Will paying the piper change the tune? Innovations in financing health services

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Agenda

- Paying hospitals
- Paying GPs (and other ambulatory care physicians)
- Paying for chronic care

Advantages and disadvantages 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	+

Advantages and disadvantages of different forms of hospital payment

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		Number of services/ case	Number of cases					
Fee-for-service	+	+	+	–	0	0	0	–
DRG based case payment	0	–	+	0	+	+	0	–
Global budget	–	–	–	+	0	–	0	+

Advantages and disadvantages 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 of services/ case	Number of cases					
Fee-for-service	+	+	+	–	USA 1980s			–
DRG based case payment	0	–	+	0	+	+	0	–
Global budget	–	–	–	+	European countries 1990s/2000s			+

Empirical evidence (I): hospital activity and length-of-stay under DRGs

USA
1980s

Country	Study	Activity	ALoS
US, 1983	US Congress - Office of Technology Assessment, 1985	▼	▼
	Guterman et al., 1988	▼	▼
	Davis and Rhodes, 1988	▼	▼
	Kahn et al., 1990		▼
	Manton et al., 1993	▼	▼
	Muller, 1993	▼	▼
	Rosenberg and Browne, 2001	▼	▼

Cf. Table 7.4
in book

Empirical evidence (II)

Country	Study	Activity	ALoS
Sweden, early 1990s	Anell, 2005	▲	▼
	Kastberg and Siverbo, 2007	▲	▼
Italy, 1995	Louis et al., 1999	▼	▼
	Ettelt et al., 2006	▲	
Spain, 1996	Ellis/ Vidal-Fernández, 2007	▲	
Norway, 1997	Biørn et al., 2003	▲	
	Kjerstad, 2003	▲	
	Hagen et al., 2006	▲	
	Magnussen et al., 2007	▲	
Austria, 1997	Theurl and Winner, 2007		▼
Denmark, 2002	Street et al., 2007	▲	
Germany, 2003	Böcking et al., 2005	▲	▼
	Schreyögg et al., 2005		▼
	Hensen et al., 2008	▲	▼
England, 2003/4	Farrar et al., 2007	▲	▼
	Audit Commission, 2008	▲	▼
	Farrar et al., 2009	▲	▼
France, 2004/5	Or, 2009	▲	

European countries 1990/ 2000s

Cf. Table 7.4 in book

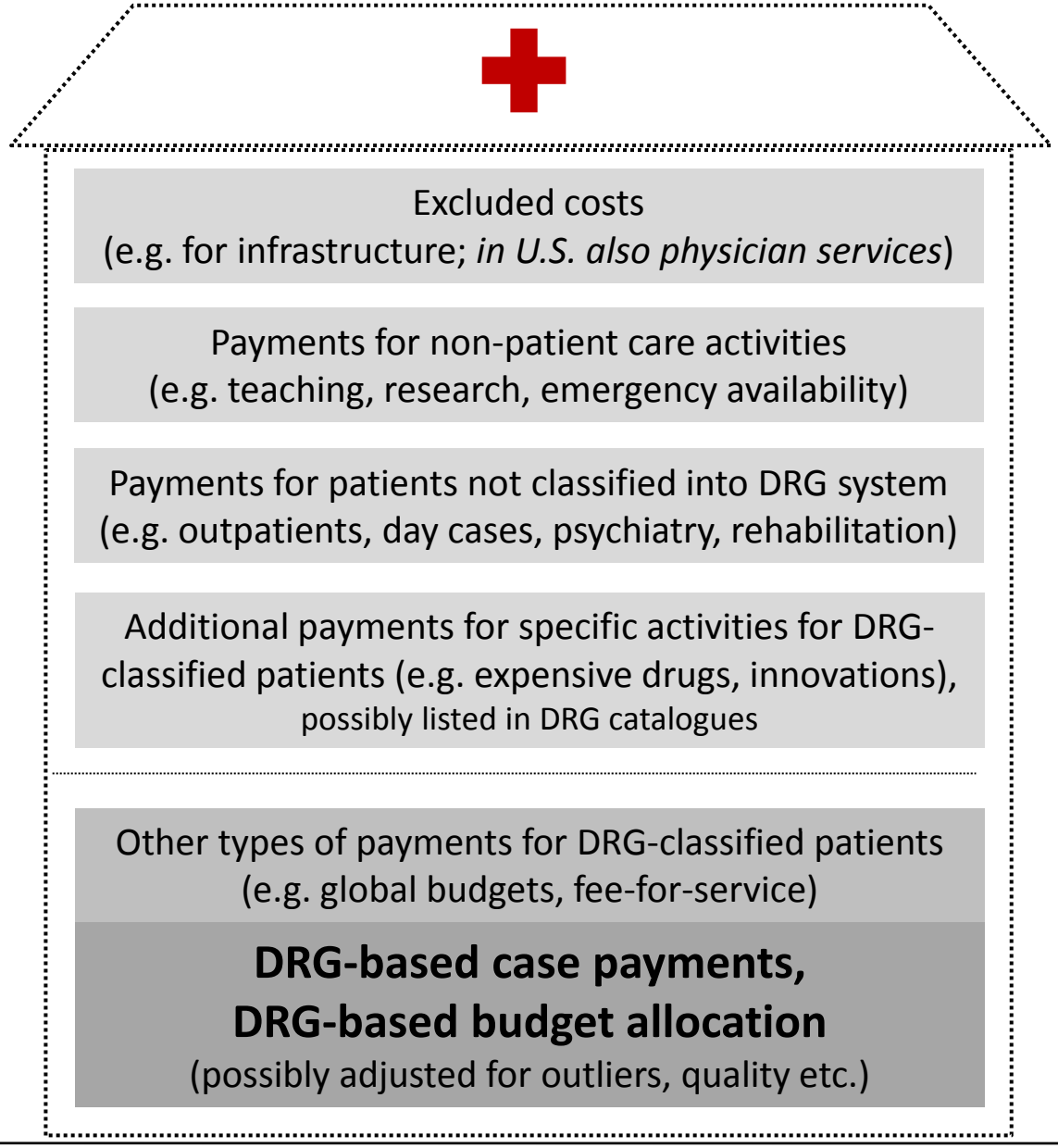
So then, why DRGs?

