) health status reporting (burden of disease) and (C) Health Impact Assessment of non-medical determinants – separate but thought together …



New (2023) HSPA framework from Belgium

While again others argue that easy-to-understand relationships (between functions and key performance dimensions) are key for political acceptance of benchmarking activities



Access(ibility) (incl. financial risk protection)

×

Quality

=

Population Health Outcomes

Responsive-ness

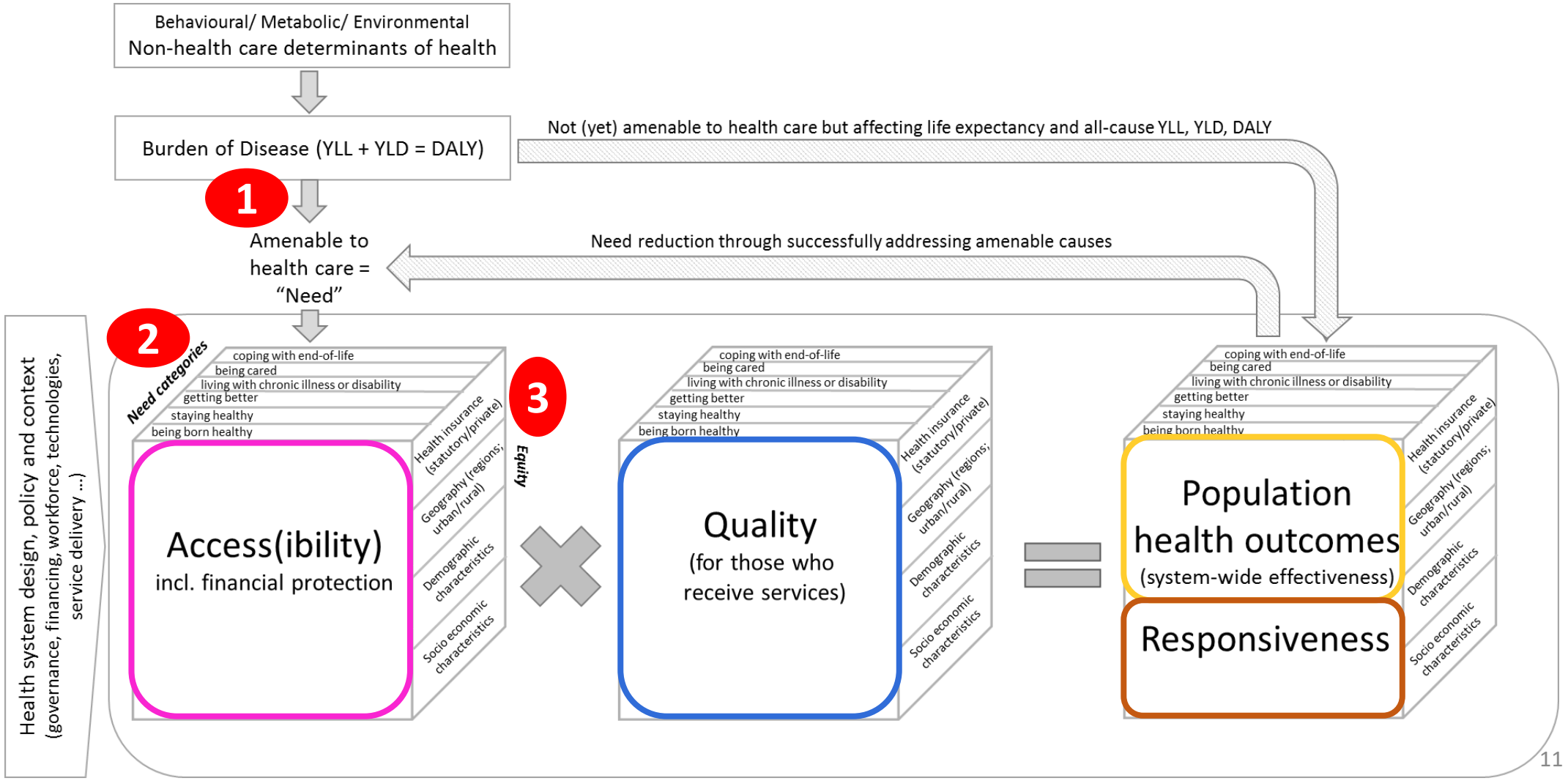
Costs/expenditure, physical input and/or output

=

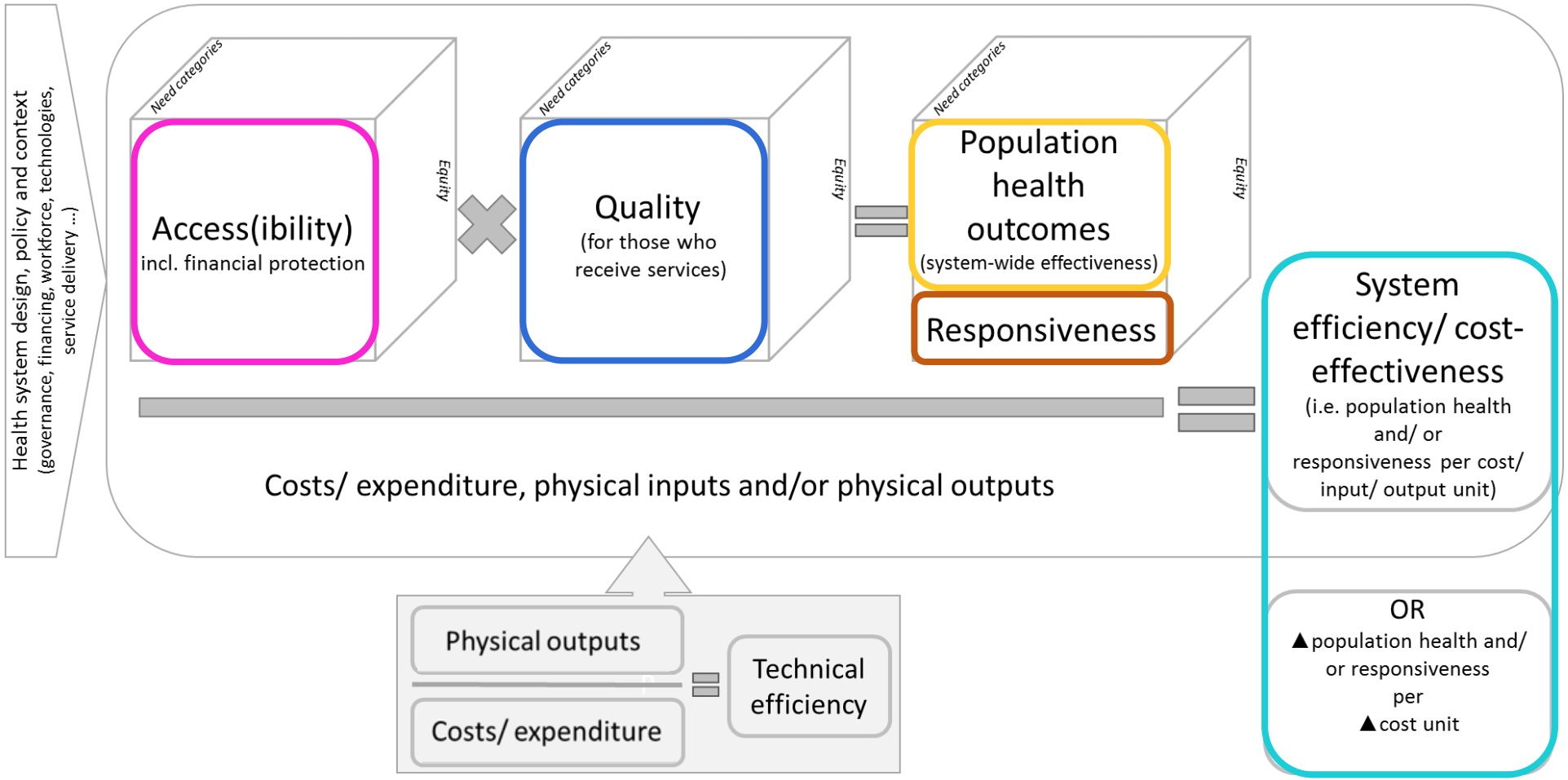
System-wide efficiency / cost-effective-ness

→ *Both population health outcomes and responsiveness are the multiplicative effect of access and quality: High accessibility but bad quality as well as low accessibility but high quality lead, on the population level, to inferior outcomes (but pointing to the problem is important for deciding on reform need)*

In reality, the framework needs to be a bit more complicated, taking (1) the burden of disease (or rather, the part which we define as "need"), (2) need categories & (3) equity considerations into account

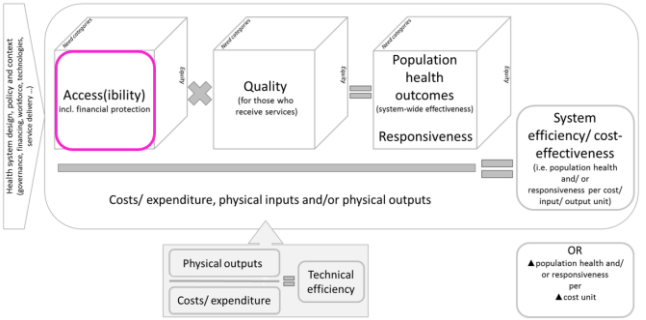


… and adding “efficiency” again – HSPA is mainly looking at “system efficiency” but technical efficiency is also important

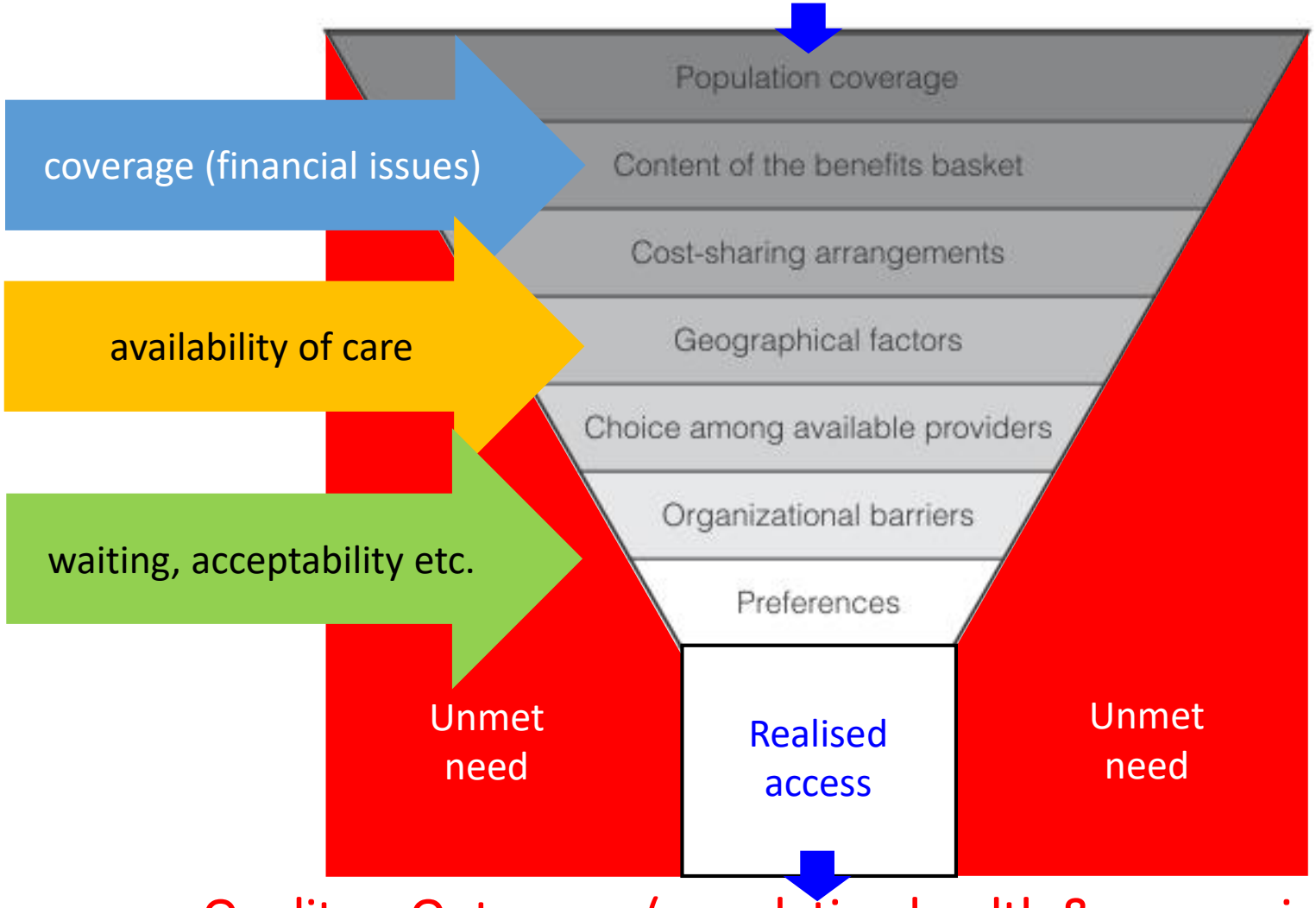


The access(ibility) dimension

(denominator: population/ persons with need)



