

## LSE/NHS Confederation Seminar Series 2010

# Hospital Financing in Germany: The G-DRG System

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&

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## 1. Diagnosis Related Groups (DRGs): Introduction

- Options for hospital reimbursement
- DRGs: Patient classification + hospital payment

## 2. DRGs in Germany

- Three phases of introducing DRGs
- Current developments and options for the future

## 3. EuroDRG

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## 3. EuroDRG

# Options for hospital reimbursement (I)

Reimbursement	Strengths	Weaknesses
Global budgets	<ul style="list-style-type: none"> <li>- cost containment</li> <li>- administratively simple</li> <li>- planning security for providers</li> </ul>	<ul style="list-style-type: none"> <li>- no incentives for performance / productivity</li> <li>- no incentive <b>Undertreatment</b></li> <li>- incentives to avoid sicker patients</li> </ul>
Per diems	<ul style="list-style-type: none"> <li>- administratively simple</li> <li>- somewhat related to resource consumption of patients</li> </ul>	<ul style="list-style-type: none"> <li>- incentives to increase length of stay</li> <li>- few incentives for productivity</li> <li>- incentives to <b>Inappropriate treatment</b></li> </ul>

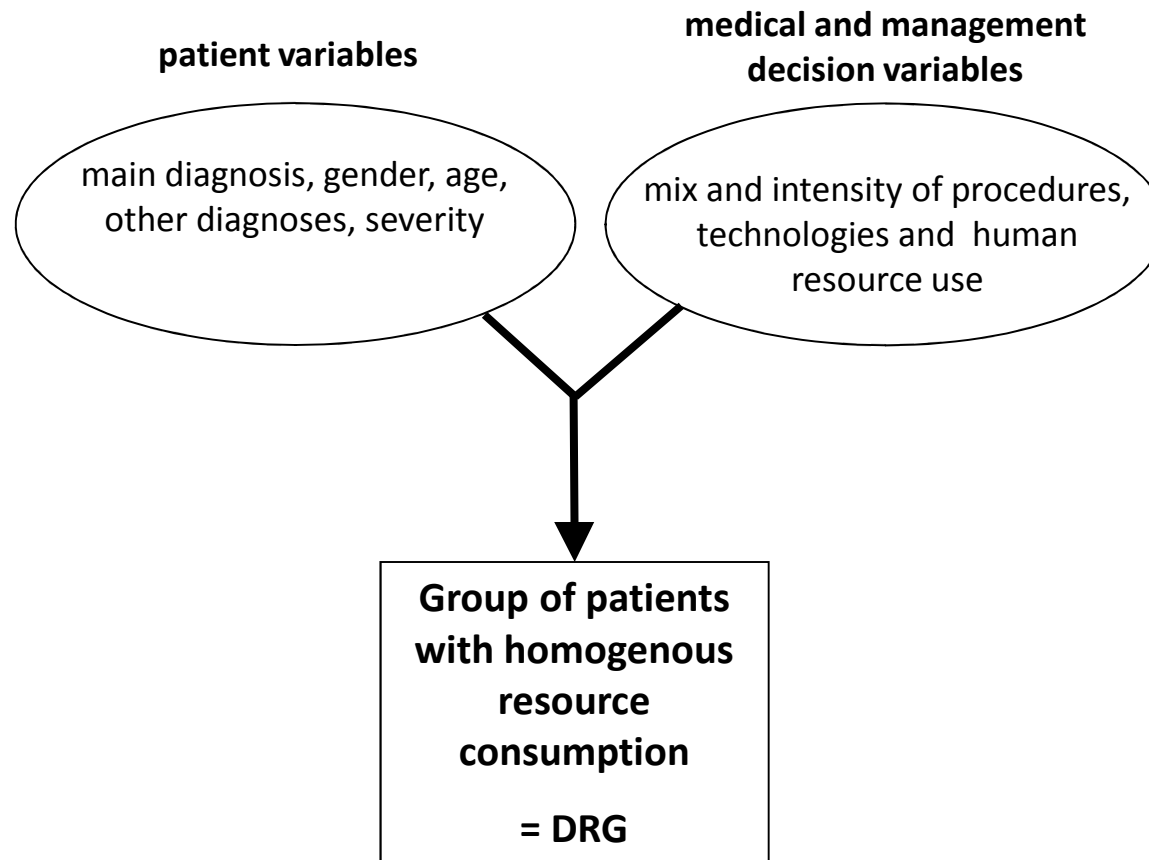
# Options for hospital reimbursement (II)

Reimbursement	Strengths	Weaknesses
Global budgets	<ul style="list-style-type: none"> <li>- cost containment</li> <li>- administratively simple</li> <li>- planning security for providers</li> </ul>	<ul style="list-style-type: none"> <li>- no incentives for performance / productivity</li> <li>- no incentives</li> <li>- incentives to</li> </ul> <p><b>Undertreatment</b></p>
Per diems	<ul style="list-style-type: none"> <li>- administratively simple</li> <li>- somewhat related to resource consumption of patients</li> </ul>	<ul style="list-style-type: none"> <li>- incentives to increase length of stay</li> <li>- usually not ad</li> <li>- incentives to</li> </ul> <p><b>Inappropriate treatment</b></p>
Fee-for-service	<ul style="list-style-type: none"> <li>- incentives to increase provision of services</li> <li>- incentives to provide all (necessary) care for all patients</li> <li>- allows incentivising specific services</li> </ul>	<ul style="list-style-type: none"> <li>- incentives for overtreatment</li> <li>- no incentives for efficiency</li> <li>- cost inflation</li> <li>- administratively complex</li> </ul> <p><b>Overtreatment</b></p>