To get a common "currency" of hospital activity for

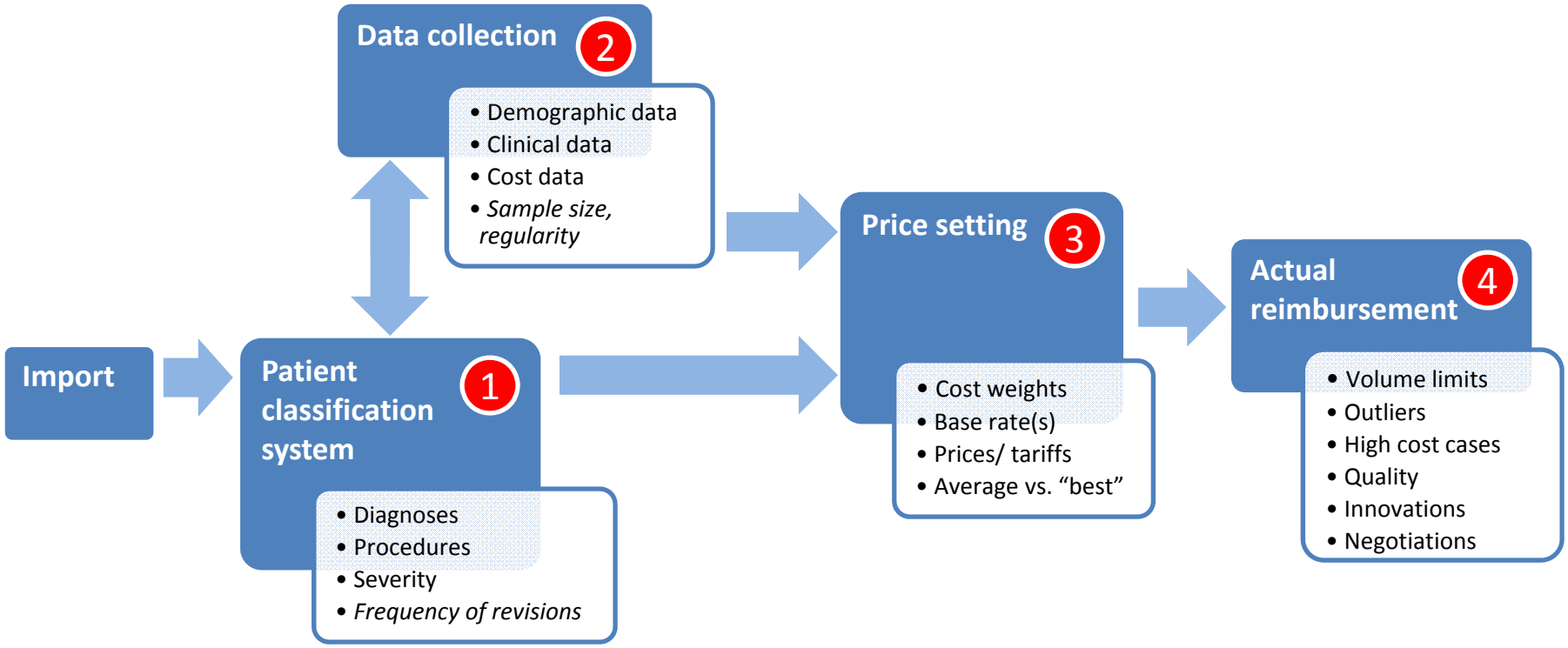
- transparency → efficiency benchmarking & performance measurement (protect/ improve quality),
- budget allocation (or division among providers),
- planning of capacities,
- payment (→ efficiency)

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 set of hospital activities



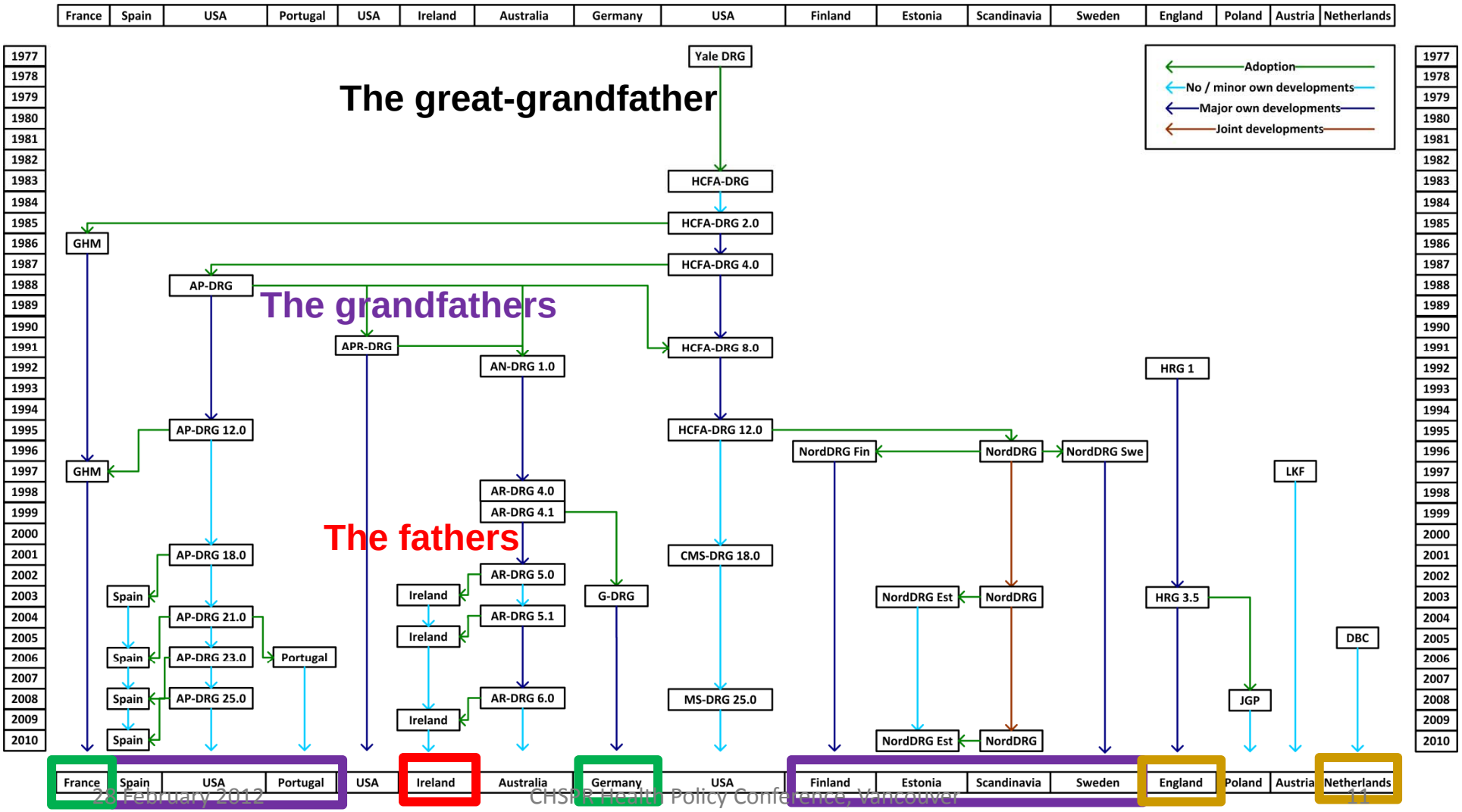
Essential building blocks of DRG systems



