

# Paying hospitals – the use of DRGs and performance-related payment in specialised care



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To get a common “currency” of hospital activity for

- transparency → efficiency benchmarking & performance measurement (protect/ improve quality),
- fair budget allocation (or division among providers),
- planning of capacities,
- payment (→ efficiency & → reduction of variation)

Exact reasons, expectations and DRG usage differ among countries – due to (de)centralisation, one vs. multiple payers, public vs. mixed ownership.



Excluded costs  
(e.g. for infrastructure; *in U.S. also physician services*)

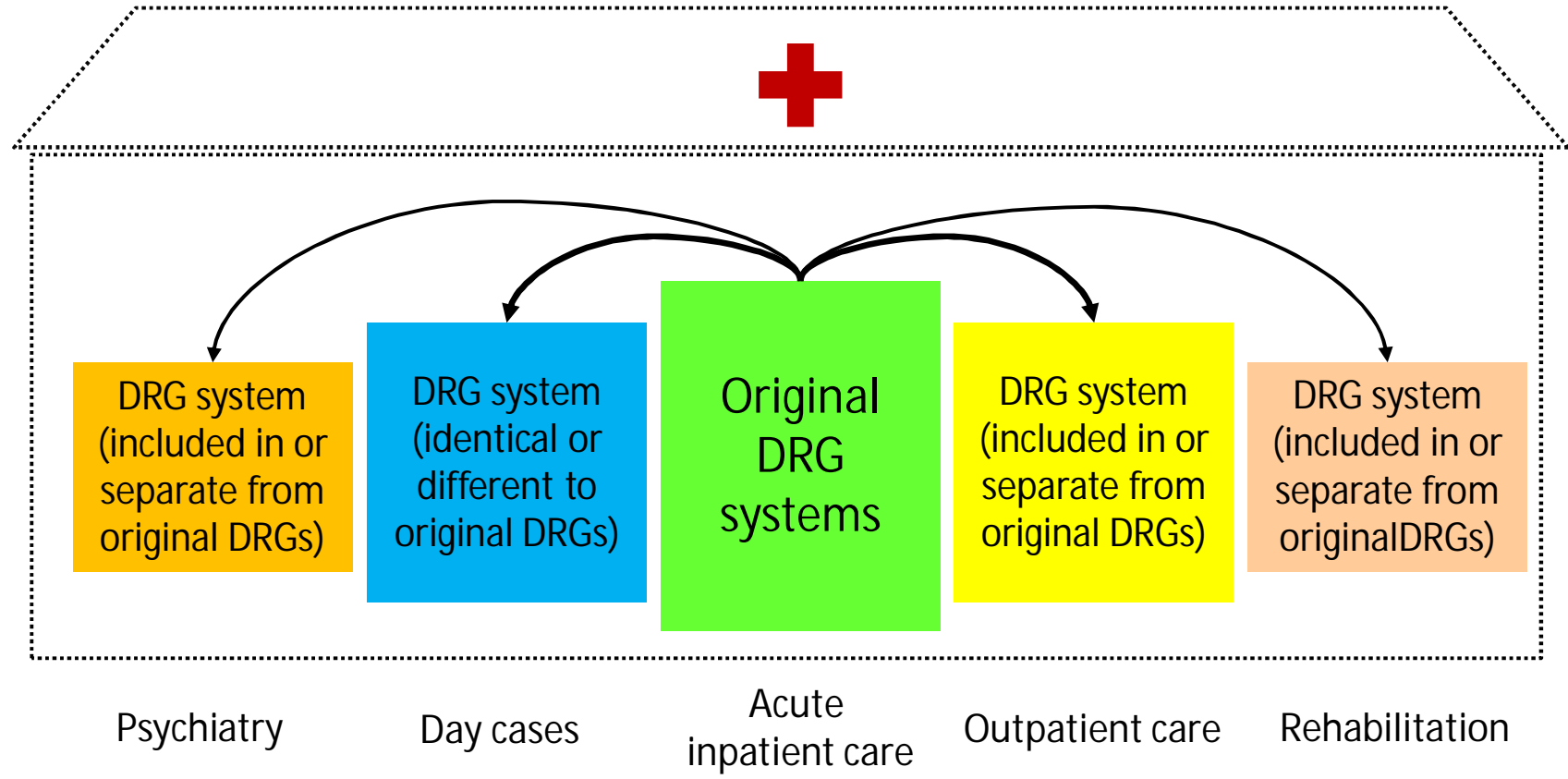
Payments for non-patient care activities  
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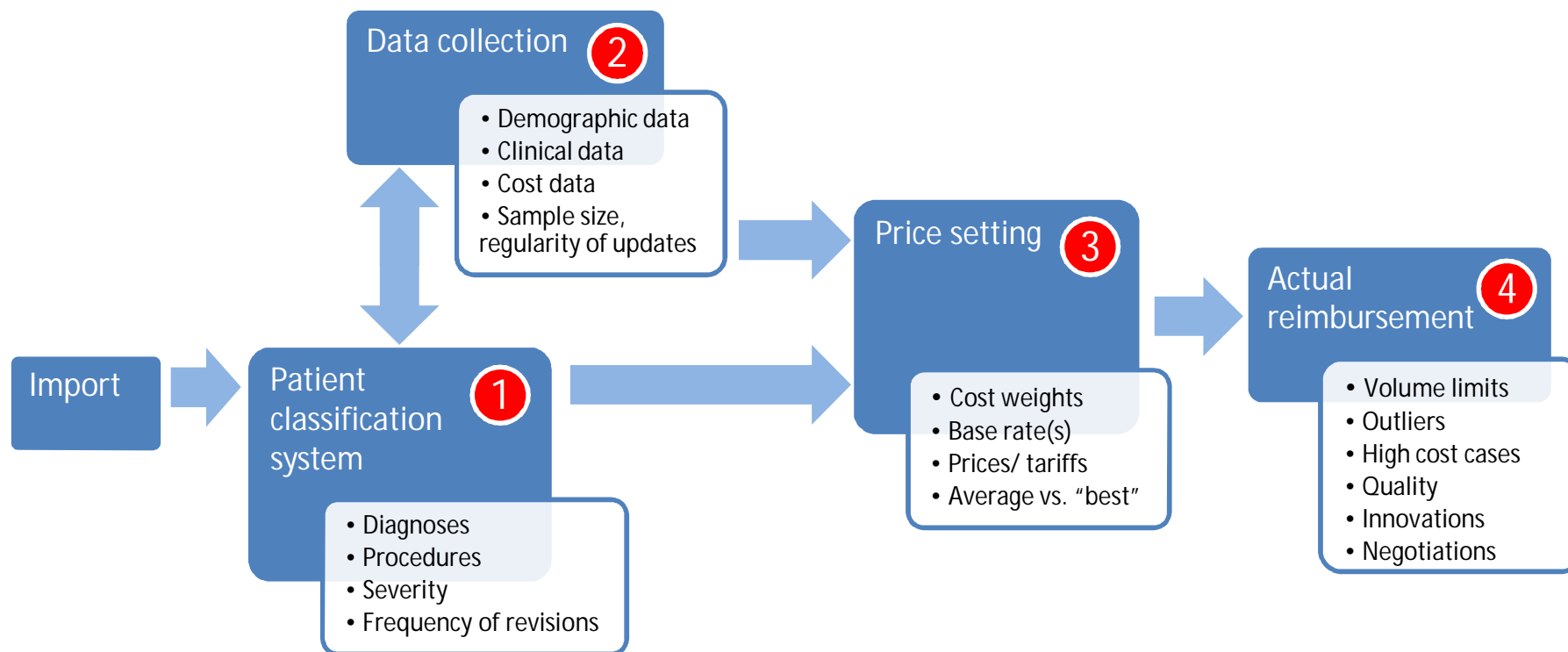
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(e.g. outpatients, day cases, psychiatry, rehabilitation)

Additional payments for specific activities for DRG-  
classified patients (e.g. expensive drugs, innovations),  
possibly listed in DRG catalogues

Other types of payments for DRG-classified patients  
(e.g. global budgets, fee-for-service)

DRG-based case payments,  
DRG-based budget allocation  
(possibly adjusted for outliers, quality etc.)