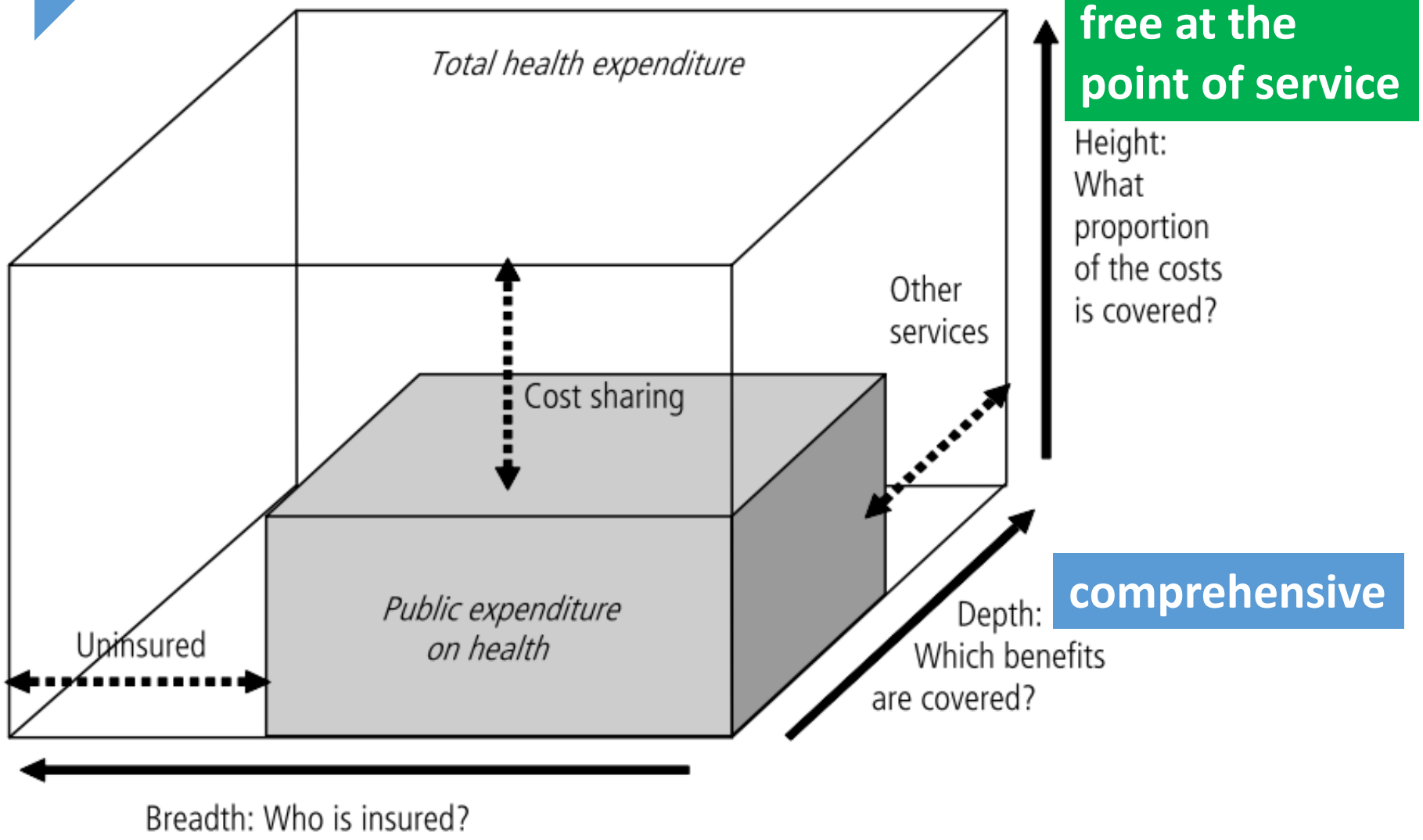
Need (burden of disease amenable to health care)



x Quality = Outcomes (population health & responsiveness)

coverage (financial issues)

The three dimensions of decisions about the financing of services



free at the point of service

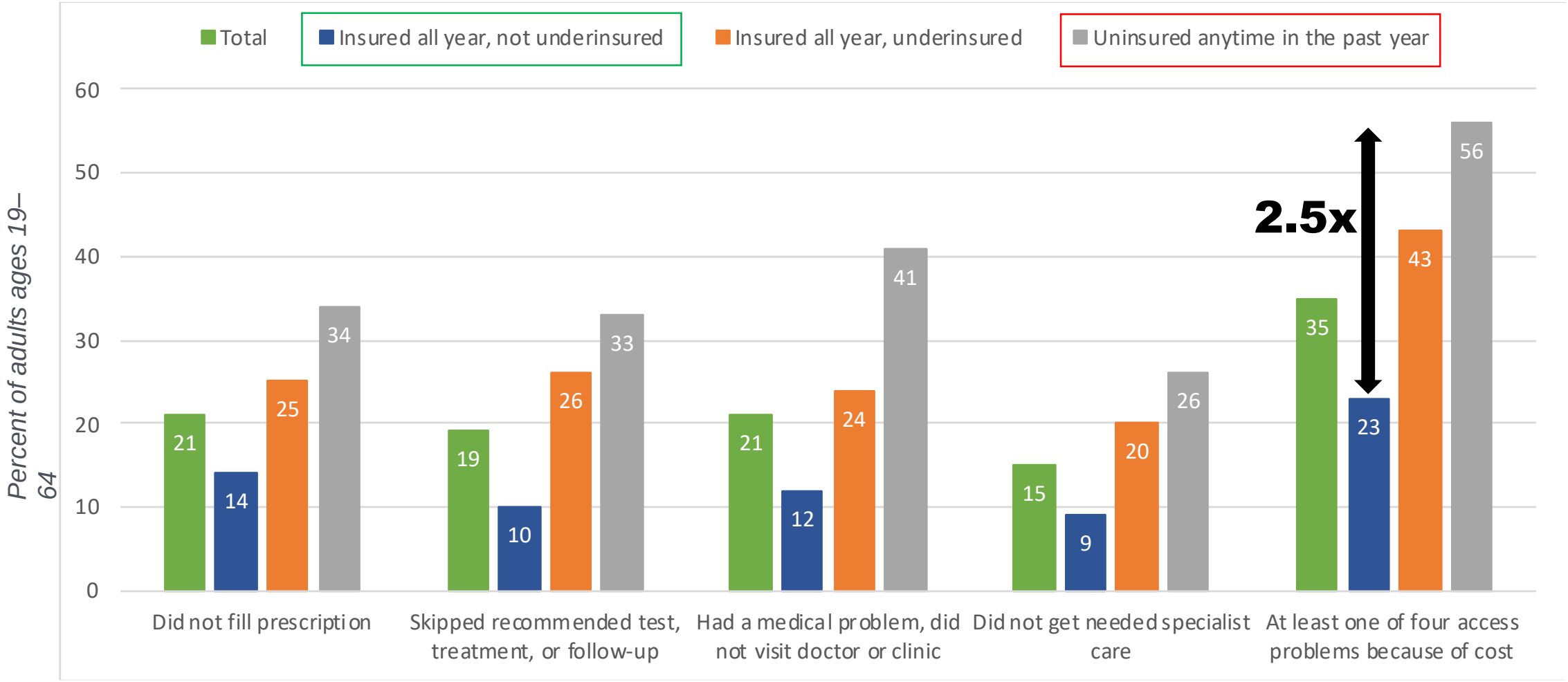
comprehensive

universal

Source: Expanded from Busse, Schreyögg and Gericke 2007

coverage (financial issues)

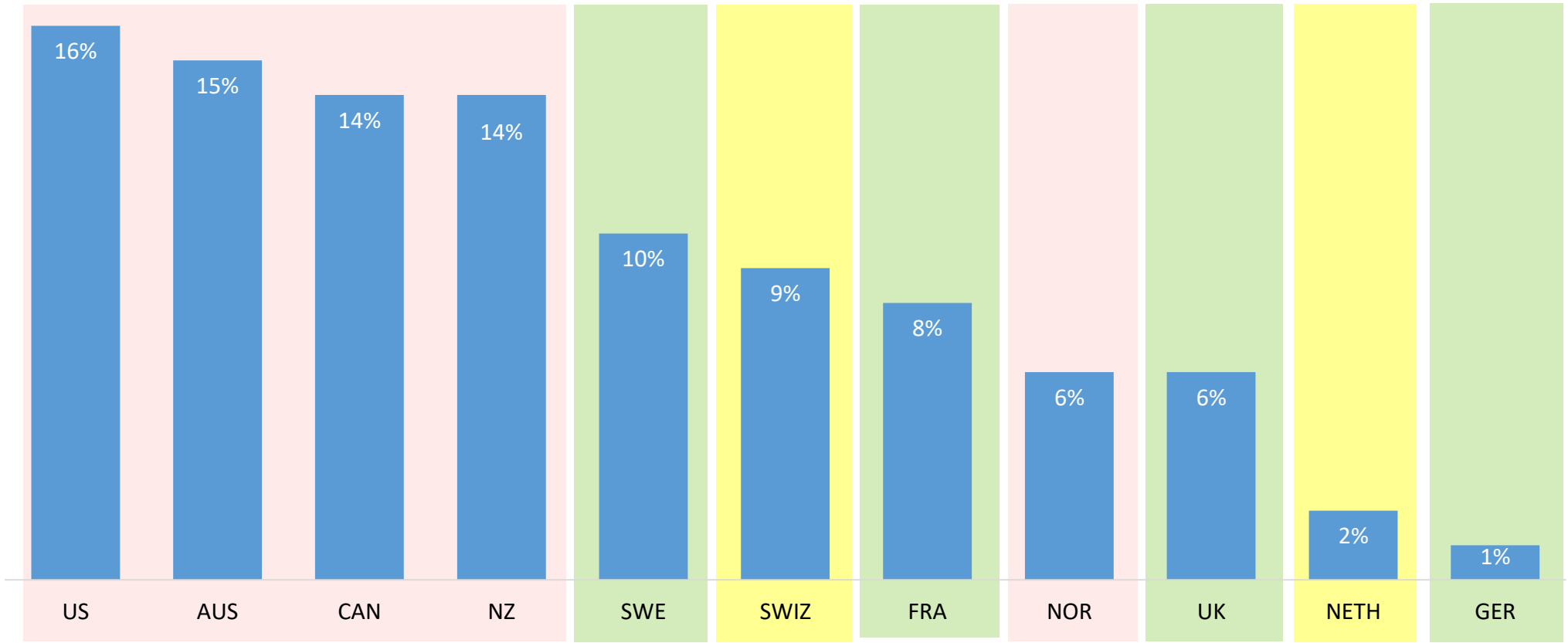
1st dimension/ population coverage: the importance is known usually by U.S. data; here: access problems due to costs



Notes: "Underinsured" refers to adults who were insured all year but experienced one of the following: out-of-pocket costs, excluding premiums, equaled 10% or more of income; out-of-pocket costs, excluding premiums, equaled 5% or more of income if low-income (<200% of poverty); or deductibles equaled 5% or more of income. "Uninsured anytime in the past year" refers to adults who were either uninsured at the time of the survey or spent some time uninsured in the past year.
Data: Commonwealth Fund Biennial Health Insurance Survey (2020).

coverage (financial issues)

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



Percent of adults age 65+ who reported they did not visit the dentist in the past year because of the cost, by country, 2020

Data: Commonwealth Fund 2021 International Health Policy Survey of Older Adults.