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

Patient classification system

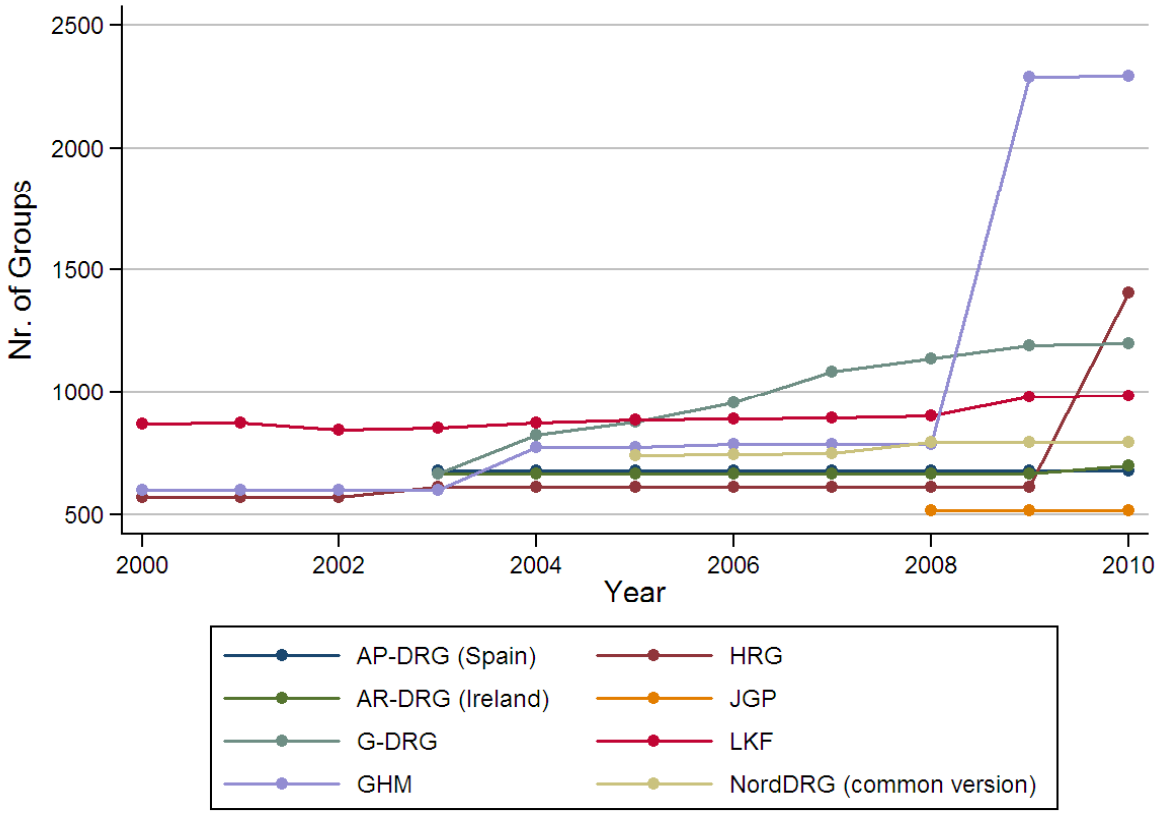
- Diagnoses
- Procedures
- Severity
- *Frequency of revisions*



Basic characteristics of DRG-like PCS in Europe

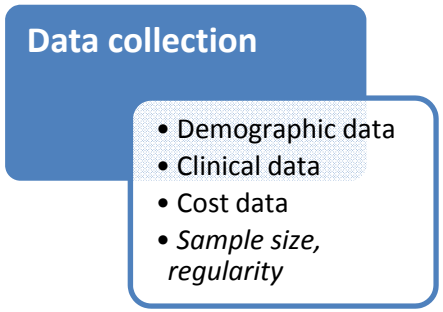
Patient classification system

- 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)

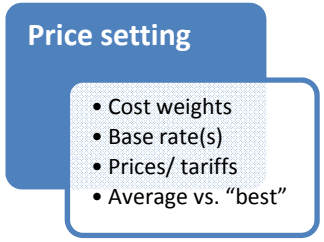
Sample size

→ 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



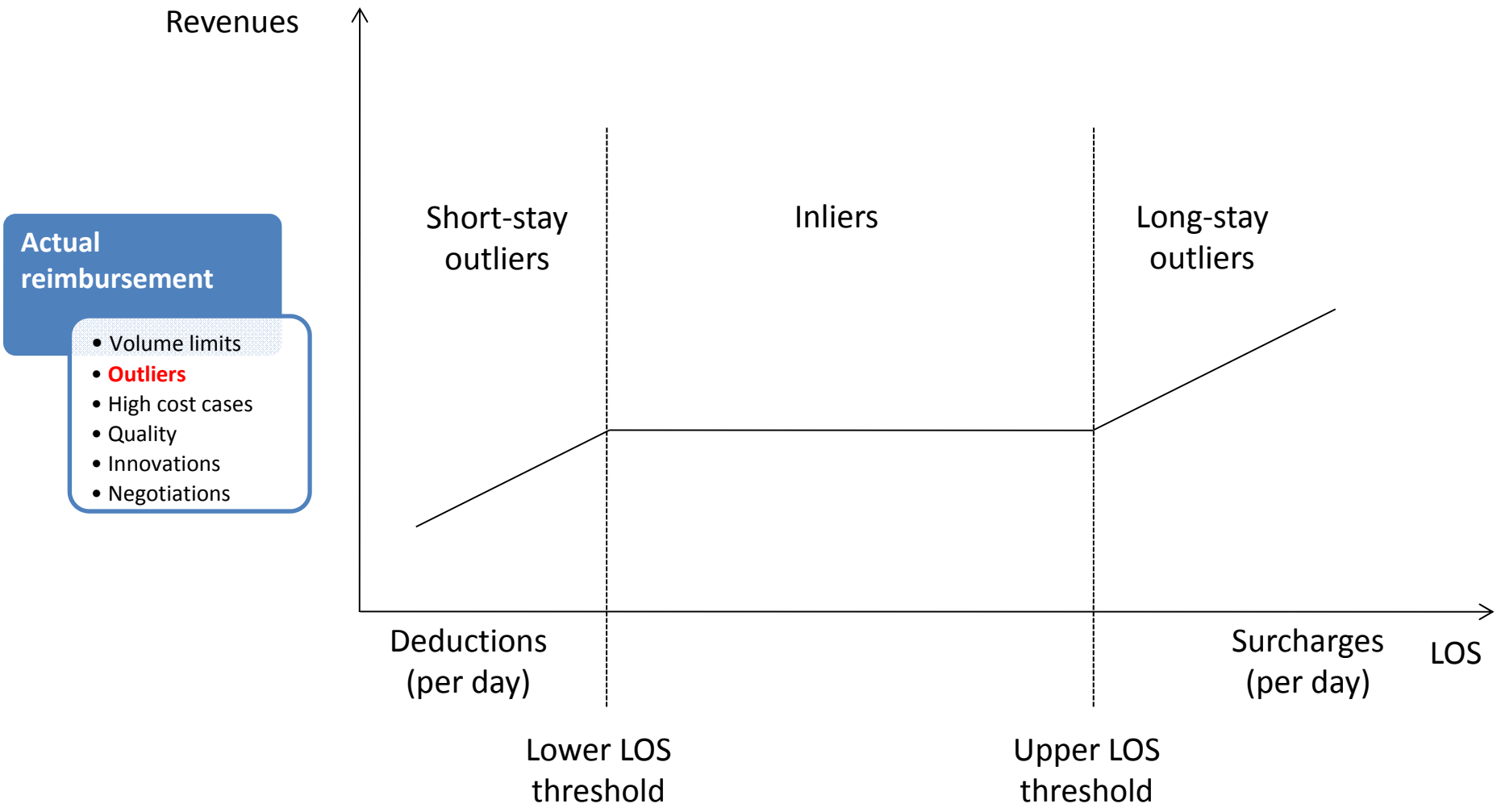
- Based on good quality data (not possible if cost weights imported)
- "Cost weights x base rate" vs. "Tariff + adjustment" vs. Scores
- Average costs vs. "best practice"