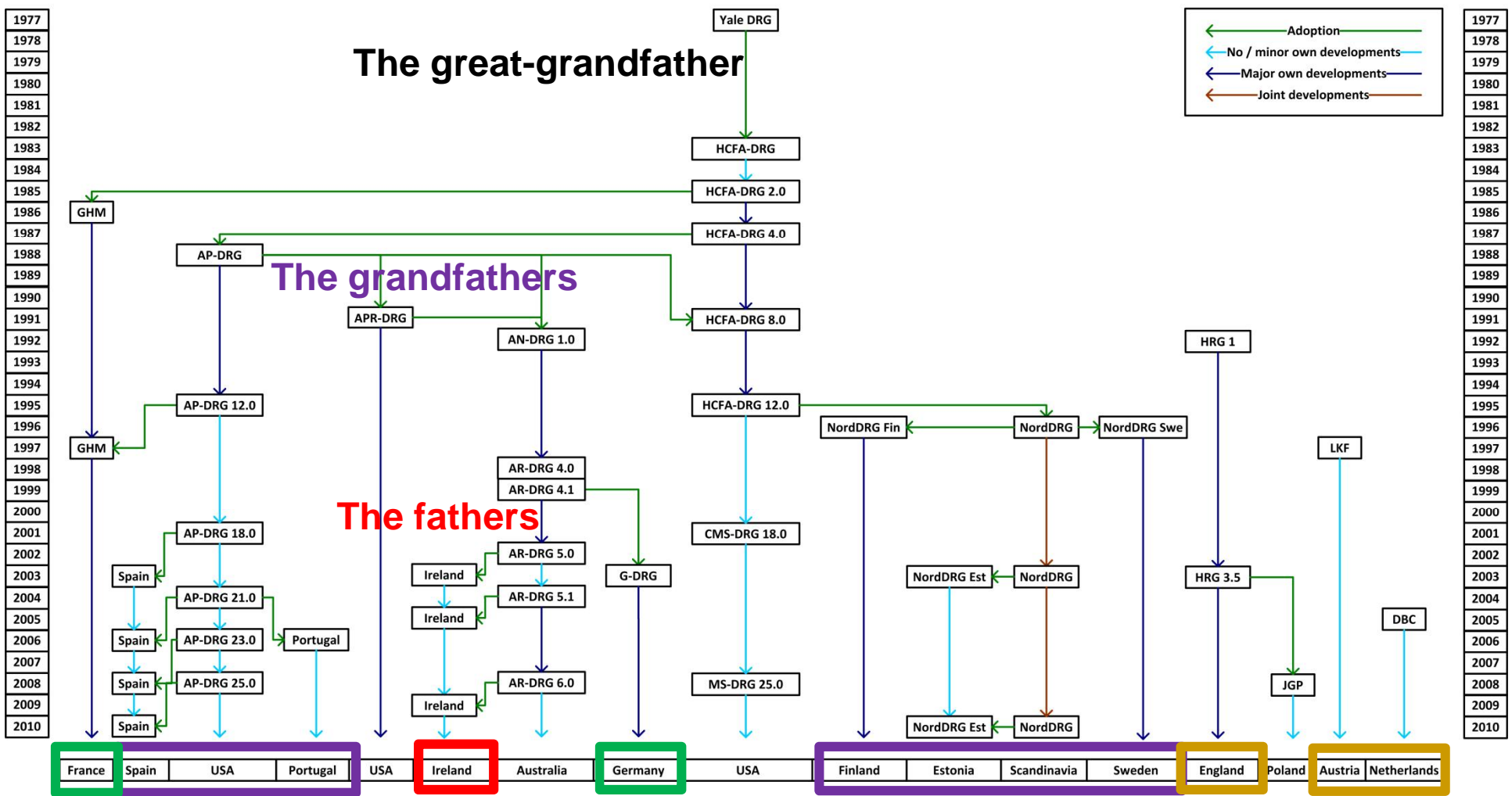


# Choosing a PCS: copied, further developed or self-developed?

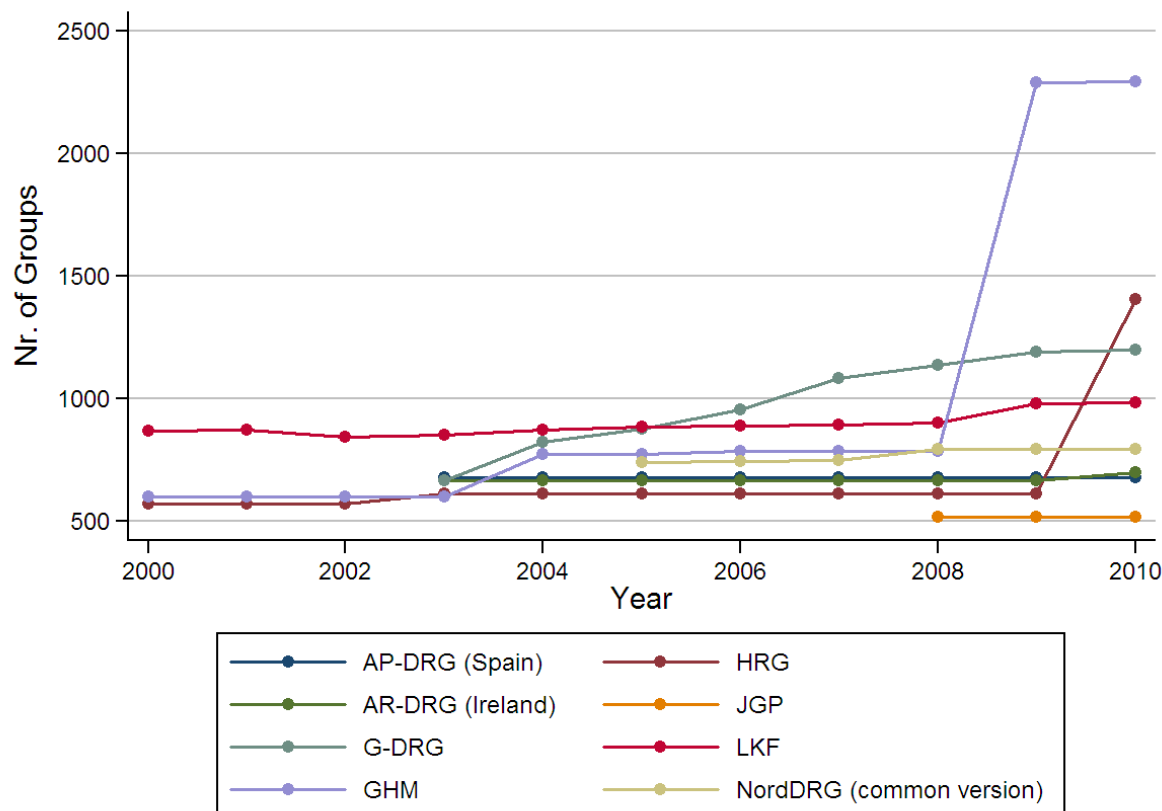
**Patient classification system**

- Diagnoses
- Procedures
- Severity
- Frequency of revisions

France	Spain	USA	Portugal	USA	Ireland	Australia	Germany	USA	Finland	Estonia	Scandinavia	Sweden	England	Poland	Austria	Netherlands
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# Basic characteristics of Patient classification systems in Europe



Patient classification system

- Diagnoses
- Procedures
- Severity
- Frequency of revisions

	AP-DRG	AR-DRG	G-DRG	GHM	NordDRG	HRG	JGP	LKF	DBC
DRGs / DRG-like groups	679	665	1,200	2,297	794	1,389	518	979	≈30,000
MDCs / Chapters	25	24	26	28	28	23	16	-	-
Partitions	2	3	3	4	2	2*	2*	2*	-

## Data collection

- Demographic data
- Clinical data
- Cost data
- Sample size, regularity of updates

### Clinical data

- classification system for diagnoses *and*
- classification system for procedures