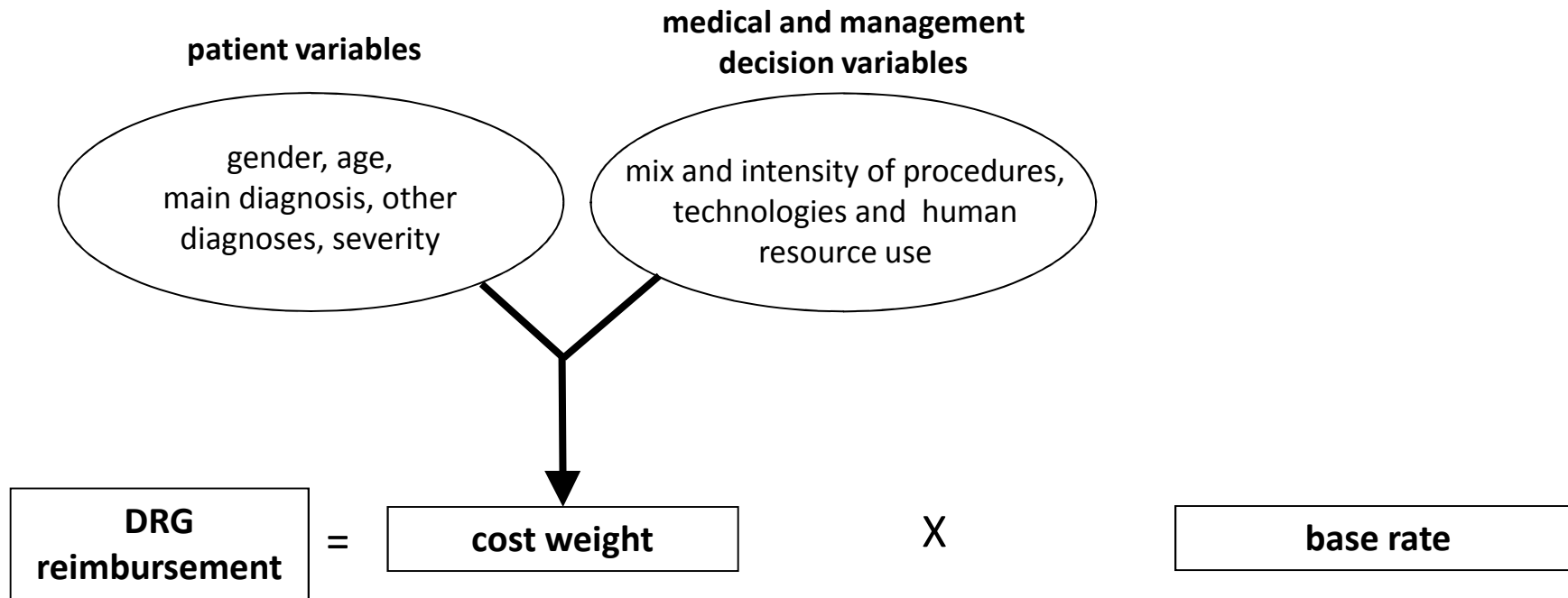
# Options for hospital reimbursement (III)

Reimbursement	Strengths	Weaknesses
Global budgets	<ul style="list-style-type: none"> <li>- cost containment</li> <li>- administratively simple</li> <li>- planning security for providers</li> </ul>	<ul style="list-style-type: none"> <li>- no incentives for performance / productivity</li> <li>- no incentives for efficiency</li> <li>- incentives to avoid patients</li> </ul> <p><b>Undertreatment</b></p>
Per diems	<ul style="list-style-type: none"> <li>- administratively simple</li> <li>- somewhat related to resource consumption of patients</li> </ul>	<ul style="list-style-type: none"> <li>- incentives to increase length of stay</li> <li>- usually not adapted to patient needs</li> <li>- incentives to avoid patients</li> </ul> <p><b>Inappropriate treatment</b></p>
DRGs	<ul style="list-style-type: none"> <li>- reimbursement is related to performance</li> <li>- incentives to increase efficiency</li> </ul>	<ul style="list-style-type: none"> <li>- administratively complex</li> <li>- incentives to avoid sicker patients</li> <li>- undertreatment of patients possible</li> <li>- up/wrong-coding, gaming</li> <li>- tendency to increase admissions</li> </ul>
Fee-for-service	<ul style="list-style-type: none"> <li>- incentives to increase provision of services</li> <li>- incentives to provide all (necessary) care for all patients</li> <li>- allows incentivising specific services</li> </ul>	<ul style="list-style-type: none"> <li>- incentives for overtreatment</li> <li>- no incentives for efficiency</li> <li>- cost inflation</li> <li>- administratively complex</li> </ul> <p><b>Overtreatment</b></p>

# DRGs: 1st step = patient classification / grouping

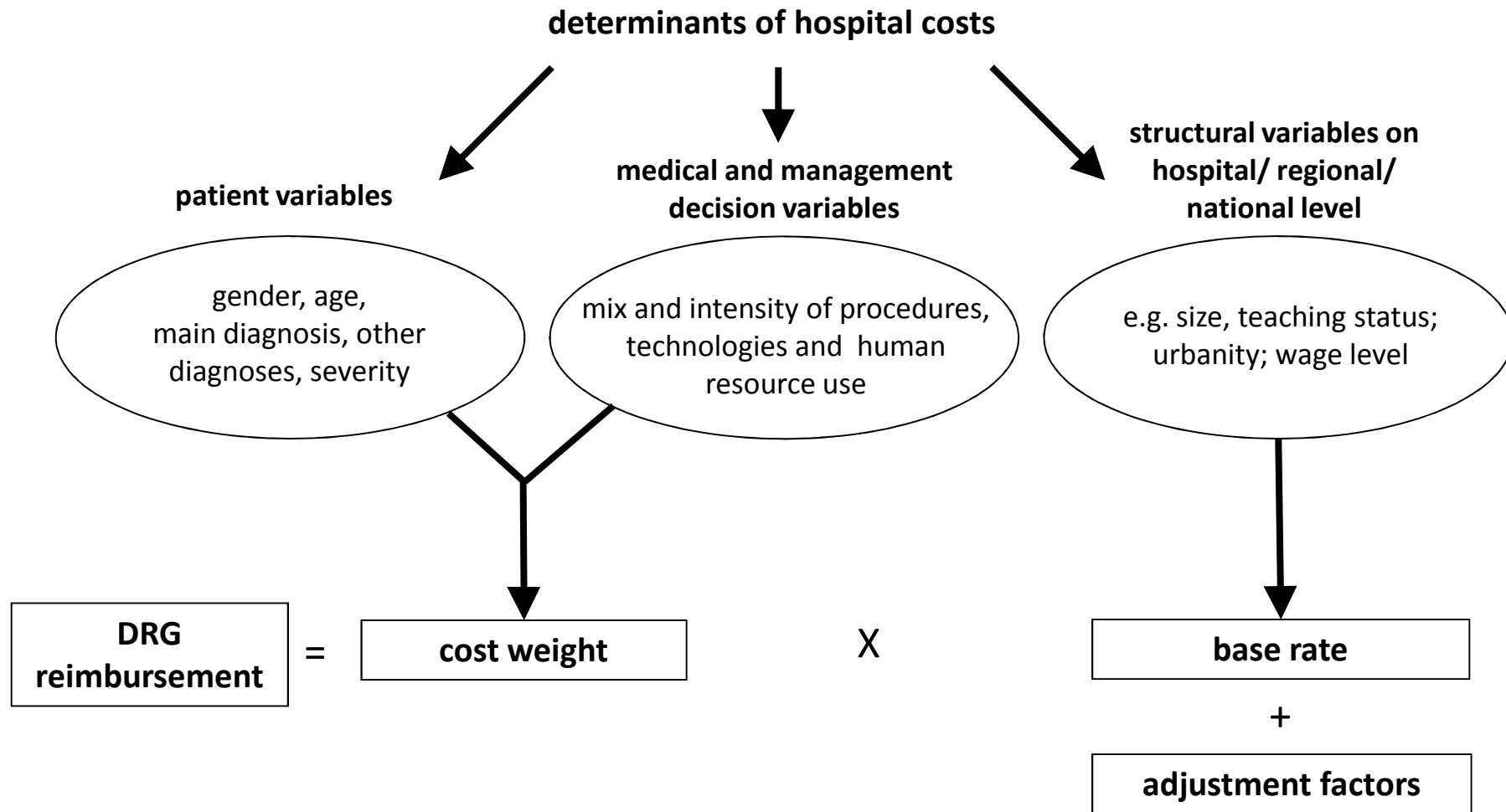


# DRGs 2nd step = Price setting (I)





# DRGs 2nd step = Price setting (II)



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- Options for hospital reimbursement
- DRGs: Patient classification + hospital payment

