Looking for the perfect hospital payment system: the European experience

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Incentives of different forms of hospital payment

Payment mecha-nism	Patient needs (risk selection)	Activity		Expendi-ture control	Technical efficiency	Trans-parency	Quality	Admini-strative simplicity
		Number of services/ case	Number of cases					
Fee-for-service	+	+	+	—	0	0	0	—
Global budget	—	—	—	+	0	—	0	+

Incentives of different forms of hospital payment

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Fee-for-service	+	+	+	—	0	0	0	—
DRG based case payment	0	—	+	0	+	+	0	—
Global budget	—	—	—	+	0	—	0	+

Incentives of different forms of hospital payment

→ "dumping" (avoidance), "creaming" (selection) and "skimping" (undertreatment)
→ up/wrong-coding, gaming

Payment mecha-nism	Patient needs (risk selection	Ac… /		Expendi-ture control	Technical efficiency	Trans-parency	Quality	Admini-strative simplicity
		Number … services/ case	Numbe… of cases					
Fee-for-service	+	+	+	—	USA 1980s			—
DRG based case payment	0	—	+	0	+	+	0	—
Global budget	—	—	—	+	European countries 1990s/2000s			+

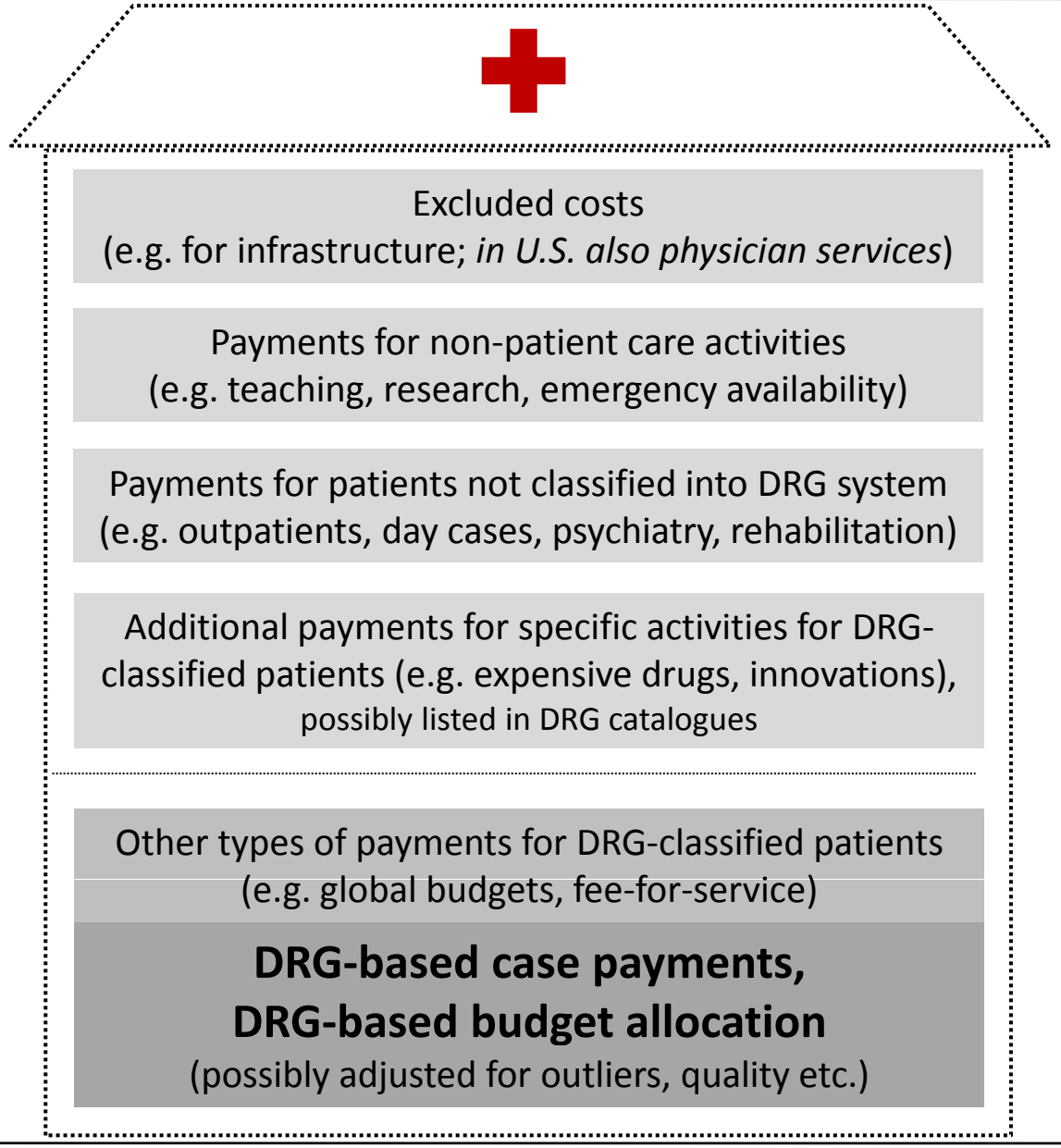
OK, there are good reasons for DRGs:

To get a common "currency" of hospital activity for

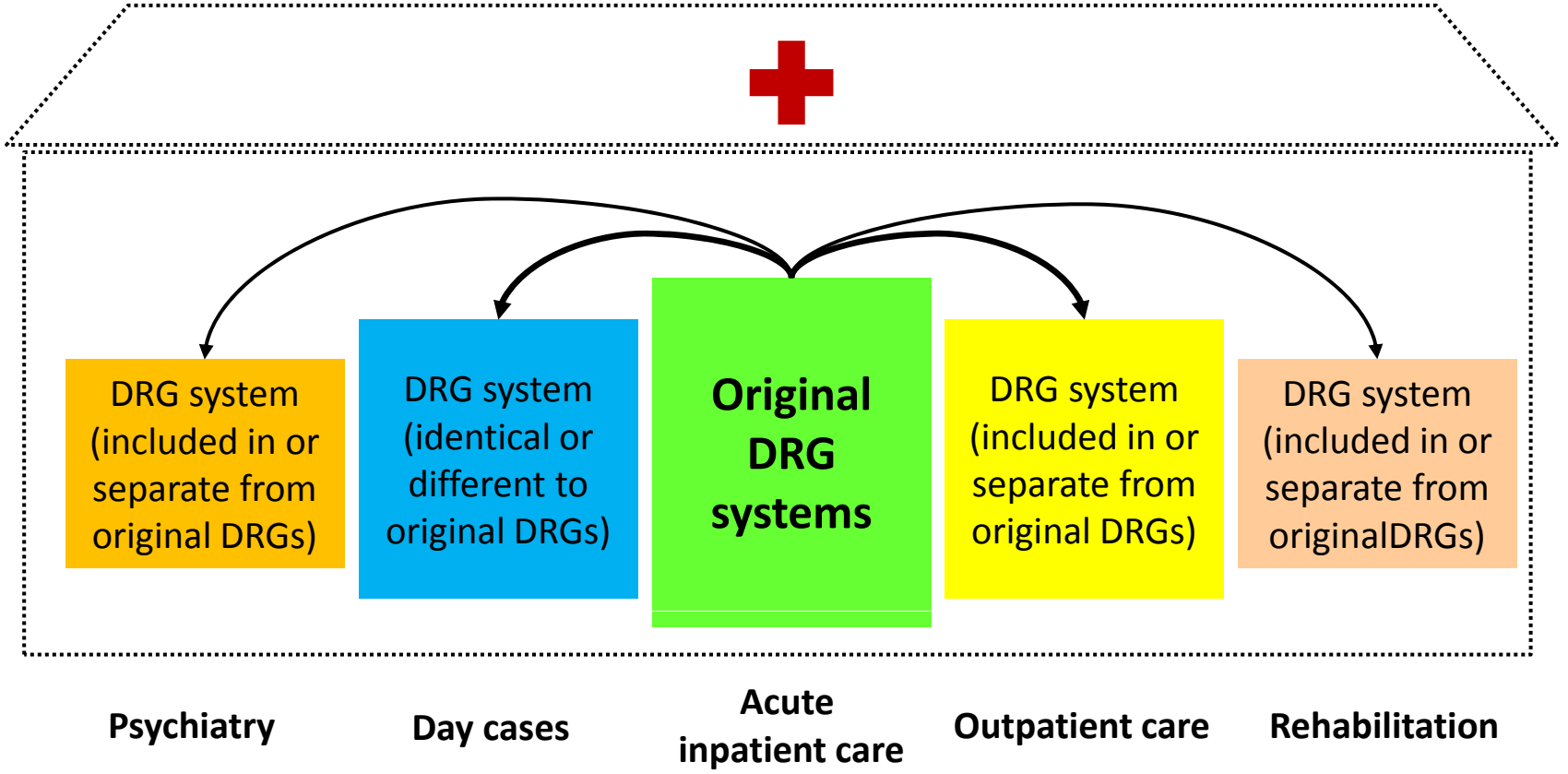
- transparency → efficiency benchmarking & performance measurement (protect/ improve quality),
- fair budget allocation (or division among providers),
- planning of capacities,
- payment (→ efficiency & → reduction of variation)