### Cost data

- imported (not good but easy) *or*
- collected within country (better but needs standardised cost accounting)

### Sample size

- entire patient population *or*
- a smaller sample

Many countries: *clinical data* = all patients;  
*cost data* = hospital sample  
with standardised cost accounting system



## Price setting

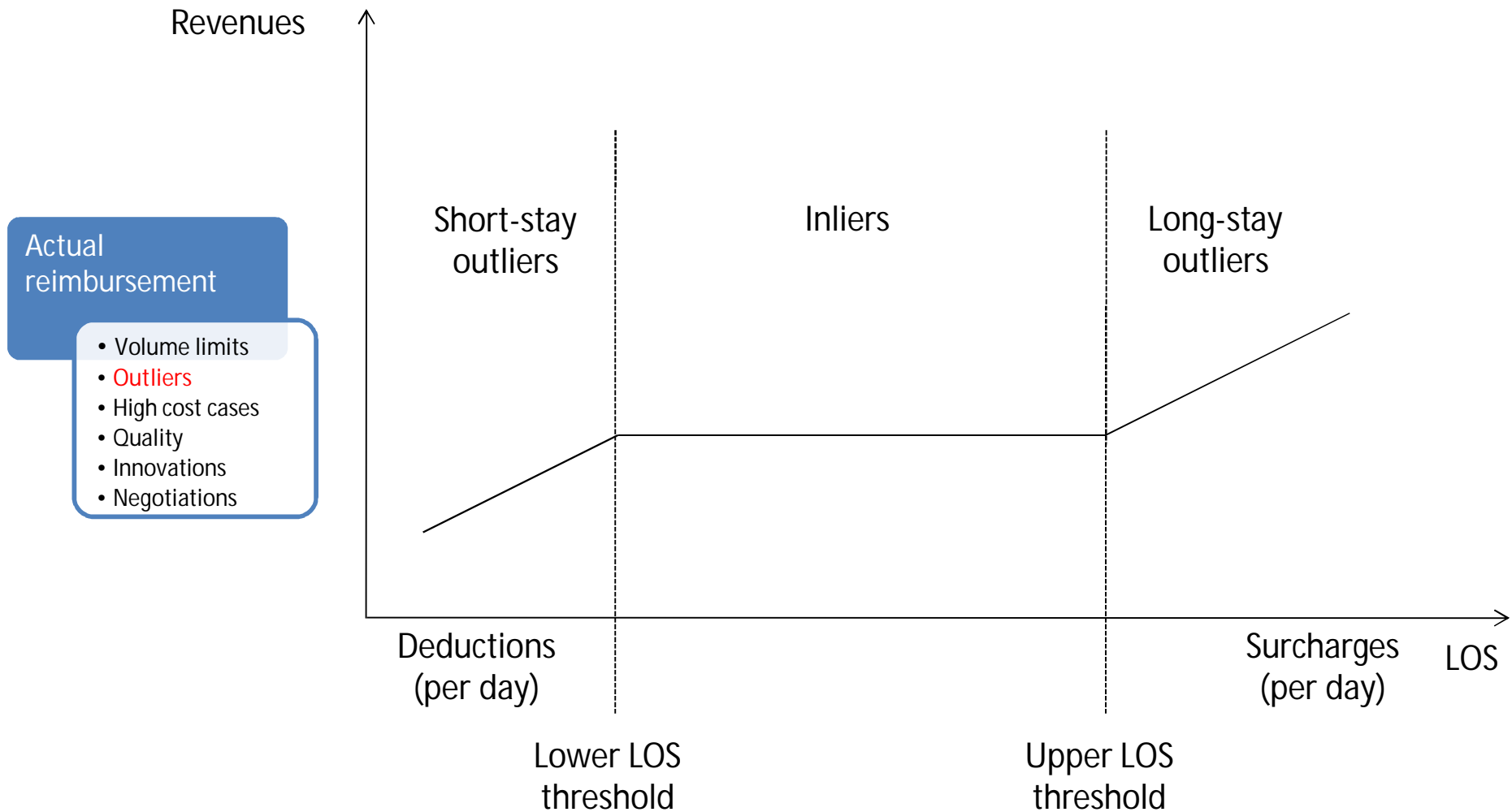
- Cost weights
- Base rate(s)
- Prices/ tariffs
- Average vs. "best"

