

# The German health system – an introduction

**Prof. Dr. med. Reinhard Busse, MPH**

Department of Health Care Management/ WHO  
Collaborating Centre for Health Systems, Research and  
Management, Berlin University of Technology &  
European Observatory on Health Systems and Policies



“Risk-structure  
compensation”

**Collector of resources**

Health fund

Uniform wage-related contribution  
+ possibly additional premium  
(set by sickness fund),  
Risk-related premium

Choice of fund/  
insurer

**Third-party payers**

Ca. 135 sickness funds

Ca. 45 private insurers

**Strong  
delegation**

(Federal Joint Committee)  
& limited  
governmental control

Contracts,  
mostly collective  
No contracts

**Population**

Universal coverage:

Statutory Health  
Insurance 86%,  
Private HI 10%

Choice



**Providers**

Public-private mix,  
organised in associations  
ambulatory care/ hospitals

### Key characteristics:

**a) Sharing of decision-making powers between the sixteen *Länder* (states), the federal government and statutory civil society organizations**

i.e. important competencies are legally delegated to membership-based, self-regulated organisations of payers and providers

**b) German health care [almost] = Statutory health insurance (SHI)**

SHI Cornerstone of health service provision is the Fifth Book of the German Social Law (SGB V)

i.e. it organizes and defines the self-regulated “corporatist” structures and give them the duty and power to develop benefits, prices and standards

**c) Existence of substitutive private health insurance alongside SHI**

## Key characteristics:

### d) Sectoral borders

Provision of ambulatory and inpatient services.

Planning, resource allocation, provision and financing are separate for ambulatory (office-based physicians) and inpatient (hospitals) sector.

→ Complicates the provision of health care delivery  
(problematic especially for chronically ill → answers: Disease Management Programmes and selective “integrated care” contracts)

→ Increases the amount of specialists

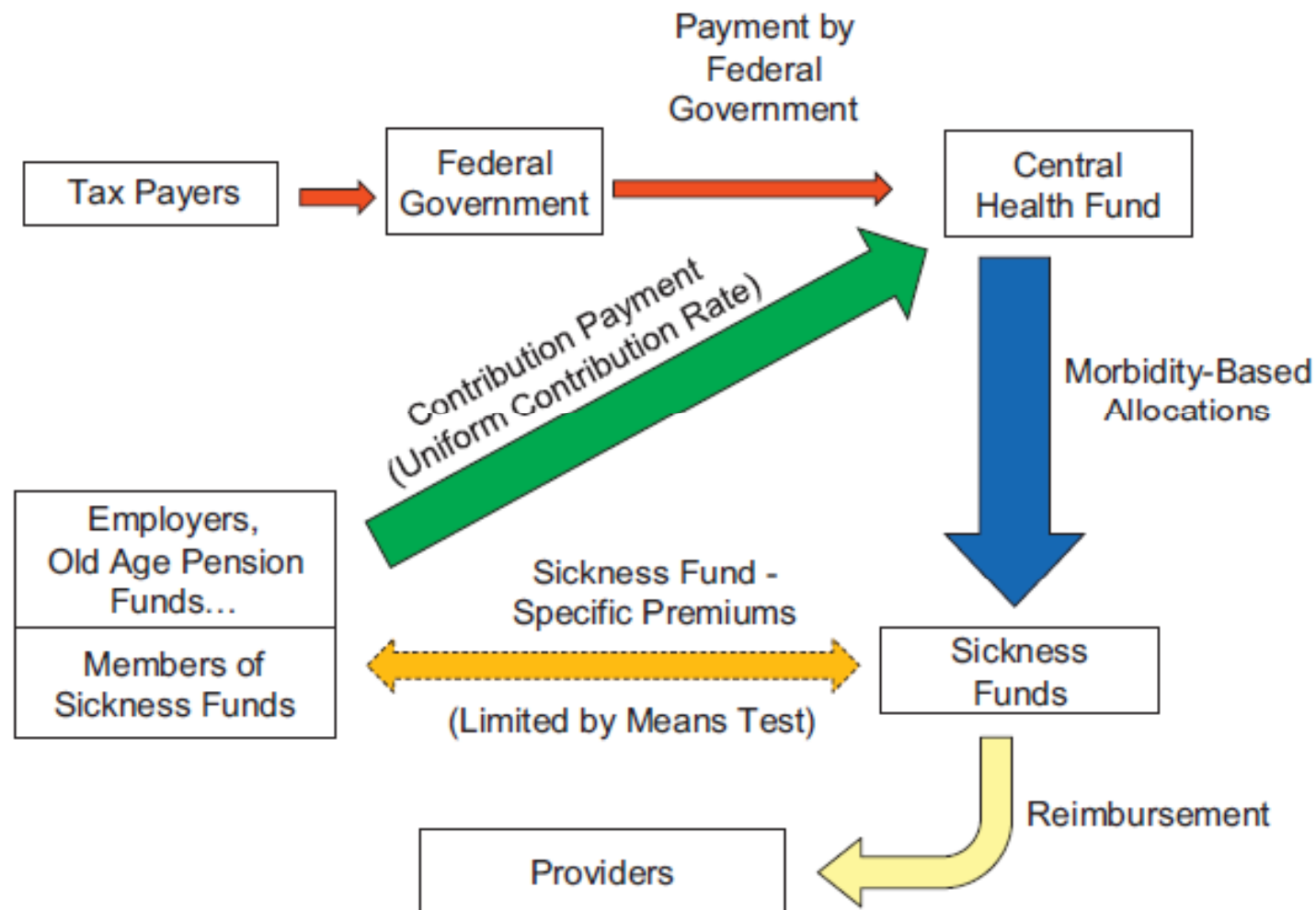
→ Increases the health care expenditure

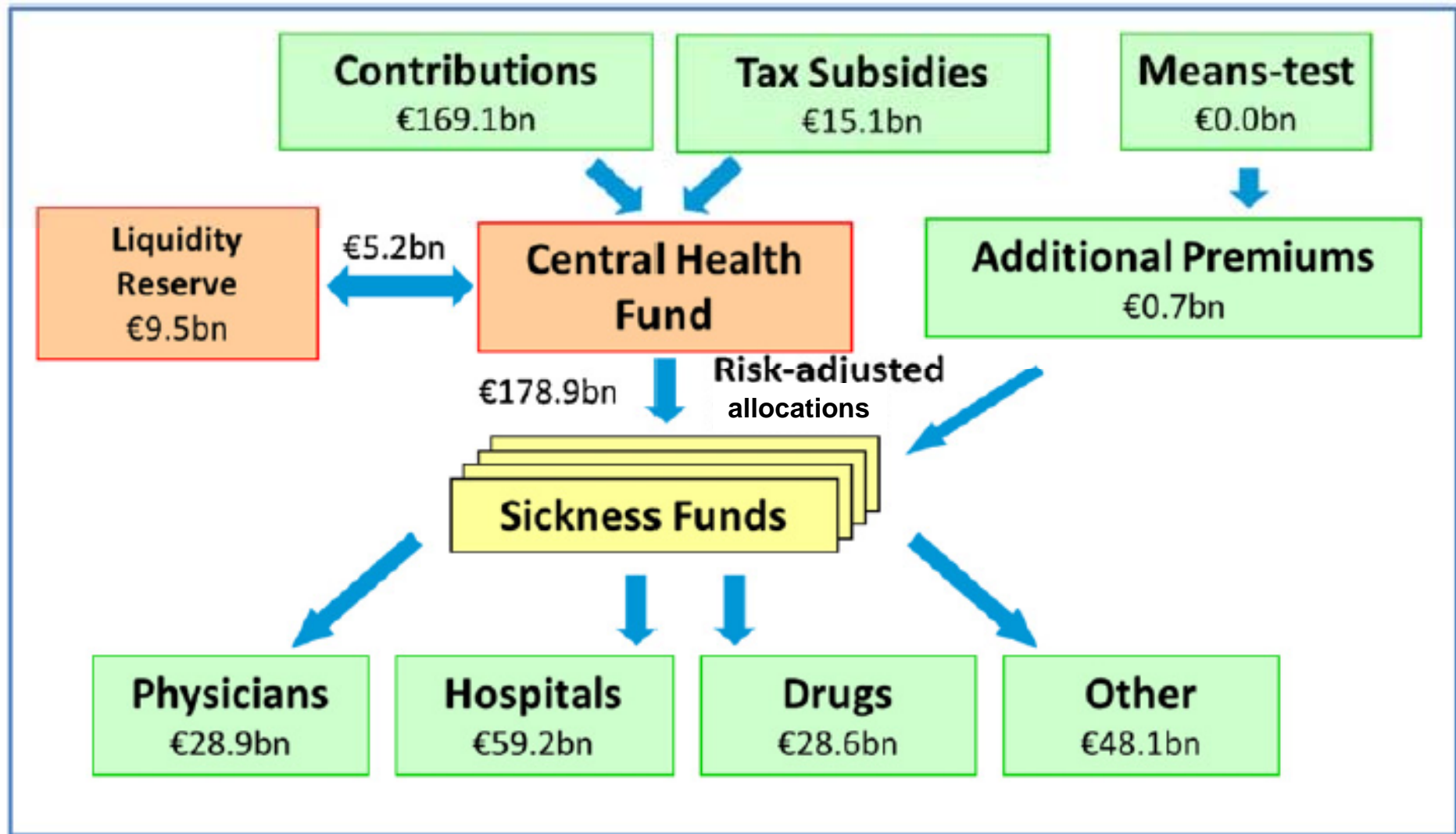
→ Various reforms have tried to lessen sectoral borders (last in 2012 by creating a new in-between sector for highly specialized ambulatory care)