Incentives and hospital 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 European DRG systems reduce unintended behaviour: 1. long- and short-stay adjustments



How European 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 •Diagnostic imaging •High-cost drugs	No
Innovation-related add'l payments	Yes	Yes	Yes	Yes (for drugs)

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

Actual reimbursement

- Volume limits
- Outliers
- High cost cases
- **Quality**
- Innovations
- Negotiations

- England/ Germany: no extra payment if patient readmitted within 30 days/ length-of-stay threshold
- Germany: deduction for not submitting quality data
- England: up 1.5% reduction if quality standards are not met
- France: extra payments for quality improvement (e.g. regarding MRSA)

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

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, emergen… …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 cost categories into DRGs

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

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Theory and Practice in the Design of Physician Payment Incentives

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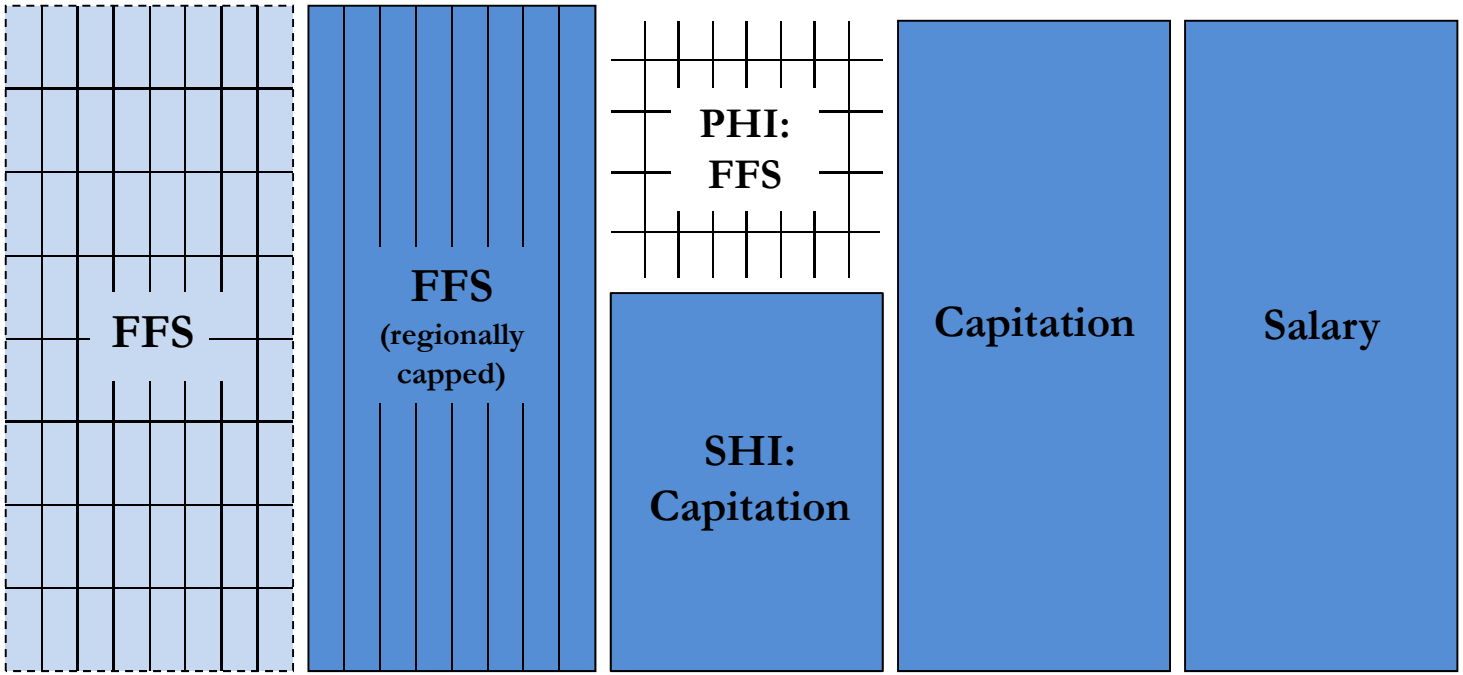
There are many mechanisms for paying physicians; some are good and some are bad. The three worst are fee-for-service, capitation, and salary. Fee-for-service rewards the provision of inappropriate services, the fraudulent upcoding of visits and procedures, and the churning of "ping-pong" referrals among specialists. Capitation rewards the denial of appropriate services, the dumping of the chronically ill, and a narrow scope of practice that refers out every time-consuming patient. Salary undermines productivity, condones on-the-job leisure, and fosters a bureaucratic mentality in which every procedure is someone else's problem. But American medicine exhibits numerous interesting compensation systems that blend elements of retrospective and prospective payment, of fee-for-service, salary, and capitation. These innovations seek a middle ground between high- and low-intensity incentives, between piece rates and straight salary. Payment

