Social Care and Health Systems

# Provider payment mechanisms

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EVROPSKÁ UNIE Evropské strukturální a investiční fondy Operační program Výzkum, vývoj a vzdělávání



## Health care financing – Third party payers

- "Third party payers" pays for the service in the markets for health services mostly
- The purchasers pay is a critical element of strategic purchasing
- Each method creates a different set of incentives
- From the position of a health service provider, it is irrelevant whether the funds come from public or private sources or whether they are generated under insurance or budget

#### Health care financing – Third party payers

- Payment methods:
  - 1. Fee for service
  - 2. Capitation
  - 3. Salary
  - 4. Budget
  - 5. Per diem
  - 6. DRG

#### 1. Fee for service

- Most traditional payment scheme
- Physicians and healthcare providers are paid by government agencies and insurance companies or individuals
- Provided that revenue for an individual service exceeds the cost of providing it, it creates natural incentives for providers to produce more and more services

## 1. Fee for service

- Payments are unbundled, so services are billed and paid for separately
- The key question is how the payment is determined
- According to this criterion, there are several quite different types of payment for services
  - A. Billed charged
  - B. Payments based on a fixed price list of services
  - C. Payments based on the so-called "reasonable" prices
  - D. Payments based on lists of services (services) valued at relative values

# Billed charged

- The doctor himself determines the fee and charges it directly to the patient
- If a "third party" is involved in this transaction, then only as an entity that performs some patient compensation
- This form is particularly useful in the United States for doctors who are not involved in large private or public insurance schemes
- Their freedom in pricing is somewhat offset by the risk that they will not be able to reimburse all the accounts they have issued
- Irrecoverable receivables reduce income and cause de facto costs to rise

#### Payments based on a fixed price list of services

- Often used both in the US and Europe
- Price lists can simply list the reimbursement services and the amount of payments that the 'third party' will reimburse to all participating doctors
- There may also be more complex systems that differentiate tariffs according to different groups of doctors (specialists and general practitioners) geographic location, etc
- Payments may be made either in the form of full or partial reimbursement of patient expenses, or direct payments to the service provider
- In the former form, doctors can set their own prices and charge services not covered by the payer
- Administration is relatively easy
- Their main advantage is that they allow payers some control over prices
- This in turn explains why this method is unpopular among physicians

#### Payments based on the so-called "reasonable" prices

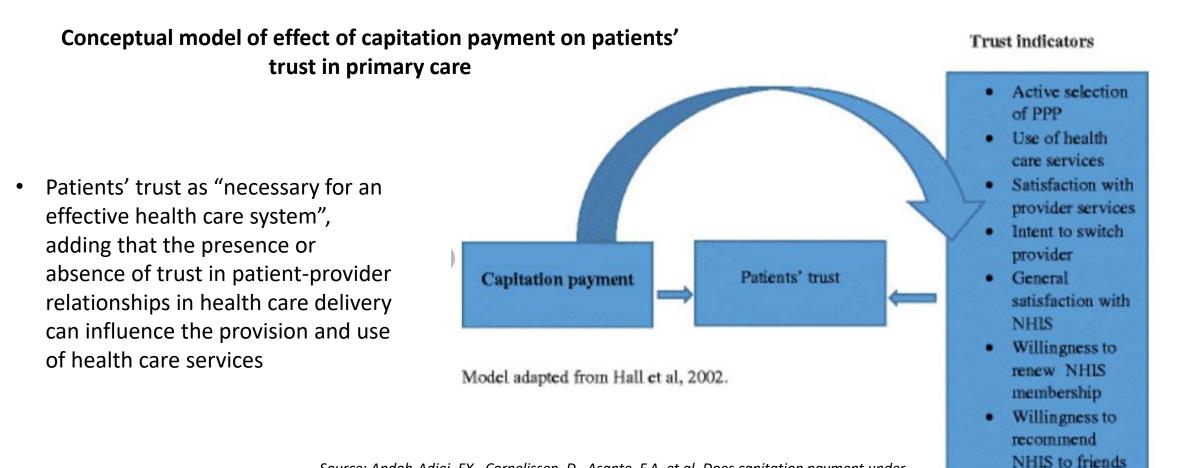
- Medicare a Medicaid work with them
- The essence of this approach is that doctors draw up their own private price lists and payers gather information on the prices charged for each service or act by all the doctors involved
- Based on this activity, a diagram can be constructed after a certain time, showing what prices a GP has charged for a certain type of service
- The price corresponding to the median (mean) is then referred to as the usual price
- The functioning of financing methods based on the prices thus fixed is far more expensive than fixed tariffs
- It is advantageous for doctors that the amount of reimbursement automatically adjusts to the prices charged, but payers lose control of the price increase