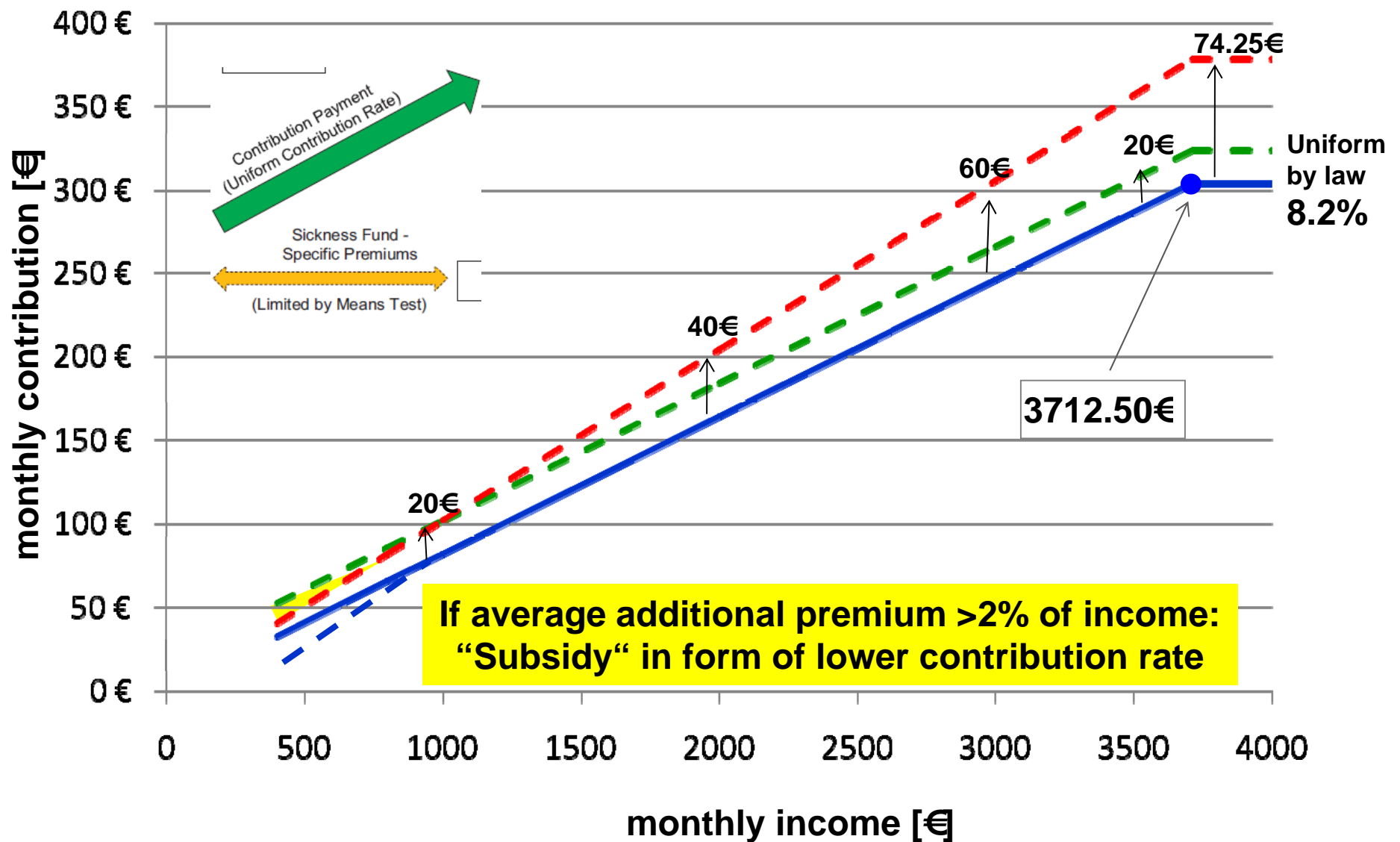
	... in the old times	Cons.-lib.		Red-green	Grand coalition		Cons.-lib.
		1994/95	1996/97	2004	2007	2009	2011
Compulsory insurance	Mandatory only for employed/pensioners/unemployed up to certain income				Universal coverage in SHI (or PHI)		
Choice between SHI and PHI	For employed above certain income within 1 year				... for 3 years		... within 1 year
Choice of SHI fund	For certain professional groups only		For most insured (97%)		For all insured except farmers		

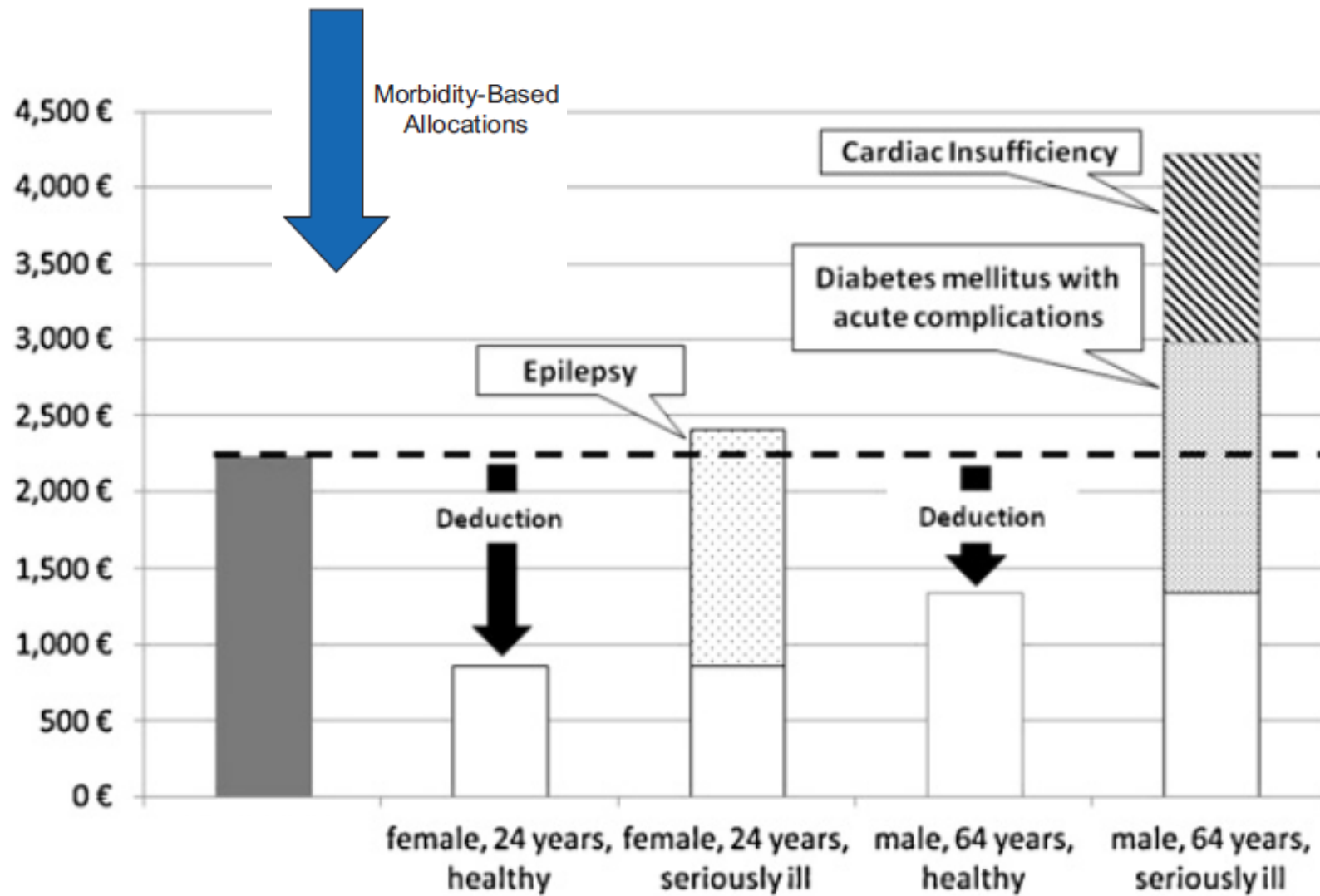
	... in the old times	Cons.-lib.		Red-green	Grand coalition		Cons.-lib.
		1994/95	1996/97	2004	2007	2009	2011
Financial contribution	<i>Contribution rate differing among sickness funds</i>					<i>Uniform rate plus possibly add'l premium set by sickness fund</i>	
						<i>Actual amount capped at 1%</i>	<i>Tax subsidy if add'l premium &gt;2%</i>

	... in the old times	Cons.-lib.		Red-green	Grand coalition		Cons.-lib.
		1994/95	1996/97	2004	2007	2009	2011
<b>Risk-structure compensation</b>	None; pooled expenditure for pensioners	<b>Risk structure compensation based on age and sex</b>		+ DMPs as criterion & high-cost pool		+ morbidity from 80 diseases	











Accuracy of prediction for revenue and expenditure, in 2009–2011.

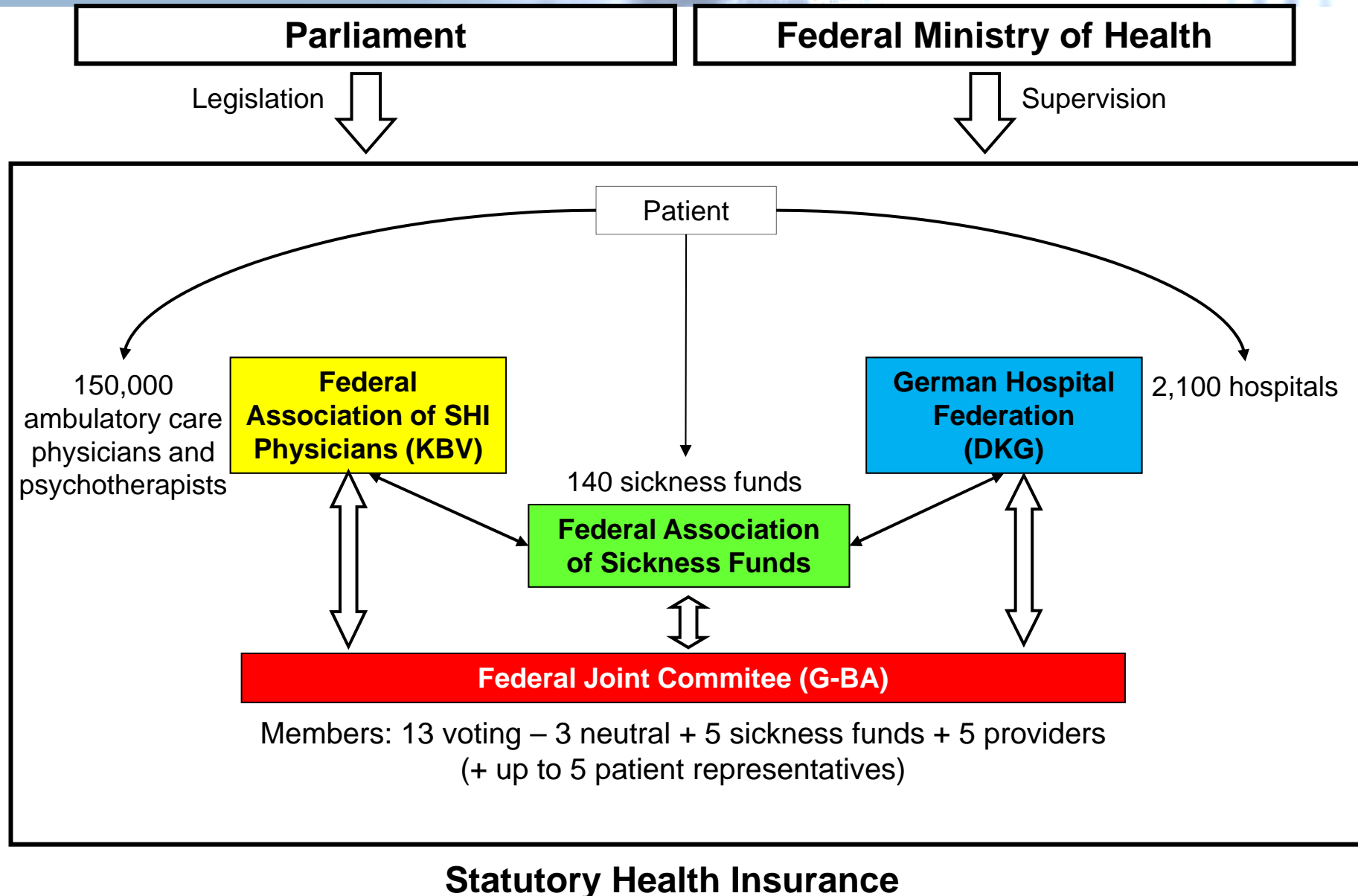
Year	Revenue of Central Health Fund			CHF payments	Expenditure of sickness funds		
	Predicted	Actual	Error		Predicted	Actual	Error
2009	€166.8bn	€164.4bn	–€2.4bn	€166.8bn	€166.8bn	€166.2bn	–€0.7bn
2010	€170.3bn	€174.5bn	€4.2bn	€170.3bn	€174.2bn	€171.3bn	–€2.9bn
2011	€181.1bn	€184.2bn	€2.9bn	€178.9bn	€178.9bn	€175.2bn	–€3.8bn
2012 <sup>a</sup>	€185.7bn	€188.7bn	€3.0bn	€185.4bn	€185.4bn	€181.6bn	–€3.9bn

<sup>a</sup> Prediction of 10.11.2012.

Both the Health fund as well as the sickness funds can have higher or lower revenue and expenditure than ex-ante calculated: e.g. in 2009, the Health Fund's revenue fell short due to the financial crisis while in the following years it was higher than predicted due to the booming economy in Germany.