Advantages and disadvantages of different forms of GP payment

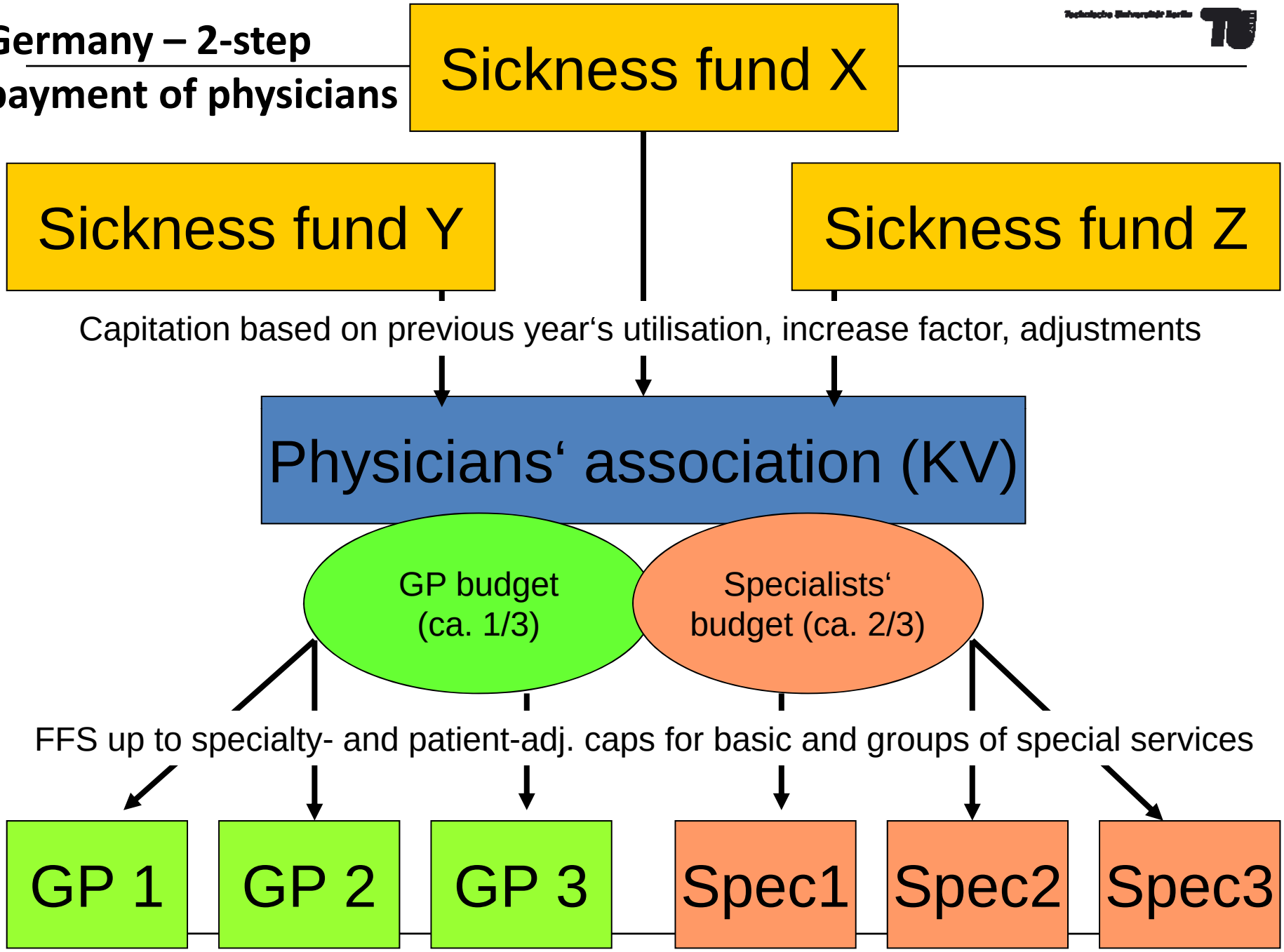
Payment mecha-nism	Patient needs (risk selection)	Activity		Expendi-ture control	Technical efficiency	Trans-parency	Quality	Admini-strative simplicity
		Number of services/ case	Number of cases					
Fee-for-service	+	+	+	—	0	0	0	—
Capi-tation	— (if not risk-adjusted)	—	+	+	+	—	0	0
Salary	0	—	—	+	0	—	0	+

Traditional forms of paying GPs (until early 2000s)

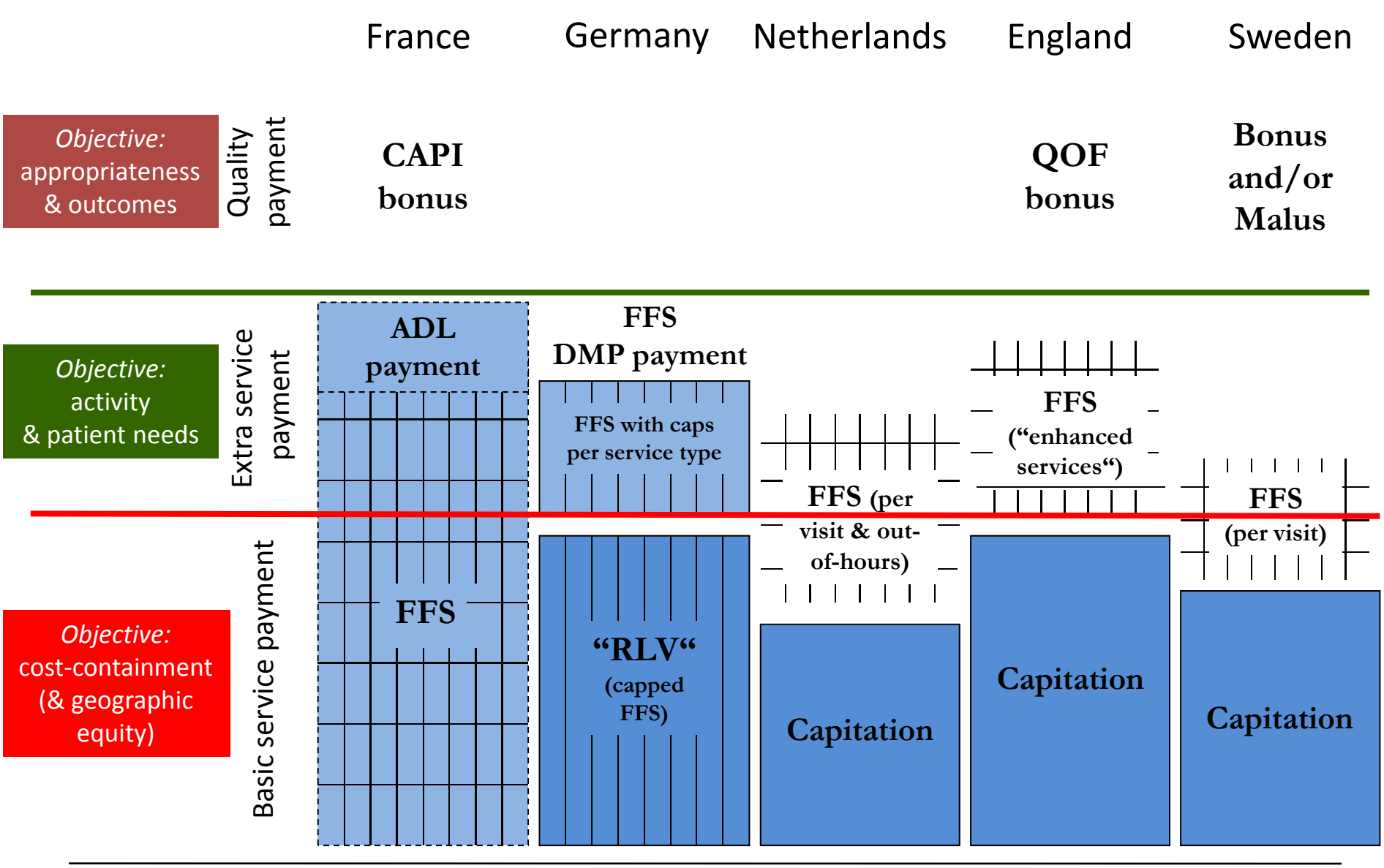
France Germany Netherlands England Sweden



Germany – 2-step payment of physicians



Payment components in GP care today



Determination

- England: sex and 7 age bands = 14 categories (1.0 = males 5-14 → 8.9 females 85+) *plus* adjustments for long-term illness and standardised mortality ratio *plus* adjustment for cost (GP, staff, land, buildings)
- Germany: based on actual utilisation in previous year
- Netherlands:
  3 age bands plus deprivation in area = 6 categories
- Sweden: several age bands and/or morbidity factors (plus socio-economic factors)

Percentage of total payment per component (estimates)

	France	Germany	Netherlands	England	Sweden
Objective: appropriateness & outcomes	5%			25-30%	max. +/- 3%
Objective: activity & patient needs	1% 95%	<5% 30%	40-45%	<10%	10-20% (Stockholm 60%)
Objective: cost-containment (& geographic equity)		60-70%	55-60%	65%	80-90% (Stockholm 40%)