Covered in the basic package

Complementary coverage high

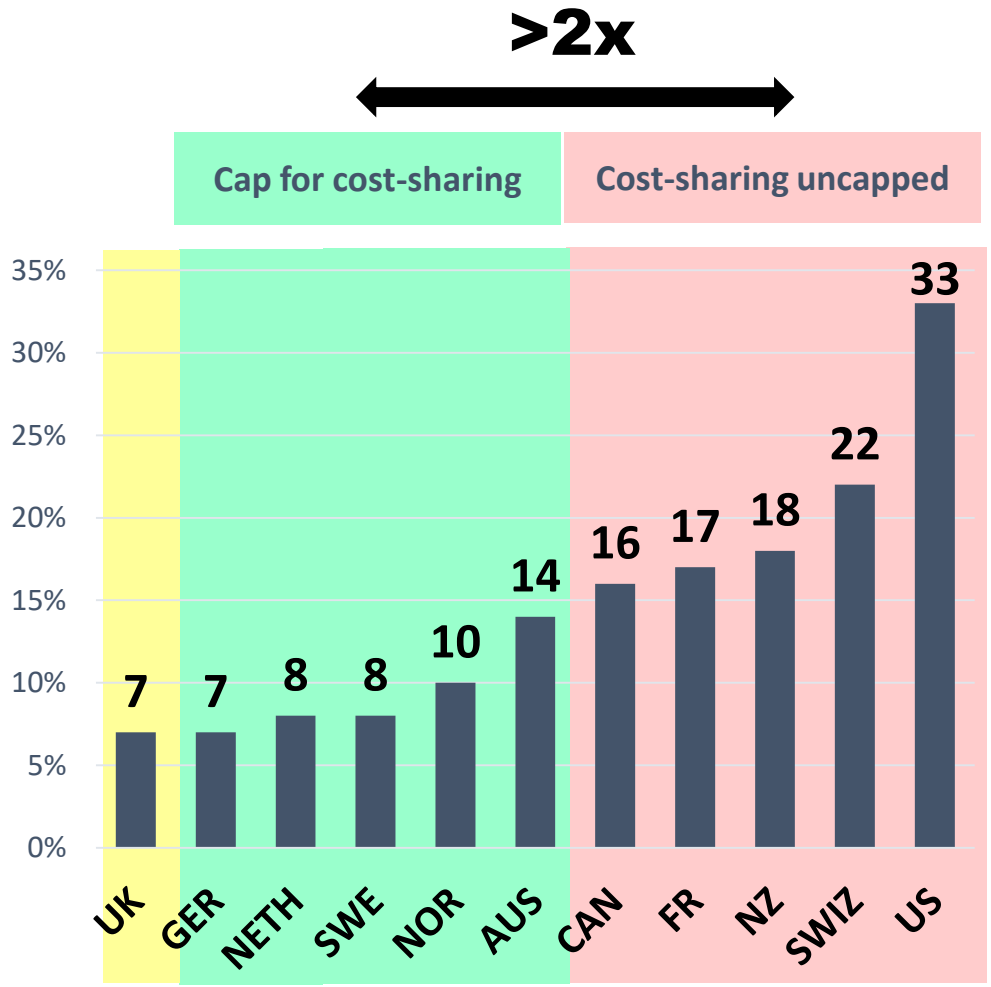
Not covered

2.5x

coverage (financial issues)

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

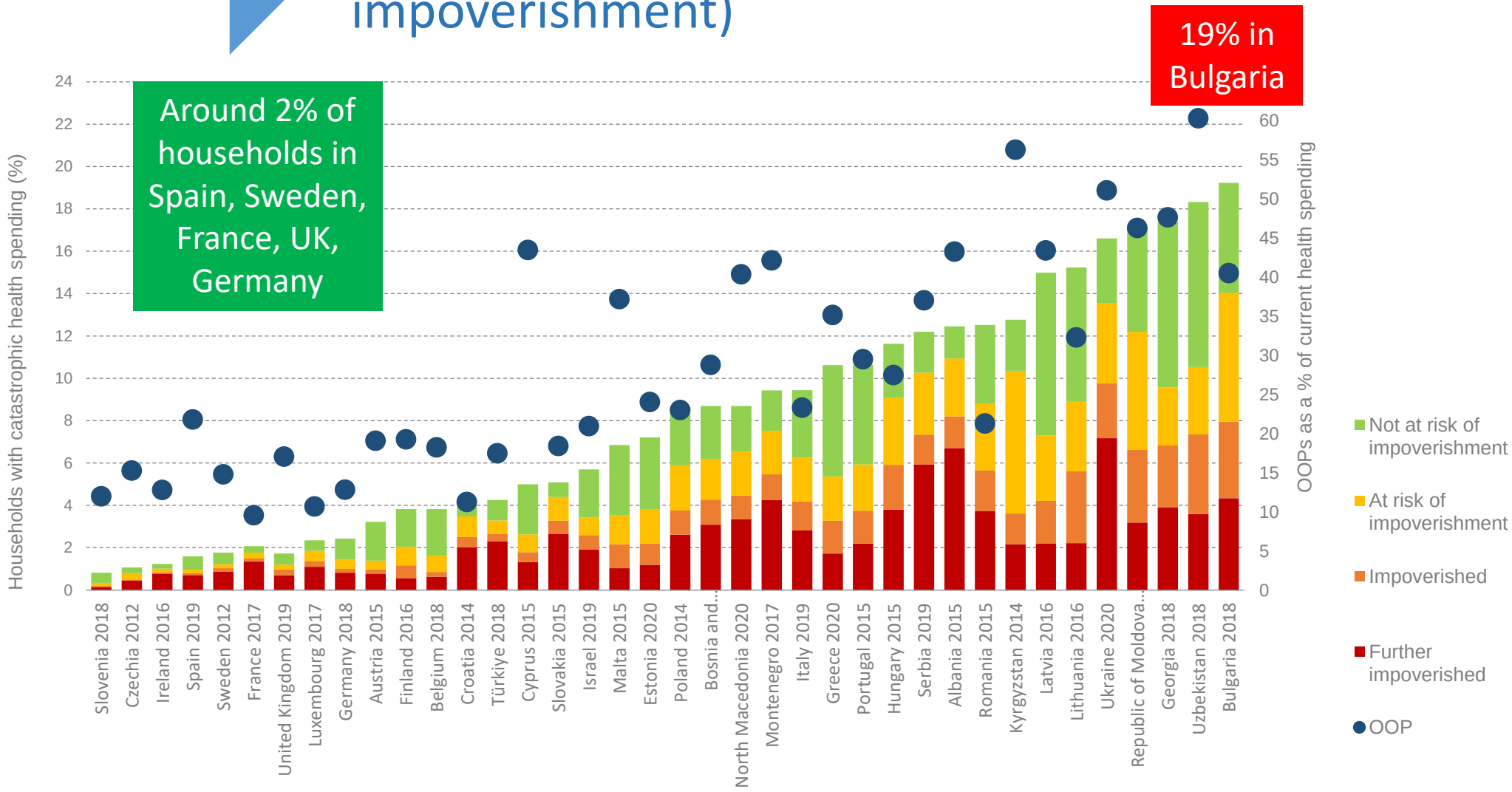
Experienced cost-related access problem,
i.e. had a medical problem but did not visit doctor;
skipped medical test or treatment recommended by doctor; or
did not fill prescription or skipped doses because of cost.



Source: modified from 2016 Commonwealth Fund International Health Policy Survey in Eleven Countries.

coverage (financial issues)

Besides access problems, coverage gaps can lead to households facing catastrophic spending (and risk of impoverishment)

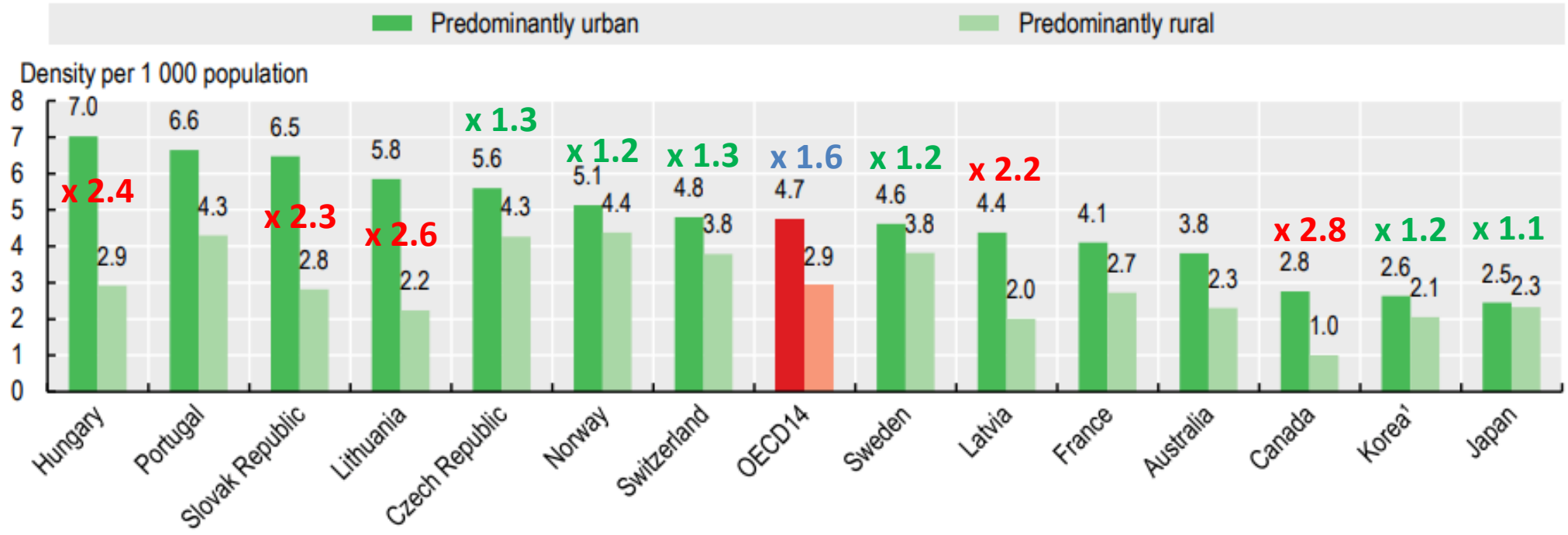


Note: Catastrophic spending on health calculated as more than 40% of HH expenditures on health care after expenditures on basic needs (housing, food, electricity, gas, heating).
Source: WHO Barcelona Office for Health Financing, 2023 forthcoming