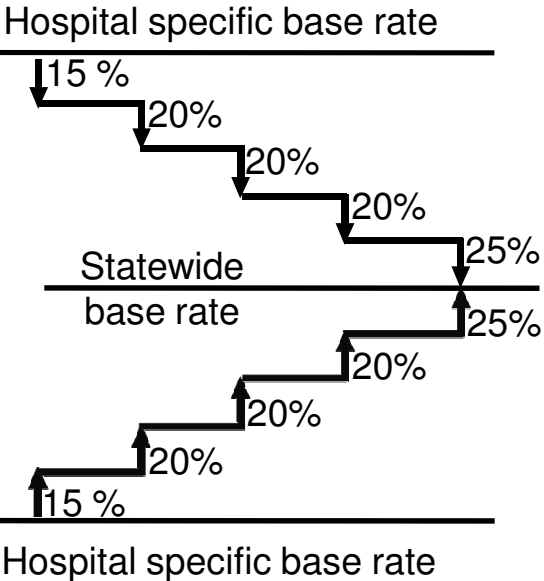
## 2. DRGs in Germany

- Three phases of introducing DRGs
- Current developments and options for the future

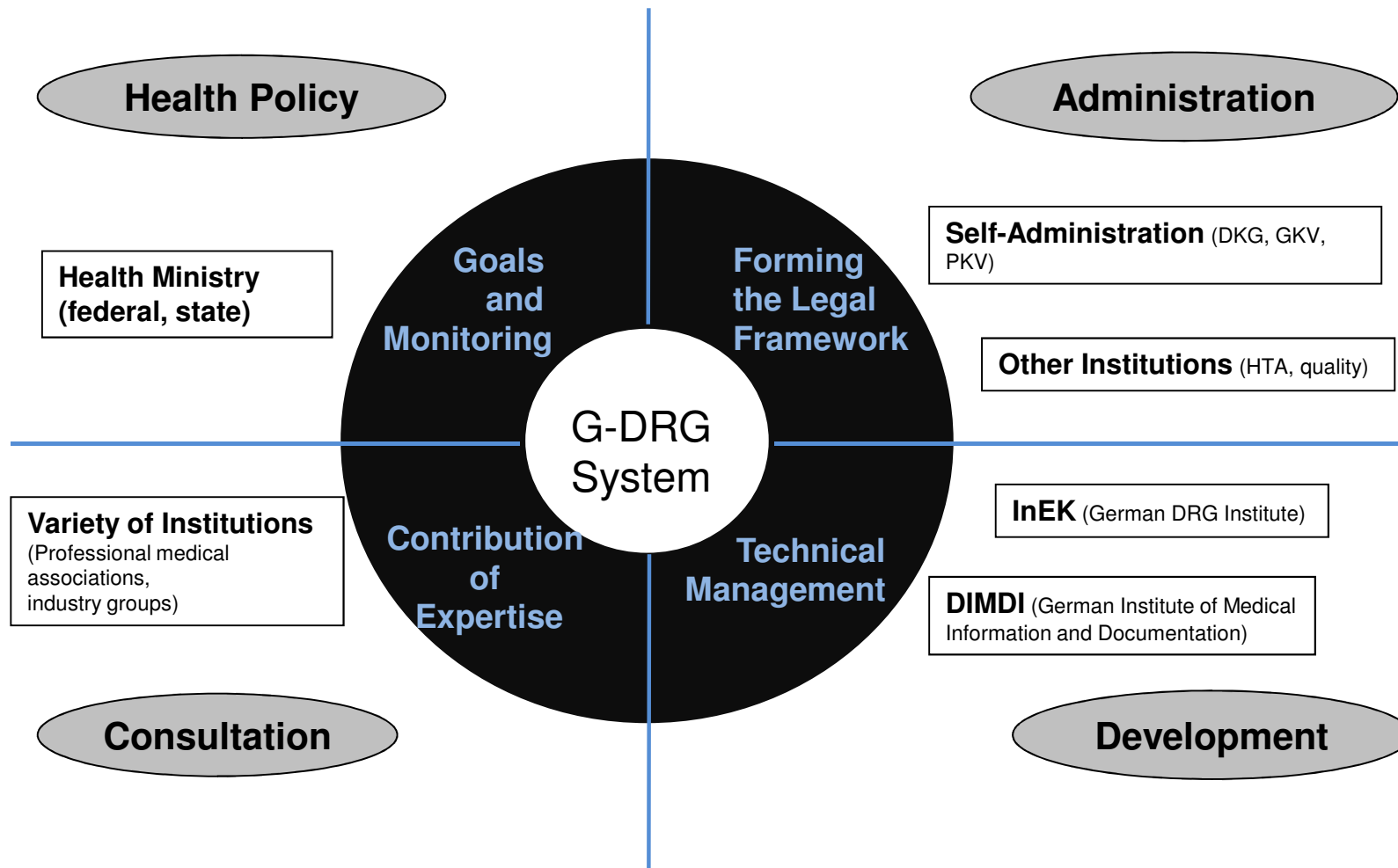
## 3. EuroDRG

- Key figures (2008):
  - 2100 Hospitals (1780 reimbursed through DRGs)
  - 17 mio. inpatient cases
  - 57 bill. € financing sum
  
- Dualistic way of hospital financing
  - Sickness funds pay running costs
  - States pay investment costs