- Payments based on lists of services (services) valued at relative values
- Administration is relatively simple and inexpensive and yet flexible enough
- A model used in the transformation of the Czech healthcare system
- This is not exclusively our Czech issue, a model based on relative values is also applied in California
- The basis is the list of services
- Each power is valued by the appropriate number of units of relative value
- The total doctor's income is then given by the value of this unit (point) expressed in money
- Any increase in input prices, inflation, etc. can thus be taken into account by changes in the point value
- It is flexible enough
- Payers do not lose control over their cost increases

- Patient-based payments (per capita)
- Flat-rate payments
- Drive on contract by a health insurance company and a medical provider
- Fixed and pre-arranged monthly payments
- The payment is calculated regardless of how often the patient needs health care services

- The term capitation (*caput*) meaning per capita, head
- A doctor or hospital is paid a fixed amount per patient for a prescribed period of time by an insurer or physician association
- The amount of the capitation will be determined, in part, by the number of services provided and will vary from health plan to health plan
- Most capitation payment plans for primary care services include basic areas of healthcare

- Capitation payments are defined, periodic, per-patient payments (usually monthly) for each individual enrolled in a capitated insurance plan
- The amount of the capitation will be determined, in part, by the number of services provided and will vary from health plan to health plan
- Most capitation payment plans for primary care services include basic areas of healthcare
- Capitation payments are designed to lower the high costs of healthcare
- The payment varies depending on the capitation agreement, but generally, they are based on characteristics such as the age of the individual enrolled in the plan



Source: Andoh-Adjei, FX., Cornelissen, D., Asante, F.A. et al. Does capitation payment under national health insurance affect subscribers' trust in their primary care provider? a cross-sectional survey of insurance subscribers in Ghana. BMC Health Serv Res 16, 437 (2016).

- This method is risky for the physician, since his income is not directly related to the actual operating costs
- Flat-rate proponents argue that such a risk is healthy by forcing doctors to think economically and "guard" costs, and also hinders the provision of unnecessary services
- Opponents point out, that the method makes the provision of services inadequate and unnecessarily burdened with specialist doctors and healthcare facilities whose services are significantly more expensive
- One way to improve this method is to distinguish between groups of patients (eg by age) when making flat-rate payments or to take into account different operating costs for different types of private practice of doctors

- Capitation payments control use of health care resources by putting the physician at financial risk for services provided to patients
- It is not unusual for large groups or physicians involved in primary care network models to also receive an additional capitation payment for diagnostic test referrals and subspecialty care
- A risk pool is established as a percentage of the capitation payment. Money in this risk pool is withheld from the physician until the end of the fiscal year

- Projected profitability for this model is ultimately based on how much health care the group is likely to need
- Given that patients with pre-existing conditions will be often mixed with younger, healthier ones, the expected profits can sometimes converge from the actual profit
- There are both primary and secondary capitation relationships
- Primary capitation is a relationship in which the PCP is paid directly by the IPA for each patient who decides to use that practice
- Secondary capitation is one in which a secondary provider approved by the IPA (like a lab, radiology unit, or medical specialist) is paid out of the PCP's enrolled membership when used

Source: Andoh-Adjei, FX., Cornelissen, D., Asante, F.A. et al. Does capitation payment under national health insurance affect subscribers' trust in their primary care provider? a cross-sectional survey of insurance subscribers in Ghana. BMC Health Serv Res 16, 437 (2016).

#### • Pros

The chief benefit for a doctor is the decreased costs of bookkeeping
 Discourages excessive billing or more costly procedures
 Patients avoid unnecessary tests and procedures

#### • Cons

Providers may spend less time per patient
 Incentivizes providing fewer services

Source: Trisha Torrey, How Healthcare Capitation Payment Systems Work, 2020

- Per person payment methods can encourage waste reduction and give patients and physicians the freedom to make the treatment decisions they think are best
- But to function well, such systems must adjust payments for risk, which is easier to do at the level of a population than of an individual patient
- There have to be quality measures to ensure that providers don't withhold necessary care
- And savings from waste reduction must go back to care delivery groups to keep them financially viable

• Many country use a capitation in Primary care:

Bulgaria, Croatia, Denmark, Slovakia, Spain, Estonia, France, Poland, United Kingdom, Latvia, Czech republic, etc.