availability of care

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

Figure 8.8. **Physician density, urban vs. rural areas, 2019 (or nearest year)**

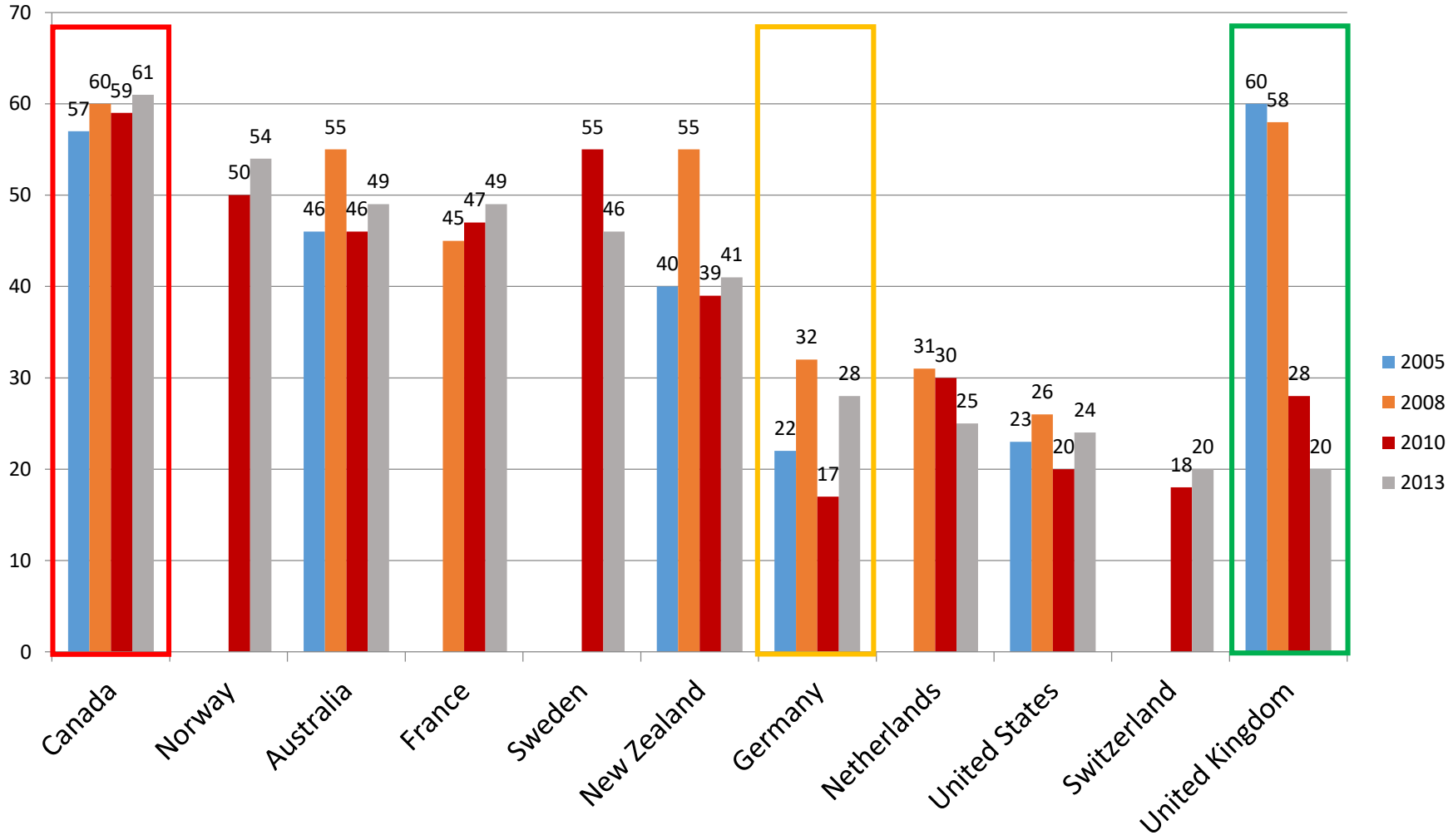


1. In Korea, data for predominantly rural refer to intermediate regions (the share of the population living in rural areas is between 15-50%).
Source: OECD Regional Statistics Database 2021.

StatLink https://stat.link/qt6e5w

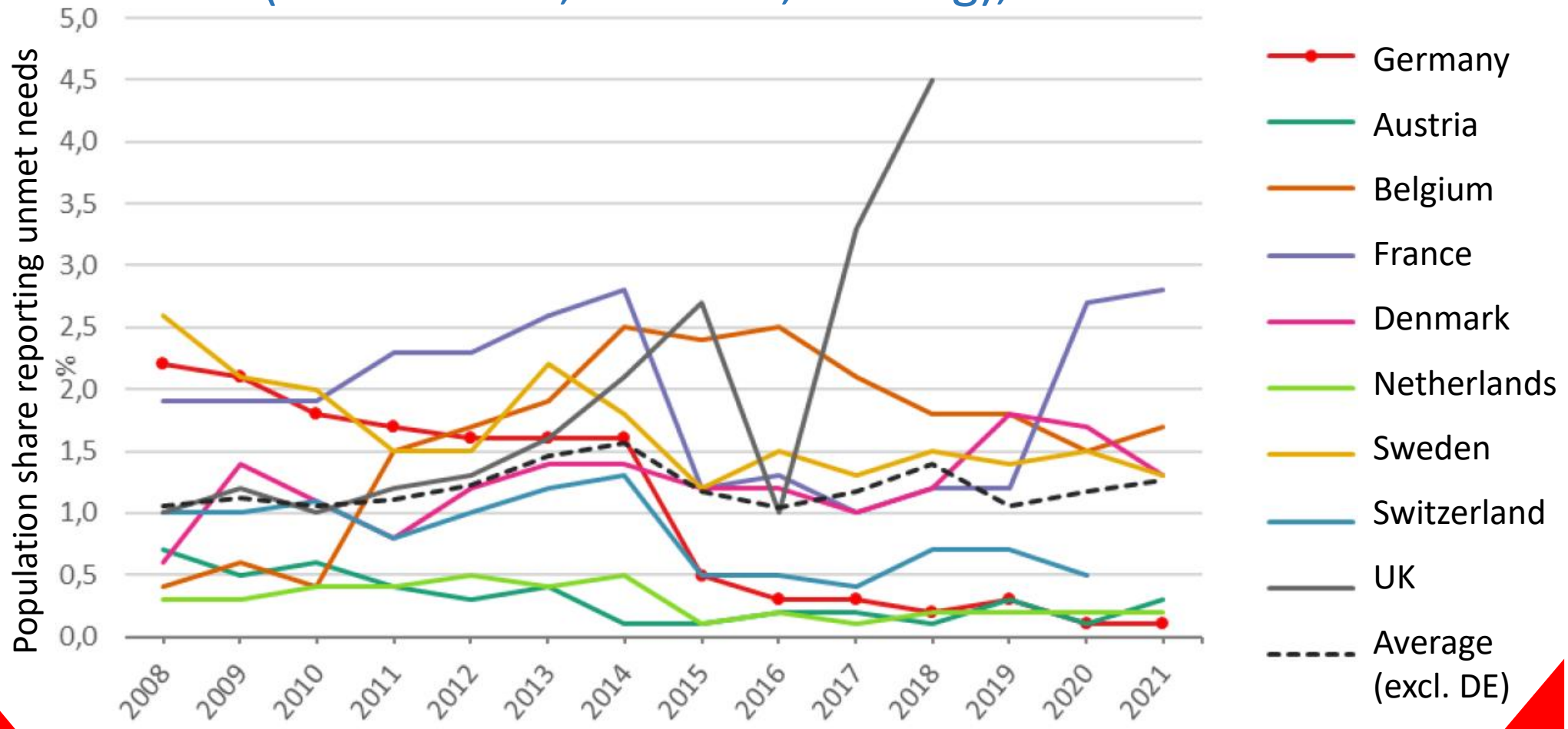
waiting, acceptability etc.

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



Own elaboration, data: Commonwealth Fund International Health Policy surveys, 2005-2013; from 2016, the respective question has asked for >2 months

(Self-reported) unmet need in selected countries (due to costs, distance, waiting), 2008-2021



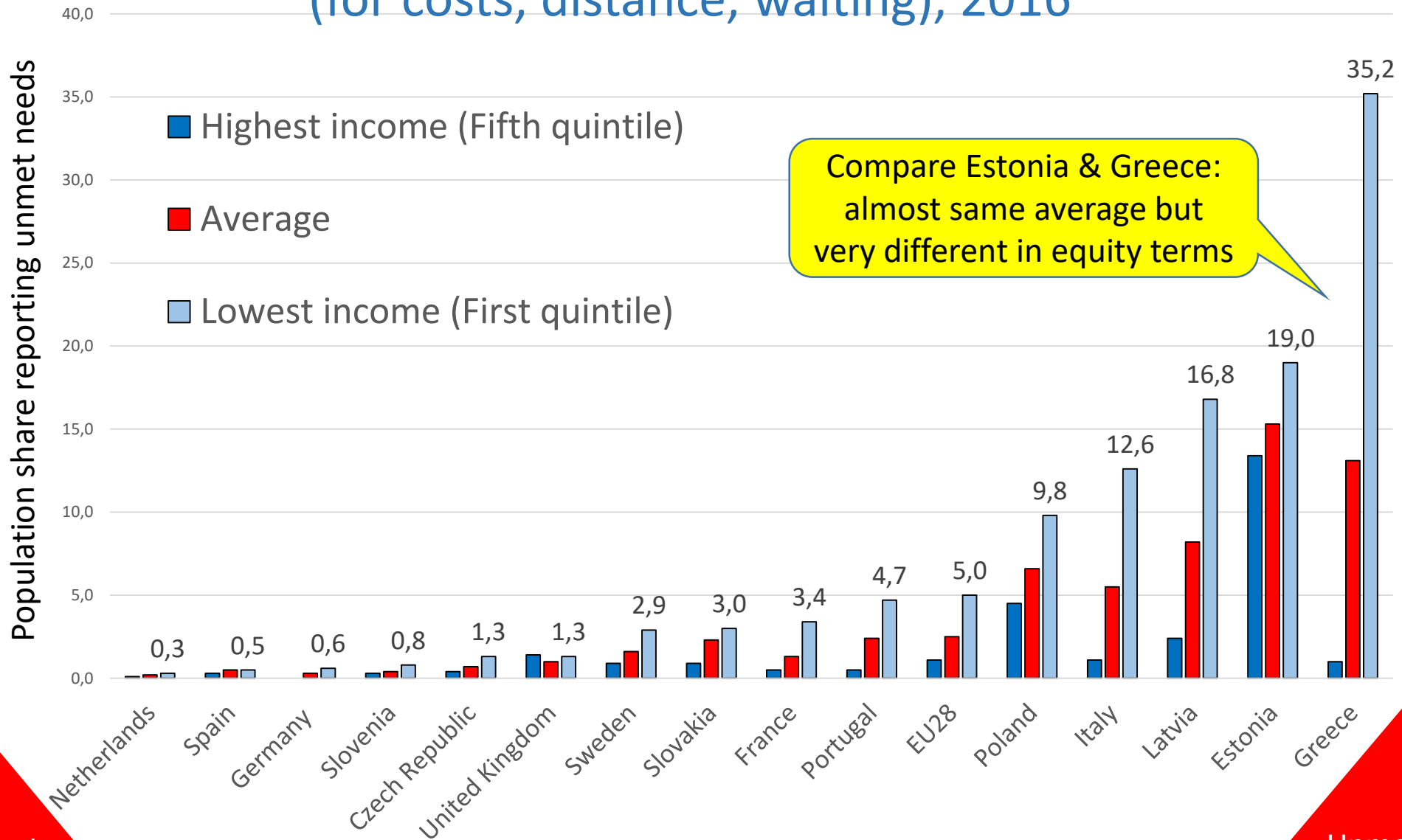
eigene Darstellung auf Basis der EU-SILC (Statistisches Amt der Europäischen Union (Eurostat) 2021e).

Unmet need

Unmet need

Source: Eurostat Statistics Database
Note: Self-reported unmet needs due to financial reasons, distance or transportation, waiting list.