The challenge for paying for chronic care

- Care for people with chronic conditions is an issue with increasing importance in all industrialized countries

- Countries have been experimenting and working towards care models in response to the fact that chronic diseases can rarely be treated in isolation

- These models try
  - ➢ to coordinate and potentially integrate care
  - ➢ with the aim of providing higher quality of care
  - ➢ while also being efficient

- Challenge: to pay providers in a way that incentivizes these objectives

Advantages and disadvantages of different forms of ayment

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	—
Capi-tation	— (if not risk-adjusted)	—	+	+	+	—	0	0
DRGs	0	—	+	0	+	+	0	—
Global budget	—	—	—	+	0	—	0	+
Salary	0	—	—	+	0	—	0	+

Advantages and disadvantages of different forms of ayment

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Capi-tation	– (if not risk-adjusted)	–	+	+	+	–	0	0
DRGs	0	–	+	0	+	+	0	–
Global budget	–	–	–	+	0	–	0	+
Salary	0	–	–	+	0	–	0	+

Advantages and disadvantages of different forms of ayment

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Capi-tation	— (if not risk-adjusted)	—	+	+	+	—	0	0
DRGs	0	—	+	0	+	+	0	—
Global budget	—	—	—	+	0	—	0	+
Salary	0	—	—	+	0	—	0	+

Advantages and disadvantages of different forms of ayment

Payment mecha-nism	Patient	Activity	Expendi-			ity	Admini-strative simplicity
Fee-for-service							–
Capi-tation	(if						0
DRGs							–
Global budget							+
Salary							+

Three observations stand out:

1) all payment mechanisms provide conflicting incentives for "activity" and "expenditure control", with capitation and DRGs best for efficiency;

2) none provide incentives for producing high quality outcomes;

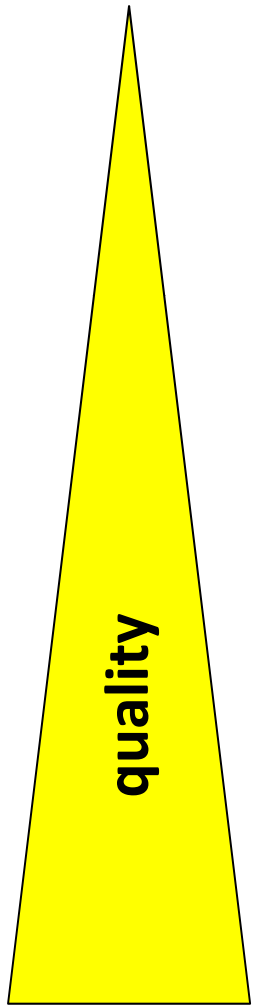
3) none provide incentives for care coordination.

First strategy: Paying for quality of care

for Structure, e.g. access time, provider's function as a gatekeeper or for including patients in registers

for Processes, i.e. for treating chronically ill according to established practice, e.g. adherence to guidelines

for Outcome of care, i.e. short- or long-term clinical outcomes or patient satisfaction

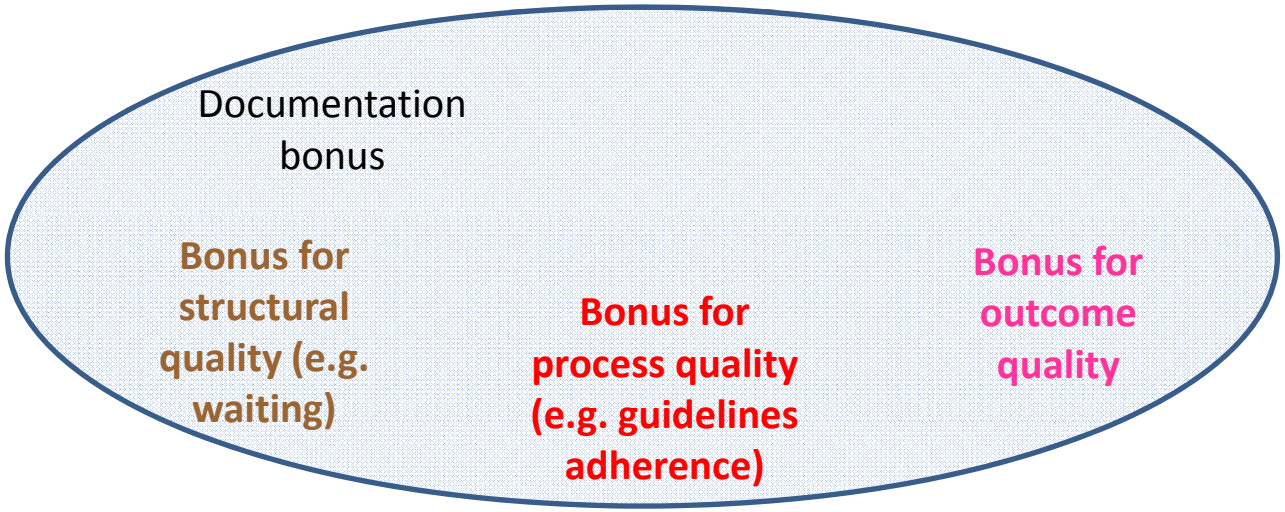


Capitation

or

Case-based

and



Paying for quality

Financial incentives to (primarily) improve quality of care

… targeting structures of care	… targeting processes of care	… targeting outcomes of care
Per patient bonus for physicians for acting as gatekeepers for chronic patients and for setting care protocols or providing patient education (FR)	Points for reaching process targets (UK: QOF; FR: CAPI; AUS: PIP)	Points for reaching outcome targets (UK: QOF)
Bonus for DMP / PIP recruitment and documentation (GER; AUS)	P4P (mainly hospitals, US)	P4P (mainly hospitals, US)
Points for reaching structural targets (UK: QOF; FR: CAPI)		

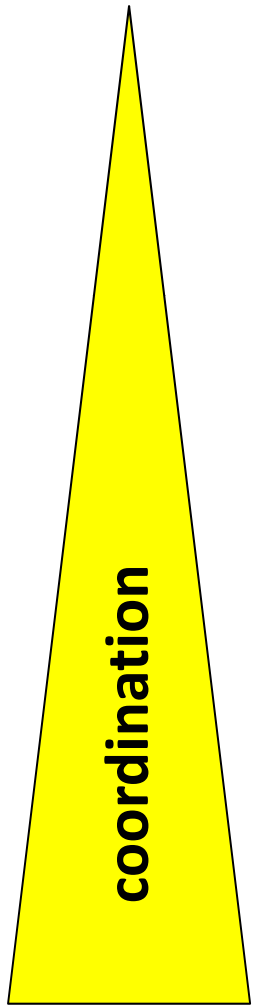
Second Strategy: Paying for care coordination