- Based on good quality data  
*(not possible if cost weights imported)*
- “Cost weights x base rate” vs.  
“Tariff + adjustment” vs.  
Scores
- Average costs (mostly in Europe) vs.  
“best practice” (for high-volume DRGs in England)

Incentives of DRG-based hospital payment	Strategies of hospitals
<b>1. Reduce costs per patient</b>	<b>a) Reduce length of stay</b> <ul style="list-style-type: none"> <li>optimize internal care pathways</li> <li>inappropriate early discharge ('bloody discharge')</li> </ul>
	<b>b) Reduce intensity of provided services</b> <ul style="list-style-type: none"> <li>avoid delivering unnecessary services</li> <li>withhold necessary services ('skimping/undertreatment')</li> </ul>
	<b>c) Select patients</b> <ul style="list-style-type: none"> <li>specialize in treating patients for which the hospital has a competitive advantage</li> <li>select low-cost patients within DRGs ('cream-skimming')</li> </ul>
<b>2. Increase revenue per patient</b>	<b>a) Change coding practice</b> <ul style="list-style-type: none"> <li>improve coding of diagnoses and procedures</li> <li>fraudulent reclassification of patients, e.g. by adding inexistent secondary diagnoses ('up-coding')</li> </ul>
	<b>b) Change practice patterns</b> <ul style="list-style-type: none"> <li>provide services that lead to reclassification of patients into higher paying DRGs ('gaming/overtreatment')</li> </ul>
<b>3. Increase number of patients</b>	<b>a) Change admission rules</b> <ul style="list-style-type: none"> <li>reduce waiting list</li> <li>admit patients for unnecessary services ('supplier-induced demand')</li> </ul>
	<b>b) Improve reputation of hospital</b> <ul style="list-style-type: none"> <li>improve quality of services</li> <li>focus efforts exclusively on measurable areas</li> </ul>

**Positive and negative consequences are closely related**

# How DRG systems reduce unintended behaviour: 1. long- and short-stay adjustments



# How DRG systems reduce unintended behaviour: 2. Fee-for-service-type additional payments

- Actual reimbursement
- Volume limits
  - Outliers
  - High cost cases
  - Quality
  - Innovations
  - Negotiations

	England	France	Germany	Netherlands
Payments per hospital stay	One	One	One	Several possible
Payments for specific high-cost services	Unbundled HRGs for e.g.: <ul style="list-style-type: none"> <li>• Chemotherapy</li> <li>• Radiotherapy</li> <li>• Renal dialysis</li> <li>• Diagnostic imaging</li> <li>• High-cost drugs</li> </ul>	Séances GHM for e.g.: <ul style="list-style-type: none"> <li>• Chemotherapy</li> <li>• Radiotherapy</li> <li>• Renal dialysis</li> </ul> Additional payments: <ul style="list-style-type: none"> <li>• ICU</li> <li>• Emergency care</li> <li>• High-cost drugs</li> </ul>	Supplementary payments for e.g.: <ul style="list-style-type: none"> <li>• Chemotherapy</li> <li>• Radiotherapy</li> <li>• Renal dialysis</li> <li>• High-cost drugs/ devices</li> </ul>	Since 2012: <ul style="list-style-type: none"> <li>• ICU</li> <li>• Care in cooperation with practice-based physicians</li> </ul>
Innovation-related add'l payments	Yes	Yes	Yes	Yes (for drugs)

# How DRG systems reduce unintended behaviour: 3. adjustments for quality

Type of adjustment	Mechanism	Examples
Hospital based		
DRG/ disease based		
Patient based	<ul style="list-style-type: none"> <li>• Payment for an individual patient is adjusted upwards or downwards by a certain amount</li> <li>• No payment is made for a case</li> </ul>	<ul style="list-style-type: none"> <li>• Certain readmissions within 30 days are not paid separately but as part of the original admission (<i>e.g., in England and Germany</i>)</li> <li>• Complications (that is, certain conditions that were not present upon admission) cannot be used to classify patients into DRGs that are weighted more heavily (<i>e.g., in the United States</i>)</li> </ul>