	... in the old times	Cons.-lib.		Red-green	Grand coalition		Cons.-lib.
		1994/95	1996/97	2004	2007	2009	2011
<b>Contents of benefit package</b>	Relatively uniform but freedom for additions by sickness funds		Dental care for adults excluded (until 1999)	Palliative care incl.; OTC drugs excl.	<b>Almost uniform (only 0.7% of exp. for additions by sickness funds)</b>		
<b>Decisions on benefits</b>	Sectoral decisions			<b>G-BA responsible across sectors</b>			
	Not evidence-based		HTA for ambulatory services	Drug benefit eval.; IQWiG founded	+ Cost-benefit assessment of drugs		+ early benefit eval. of all new drugs

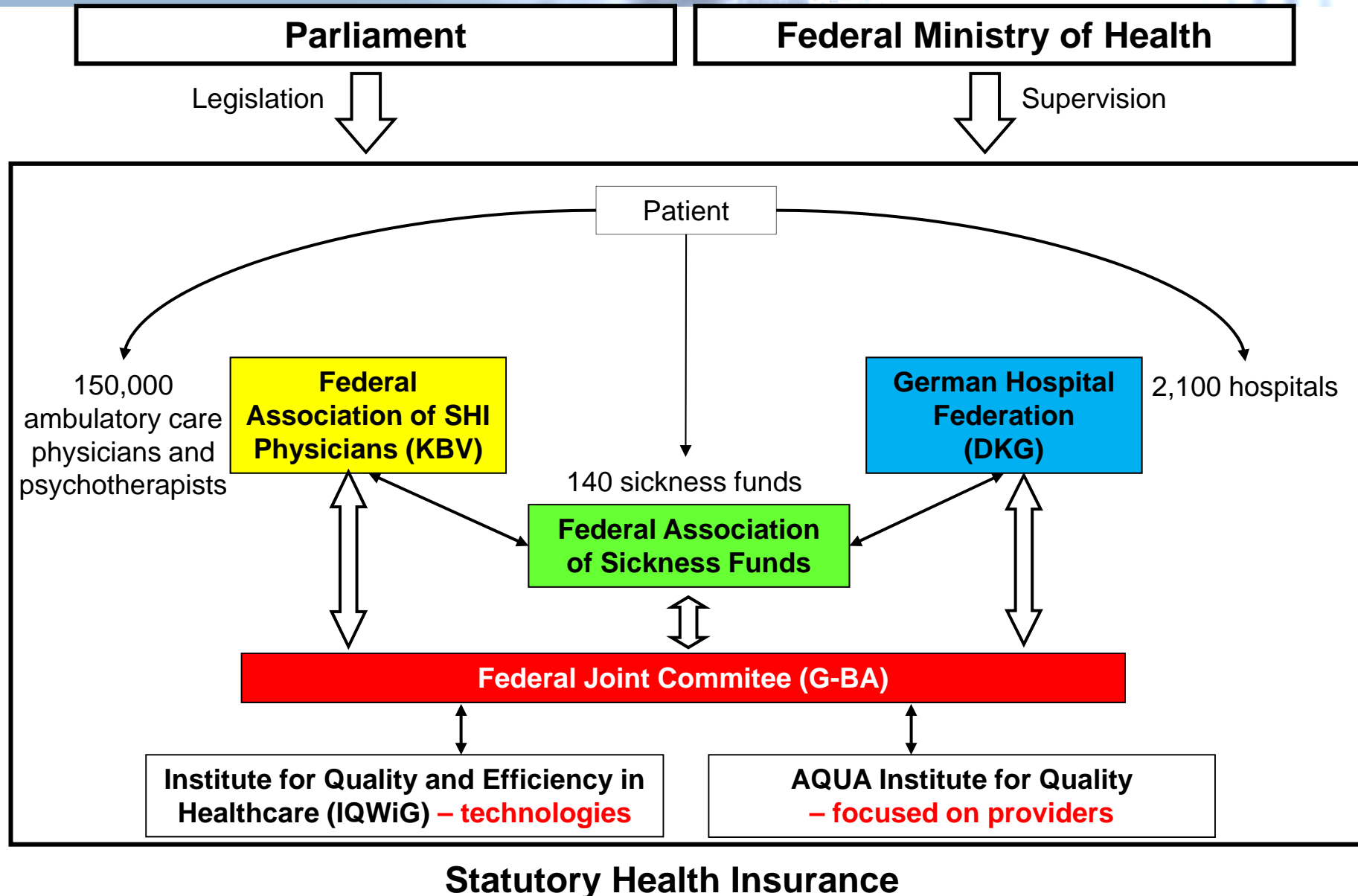
	... in the old times	Cons.-lib.		Red-green	Grand coalition		Cons.-lib.
		1994/95	1996/97	2004	2007	2009	2011
Compulsory insurance	Mandatory only for employed with certain income	Mergers between different fund types allowed; sickness fund associations → Federal Association (2008)			Universal coverage in SHI (or PHI, from 2009)		
Choice between SHI and PHI	For employed above certain income				for 3 years		... within 1 year
Choice of SHI fund	For certain professional groups only				For all insured except farmers		
Financial contribution	Contribution rate differing among sickness funds				Uniform rate plus possibly add'l premium set by sickness fund		
	No claim bonus, deductibles, additional benefits ... in SHI insurance allowed				Actual amount capped at 1%	Tax subsidy if add'l premium >2%	
Risk-structure compensation	None; pooled expenditure for pensioners	Risk structure compensation based on		+ DMPs as criterion & high-cost pool	+ morbidity from 80 diseases - DMP/ high-cost pool		
Contents of benefit package	Relatively few additions by sickness funds	Selective contracts for integrated care (2000); financially incentivized 2004-08, but only ~0.3% of total expenditure		Palliative care incl.; OTC drugs excl.	Almost uniform (only 0.7% of exp. for additions by sickness funds)		
Decisions on benefits	Sectoral decisions Not evident			G-BA responsible across sectors			
			ambulatory services	Drug benefit eval.; IQWiG founded	+ Cost-benefit assessment of drugs		+ early benefit eval. of all new drugs



- **Main functions: to regulate SHI-wide issues of access, benefits and quality (and not primarily of costs or expenditure).**
- ***Normative function of the G-BA by legally binding directives (“sub-law”) to guarantee equal access to necessary and appropriate services for all SHI insured.***
- **Benefit-package decisions must be justified by an evidence-based process to determine whether services, pharmaceuticals or technologies are medically effective in terms of morbidity, mortality and quality of life.**
- **By law, evidence based assessments can only be used to select the most appropriate (efficient) service etc. from others – not to prioritize among service areas: if a costly innovation has a significant additional benefit, the sickness funds must pay for it.**

## **Decisions are prepared by 9 sub-committees:**

- **Pharmaceuticals**
- **Quality Assurance**
- **Disease management programs**
- **Methodological Evaluation (inclusion of new ambulatory care services in benefit basket; NB: in hospitals, services can only be excluded)**
- **Highly specialized ambulatory care (by office-based physicians and hospitals; new sector since 2012)**
- **Referred Services (rehabilitation, care provided by non-physicians, ambulance transportation etc.)**
- **Needs-based Planning (ambulatory care; NB: hospital capacities are planned by state governments)**
- **Psychotherapy**
- **Dental Services**



		Structure	Processes		Outcomes	
			Types/ numbers	Appropriateness	Intra-hospital	Long-term
Federal Joint Committee 2004	→	Internal quality management system 2000			Will be cross-sectoral for certain indications (e.g. colon cancer)	
		→	Nationwide external quality assurance system based on special documents			
		→	Disease Management Programs 2002			
	directives →	Concentration of services (minimum volume numbers) 2004				
	→	Assessments through Institute for Quality and Efficiency 2004				
	→	Public hospital quality reports 2005				
	→	Public hospital quality reports (revised requirements) 2007				

# Pharmaceutical policies: evaluation and reimbursement

Important policies regarding patented drugs in Germany since 1996.

	1996-2003	2004-2006	2007-2010	Since 2011
<b>Evaluation of additional/ comparative benefit</b>	No	Upon application of Ministry of Health or parties in G-BA		
				Mandatory for all new drugs/ indications except orphan drugs <sup>a, b</sup>
<b>Price-setting</b>	Free by manufacturer			Officially free by manufacturer, but de facto only for 12 months after launch
<b>Reimbursability (benefit basket)</b>	All patented drugs included in benefit basket	Drugs without proof of effectiveness or with proven inferior effectiveness or with more efficient alternatives may be restricted or excluded (such as insulin analogues) [11]		Only drugs with proven inferior effectiveness or with more efficient alternatives may be restricted or excluded
<b>Reimbursement price in case of no additional benefit</b>	Reimbursement = price (possibly temporarily lowered by a certain %)	Drugs are grouped and a reference price is determined per group; patient pays difference between price and reference price (example: atorvastatin [Sortis])		New drugs are grouped as well and are liable to reference price; if grouping is impossible, price may not exceed that of existing alternative
<b>Reimbursement in case of additional benefit</b>		Reimbursement = price (possibly temporarily lowered by a certain %)	Maximum reimbursement ceiling may be set following cost-effectiveness analysis (not done in a single case); in other cases reimbursement = price	Country-wide rebate on manufacturer price is negotiated between Federal Association of Statutory Health Insurance Funds and manufacturer (→ fixed reimbursement price from month 13 after launch)
<b>Unevaluated drugs</b>			Reimbursement = price (possibly temporarily lowered by a certain %)	As before (concerns only patented drugs with market launch before 2011 and orphan drugs)
<b>Cost-effectiveness analysis</b>	No	No	May be commissioned by G-BA for drugs with additional benefit (two analyses commissioned)	If negotiations fail and if one side challenges the result of the arbitration, a cost-effectiveness analysis is commissioned by the G-BA

<sup>a</sup> Although the additional benefit is deemed to be proven for orphan drugs, a dossier has to be submitted, and price negotiations will follow. The dossier does not have to present proof of the medical benefit and additional benefit. However, the dossier must include information on the groups of patients for whom there is significant medical additional benefit and on the extent of this additional benefit [10]. If the business volume of an orphan drug reached the amount of 50 million EUR during the last 12 months, a second (and full) dossier demonstrating additional benefits will have to be submitted within 3 months of its request by the G-BA.

<sup>b</sup> Patented pharmaceuticals that were approved before 2011 are also assessed in the AMNOG process, if it is initiated by the G-BA.