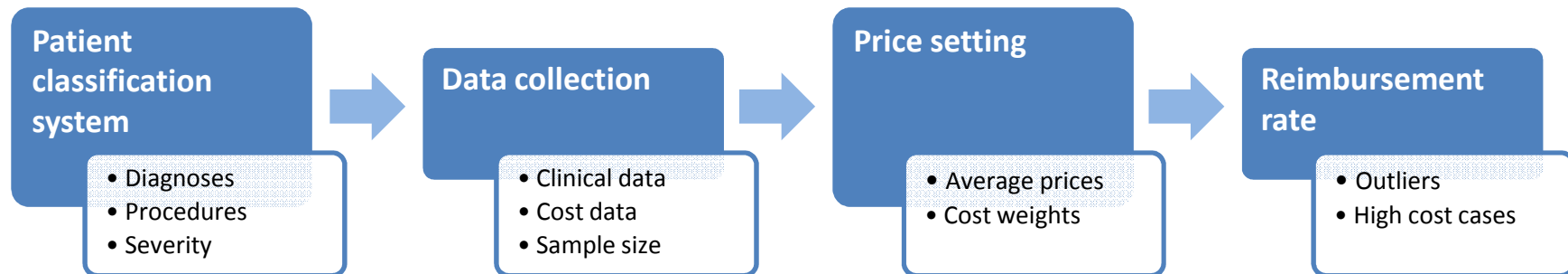
# DRGs in Germany

	2000-2002	2003 - 2004	2005 - 2009	2010 - 2014
<b>1) Phase of preparation</b>	<b>2) Budget-neutral phase</b>		<b>3) Phase of convergence to state-wide base rates</b>	
	<p>Historical Budget (2003)</p> <p>↓</p> <p>Transformation</p> <p>↓</p> <p>DRG-Budget (2004)</p>			

# 1) Phase of preparation: Responsibilities



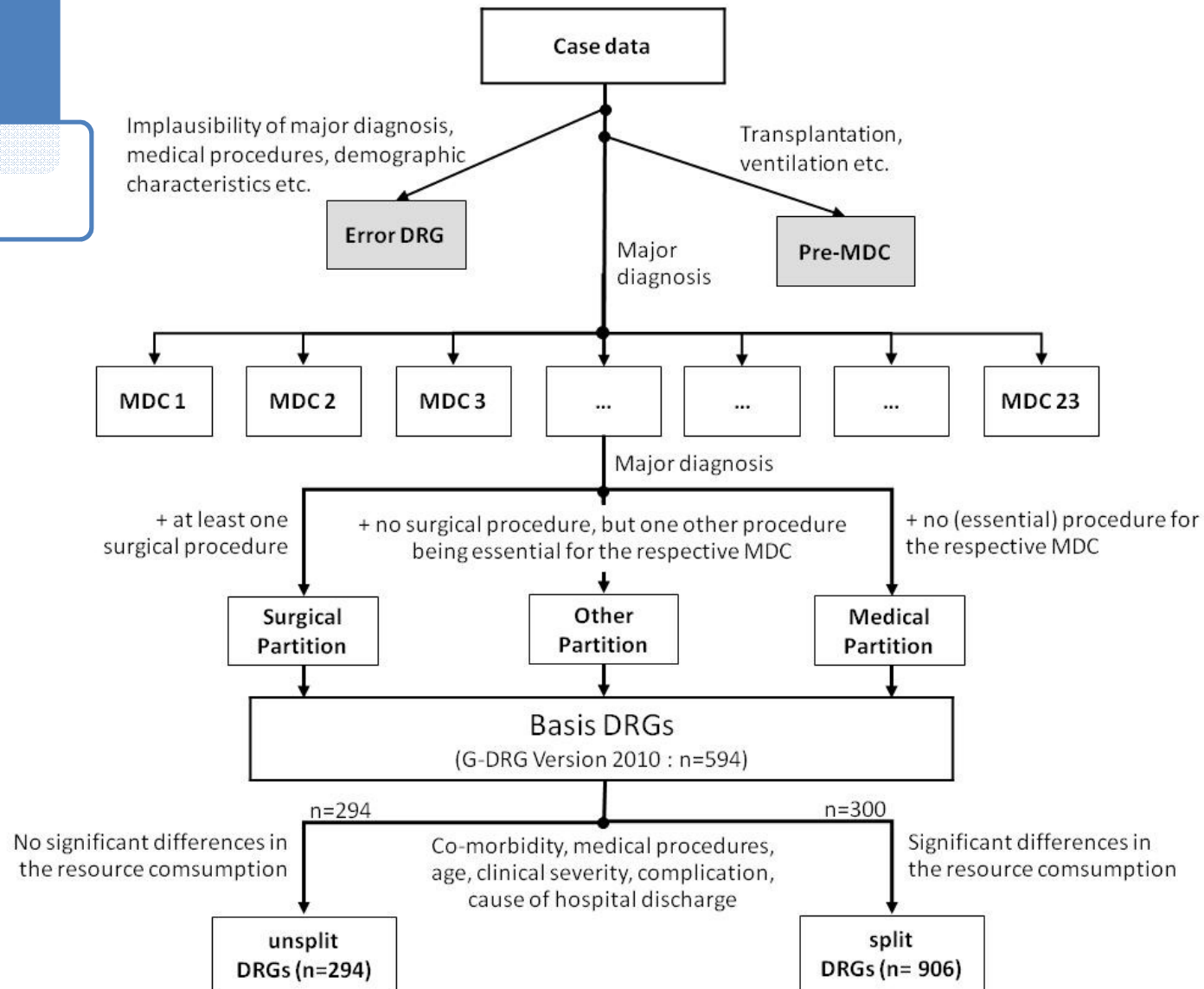
# 1) Phase of preparation: How to construct a system?