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

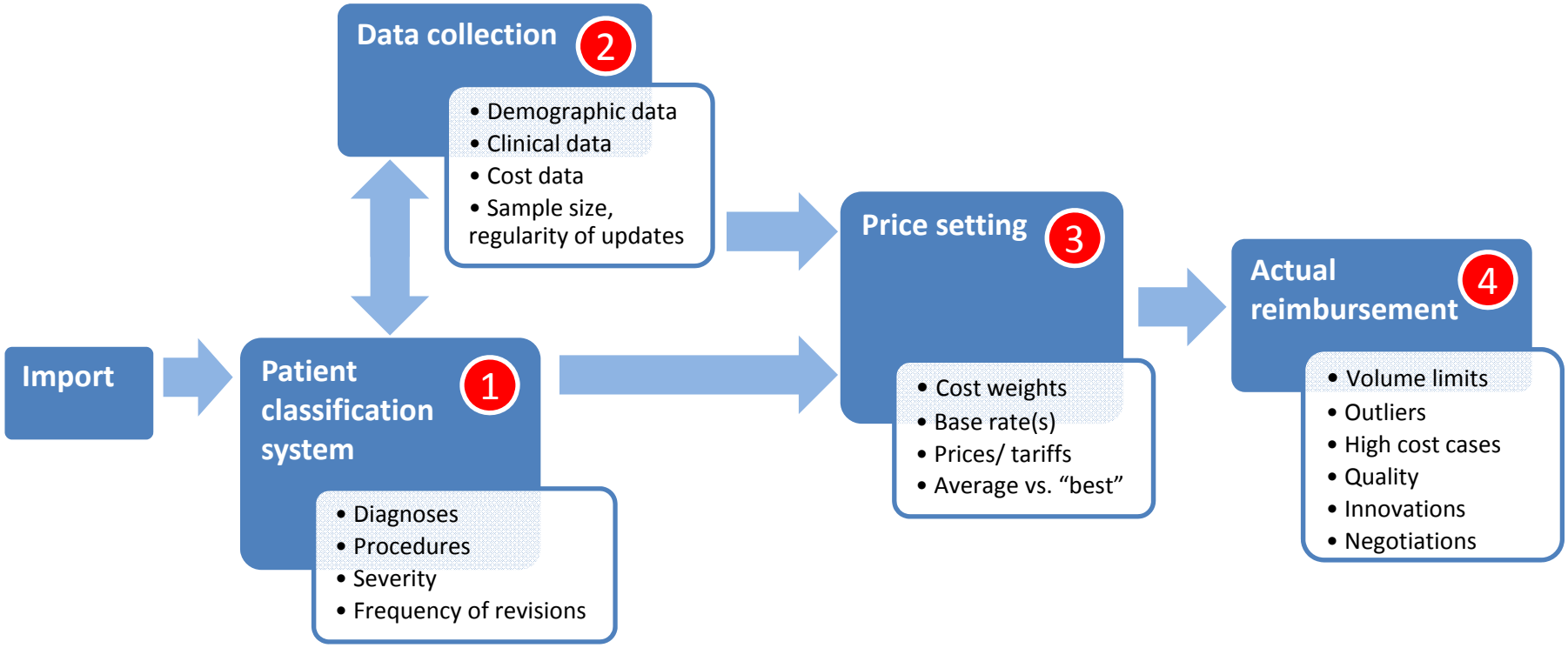
Scope of DRGs within hospital activities (I)



Scope of DRGs within hospital activities (II)