1st level: separate payment for coordination or extra effort

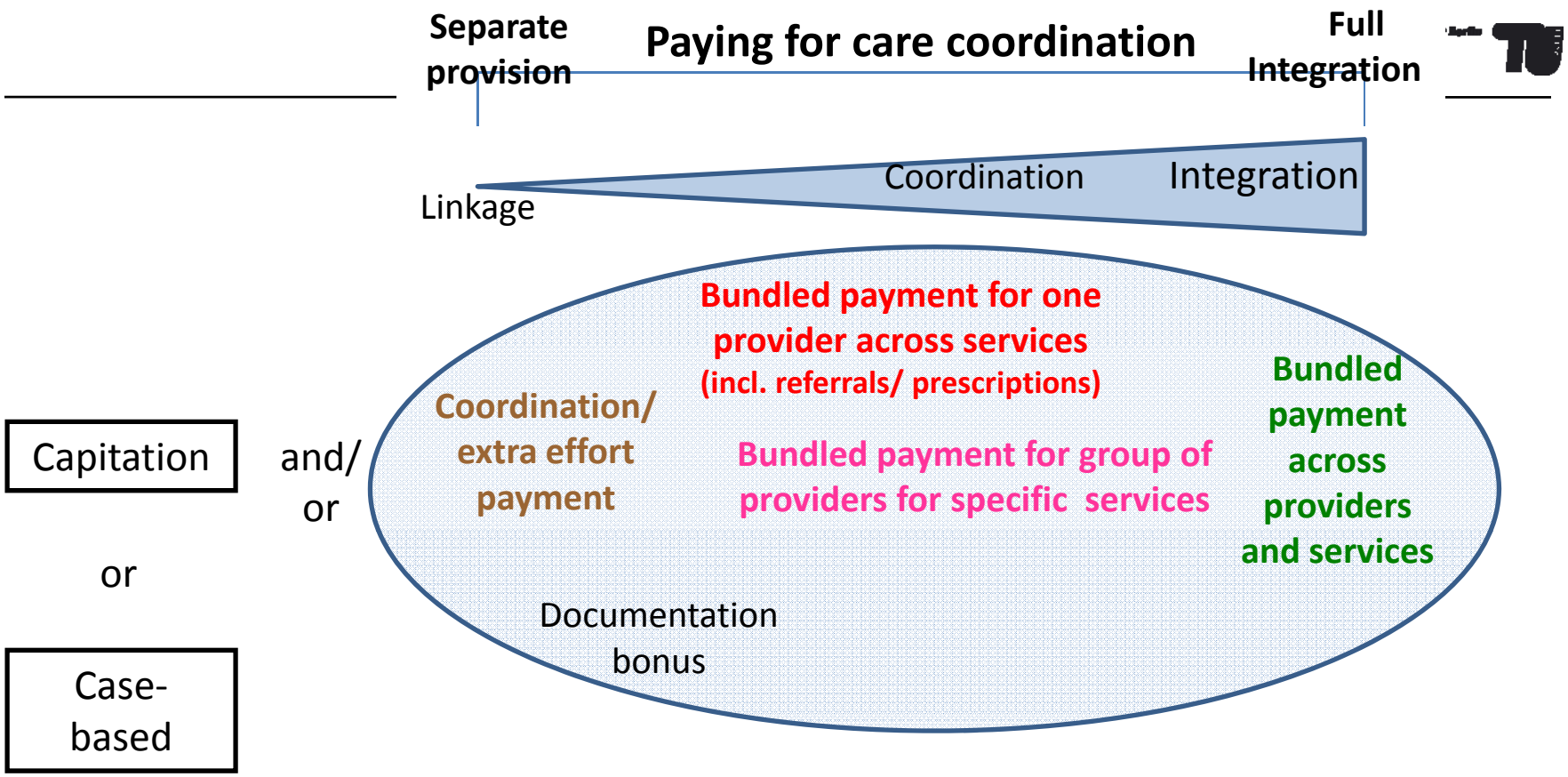
2nd level: bundled payment across services (for one provider but incl. referrals/ prescriptions)

3rd level: bundled payment across providers (but restricted to a set of activities, e.g. only those related to one disease)

4th level: bundled payment across services and providers

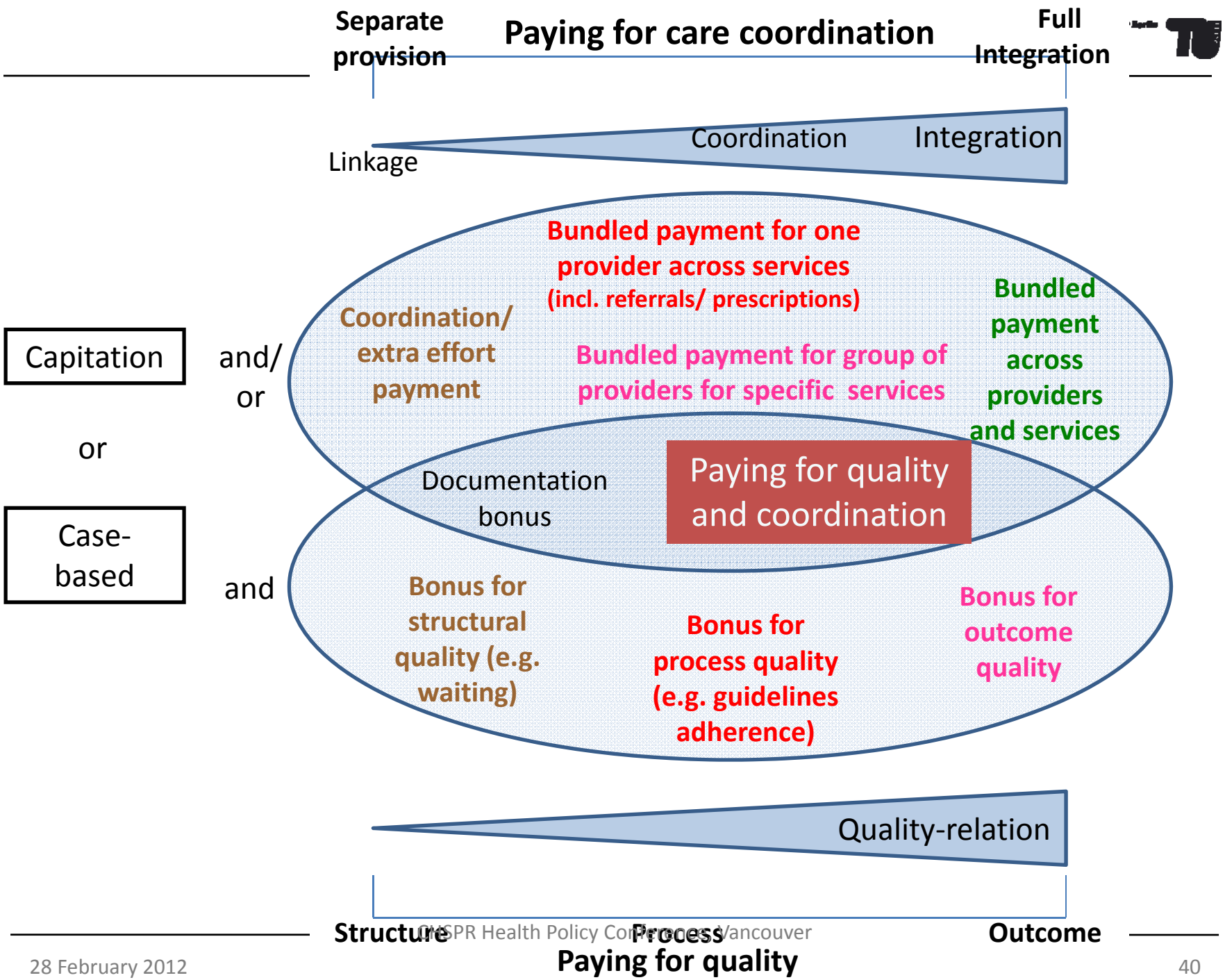


Main incentive: be efficient and keep savings!