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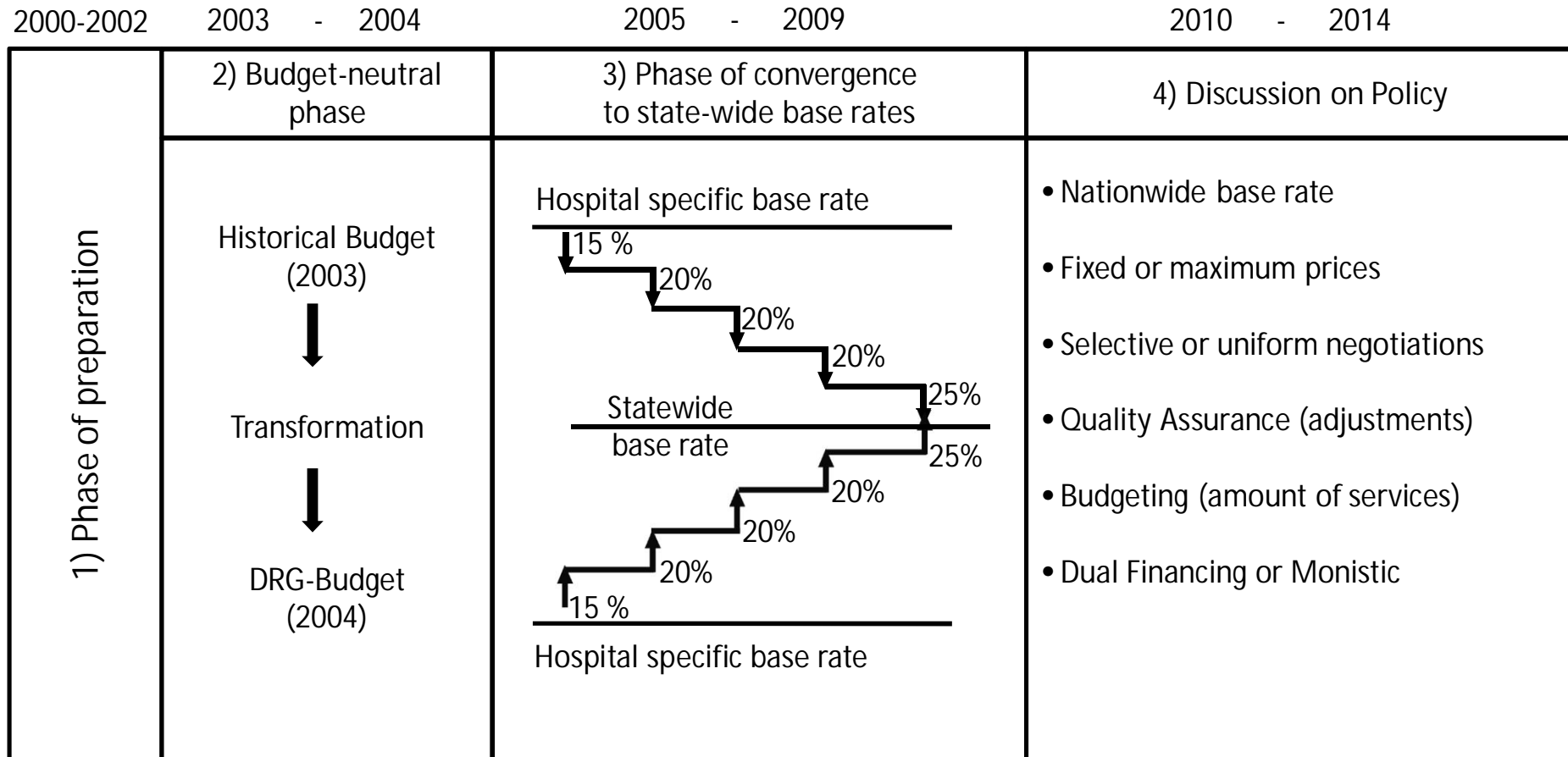
Type of adjustment	Mechanism	Examples
Hospital based	<ul style="list-style-type: none"> <li>• Payment for entire hospital activity is adjusted upwards or downwards by a certain percentage</li> <li>• Hospital receives an additional payment unrelated to activity</li> </ul>	<ul style="list-style-type: none"> <li>• Predefined quality results are met/not met (<i>e.g., in England</i>)</li> <li>• Overall readmission rate is below/above average or below/above agreed target (<i>e.g., in the United States</i>)</li> <li>• Hospitals install new quality improvement measures (<i>e.g., in France</i>)</li> </ul>
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## 4. Frequent revisions of PCS and payment rates