Unmet need in selected EU countries by income quintiles (for costs, distance, waiting), 2016



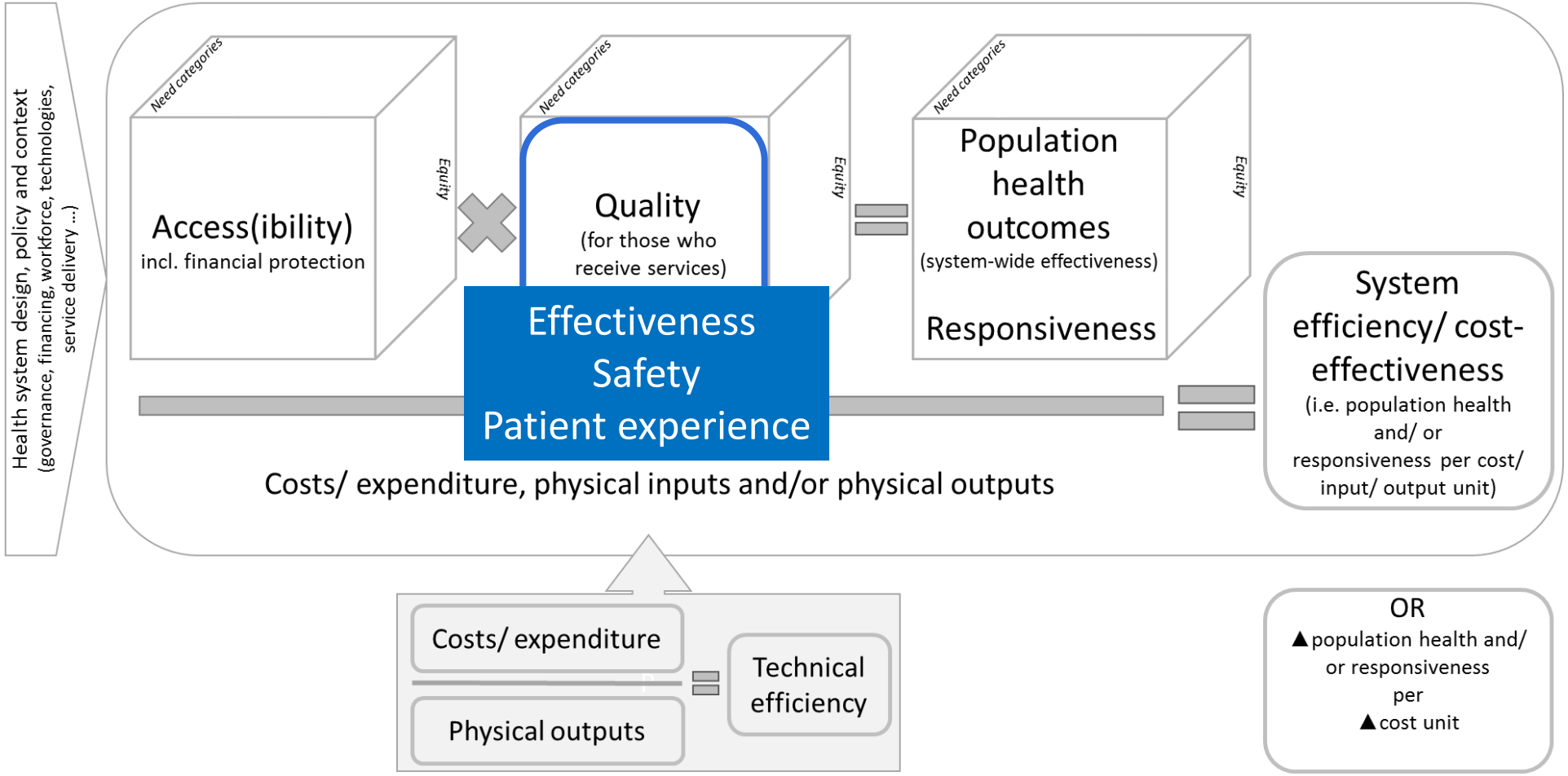
Unmet need

Unmet need

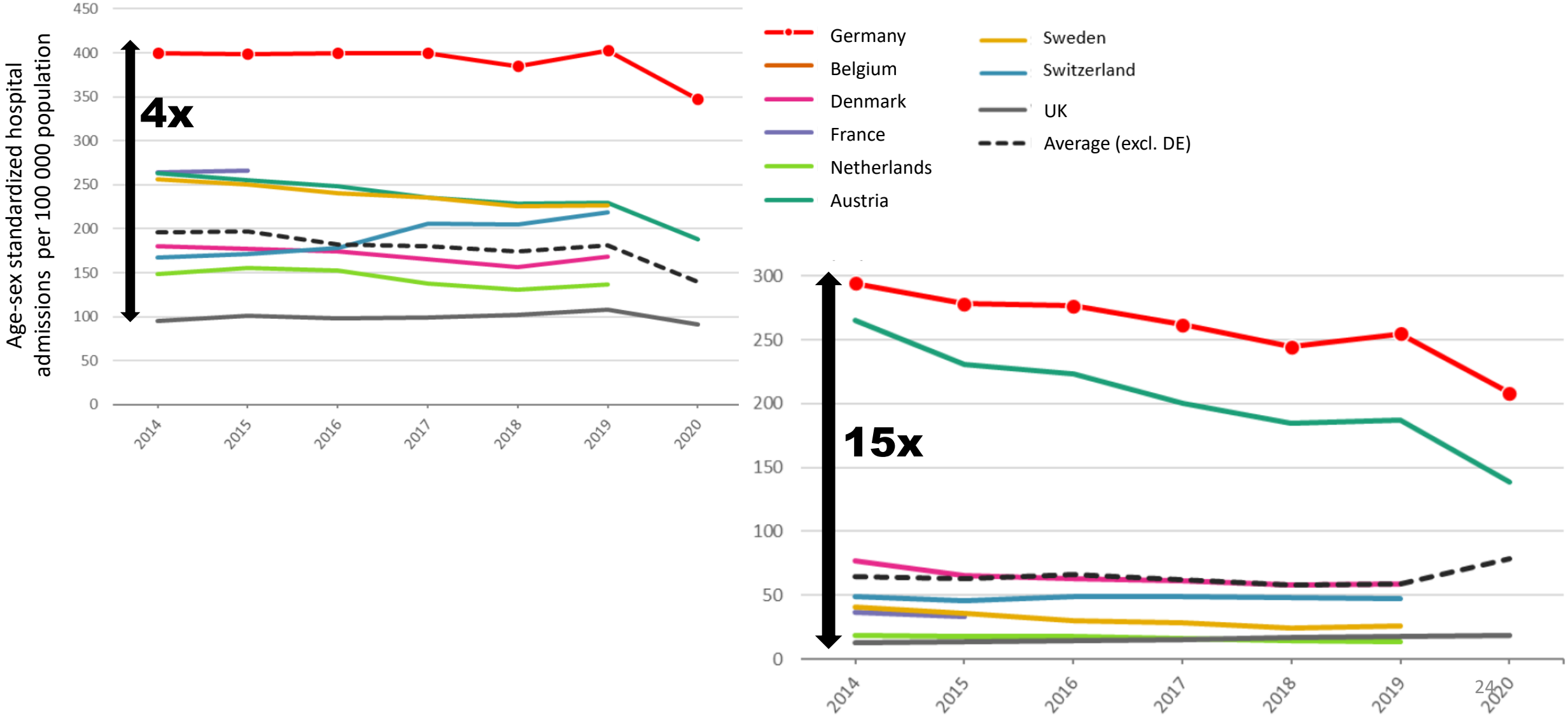
Source: Eurostat Statistics Database
Note: Self-reported unmet needs due to financial reasons, distance or transportation, waiting list.

The quality dimension
(denominator: patients/ persons receiving services)

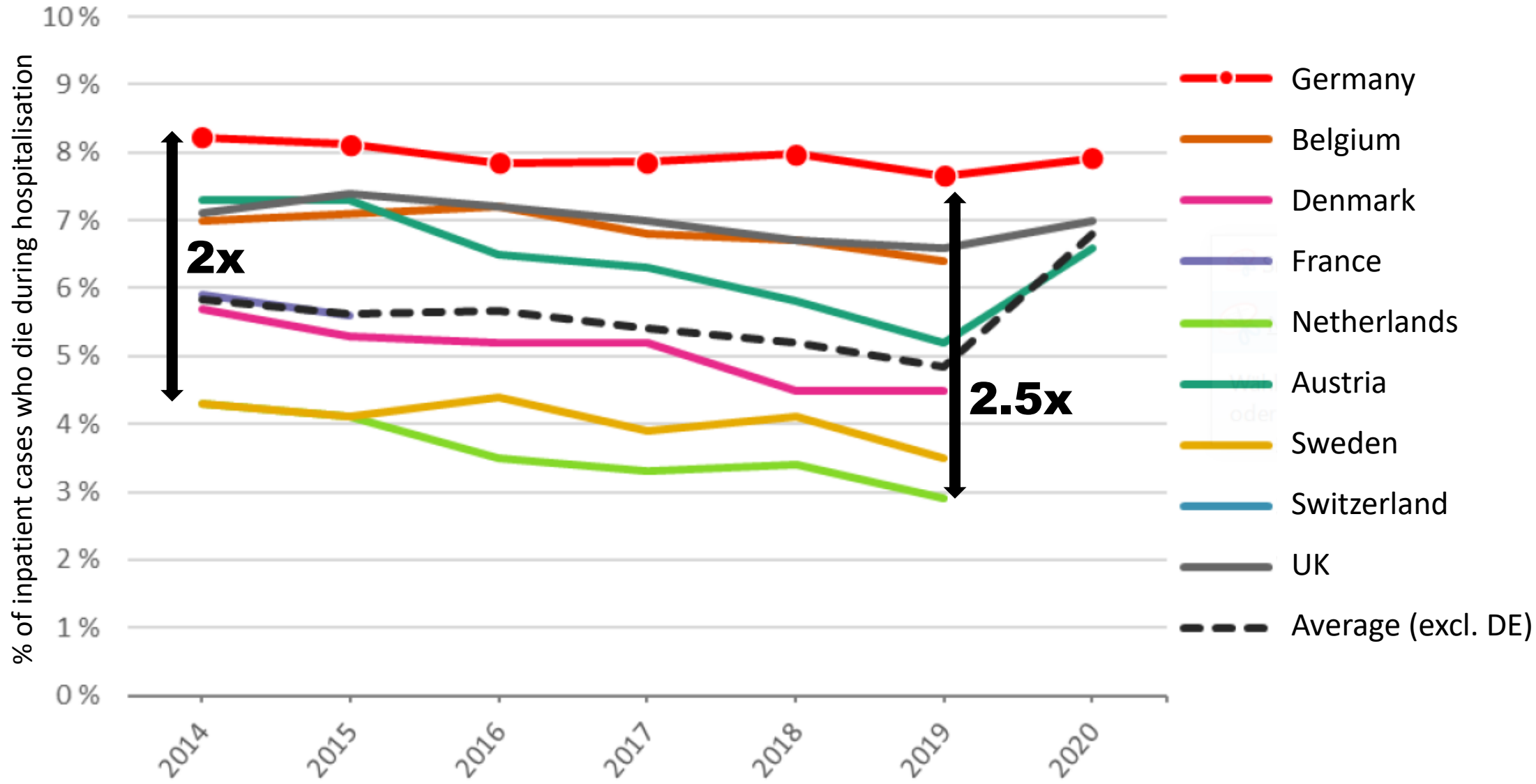
Health-service only performance dimension