# Pharmaceutical policies: evaluation and reimbursement

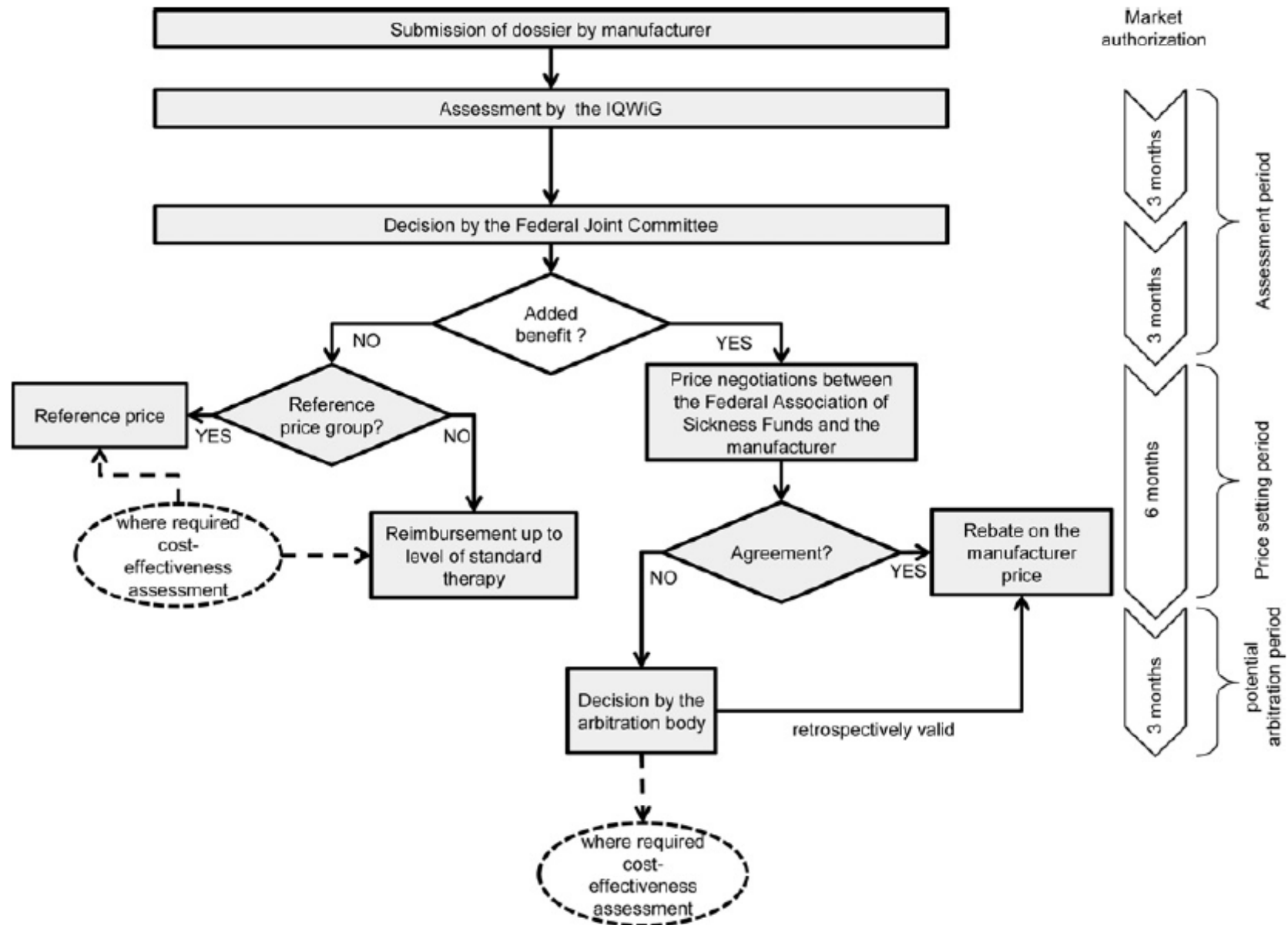
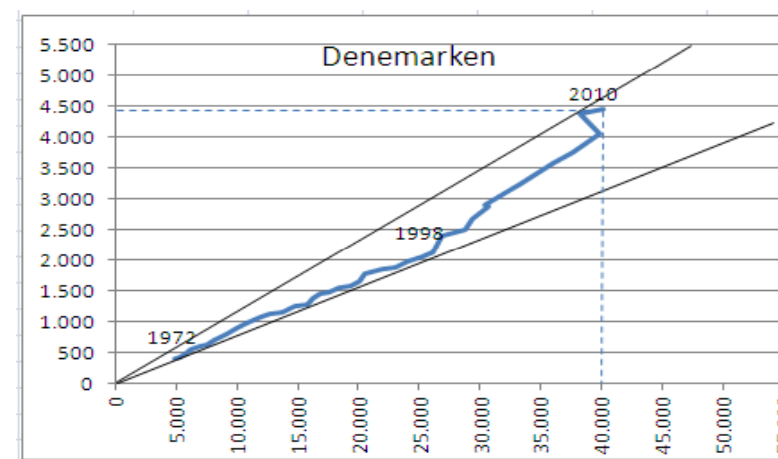
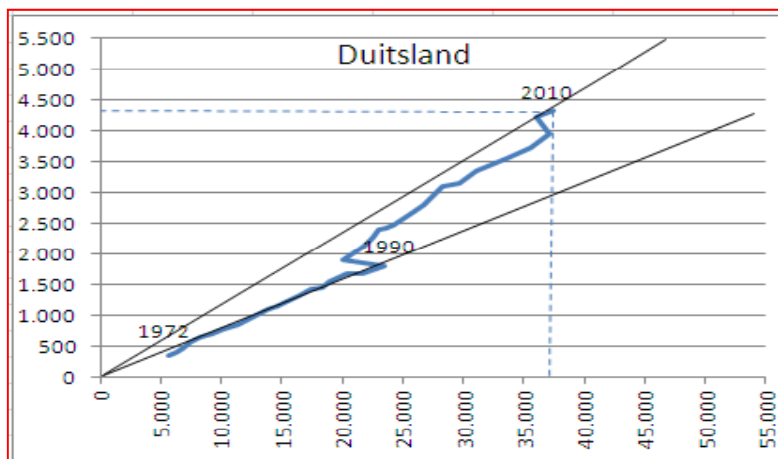
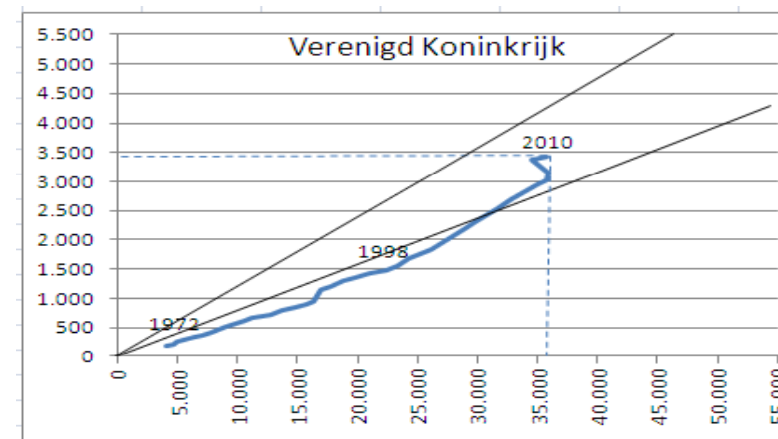
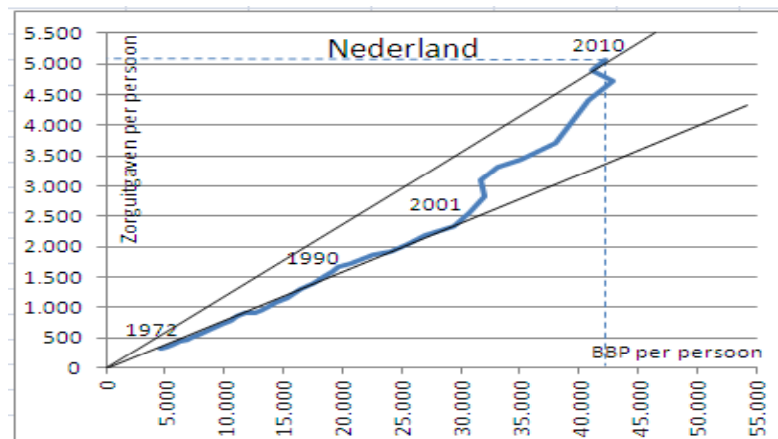


Fig. 1. Procedure for reimbursement of patented pharmaceuticals source: based on IQWiG [14].

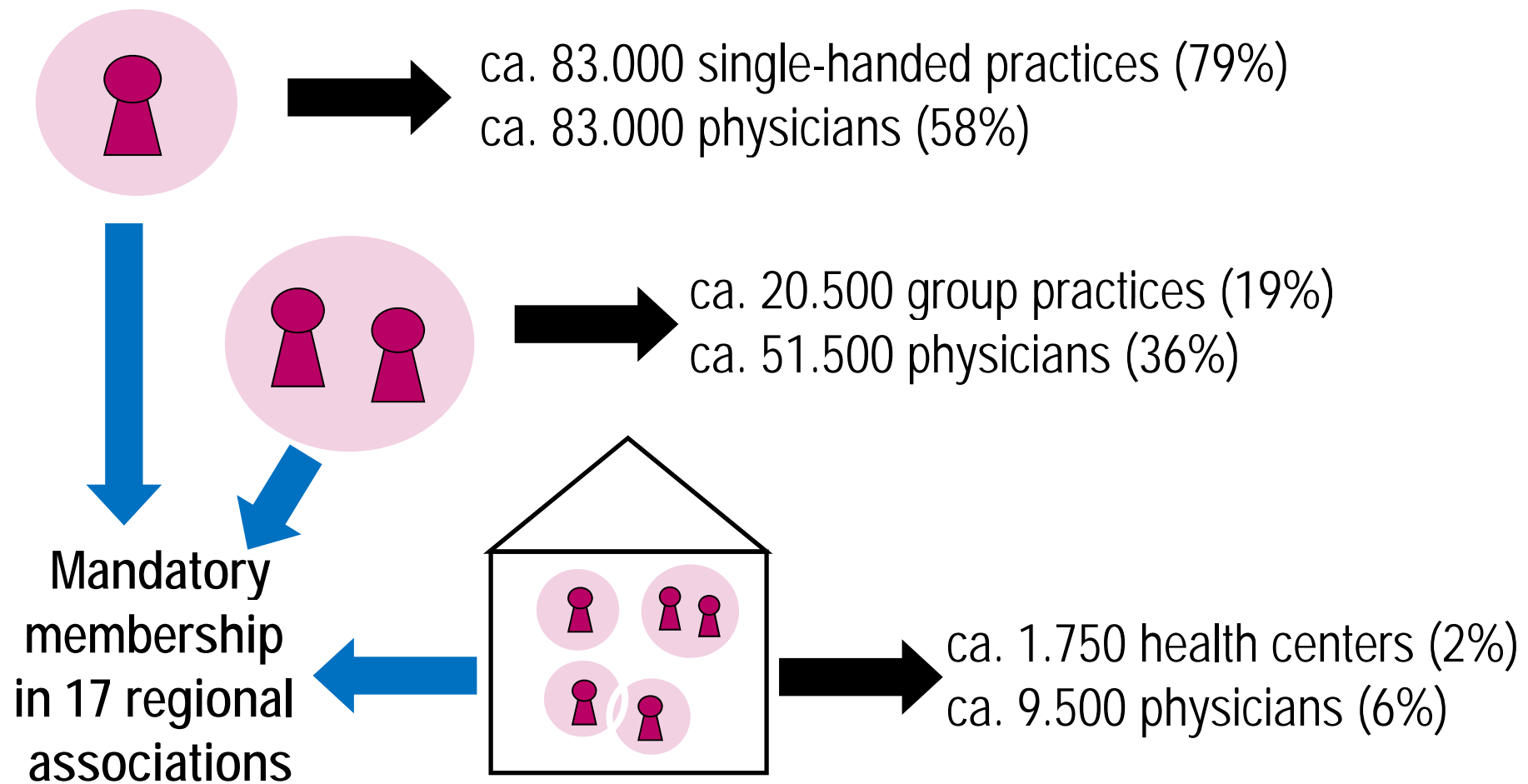
- No overall expenditure limit or cap – but since 1970s legal requirement for “income-oriented” expenditure growth.
- In 1990s main – legally required – instruments: sectoral budgets (ambulatory, dental, hospitals) and caps (pharmaceuticals), growing in line with contributory income of insured.
- Since 2001 (pharmaceuticals), 2005 (hospitals) and 2009 (ambulatory care) more flexible arrangements trying to balance need and expenditure control  
→ greater role for contract partners to negotiate volumes;

*but legislator is intervening time after time, especially in times of financial deficit.*