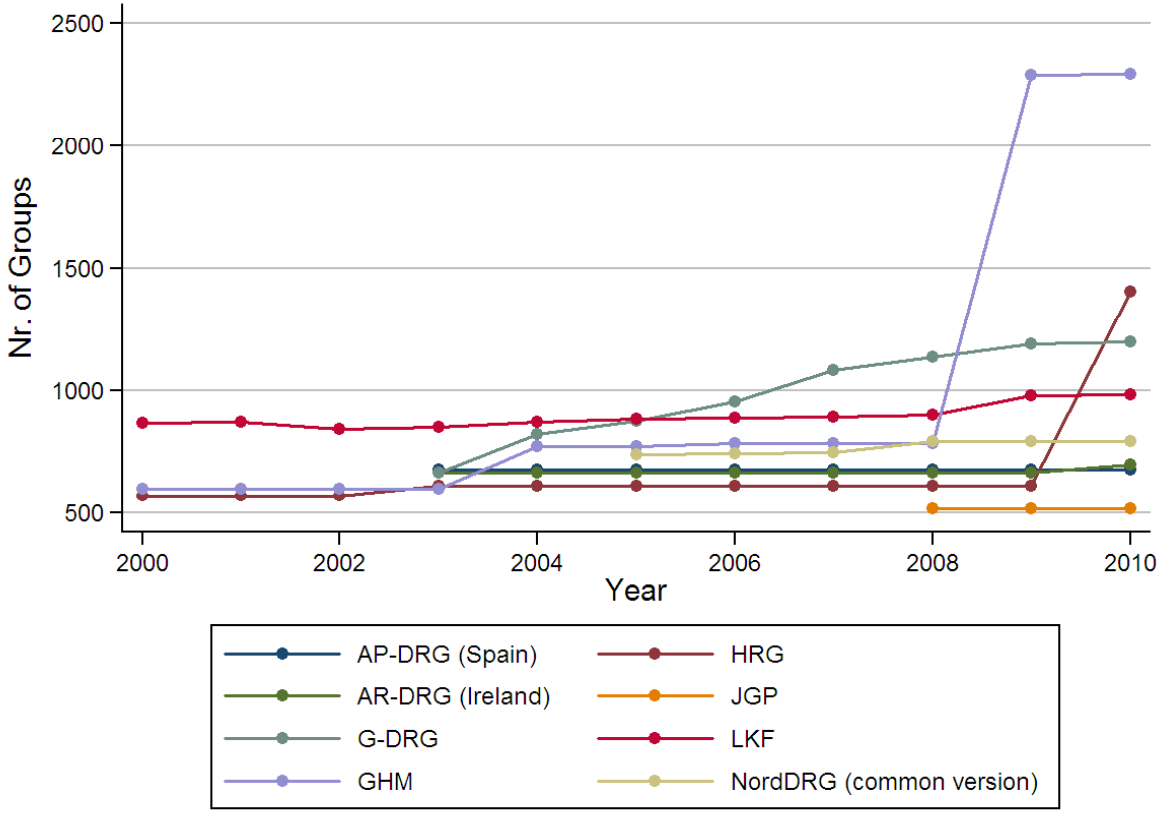
Essential building blocks of DRG systems



Basic characteristics of Patient classification systems in Europe

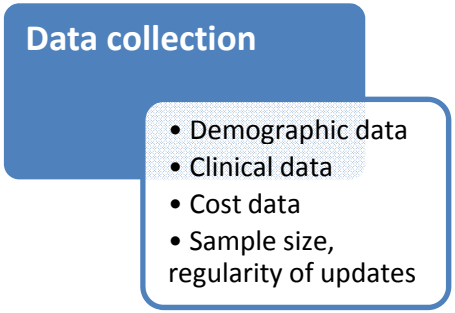
Patient classification system

- 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*	-

Main questions relating to data collection



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)