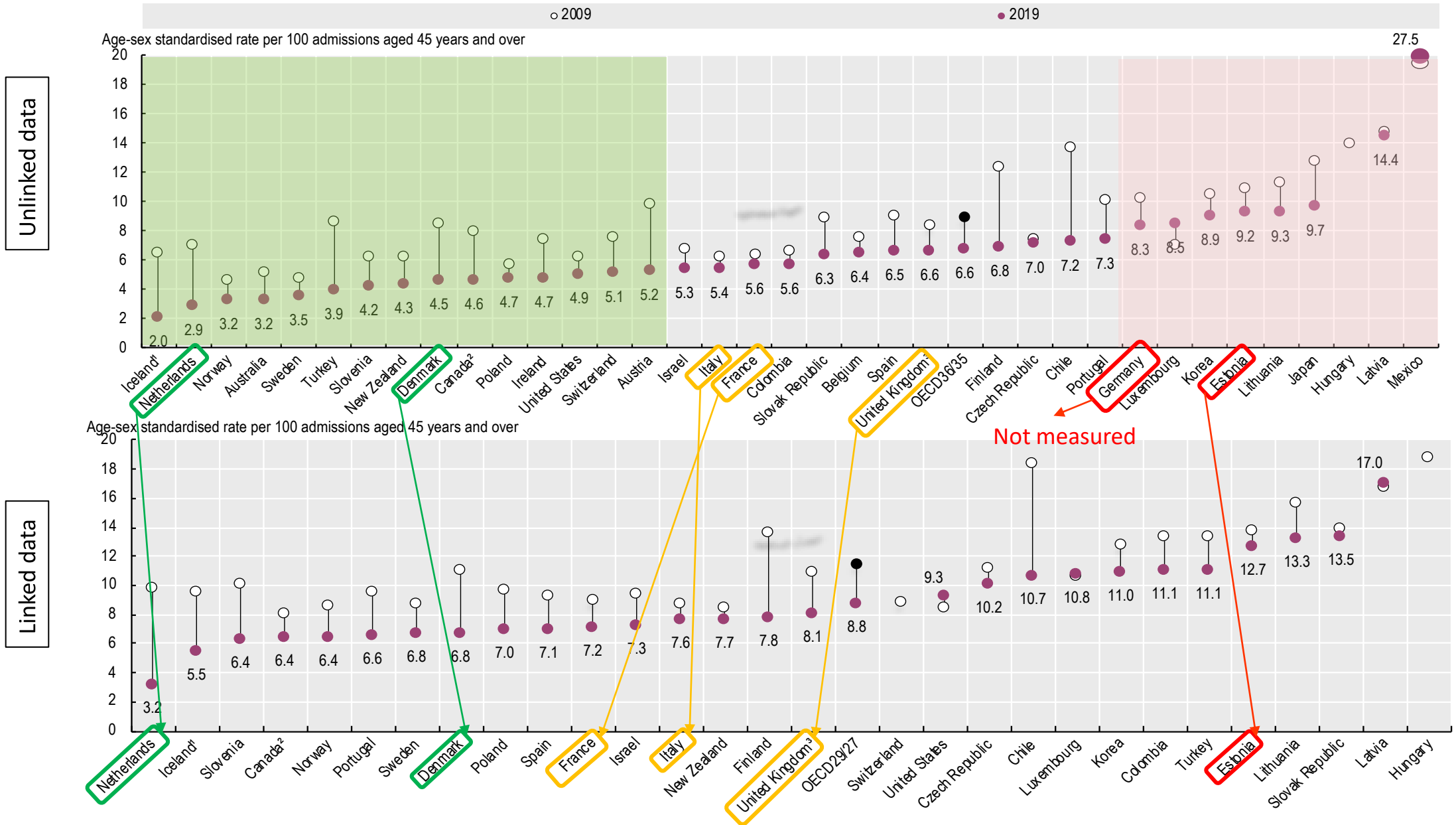
A major patient-relevant indicator of ambulatory care effectiveness: not being hospitalised in case of chronic conditions ("avoidable hospital admissions") – here: here: chronic heart failure (left) and hypertension (right), *as main diagnosis*



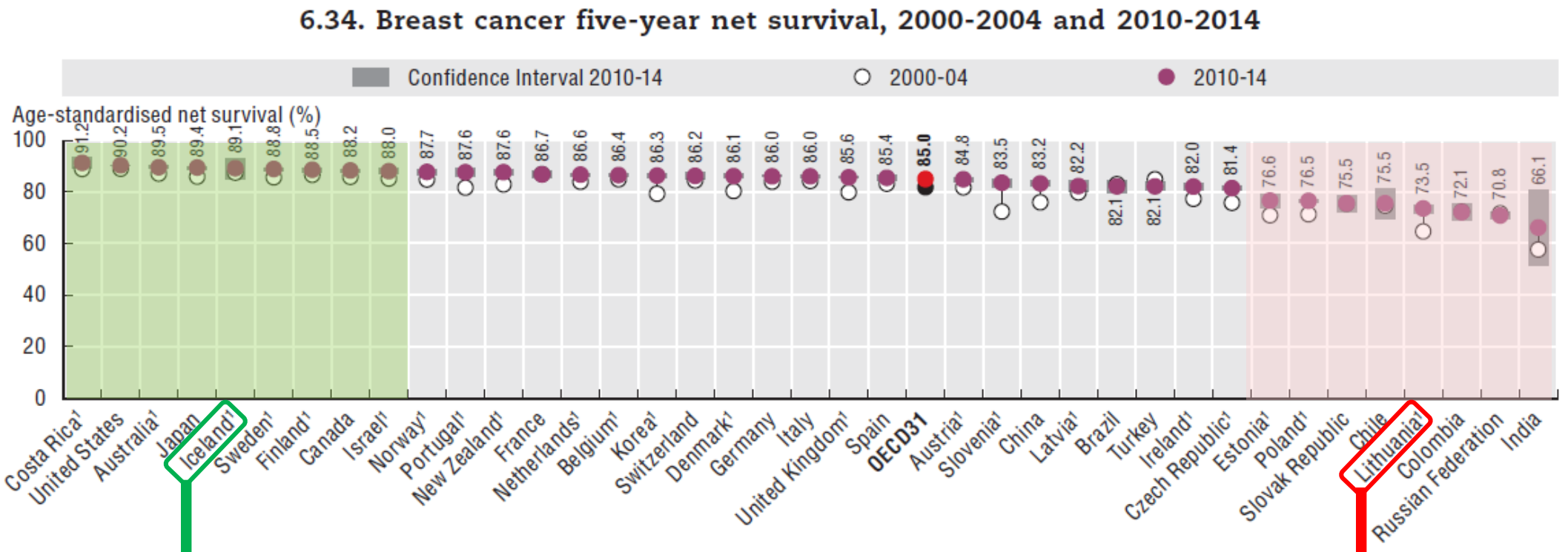
Assessing the effectiveness of inpatient care: AMI case-fatality … during hospitalision only



… and looking at the first 30 days after AMI



Extending the time horizon to 5 years for cancer patients



Note: 95% confidence intervals have been calculated for all countries, represented by grey areas. Expected updates in the data may reduce the survival estimate for Costa Rica.

1. Data with 100% coverage of the national population.

Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

10.9% die within 5 years

26.5% die within 5 years

A short look at patient experience (responsiveness) in ambulatory care

Figure 6.8. **Doctor involving patient in decisions about care and treatment, 2010 and 2020 (or nearest year)**

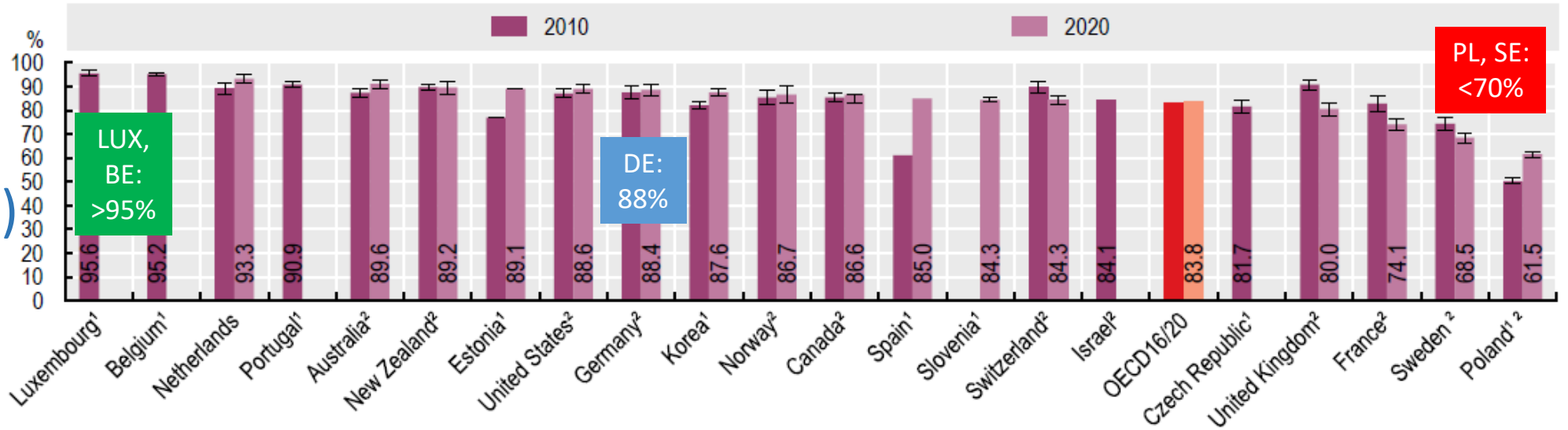
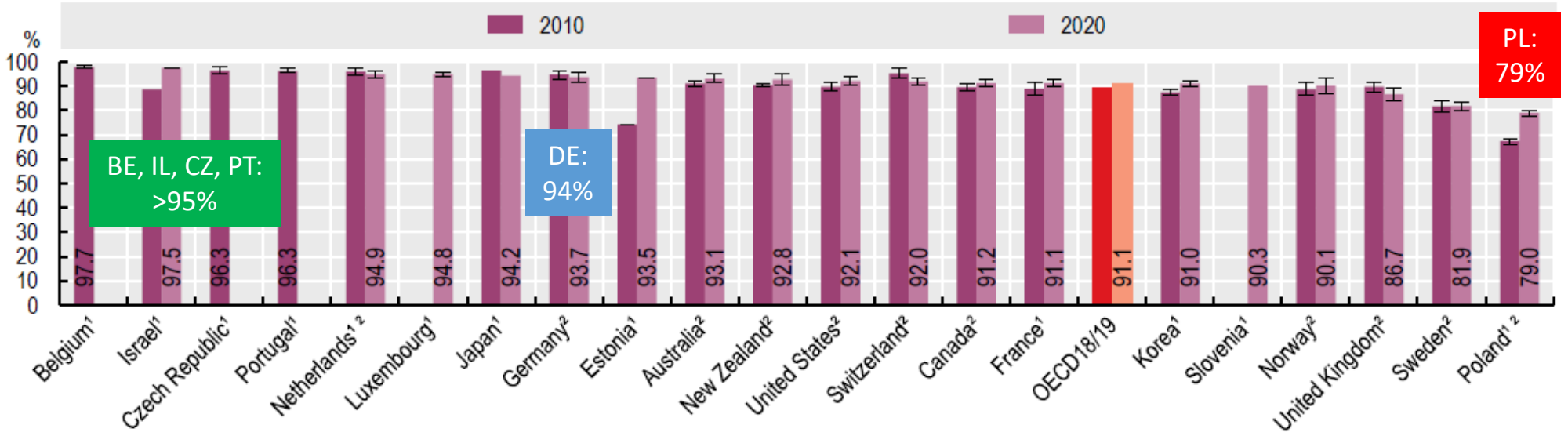