- Usually use mix of capitation and payment for service
- Pure capitation in primary care is in Hungary Ireland and Italy
- In Poland is capitation even used in Outpatient specialized care

## Provider payment mechanisms - 3. Salary

- Wages, essentially based on time worked, are the method by which most healthcare workers are paid if they are taken as a whole
- All OECD countries make a partial or complete use of salaries for paying doctors, whether they are working as individual doctors or within the context of hospitals
- Under salary payment doctors' income is not linked to output such as quantity of items or quality of services
- Therefore, salaried doctors in the public sector are often associated with low motivation, low productivity and low quality of services
- Recently, however, salaries are also being combined with capitation and performance based components to promote motivation as well as higher productivity and quality

## Provider payment mechanisms - 3. Salary

- This is the least risky method for the practitioner
- Operating costs and risk are borne by the employer
- As personnel costs are only one part of the total treatment costs it is important to see in which context salaries are used as a provider payment method
- There can be a notable impact from hospital management on hospital doctors' treatment decisions if salaries are paid under strict budgetary limitations, prompting doctors to favour low cost treatments and perhaps tolerating treatments of lower quality

- Distinguish budgets for the whole health care system, and budgets for parts of it such as for ambulatory care, hospital care, pharmaceuticals etc
- These are referred to as global and sectoral budgets, respectively. Budgets are also being set for health facilities such as hospitals, as is the case in France
- However, this does not preclude hospitals from using other provider payment methods
- Budgets are different from other provider payment schemes: they are used more to allocate pre-determined amounts of money to providers, thereby setting the framework for the subsequent introduction of other provider payment schemes Source: WHO, PROVIDER PAYMENTS AND COST-CONTAINMENT LESSONS FROM OECD COUNTRIES, 2007

#### 2 types of budgeting

Global budget	A prospective payment where health care providers are given an amount of money to spend, with total flexibility on how and what to spend on, to deliver an agreed-upon set of services
Line-item budget	A prospective payment where providers receive a given amount of money to spend on specific itemised services. The budget is not flexible, and expenditure must follow line items, unless with prior authorisation from relevant authorities
	Source: Diane Mcinture: Learning from Experience: Health care financing in low-and mi

Source: Diane Mcintyre: Learning from Experience: Health care financing in low-and middleincome countries, 2007 23

- For settings that employ **line-item budgets**, substantial long-term planning is needed to change payment systems, estimate costs, and use prices and payment systems to reach policy goals
- For any payment reform, the starting point is developing a classification system of the services that are currently being delivered
- Given that the strength of health systems can affect the speed and quality of implementation of reforms, continued investments in broader capacities should receive greater attention including, for example, clinical guidelines, regulatory frameworks, and strengthening professional associations.

Source: Barber, S., L. Lorenzoni and P. Ong (2019), Price Setting and Price Regulation in Health Care: Lessons for Advancing Universal Health Coverage, OECD Publishing, Paris/WHO, Geneva

- **Budget-based** line item and global payments are typical in many low- and middleincome settings
- Gradually being replaced by other methods
- Because such methods are not strongly aligned with the costs that health care
  providers may incur in delivering different types of services
- The advantages of line-item budgets are predictability and control
- They are not linked to the type and volume of services provided, nor do they
  provide any incentives for efficiency or quality
- Global budgeting has replaced line-item budgeting in many settings that rely on regulation to control health spending
- A global budget provides fixed funding for a specific population group and offers more flexibility in allocating resources
- Like line-item budgets, global budgets are commonly based on prior years' allocations, although capitation and other methods can be used

Source: Barber, S., L. Lorenzoni and P. Ong (2019), Price Setting and Price Regulation in Health Care: Lessons for Advancing Universal Health Coverage, OECD Publishing, Paris/WHO, Geneva

#### • Can be achieved cost-containment?

- > Depends on the type of budget and its rigidity
- First, to reflect the degree of rigidity, one can distinguish hard and soft budgets
- Under hard budgets providers are fully responsible for all profits and losses while soft budgets entail a fixed amount of spending but without penalty in case of excess
- The hard type is more effective for cost-containment but may reduce access and quality of services or produce waiting lists
- >Only hard global and sectoral budgets are effective
- >With soft budgets, the risk of overspending is large