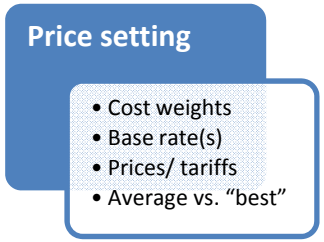
Sample size

→ entire patient population *or*
→ a smaller sample

Many countries: *clinical data* = all patients;

cost data = hospital sample
with standardised cost accounting system

How to calculate costs and set prices fairly



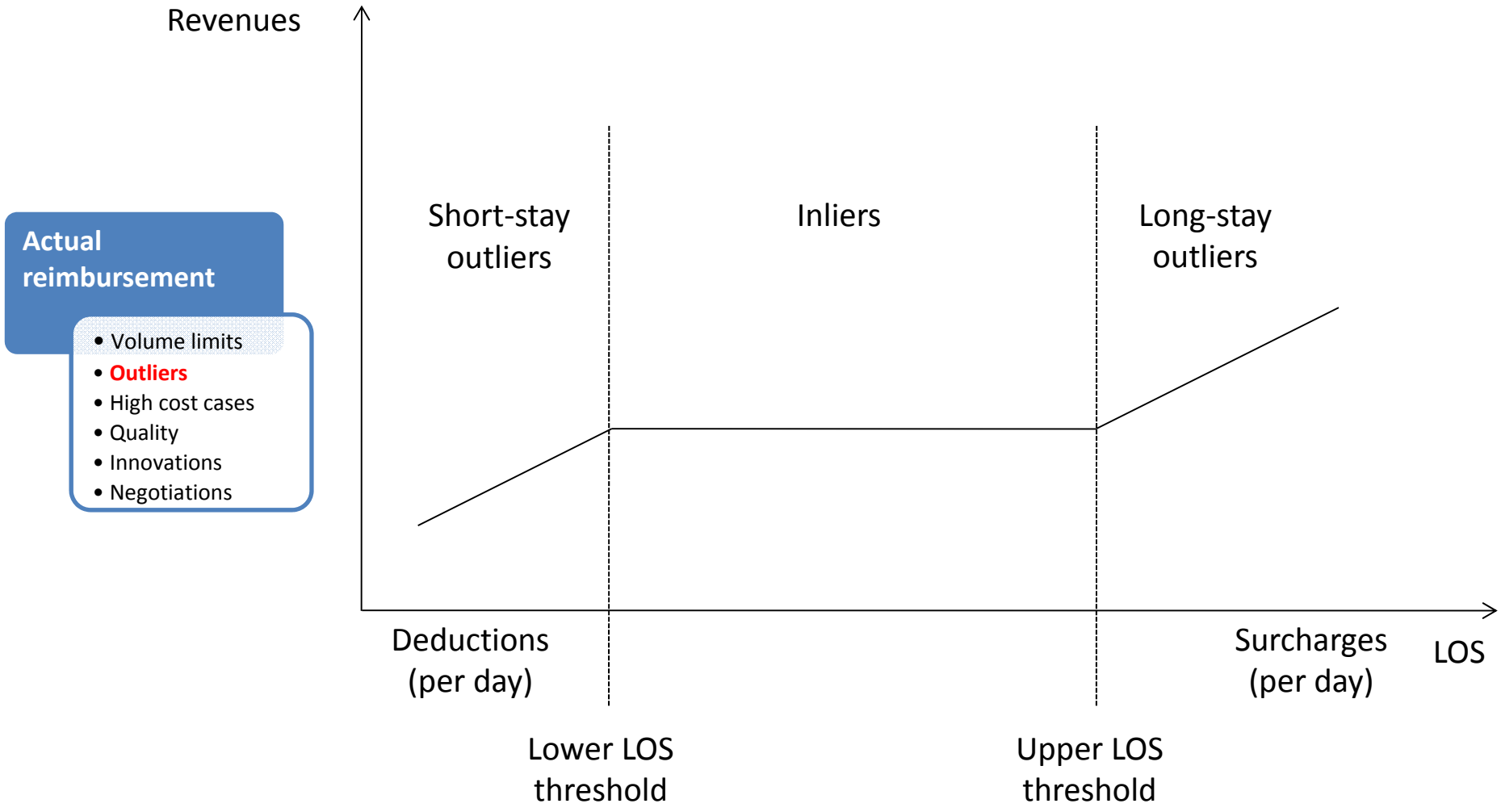
- Based on good quality data
  (not possible if cost weights imported)
- "Cost weights x base rate" vs.
  "Tariff + adjustment" vs.
  Scores
- Average costs (mostly in Europe) vs.
  "best practice" (for high-volume DRGs in England)