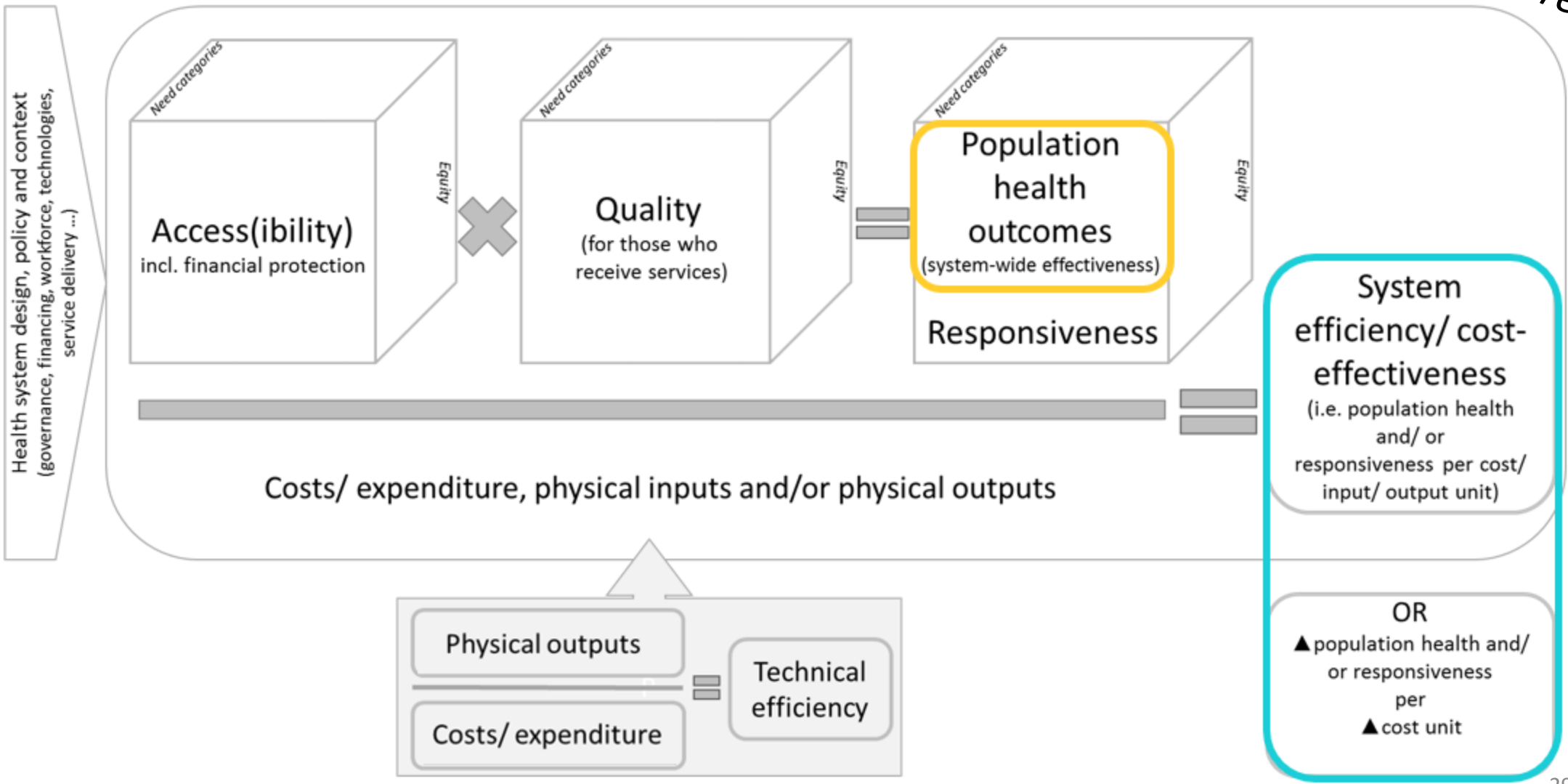
Figure 6.7. **Doctor providing easy-to-understand explanations, 2010 and 2020 (or nearest year)**



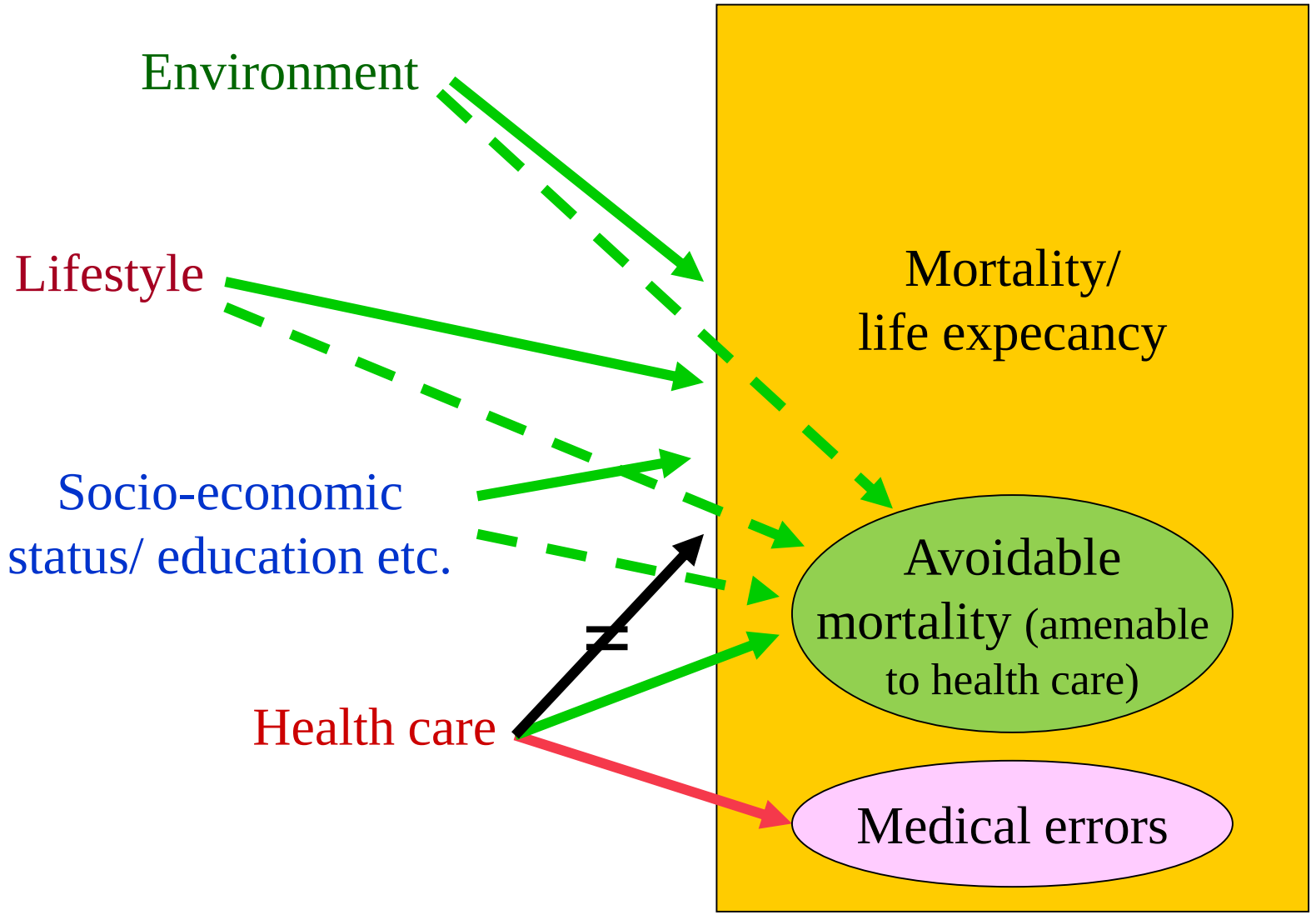
Note: H lines show 95% confidence intervals. 1. Data from national sources. 2. Refers to patient experiences with regular doctor or regular practice.
Source: Commonwealth Fund International Health Policy Survey 2010 and 2020 and other national sources.

The population/system-wide outcomes

The areas with the least agreement but highest political relevance



How can we calculate the health system contribution to health?



The concept of avoidable mortality

- 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 avoidable mortality 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

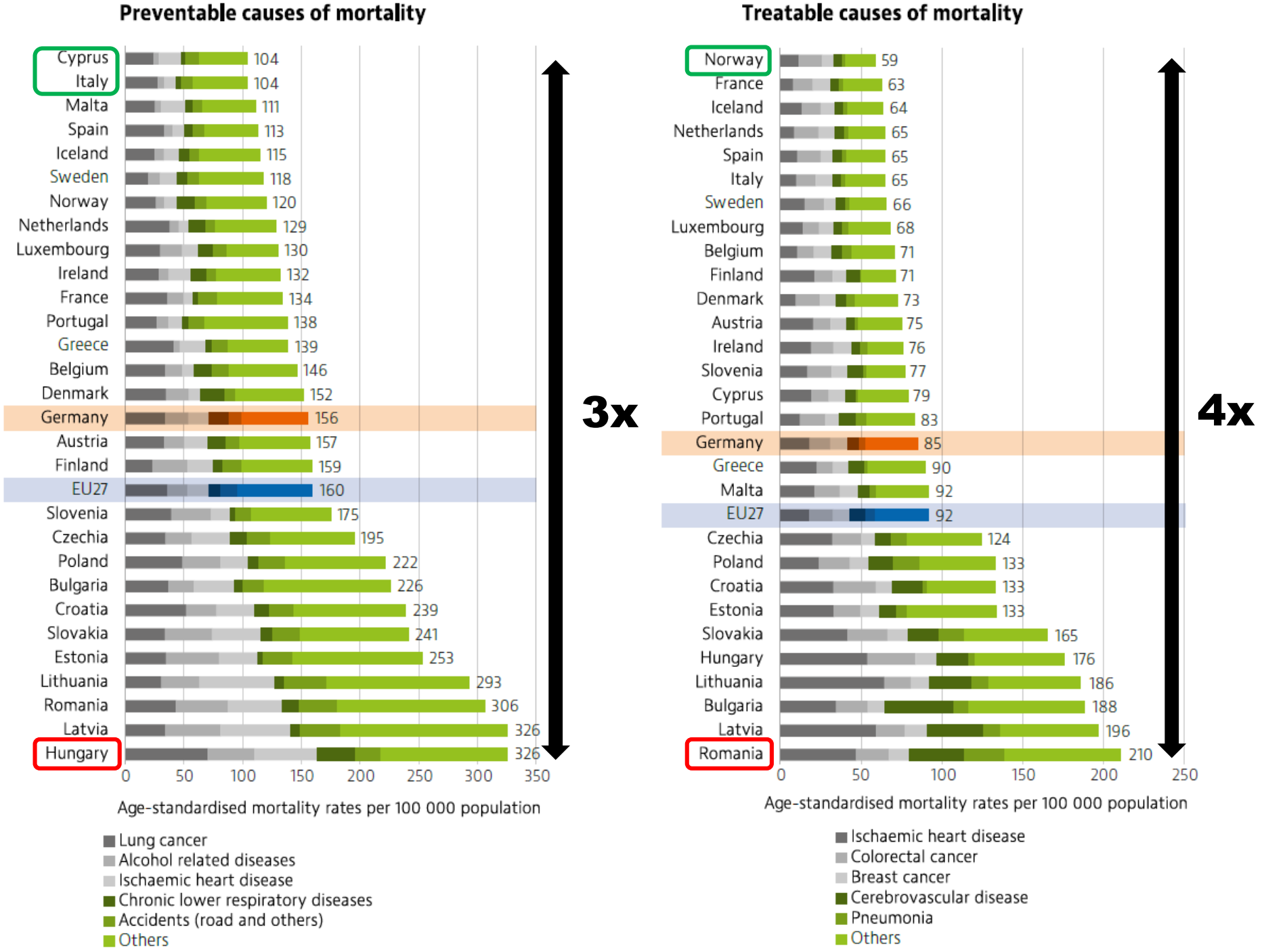
Dividing avoidable into “preventable” + “treatable/ amenable” mortality (45 causes)

Short distinction (joint Eurostat/OECD approach since 2019):

Treatable (amenable) mortality: in the light of medical knowledge and technology at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided through good quality healthcare.