**Expenditure as % of GDP has been stable over long periods (unlike e.g. in NL or DK) but reunification and recession in 2009 were major forces for increases**



ca. 145.000 physicians, of which ca. 130.000 self-employed



2-step payment  
of ambulatory care physicians

Sickness fund X

Reimbursement

Sickness fund Y

Sickness fund Z

Capitation based on previous year's utilisation, increase factor, adjustments

Physicians' association (KV)

GP budget  
(ca. 1/3)

Specialists' budget  
(ca. 2/3)

Capped FFS (e.g. specialty-specific case-volume age-based caps for basic (RLV) and groups of special services (QZV))

GP 1

GP 2

GP 3

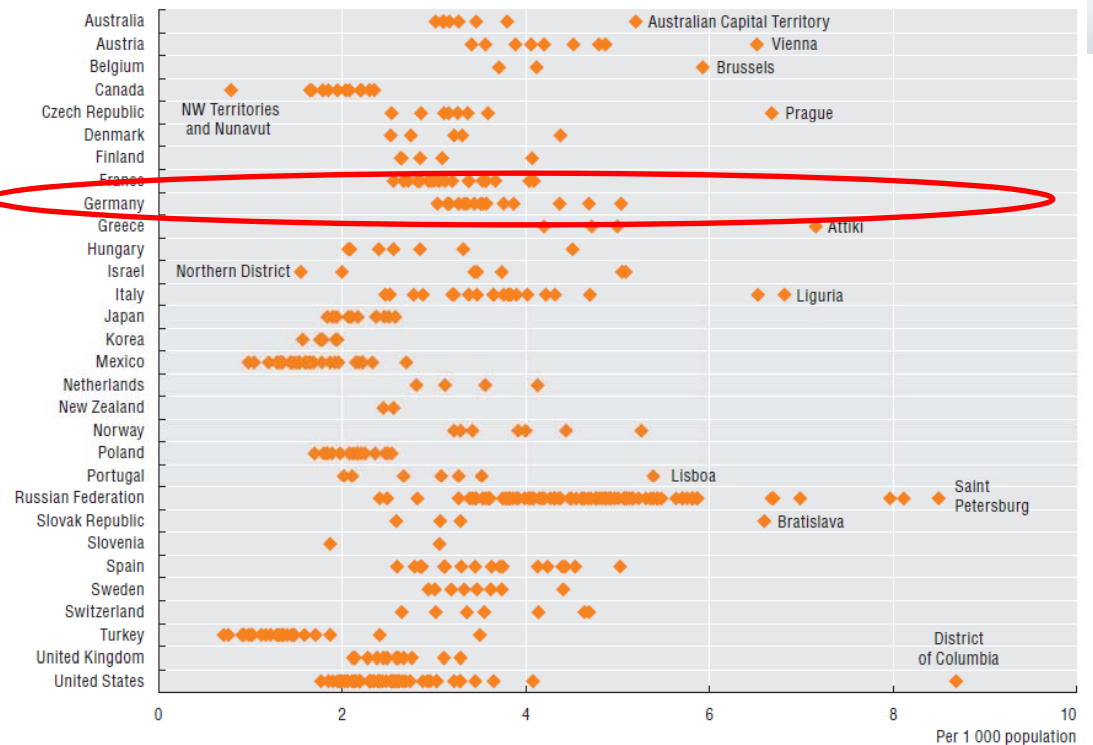
Spec1

Spec2

Spec3

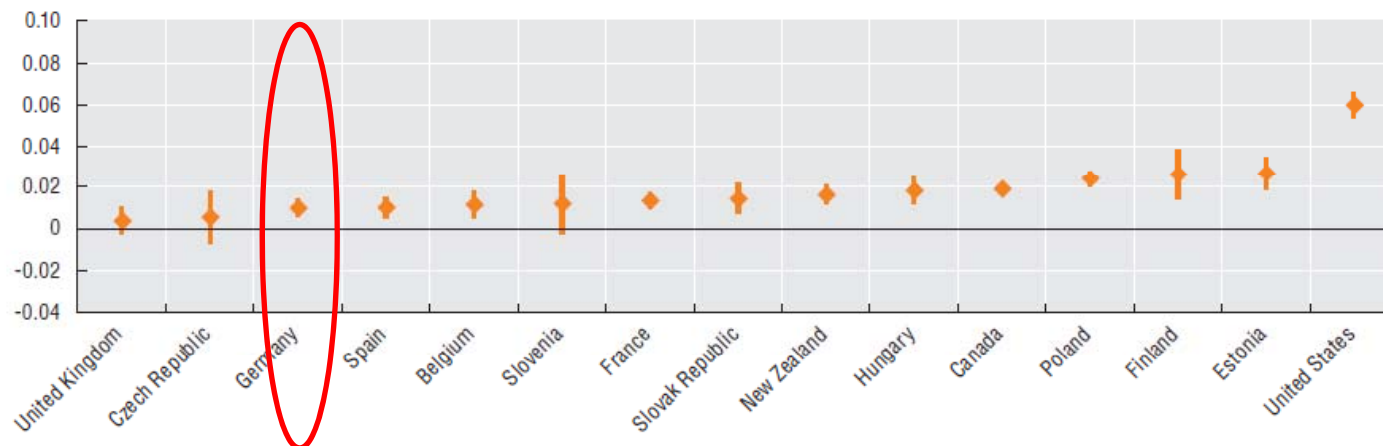
## Physician density by region and patient access by income

6.4.1 Physician density, by territorial level 2 regions, 2008 (or nearest year)



6.5.1 Horizontal inequity indices for probability of a doctor visit (with 95% confidence interval), 15 OECD countries, 2009 (or nearest year)

StatLink <http://dx.doi.org/10.1787/888932525780>



Source: OECD estimates (2011).

StatLink <http://dx.doi.org/10.1787/888932525818>

## Acute care hospital beds per 100000

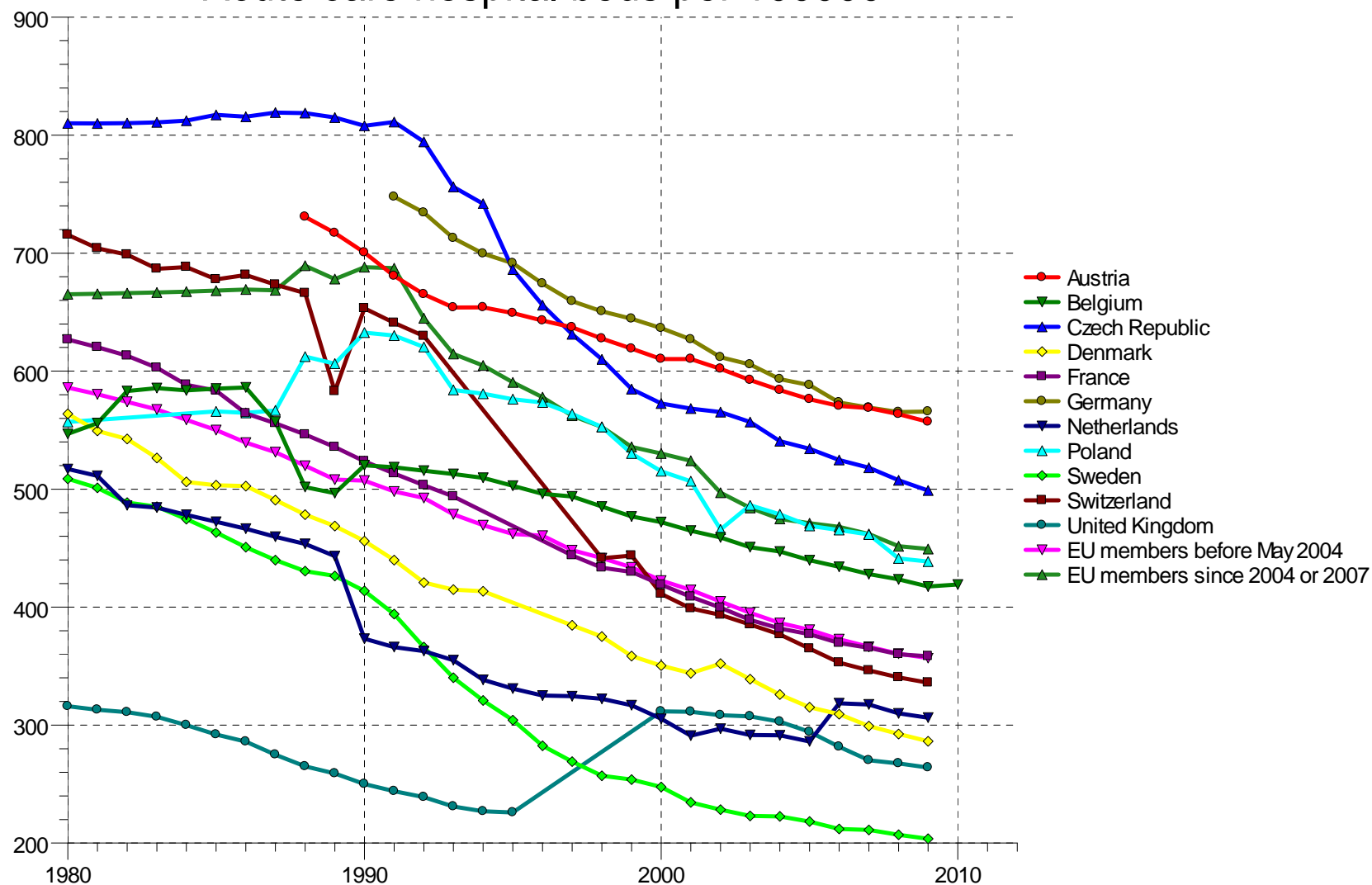
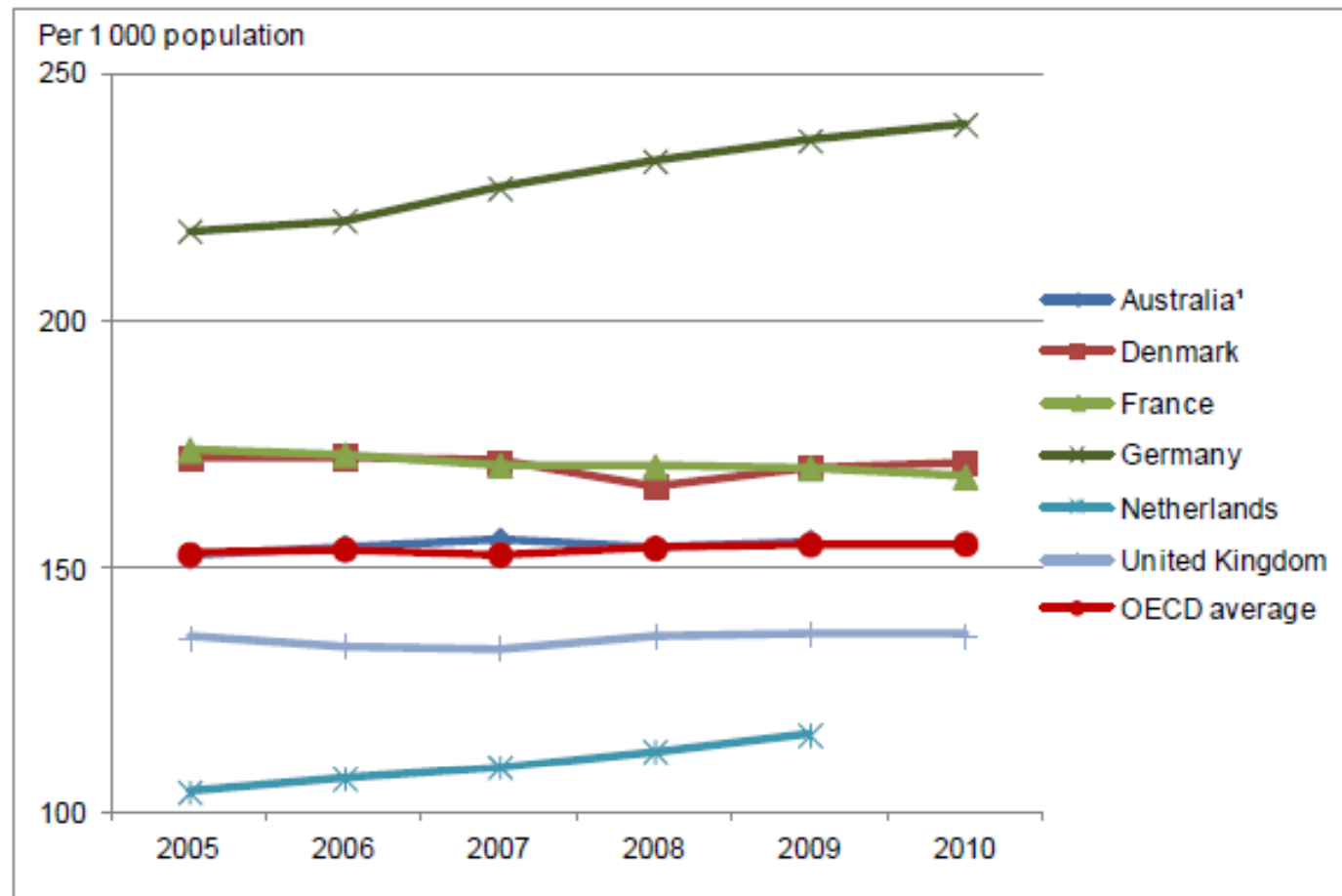