Incentives and (un-)intended strategies

Incentives of DRG-based hospital payment	Strategies of hospitals
1. Reduce costs per patient	a) Reduce length of stay • optimize internal care pathways • inappropriate early discharge ('bloody discharge')
	b) Reduce intensity of provided services • avoid delivering unnecessary services • withhold necessary services ('skimping/undertreatment')
	c) Select patients • specialize in treating patients for which the hospital has a competitive advantage • select low-cost patients within DRGs ('cream-skimming')
2. Increase revenue per patient	a) Change coding practice • improve coding of diagnoses and procedures • fraudulent reclassification of patients, e.g. by adding inexistent secondary diagnoses ('up-coding')
	b) Change practice patterns • provide services that lead to reclassification of patients into higher paying DRGs ('gaming/overtreatment')
3. Increase number of patients	a) Change admission rules • reduce waiting list • admit patients for unnecessary services ('supplier-induced demand')
	b) Improve reputation of hospital • improve quality of services • focus efforts exclusively on measurable areas

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	Nether-lands
Payments per hospital stay	One	One	One	Several possible
Payments for specific high-cost services	Unbundled HRGs for e.g.: • Chemotherapy • Radiotherapy • Renal dialysis • Diagnostic imaging • High-cost drugs	Séances GHM for e.g.: • Chemotherapy • Radiotherapy • Renal dialysis Additional payments: • ICU • Emergency care • High-cost drugs	Supplementary payments for e.g.: • Chemotherapy • Radiotherapy • Renal dialysis • High-cost drugs/ devices	Since 2012: • ICU • Care in cooperation with practice-based physicians
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	• Payment for an individual patient is adjusted upwards or downwards by a certain amount • No payment is made for a case	• Certain readmissions within 30 days are not paid separately but as part of the original admission *(e.g., in England and Germany)* • Complications (that is, certain conditions that were not present upon admission) cannot be used to classify patients into DRGs that are weighted more heavily *(e.g., in the United States)*

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

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Hospital based		
DRG/ disease based	• Payment for all patients with a certain DRG (or a disease entity) is adjusted upwards or downwards by a certain percentage • DRG payment is not based on average costs but is awarded to those hospitals delivering 'good quality'	• Insurers negotiate with hospitals that DRG payment is higher/lower if certain quality standards are met/not met *(e.g., in Germany and the Netherlands)* • DRG payment for all hospitals is based on 'best practice'; that is, costs incurred by efficient, high-quality hospitals *(e.g., in England)*
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How DRG systems reduce unintended behaviour: 3. adjustments for quality

Type of adjustment	Mechanism	Examples
Hospital based	• Payment for entire hospital activity is adjusted upwards or downwards by a certain percentage • Hospital receives an additional payment unrelated to activity	• Predefined quality results are met/not met *(e.g., in England)* • Overall readmission rate is below/above average or below/above agreed target *(e.g., in the United States)* • Hospitals install new quality improvement measures *(e.g., in France)*
DRG/ disease based	• Payment for all patients with a certain DRG (or a disease entity) is adjusted upwards or downwards by a certain percentage • DRG payment is not based on average costs but is awarded to those hospitals delivering 'good quality'	• Insurers negotiate with hospitals that DRG payment is higher/lower if certain quality standards are met/not met *(e.g., in Germany and the Netherlands)* • DRG payment for all hospitals is based on 'best practice'; that is, costs incurred by efficient, high-quality hospitals *(e.g., in England)*
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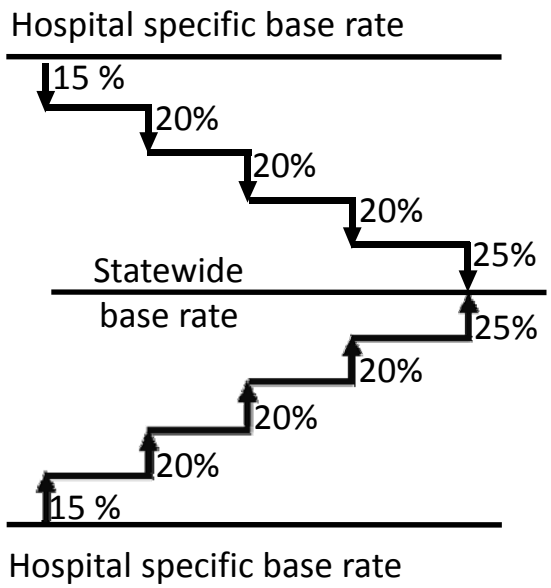
4. Frequent revisions of PCS and payment rates