Source: Barber, S., L. Lorenzoni and P. Ong (2019), Price Setting and Price Regulation in Health Care: Lessons for Advancing Universal Health Coverage, OECD Publishing, Paris/WHO, Geneva

- Could be prospective of retrospective
- Commonly used in the public sector
- Line item budget –allocated to specific functions such as food, salaries, medicines
- Global budget; advance payment to a health facility to cover a specified period
- Tendency to spend entire budget to ensure continued level of support

Pros and Cons

- Simple to administrate
- Cost containment
- Low investment in technologies
- election of patients
- patient shifting
- substitution costs under sectoral budget

The case od Germany

- The German hospital care system uses flexible budgets to control expenditures
- Every hospital has a budget
- In case of exceeding this budget hospitals get only the variable costs of the DRG remuneration inside the budget corresponding to around 35 % of the surplus
- Therefore hospitals have a strong incentive to stay inside the budge

*Source: WHO: PROVIDER PAYMENTS AND COST-CONTAINMENT LESSONS FROM OECD COUNTRIES, 2007* 

- Some analysis revealed that capitation, case-based, and global budget provider payment mechanisms have the potential to control healthcare costs by creating incentives for providers to reduce the volume of services
- Capitation payment has the potential to promote provider efficiency, while global budget may reward inefficient hospitals if risk adjustors (such as gender and age) are not considered in the resource allocation formula
- Both capitation payment and global **budget** have lower administrative costs compared to fee-for-service Source: WHO: PROVIDER PAYMENTS AND COST-CONTAINMENT LESSONS FROM OECD

- Daily payment
- It gives hospitals a strong incentive to increase the number of admissions and to extend the length of stay, thereby enhancing health expenditure
- Norway abandoned per diem payments at the beginning of the 1980s and over the past years health reforms in the OECD countries confirm the trend of a limited use of daily payment
- For example, an excessively high length of stay under the per diem payment scheme was one main reason for Germany to introduce DRGs for the remuneration of inpatient care

- Fixed amount per day for inpatient stay, which may vary by department, patient, clinical characteristics, or other factors
- In many settings, per diem payments are adjusted for case mix or estimated for each hospital ward or specialty
- They are administratively simple but provide incentives for longer lengths of stay
- The per diem system to finance the operational costs of hospitals, is a reimbursement system which was frequently used in the past
- In these systems, specialists play a decisive role in hospital reimbursement because they determine the length of stay of patients (and hence the income for the hospitals) by their admission and discharge policy

- The per diem system is largely variable and can have a retrospective or a prospective basis
- In the latter case, whereby a price, independent of threal costs, is determined ex ante by the regulatory authorities, incentives for profitmaximising providers are to reduce costs per patient-day
- In the former case, the real costs of the hospital determine the reimbursement
- The per diem price is hence not a real 'unit of reimbursement' but rather a payment modality, to cover the historical costs of the hospital

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Source: Green, J.:

Difference Between Discounted Charge & Per Diem Reimbursement, 2020

## Provider payment mechanisms - 5. Per Diem

- Per diem reimbursement is a type of a prospective payment
- In a prospective payment system, the health care provider already establishes the cost of health care, and the insurance provider takes these already established rates as given
- The health care provider sets these rates based on the average cost of delivery of a certain health need, using historical prices as an estimator
- A per diem payment version of a prospective payment system is where the insurance provider pays for the patient's healthcare based on the number of days the patient directly receives treatment from the health care provider

Source: Green, J.: Difference Between Discounted Charge & Per Diem Reimbursement, 2020

- Per diems represent an administratively straightforward way of modifying the inherently complex and inflationary approach of paying for each individual service hospitals provide
- Per diem payment for inpatient services provides a fixed amount for a patient day in the hospital, regardless of a hospital's charges or costs incurred for caring for that particular patient
- Per diem payment is often subject to carve-outs for particularly highcost items and services, such as surgical implants and expensive drugs
- The costs for these items can be passed through, sometimes with a markup for the hospital

#### • Pros

- Led to straightforward administration and contracting
- Has facilitated administrative standardization, with supporting software to facilitate coding and billing
- Provides some constraints on cost-generating hospital behavior, because the payment amount per day is prospectively set
- Can provide greater transparency for consumers to compare prices and lengths of stay among hospitals, as a surrogate for overall hospital costs
- Cons
  - > Hospitals have no incentive to avoid unnecessary days during a hospitalization
  - > Do not provide much transparency about hospitals' actual clinical activities
  - Efforts to control costs may require third parties that monitor per diems to determine medical necessity through aggressive "continued stay" medical review