Abbildung 4: Anstieg der Krankenhausleistungen in den letzten fünf Jahren, ausgewählte OECD-Staaten



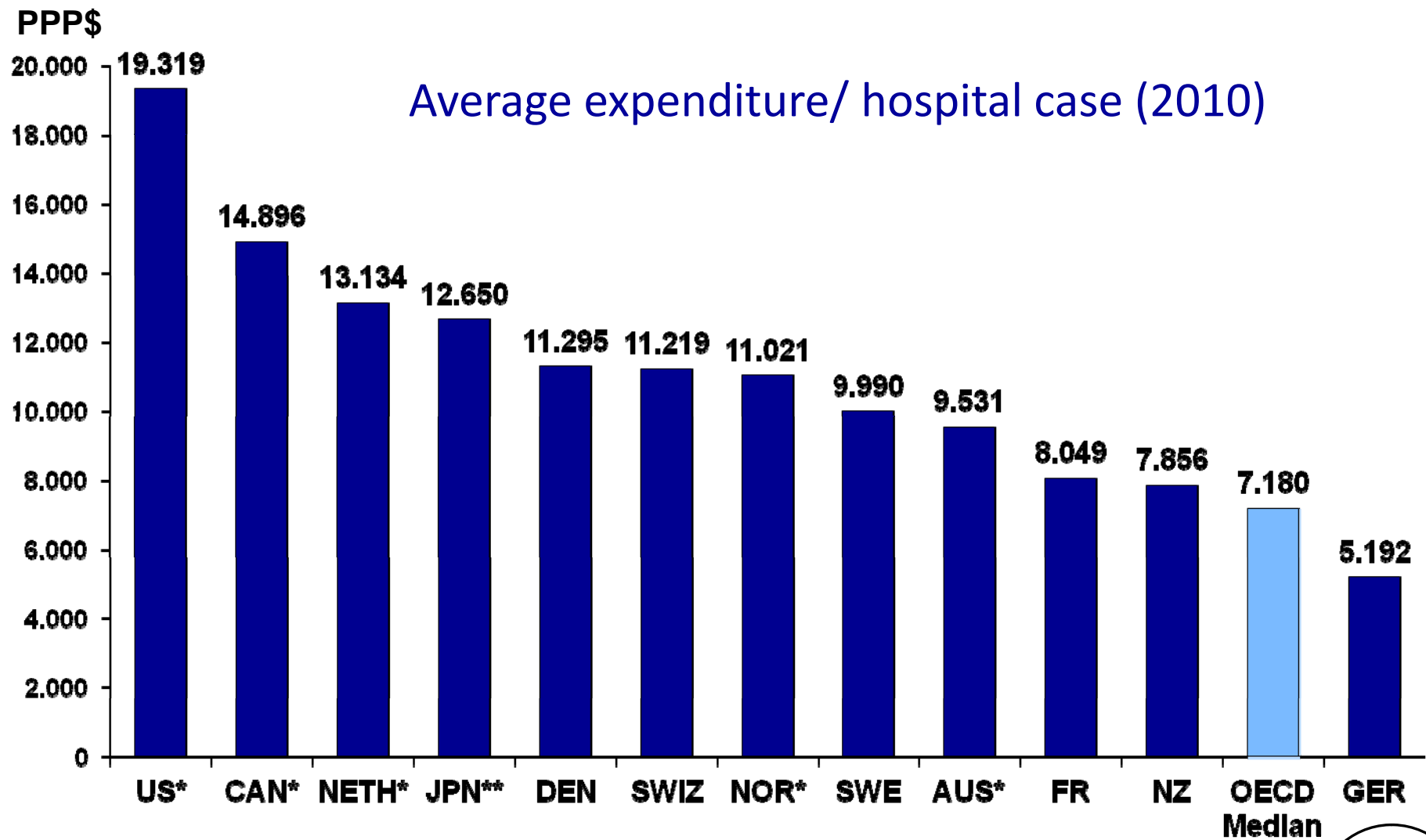
Anm. 1. Enthält keine Fallzahlen gesunder im Krankenhaus geborener Säuglinge (zwischen 3-7% aller Fallzahlen). Quelle: OECD Health Data 2012

### Operating costs (NB: investment costs are covered through taxes by the Länder)

- Sickness funds negotiating activity based DRG budgets every year with every “planned” Hospital

$$\begin{array}{|c|} \hline \text{Casemix} \\ \times \\ \text{Base rate} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Supplementary} \\ \text{fees} \\ \hline \end{array} = \begin{array}{|c|} \hline \text{Hospital budget} \\ \hline \end{array} + \begin{array}{|c|} \hline \text{Extra-} \\ \text{budgetary} \\ \text{payments (e.g.} \\ \text{for innovations)} \\ \hline \end{array}$$

- Budget over-run adjustment (hospital pays back):
  - 65 % (standard DRGs), 25 % (drugs, medical, polytrauma and burns DRGs), Negotiation for hardly predictable DRGs
- Budget under-run adjustment (hospital receives compensation):
  - 20% (standard DRGs)

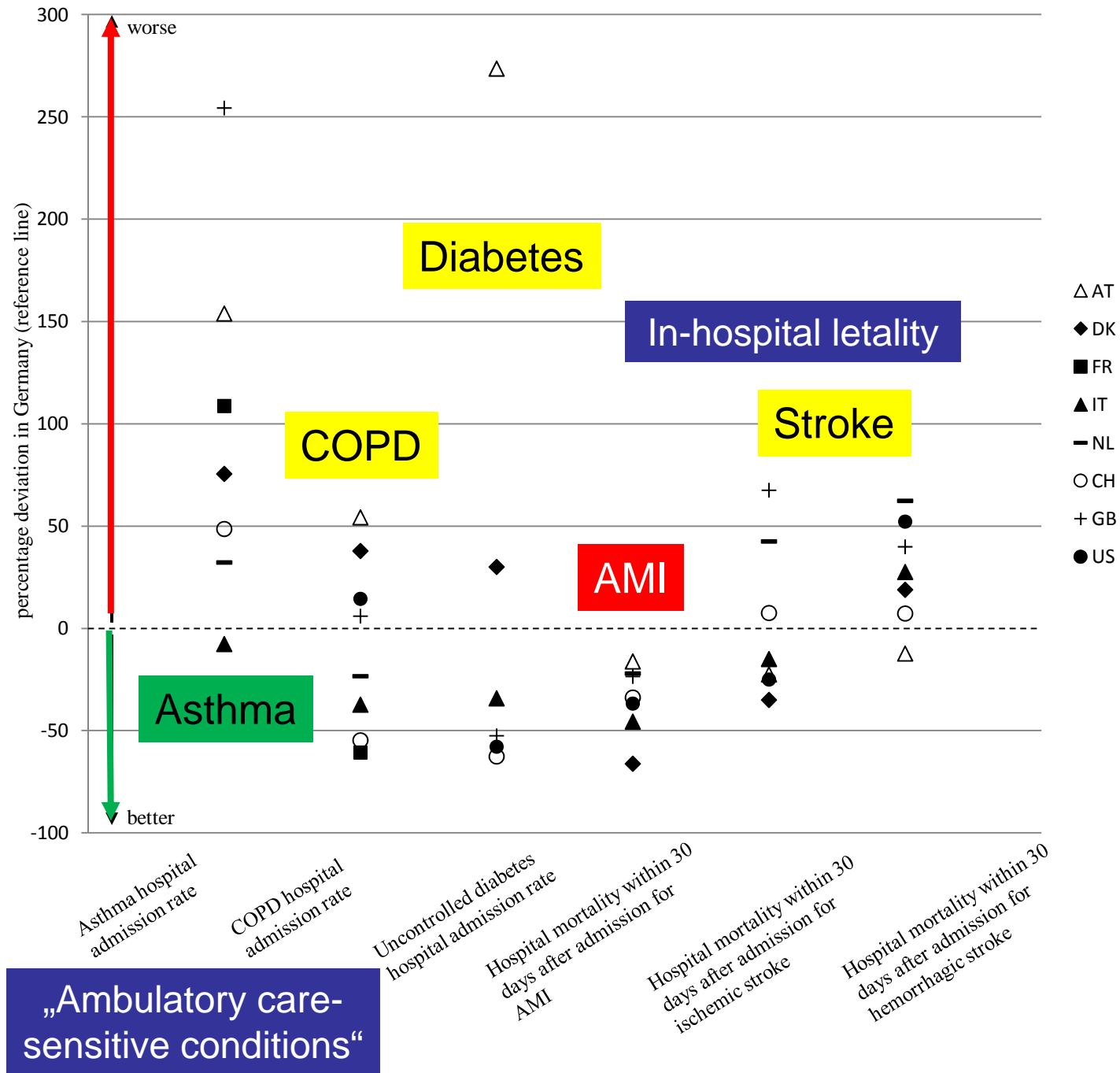


\* 2009.

\*\* 2008.