# 1) Phase of preparation: Patient Classification

## Patient classification system

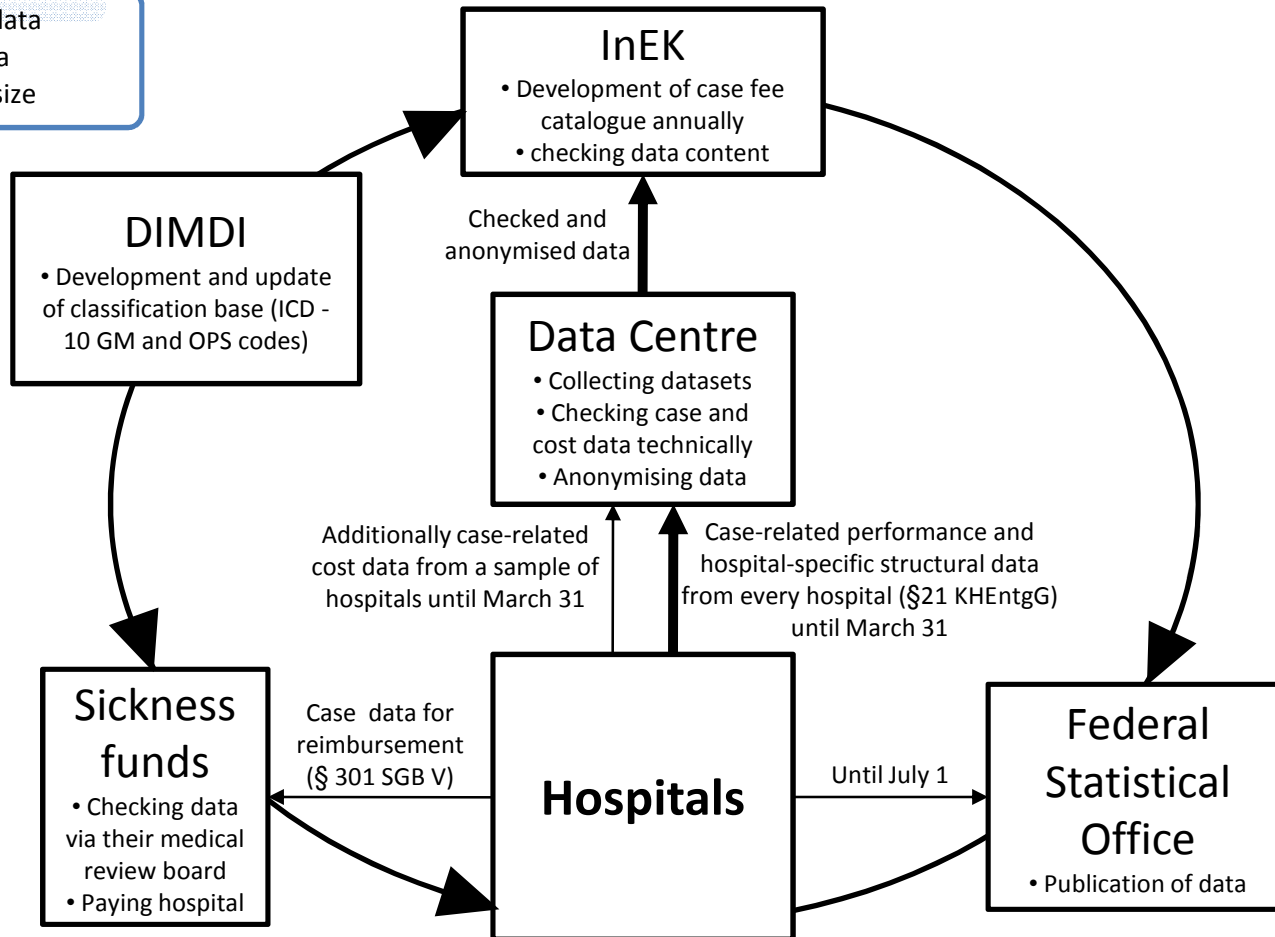
- Diagnoses
- Procedures
- Severity



# 1) Phase of preparation: Data collection

## Data collection

- Clinical data
- Cost data
- Sample size





# 1) Phase of preparation: Price setting mechanism

Price setting

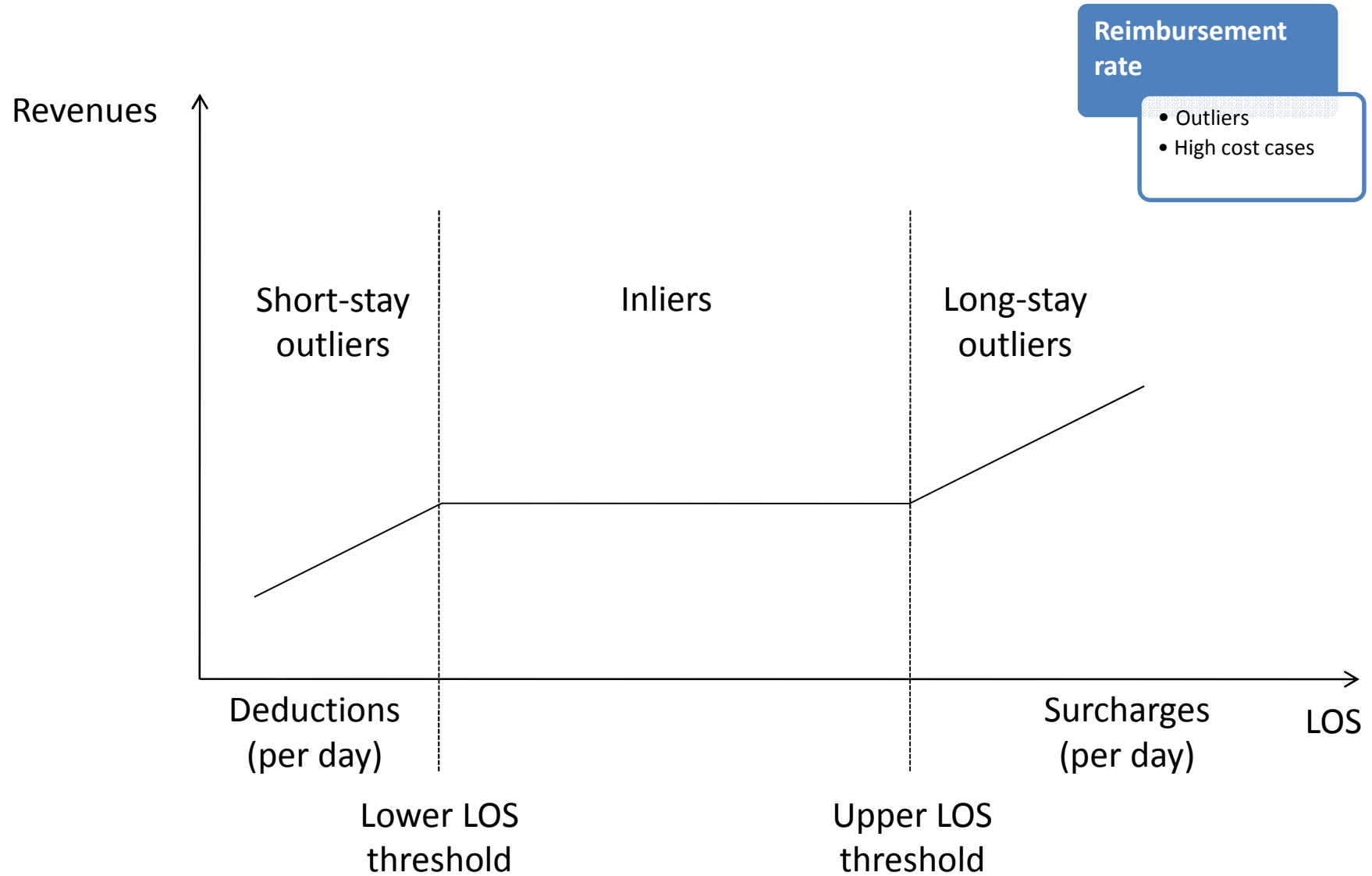
- Average prices
- Cost weights

- Calculation of cost weights: based on average costs of cases
- Data sample:

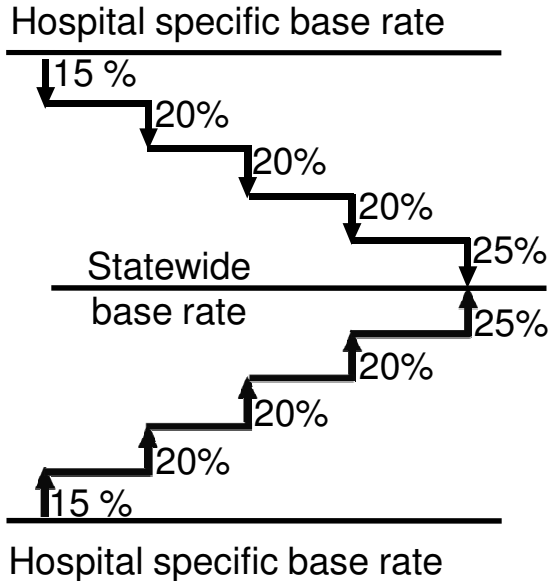
Year	2003	2005	2007	2009	2010
<b>Hospitals participating in cost data collection</b>	<b>125</b>	<b>148</b>	<b>263</b>	<b>251</b>	<b>253</b>
- excluded for data quality	9	0	38	33	28
- actual	116	148	225	218	225
- included university hospitals	0	10	10	10	10
- number of cases available for calculation	633,577	2,909,784	4,239,365	4,377,021	4,539,763
- number of cases used for calculation after data checks	494,325	2,283,874	2,863,115	3,075,378	3,257,497

→ Cost weight of each DRG = Average costs of DRG inliers / Reference Value

# 1) Phase of preparation: Reimbursement



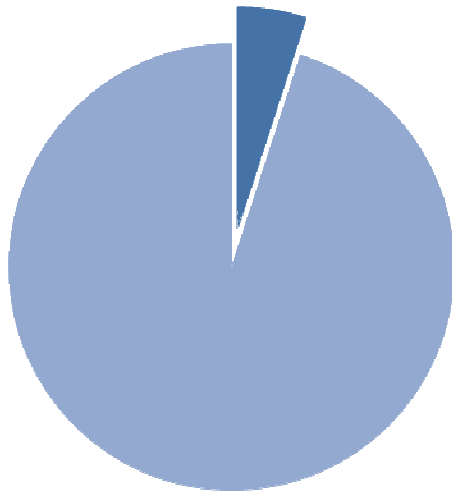
# DRGs in Germany

	2000-2002	2003 - 2004	2005 - 2009	2010 - 2014
<b>1) Phase of preparation</b>	<b>2) Budget-neutral phase</b>		<b>3) Phase of convergence to state-wide base rates</b>	<b>4) Current developments and options for the future</b>
	<p>Historical Budget (2003)</p> <p style="text-align: center;">↓</p> <p>Transformation</p> <p style="text-align: center;">↓</p> <p>DRG-Budget (2004)</p>		 <p>Hospital specific base rate</p> <p>↓ 15 %</p> <p>↓ 20%</p> <p>↓ 20%</p> <p>↓ 20%</p> <p>↓ 25%</p> <p>Statewide base rate</p> <p>↑ 15 %</p> <p>↑ 20%</p> <p>↑ 20%</p> <p>↑ 25%</p> <p>Hospital specific base rate</p>	<ul style="list-style-type: none"> <li>• Nationwide base rate</li> <li>• Dual Financing or Monistic</li> <li>• Introduction of DRG-like reimbursement for psychiatric hospitals</li> <li>• Selective or uniform negotiations</li> <li>• Quality Assurance (adjustments)</li> </ul>