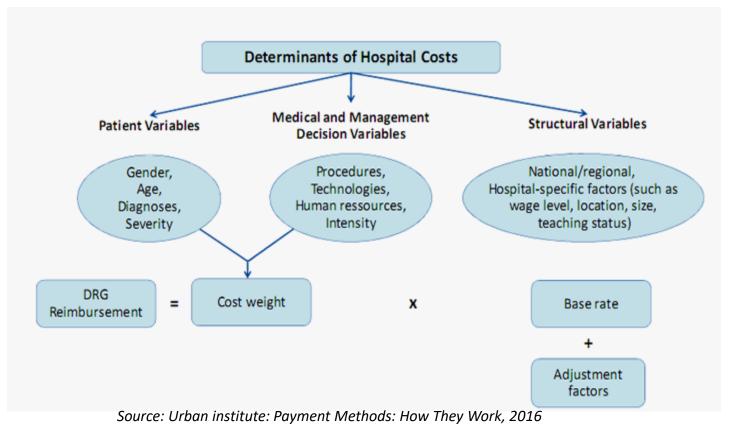
- The Diagnosis-Related Groups (DRG)-system is a patient classification system developed to classify patients into groups economically and medically similar, expected to have comparable hospital resource use and costs
- Under DRGs providers are reimbursed at a fixed rate per discharge based on diagnosis, treatment and type of discharge
- DRGs have a strong incentive for cost containment
- As the remuneration refers to diagnoses and procedures, providers are motivated to deliver services as cost-effective as possible with the shortest possible length of stay
- On the other hand, concerns about premature discharges, selection of lowcost patients and the increase of admissions should be dealt with
- Therefore quality and monitoring measures are essential to avoid negative side effects

Source: Kobel C, Thuilliez J, Bellanger MM, Pfeiffer KP. DRG systems and similar patient classification systems in Europe. In: Busse R, Geissler A, Quentin W, Wiley MM, editors. Diagnosis-related groups in Europe: moving towards transparency, 37 efficiency and quality in hospitals. First ed., Buckingham: Open University

- The first DRG payment system was introduced in 1983 for US Medicare
- By now a form of DRG-system is adopted by several OECD members
- Australia began to pilot the American system in 1985 and has now developed its own DRG-system
- As recent examples, since 2003 Germany is developing its own DRGsystem based on the Australian system
- Switzerland decided to use the German base for the future introduction of Swiss-DRGs

Source: Kobel C, Thuilliez J, Bellanger MM, Pfeiffer KP. DRG systems and similar patient classification systems in Europe. In: Busse R, Geissler A, Quentin W, Wiley MM, editors. Diagnosis-related groups in Europe: moving towards transparency, efficiency and quality in hospitals. First ed., Buckingham: Open University Press and WHO Regional Office for Europe; 2011.

 Payers and hospitals have found DRG-based payment methods attractive because of their much stronger incentives and rewards for shorter stays and reduced costs



- Method based on diagnostically related groups
- Development began at Yale University in the late 1960s
- At the beginning of the DRGwas an effort to create a tool that would allow a direct comparison of the performance and efficiency of the operation of different medical facilities
- Comparison and cost analysis of hospitals makes sense only if costs are recalculated to take into account differences in severity of cases treated
- Grouping by related diagnosis is based on a homogeneous grouping of patients who, in the opinion of doctors, require approximately the same care regimes and therefore consume a similar amount of hospital resources

- The measure of utilization of resources is the average period of hospitalization
- DRGs are far from being the only tool developed to directly measure the complexity of a case mix
- A number of alternative approaches can be found in expert studies, such as the Severity of Illness Index and others
- DRG cames to the awareness of the Czech healthcare public in connection with projects using this system for the reimbursement of hospital health care from public health insurance funds

• 4 levels of the classification system

#### 1. Major Diagnostic Category (MDC)

In most situations, this base unit reflects the clinical similarity of cases in terms of the organ system, corresponding to the disease, defect, medical or functional condition that is primarily addressed to the patient in a hospital case

In fact, the MDC level tells us what area of medicine is involved in a given hospitalization case

>What organ system of the patient I treat?