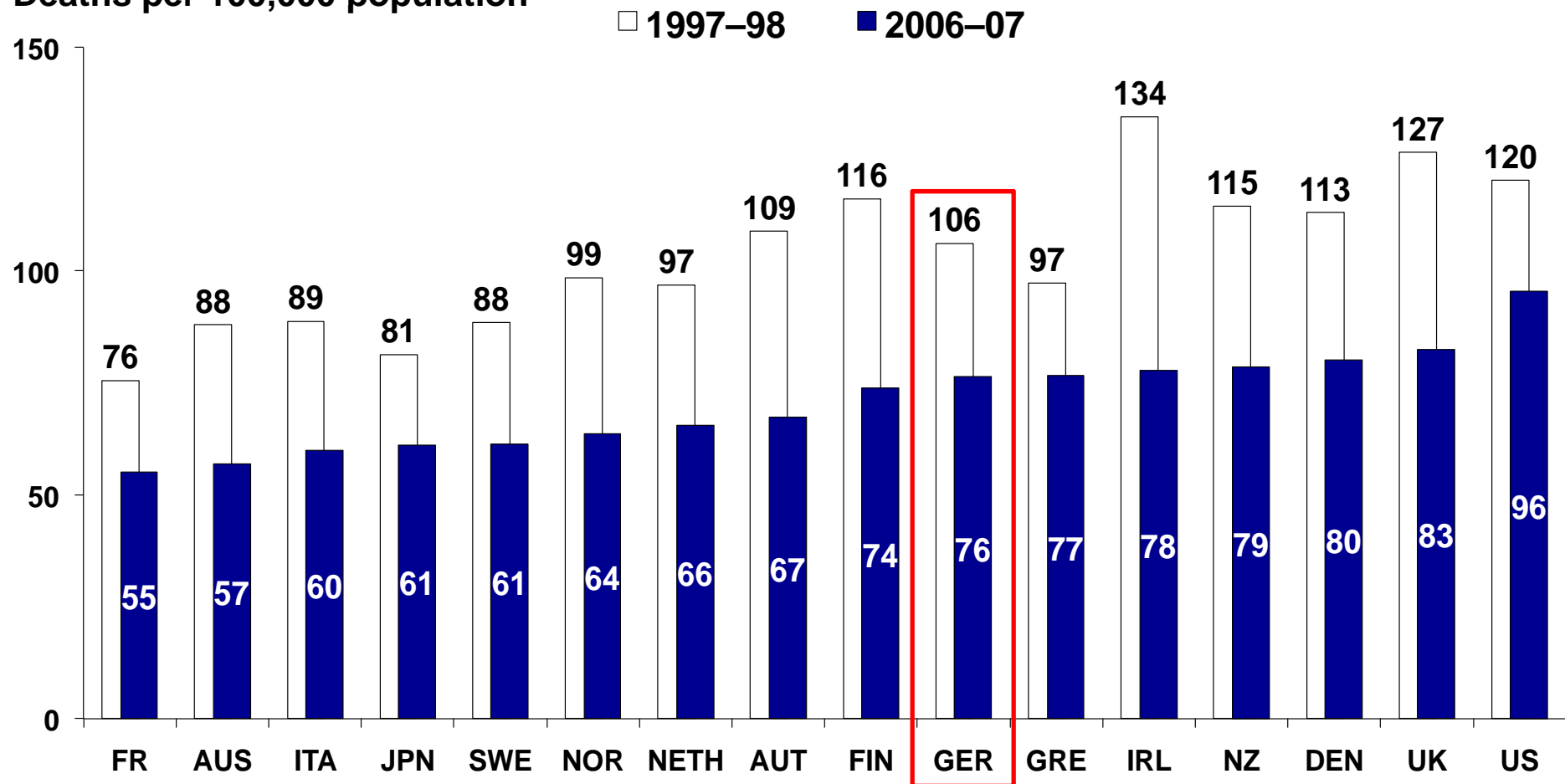
Source: OECD Health Data 2012.

## Performance assessment

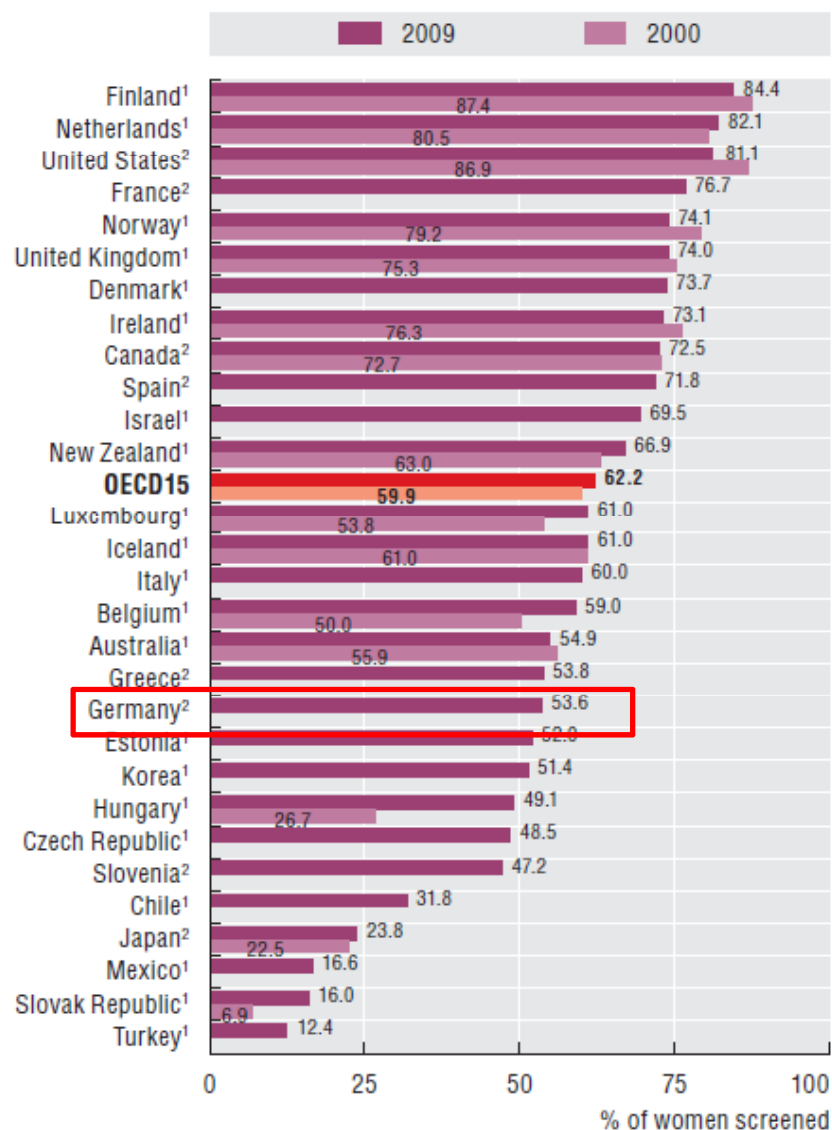


## Avoidable mortality

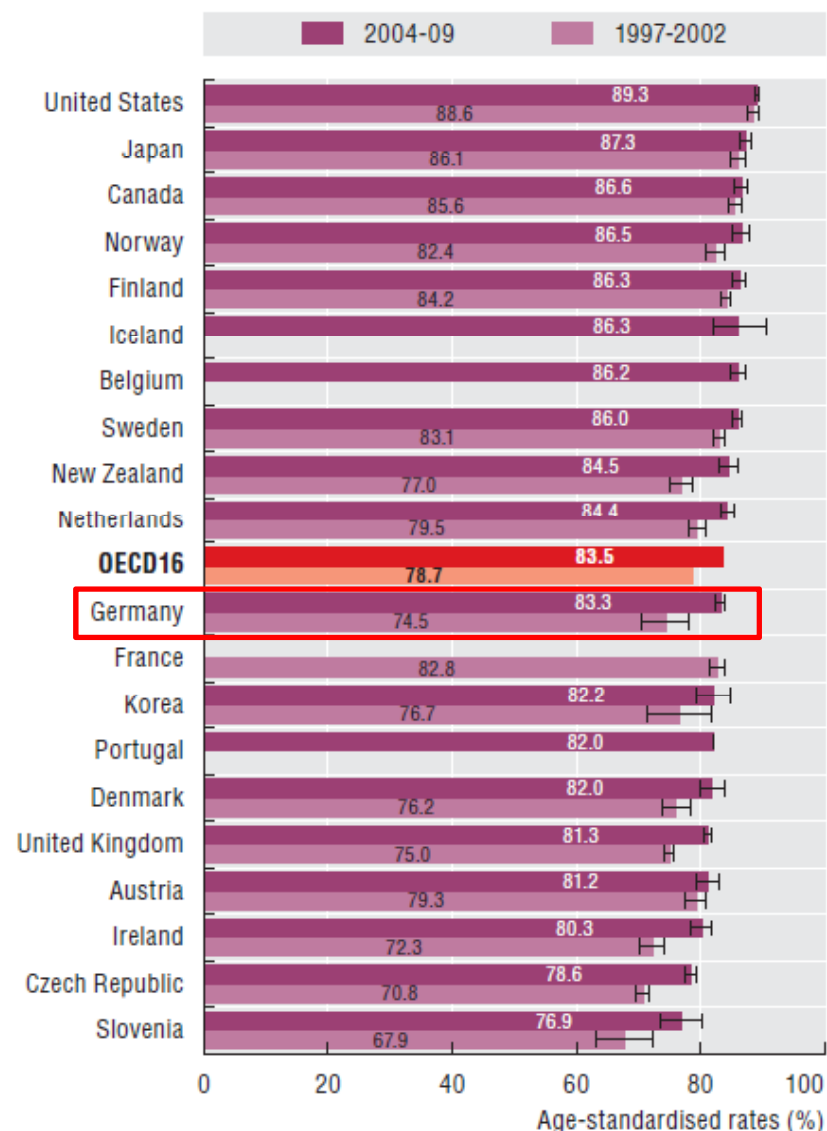
Deaths per 100,000 population\*



### 5.9.1 Mammography screening, percentage of women aged 50-69 screened, 2000 to 2009 (or nearest year)



### 5.9.2 Breast cancer five-year relative survival rate, 1997-2002 and 2004-09 (or nearest period)



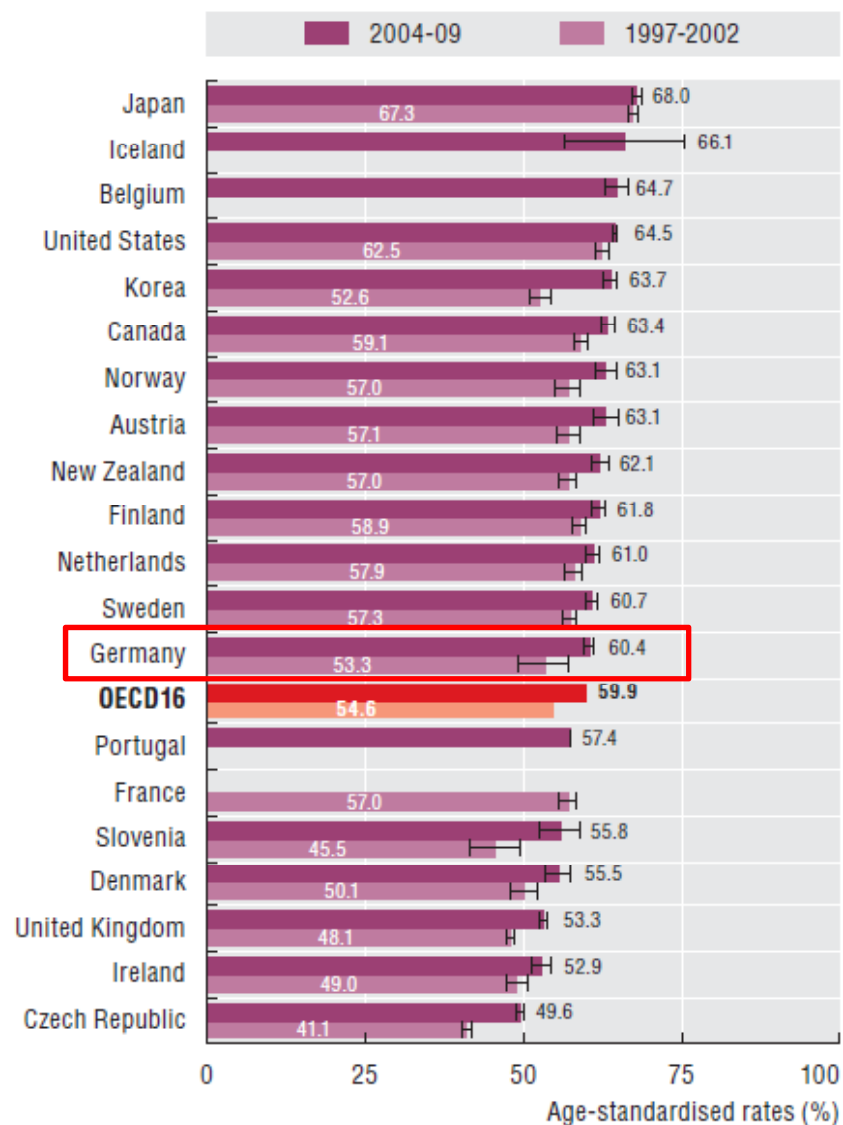
—1. Programme. 2. Survey.  
Source: OECD Health Data 2011.