## 2) Budget neutral phase: Transfer to DRG budgets

Hospital Budget 2002

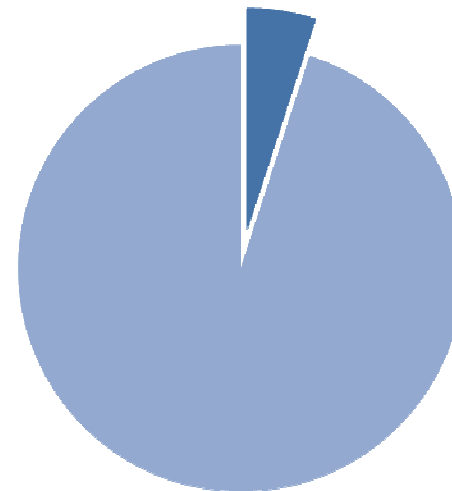
**100 Million Euros**



Reimbursement unit = per diem

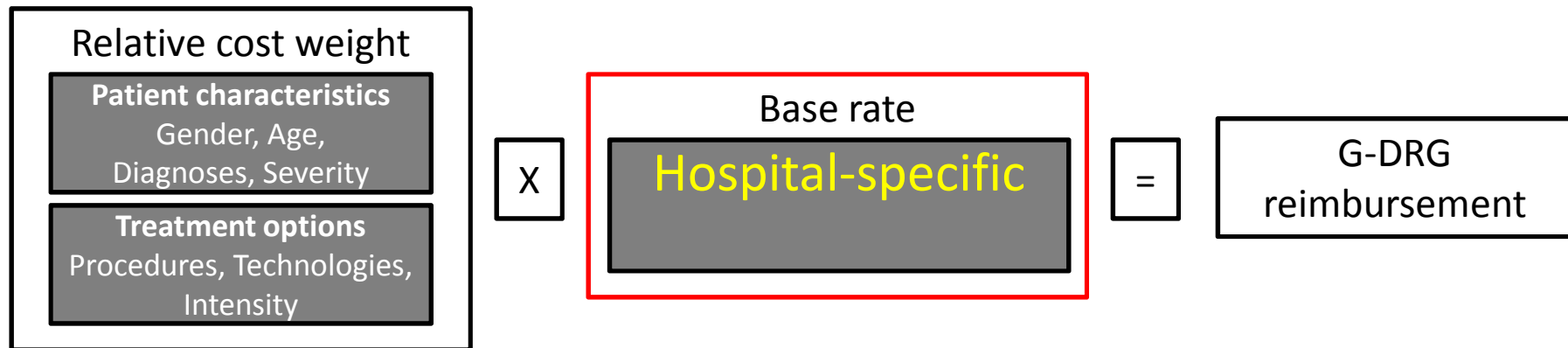
Hospital Budget 2004

**100 Million Euros**

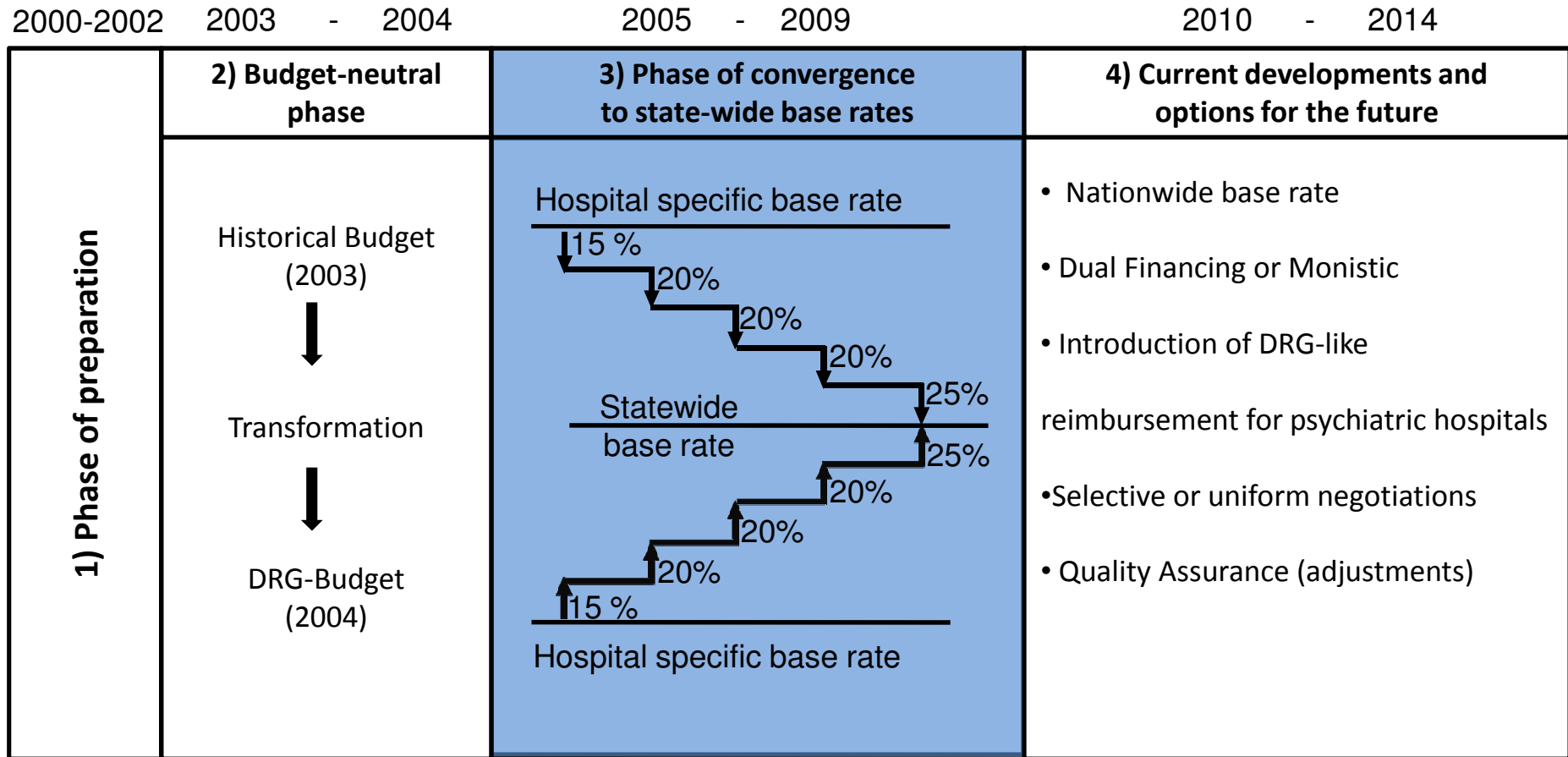


Reimbursement unit = case (DRG)

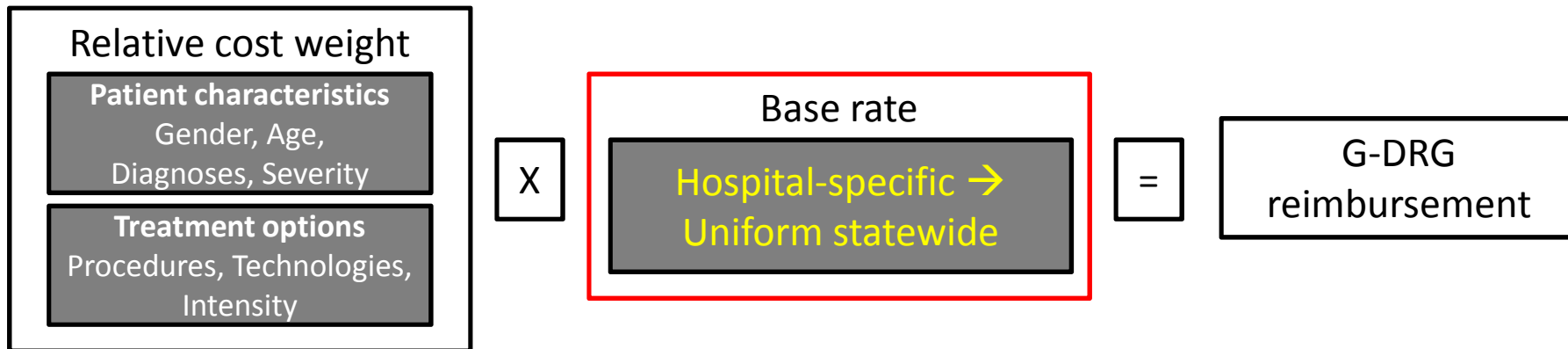
## 2) Budget neutral phase: Hospital-specific base rate