Country	PCS		Payment rate	
	Frequency of updates	Time-lag to data	Frequency of updates	Time-lag to data
<b>Austria</b>	Annual	2–4 years	4–5 years	2–4 years
<b>England</b>	Annual	Minor revisions annually; irregular overhauls about every 5–6 years	Annual	3 years (but adjusted for inflation)
<b>Estonia</b>	Irregular (first update after 7 years)	1–2 years	Annual	1–2 years
<b>Finland</b>	Annual	1 year	Annual	0–1 year
<b>France</b>	Annual	1 year	Annual	2 years
<b>Germany</b>	Annual	2 years	Annual	2 years
<b>Ireland</b>	Every 4 years	Not applicable (imported AR-DRGs)	Annual (linked to Australian updates)	1–2 years
<b>Netherlands</b>	Irregular	Not standardized	Annual or when considered necessary	2 years, or based on negotiations
<b>Poland</b>	Irregular – planned twice per year	1 year	Annual update only of base rate	1 year
<b>Portugal</b>	Irregular	Not applicable (imported AP-DRGs)	Irregular	2–3 years
<b>Spain (Catalonia)</b>	Biennial	Not applicable (imported 3-year-old CMS-DRGs)	Annual	2–3 years
<b>Sweden</b>	Annual	1–2 years	Annual	2 years



# Implementation: Not from one day to the next - the long way of DRG introduction in Germany



- DRG-based hospital payment is the main method of provider payment in Europe, but systems vary across countries
  - Different patient classification systems
  - DRG-based budget allocation vs. case-payment
  - Regional/local adjustment of cost weights/conversion rates
- To address potential unintended consequences, countries
  - implemented DRG systems in a step-wise manner
  - operate DRG-based payment together with other payment mechanisms
  - refine patient classification systems continuously (increase number of groups)
  - place a comparatively high weight on procedures
  - base payment rates on actual average (or best-practice) costs
  - reimburse outliers and high cost services separately
  - update both patient classification and payment rates regularly
- If done right (which is complex), DRGs can contribute to increased transparency and efficiency – and quality



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Integrate all relevant costs and measure them accurately

Separate priority activities not related to a particular patient from DRG payments

Pay separate for patient-related activities which you want to incentivize (upon prior authorization, 2nd opinion?)

- Define clinically meaningful groups (constant updating),
- which are cost-homogeneous (on average or “best practice”),
  - measure quality and
  - adjust payment

# New from Open University Press

## Diagnosis-Related Groups in Europe

Moving towards transparency,  
efficiency and quality in hospitals

Reinhard Busse, Alexander Geissler, Wilm Quentin and  
Miriam M. Wiley (Eds)

*Berlin University of Technology, Germany; Berlin University of Technology,  
Germany; Berlin University of Technology, Germany; Economic and Social  
Research Institute, Dublin, Ireland*

Diagnosis Related Group (DRG) systems were introduced in Europe to increase the transparency of services provided by hospitals and to incentivise greater efficiency in the use of resources invested in acute hospitals. In many countries, these systems were also designed to contribute to improving - or at least protecting - the quality of care. After more than a decade of experience with using DRGs in Europe, this book considers whether the extensive use of DRGs has contributed towards achieving these objectives.

12 June 2012

Moving towards universal health coverage in Moldova

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