Note: 95% confidence intervals are represented by I—I.  
Source: OECD Health Data 2011.

## Performance assessment

## 5.10. Survival and mortality for colorectal cancer

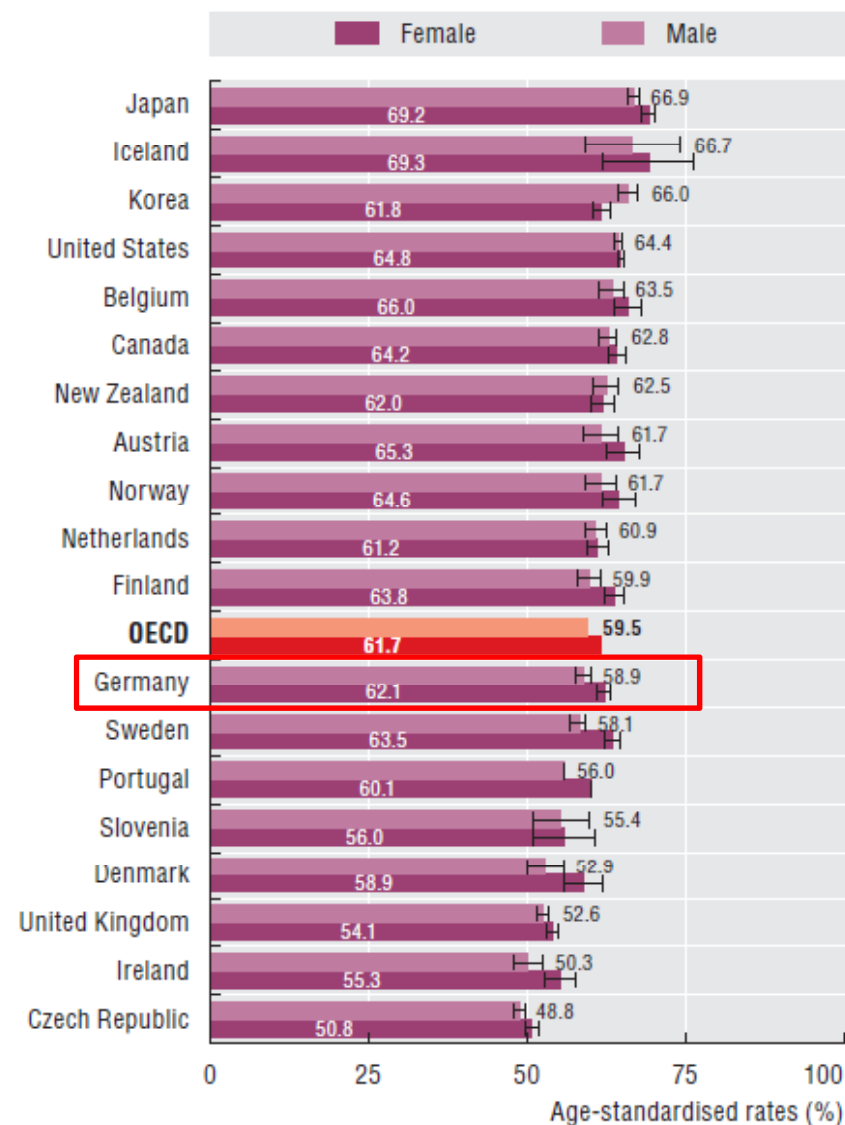
### 5.10.1 Colorectal cancer, five-year relative survival rate, 1997-2002 and 2004-09 (or nearest period)



Note: 95% confidence intervals represented by I—I.

Source: OECD Health Data 2011.

### 5.10.2 Colorectal cancer, five-year relative survival rate by sex, 2004-09 (or nearest period)

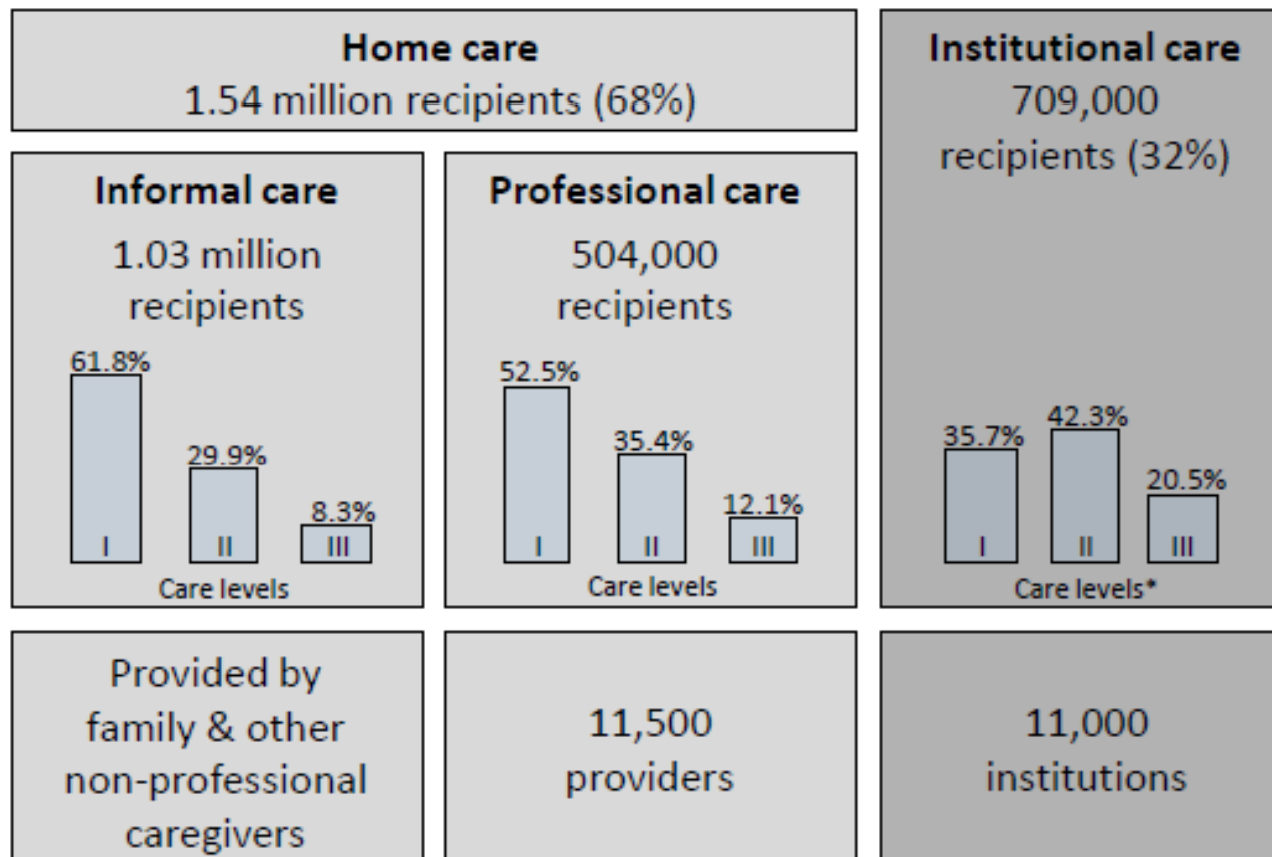


Note: 95% confidence intervals represented by I—I.

Source: OECD Health Data 2011.

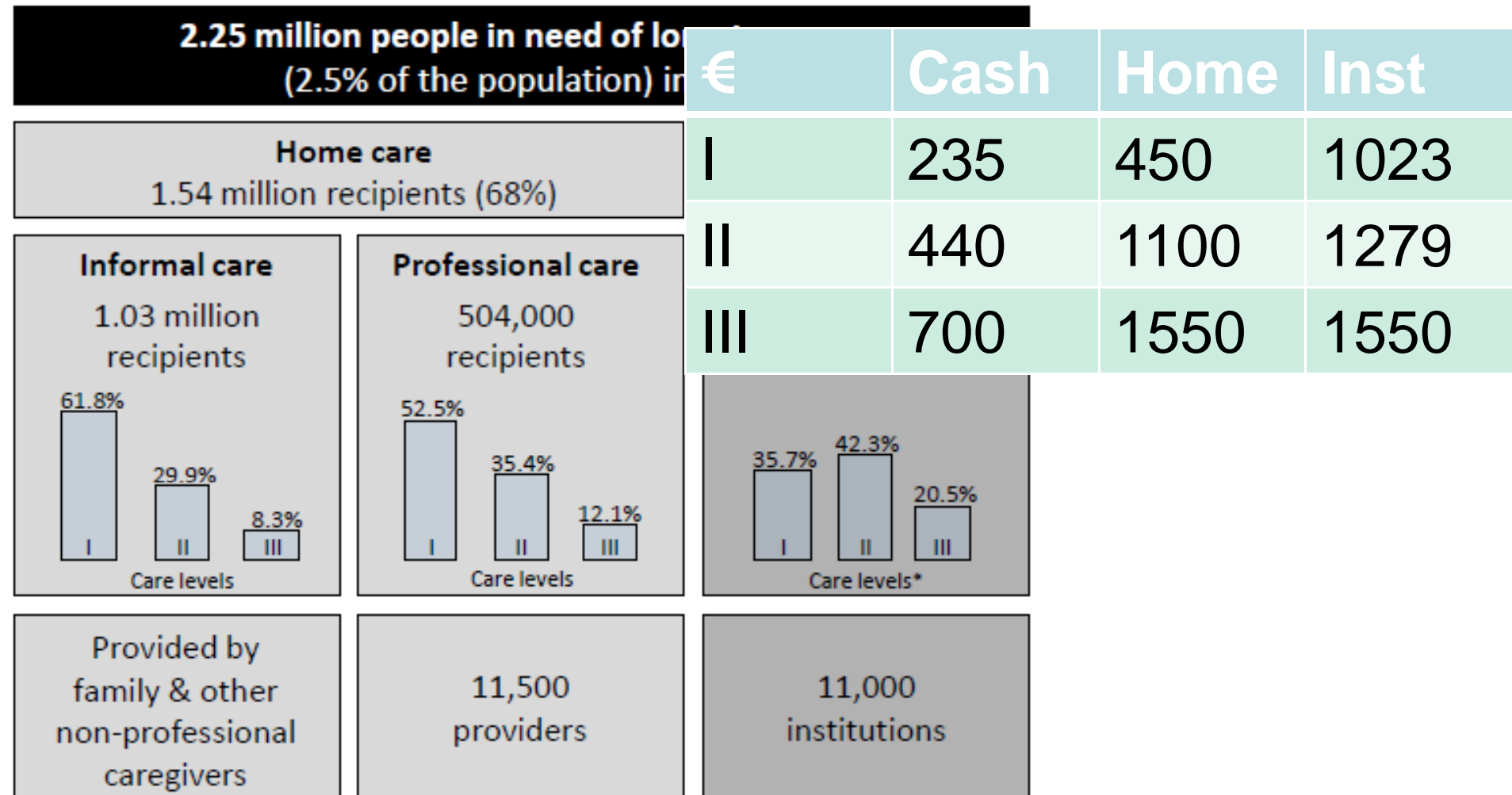
## Burden of disability and dependency

**2.25 million people in need of long-term care**  
(2.5% of the population) in 2007



\*1.5% not assigned

## Burden of disability and dependency



\*1.5% not assigned