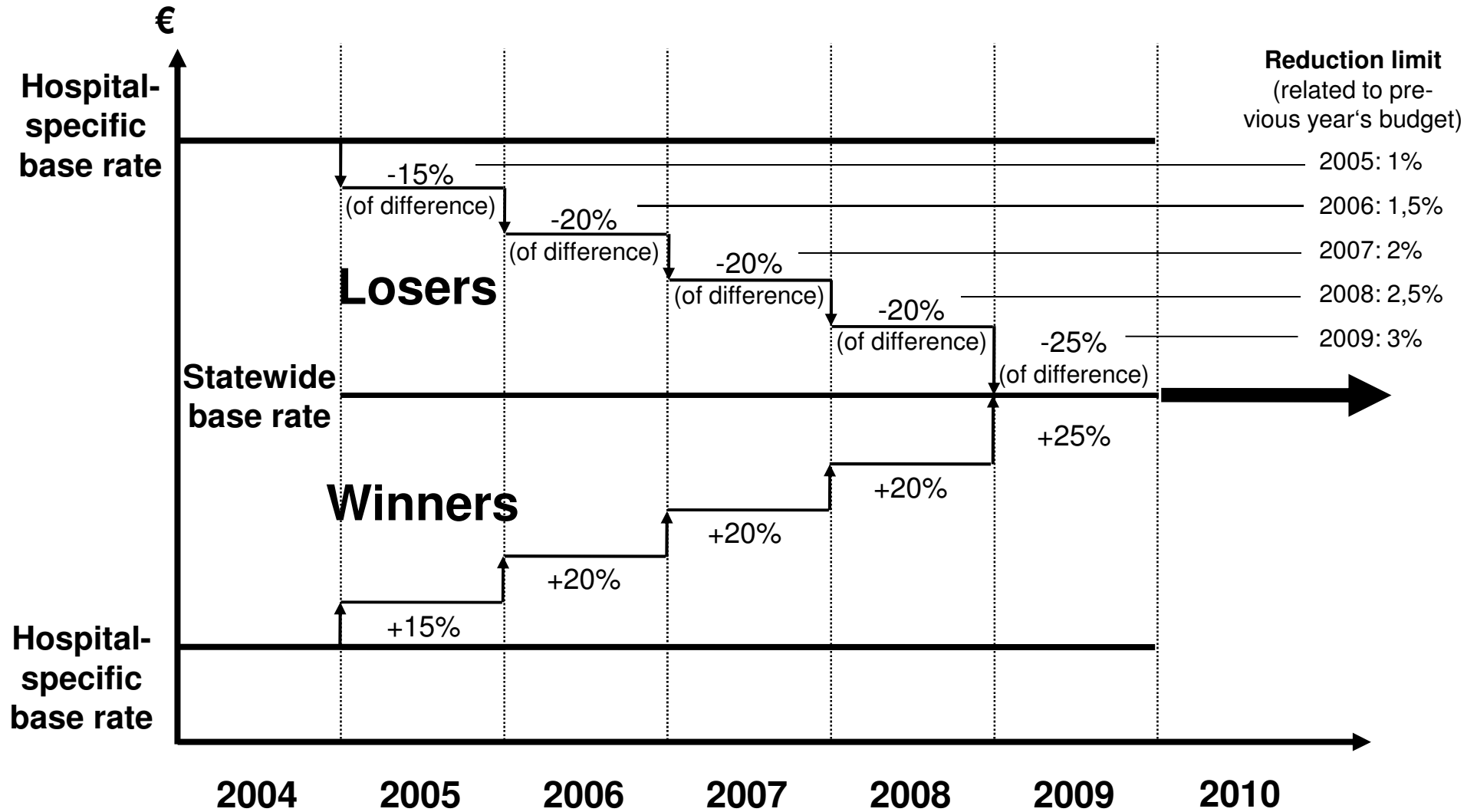
# DRGs in Germany



### 3) Phase of convergence: Adaptation of base rate



### 3) Phase of convergence: Five year process





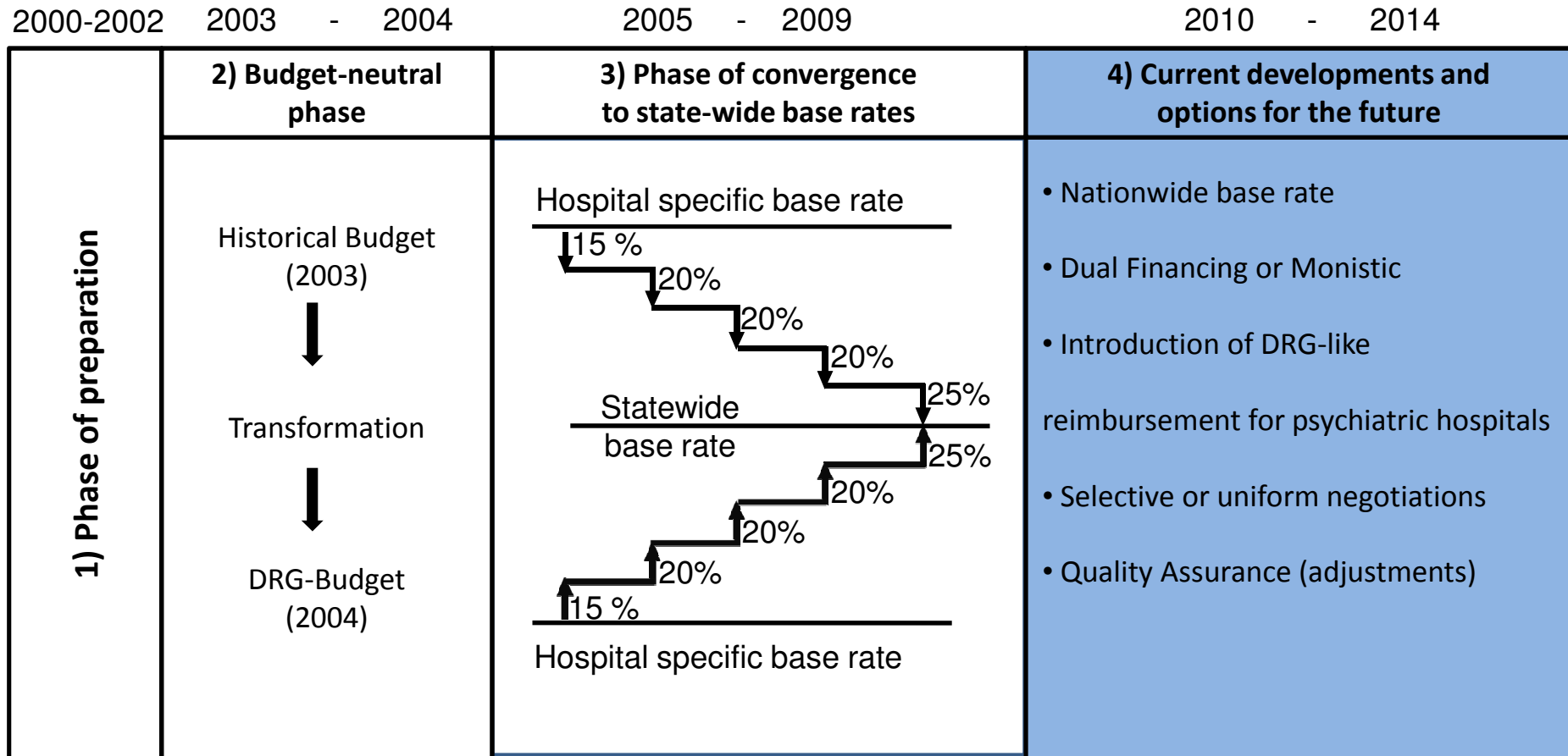
### 3) Phase of convergence: Changing cost weights

**Relative cost weight**

- Patient characteristics**  
Gender, Age, Diagnoses, Severity
- Treatment options**  
Procedures, Technologies, Intensity

Year	2003	2005	2007	2009	2010
DRGs total	664	878	1082	1192	1200
Inpatient DRGs total	664	878	1077	1187	1195
Range of cost weights: min.-max.(rounded)	0.12 - 29.71	0.12 - 57.63	0.11 - 64.90	0.12 - 78.47	0.13 - 73.76
Day care DRGs total	0	0	5	5	5
Supplementary fees	0	71	105	127	143

# DRGs in Germany



1. Central role of self-governing bodies
2. Data driven system with annual updates
3. Detailed analysis of hospital costs
4. Ten-year process of introduction

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## EuroDRG project

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- EuroDRG: project partner institutions from 13 countries
- Book on DRGs in Europe
- Mapping of grouping algorithms
- Analyses of determinants of hospital costs



<http://www.eurodrg.eu/>

Thank you very much!