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

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

2000-2002	2003 - 2004	2005 - 2009	2010 - 2014
1) Phase of preparation	**2) Budget-neutral phase**	**3) Phase of convergence to state-wide base rates**	**4) Discussion on Policy**
	Historical Budget (2003) ↓ Transformation ↓ DRG-Budget (2004)		• Nationwide base rate • Fixed or maximum prices • Selective or uniform negotiations • Quality Assurance (adjustments) • Budgeting (amount of services) • Dual Financing or Monistic

Conclusions

- 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 continously (increase number of groups)
  - place a comparatively high weight on procedures
  - base payment rates on actual average (or best-practice) costs
  - reimburse outliers and 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

DRG payment – the way forward

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

Payments for non-patient care activities
(e.g. teaching, research, emergenc… …ability)

Payments fo… … system
(e.g. outp… …litation)

Additiona… …specific activities for DRG-classified p…ients (e.g. expensive drugs, innovations), possibly listed in DRG catalogues

Develop intersectoral "bundled" DRGs based on care pathways

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.)

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

Diagnosis-Related Groups in Europe

Moving towards transparency, efficiency and quality in hospitals

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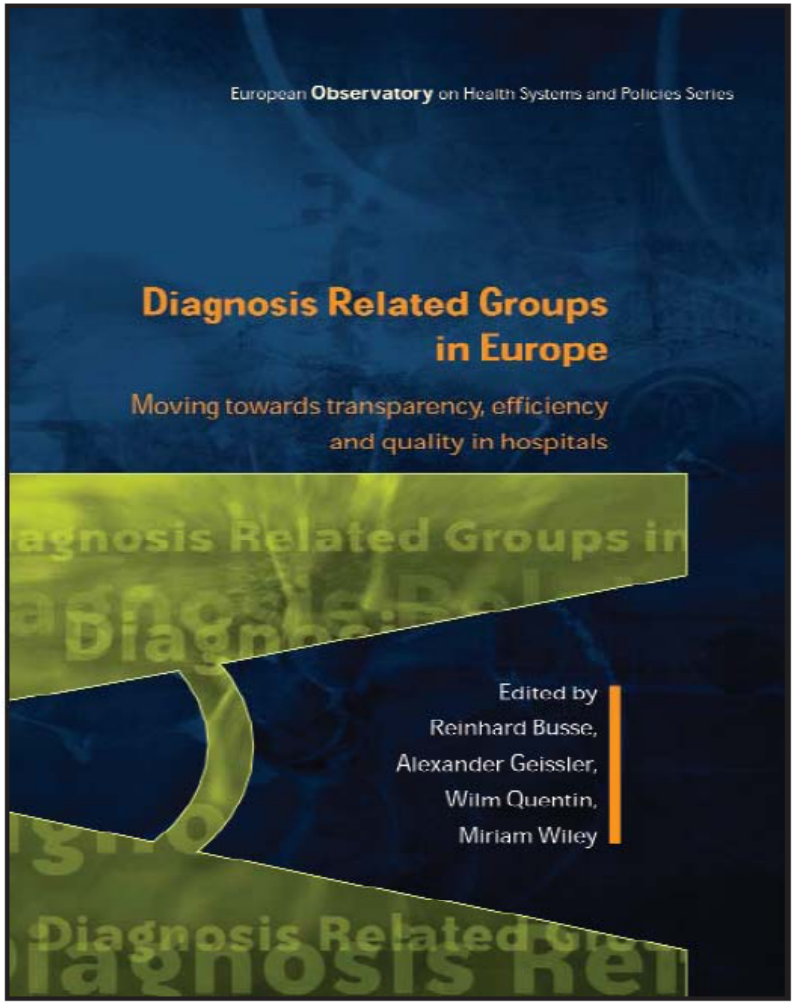

Diagnosis Related Group (DRG) systems were introduced in Europe to increase the transparency of services provided by hospitals and to incentivise greater efficiency in the use of resources invested in acute hospitals. In many countries, these systems were also designed to contribute to improving - or 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.