• 4 levels of the classification system

#### 2. DRG category

➤The DRG category within the relevant MDC corresponds to a clinically and / or etiologically defined clinical condition and is defined in particular on the basis of the relevant major diagnoses, which, with few exceptions, do not overlap between DRG categories

Each DRG category always contains at least one DRG base and each DRG category has its internal hierarchical structure of treatment modalities, ie DRG bases have their priority order within that category

> What do I treat within the system?

• 4 levels of the classification system

#### 3. DRG base

- ➤The individual DRG bases correspond to the treatment modality allowed for addressing the clinical condition defined by the DRG category or more DRG categories
- Each DRG base always contains at least one DRG group
- How do I treat the clinical condition?

#### 4. DRG group

- ➢Is the basic taxonomic unit of the system into which the most clinically and economically homogeneous cases are classified
- >What are the other specifics of the treatment provided?

#### Hospital remuneration in countries with social health insurance

Country	Public hospitals	Private not-for-profit hospitals	Private for-profit hospitals
Austria	DRG	DRG	DRG
Belgium	Prospective global budget	Prospective global budget	n.a.
Chile	DRG	DRG	line-item remuneration
Czech Republic	DRG	DRG	DRG
Estonia	DRG	n.a.	n.a.
France	DRG	DRG	DRG
Germany	DRG	DRG	DRG
Greece	DRG	DRG	Procedure service payment
Hungary	DRG	DRG	Procedure service payment
Israel	Procedure service payment	Procedure service payment	Procedure service payment
Japan	DRG	DRG	n.a.
Korea	Procedure service payment	Procedure service payment	n.a.
Luxembourg	Prospective global budget	Prospective global budget	n.a.
Mexico	Prospective global budget	Procedure service payment	Procedure service payment
Netherlands	DRG	DRG	n.a.
Poland	DRG	DRG	DRG
Slovak Republic	Procedure service payment	Procedure service payment	Procedure service payment
Slovenia	DRG	DRG	DRG
Switzerland	DRG	DRG	DRG
Turkey	Prospective global budget	Prospective global budget	Prospective global budget
United States (Medicare)	DRG	DRG	Procedure service payment

- DRG systems were internationally introduced for similar reasons, which can be grouped into two broad categories
- 1. First, they should increase the transparency of services which are effectively provided in hospitals
- 2. Second, DRG-based payment systems should give incentives for the efficient use of resources within hospitals by paying hospitals on the basis of the number and type of cases treated
- In addition, the combination of increased transparency and efficient use of resources was assumed to contribute to improving – or at least assuring – the level of quality of care

Source: Busse R, Geissler A, Aaviksoo A, Cots F, Häkkinen U, Kobel C et al. Diagnosis related groups in Europe: moving towards transparency, efficiency, and quality in hospitals? BMJ 2013; 46 346 :f3197

### • Years of introduction and purposes of DRG systems over time

Country	Year of DRG introduction	Original purpose(s)	Principal purpose(s) in 2010
Austria	1997	Budgetary allocation	Budgetary allocation, planning
England	1992	Patient classification	Payment
Estonia	2003	Payment	Payment
Finland	1995	Description of hospital activity, benchmarking	Planning and management, benchmarking, hospital billing
France	1991	Description of hospital activity	Payment
Germany	2003	Payment	Payment
Ireland	1992	Budgetary allocation	Budgetary allocation
Netherlands	2005	Payment	Payment
Poland	2008	Payment	Payment
Portugal	1984	Hospital output measurement	Budgetary allocation
Spain (Catalonia)	1996	Payment	Payment, benchmarking
Sweden	1995	Payment	Benchmarking, performance measurement

Countries that were early adopters of DRGs primarily did so with the aim of increasing transparency (such as Portugal and France

Countries that introduced DRGs later (such as the Netherlands and Poland) generally did so with The intention of paying hospitals on the basis of DRGs

Source: Busse R, Geissler A, Aaviksoo A, Cots F, Häkkinen U, Kobel C et al. Diagnosis related groups in Europe: moving towards transparency, efficiency, and quality in hospitals? BMJ 2013; 47 346 :f3197

- FUTURE of DRG?
- Diagnosis-Related Group (DRG) systems across Europe are very heterogeneous
- Because of different classification variables and algorithms as well as costing methodologies
- But, given the challenge of increasing patient mobility within Europe, health systems are forced to incorporate a common patient classification language in order to compare and identify similar patients e.g. for reimbursement purposes

# Thank you for your attentiom



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