Separate provision
Paying for care coordination
Full Integration
Coordination
Integration
Linkage
Capitation
and/ or
or
Case-based
Bundled payment for one provider across services (incl. referrals/ prescriptions)
Coordination/ extra effort payment
Bundled payment for group of providers for specific services
Bundled payment across providers and services
Documentation bonus

Financial incentives
used to (primarily) improve care coordination

… for coordination/ extra effort	… for bundling across services	… for bundling across providers	… for bundling across services and providers
"Year of care" payment for the complete package of chronic disease management (UK) or service incentives (AUS)	GP "fundholding" (UK)	1% of overall health budget available for **integrated care** → majority of integrated care (GER)	1% overall health budget available for **integrated care** → population-based integrated care (Kinzigtal; GER)
Per patient bonus for physicians acting as gatekeepers for chronic patients/ for setting care protocols/ providing patient education (FR)		**Payment for professional cooperation and diagnostic-related bundled payment** (FR)	Shared savings for Accountable Care Groups ; tested in **Physician Group Practice demonstration** (US)
Bonus for DMP recruitment and documentation (GER) or initial payments (AUS)		**Integrated Care Groups** (NL)	
Service outcome payments (AUS)		Bundled payment for acute-care episodes (US)	


Separate provision
Paying for care coordination
Full Integration
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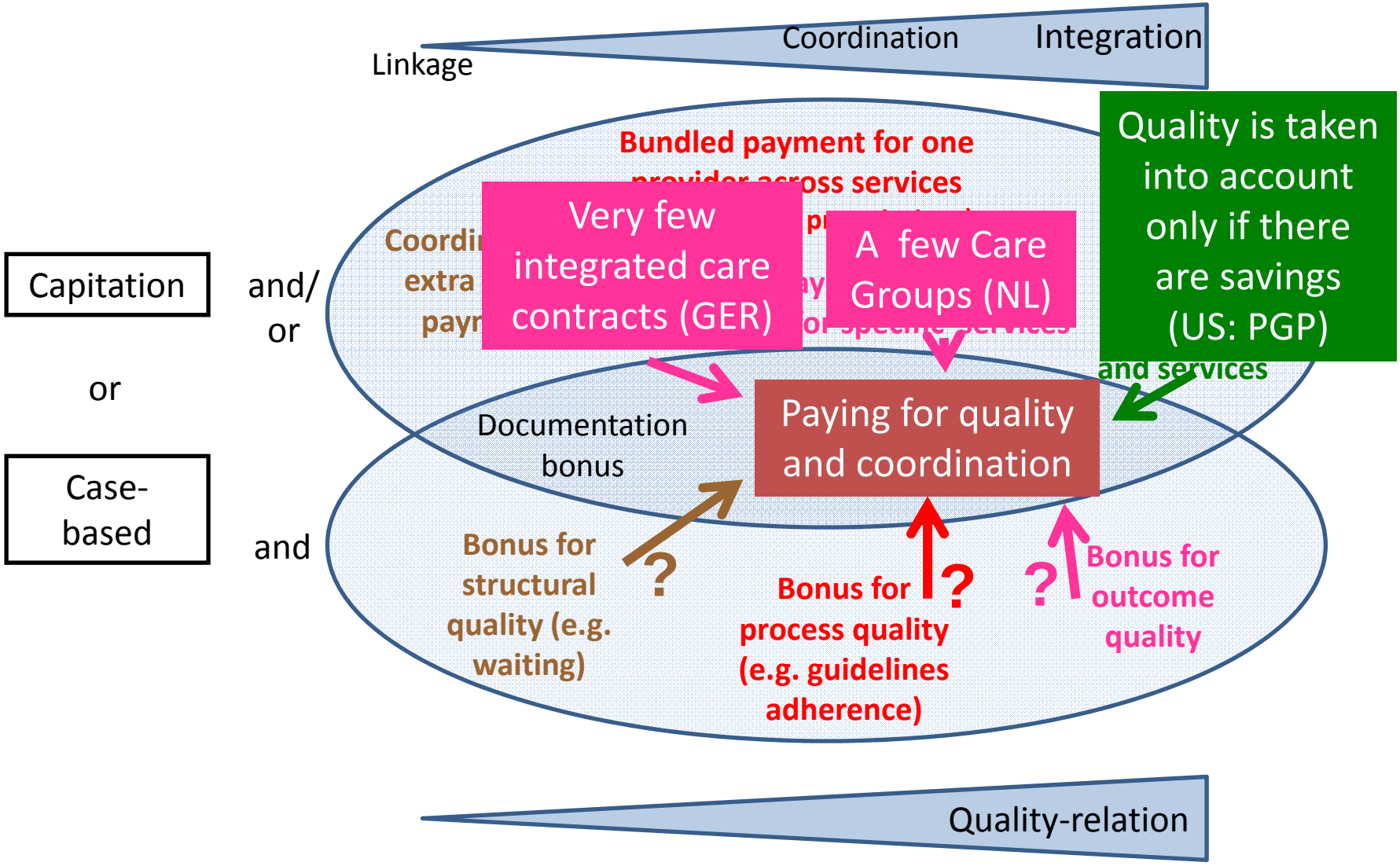
Linkage
Capitation
and/ or
or
Case-based
and
Bundled payment for one provider across services (incl. referrals/ prescriptions)
Coordination/ extra effort payment
Bundled payment for group of providers for specific services
Bundled payment across providers and services
Documentation bonus
Paying for quality and coordination
Bonus for structural quality (e.g. waiting)
Bonus for process quality (e.g. guidelines adherence)
Bonus for outcome quality
Quality-relation
Structure
Process
Outcome
Paying for quality


Linkage
Coordination
Integration
Capitation
and/
or
or
Case-
based
and
Bundled payment for one
Very few
integrated care
contracts (GER)
A few Care
Groups (NL)
Quality is taken
into account
only if there
are savings
(US: PGP)
Documentation
bonus
Paying for quality
and coordination
Bonus for
structural
quality (e.g.
waiting)
Bonus for
process quality
(e.g. guidelines
adherence)
Bonus for
outcome
quality
Quality-relation

Conclusions: paying for chronic care

- A shift from incentives which simply take into account the presence of chronically ill towards incentives designed to improve structural and process indicators
  - Although a trend towards more quality-related payment can be observed, financial incentives for the delivery of quality outcomes are still limited
  - A separate trend towards more bundling of payments across providers, services or both ("integrated care") can be observed (main incentive: profit-sharing for efficiency)
- The challenge – paying for successful coordination AND quality (rather than just efficiency) – still remains
  - The current rare approaches need to be evaluated
  - Further models need to be developed