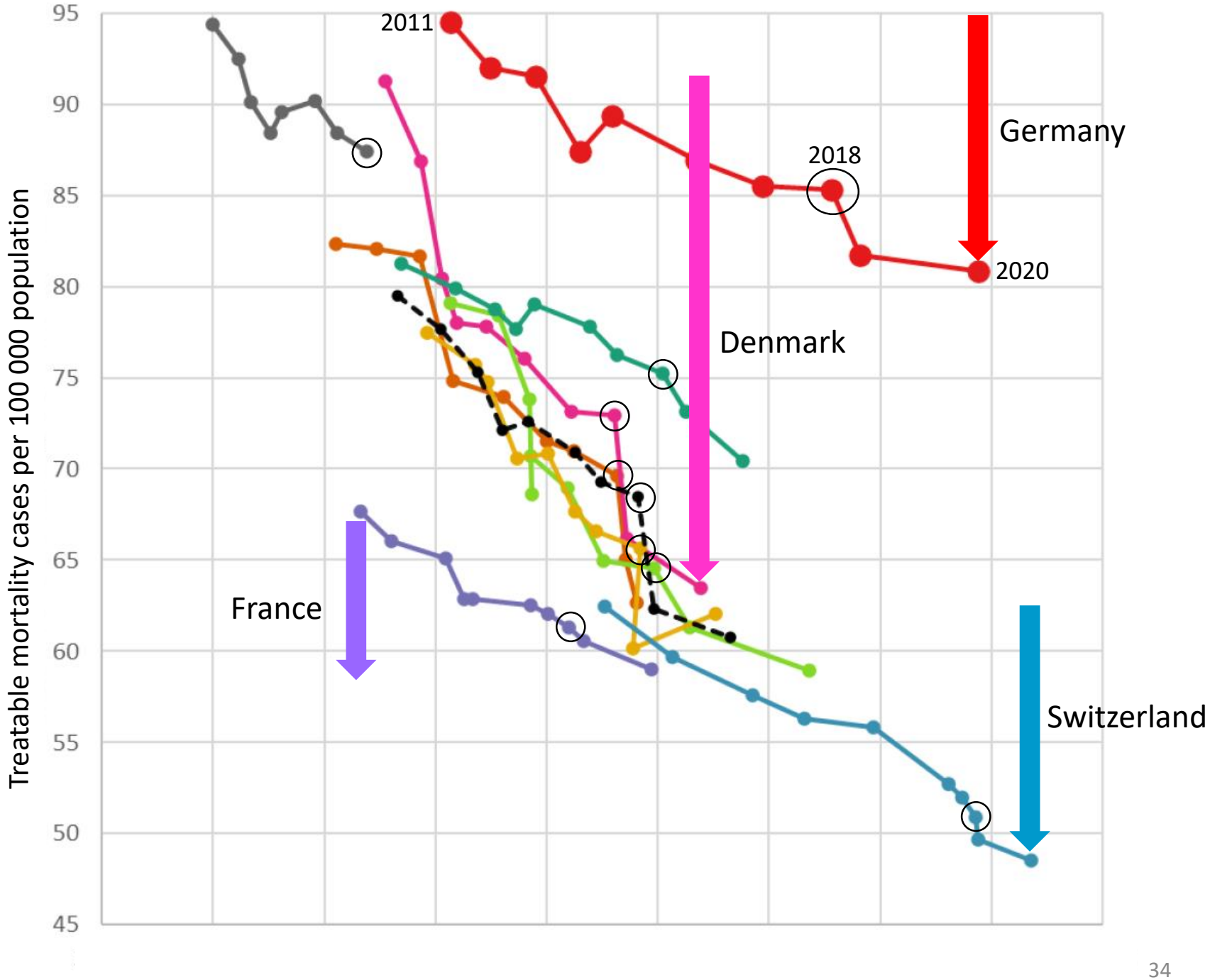
+ Preventable mortality: in the light of understanding the determinants of health at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense.

= Avoidable mortality: all deaths defined as preventable, treatable (amenable), or both, where each death is counted only once.

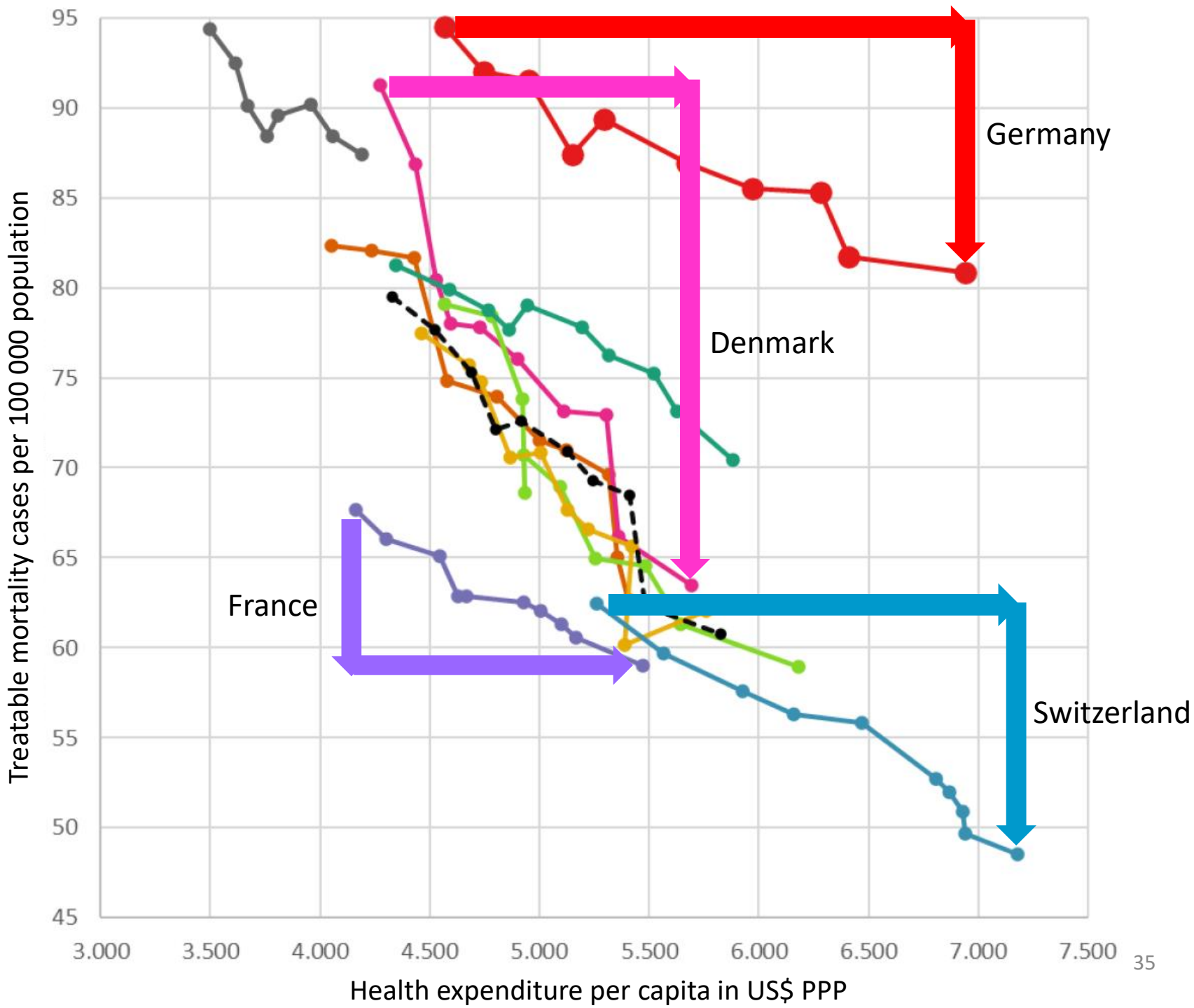


Source: OECD/European Observatory on Health Systems and Policies (2021); data for 2018

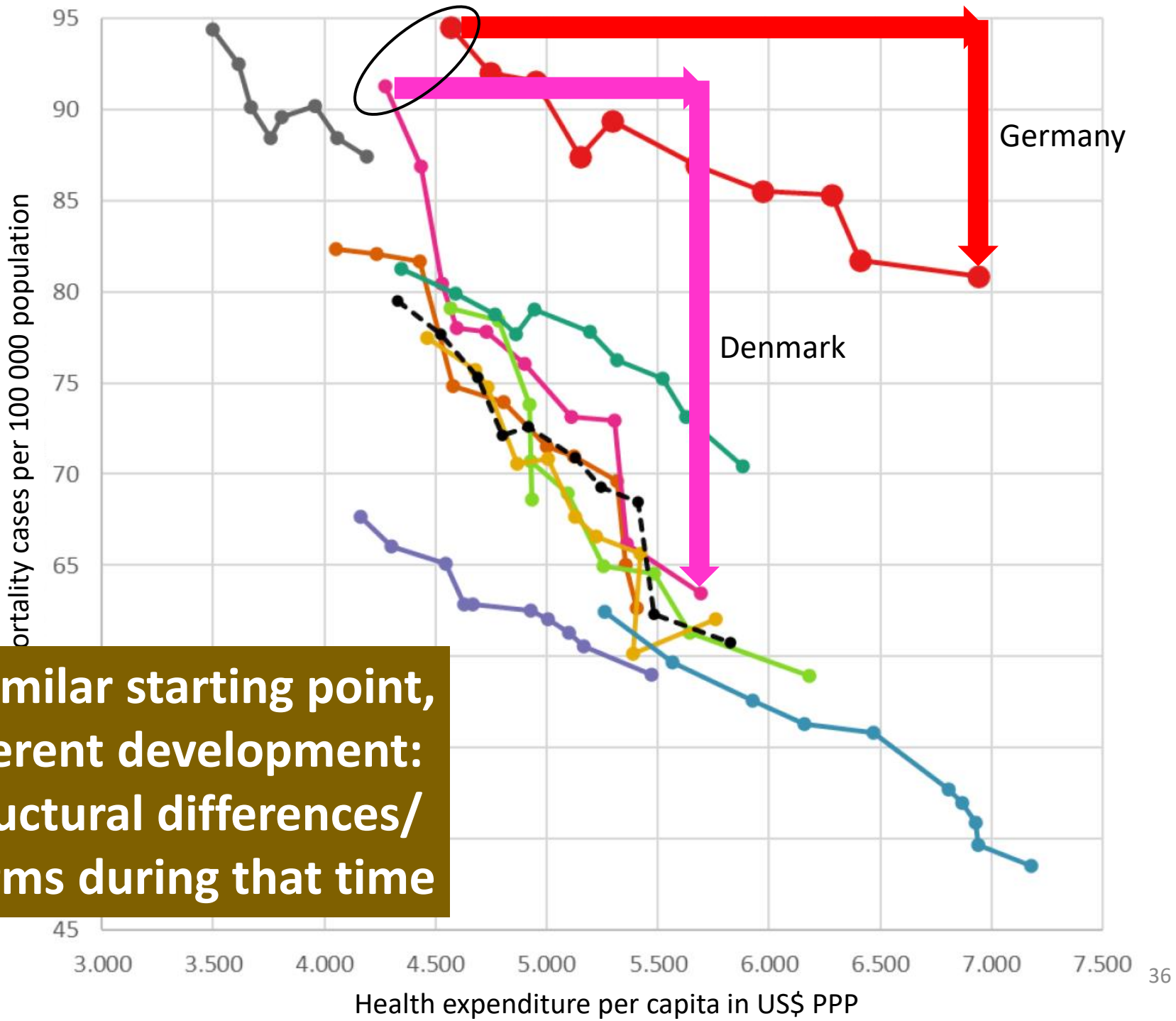
Applying the concept of treatable mortality longitudinally (2011-2020)



Applying the concept of treatable mortality longitudinally (2011-2020) and adding expenditure to get "system efficiency"



Efficiency – of high political relevance but few accepted indicators: here an example from the German HSPA



Similar starting point, but very different development: need to look into structural differences/ reforms during that time

Take-home messages:

1. There is a good agreement of what a good (high-performing) health system should achieve: accessibility, quality, population-wide outcomes and efficiency (value-for-money).
2. For many dimensions, there is also agreement on indicators, and data to fill them. But especially patient-reported data are not available in a coherent manner … and for some dimensions (e.g. efficiency) conceptual issues are still debated.
3. However, for any kind of data to be used for improving performance requires (a) that we realize we may not be the best, (b) look at international data, (c) acknowledge scope for improvement, and (d) are willing to learn from others.