chapter two

Introduction to DRGs in Europe: Common objectives across different hospital systems

Alexander Geissler, Wilm Quentin, David Scheller-Kreinsen and Reinhard Busse

2.1 Introduction

Since 1983, when Medicare adopted diagnosis-related groups (DRGs) as the basis for paying hospitals in the United States, DRG-based hospital payment systems have become the basis for paying hospitals and measuring their activity in most high-income countries, albeit to different extents (Paris et al., 2010). However, the term DRG is widely used with different meanings across and within countries. Some countries use DRGs mostly as a measure for assessing hospital casemix (for example, Sweden and Finland), whereas in other countries DRGs are used as a synonym for payment rates (such as in France and Germany). This is partly due to different DRG implementation processes that took place in different decades, and partly due to the fact that DRG systems were adopted and designed primarily based on the needs of the health system concerned (Busse et al., 2006; Schreyögg et al., 2006).

The second section (2.2) of this chapter summarizes the purposes of the introduction of DRGs in European countries and the expectations associated with their implementation, as well as illustrating the complexity of this process by highlighting the extended periods of time that sometimes evolved from the initial application of DRGs in hospitals to their use for hospital payment. In many countries, this process was highly controversial because of the potential unintended consequences of DRG-based hospital payment systems (see Chapter 6), and it is difficult to understand the international success of these systems without being aware of the alternatives. Therefore, section 2.3 presents the basic incentives of fee-for-service systems and global budgets that were

traditionally used in most countries. Section 2.4 then turns to the large structural differences in the hospital sector – both those that existed between countries at the time when DRGs were introduced for hospital payment and those that continue to persist today, despite the fact that DRGs are used for hospital payment in all countries. This serves to illustrate the original aim of this book; namely, to identify similarities and differences in the use of DRG systems across Europe. The chapter closes with a brief overview of the structure of this book.

2.2 Expectations and purposes of DRG introduction

Independent of the type of hospital system in place (see section 2.4), DRG systems were internationally introduced for similar reasons, which can be grouped into two broad categories: first, they should increase the transparency of services which are effectively provided in hospitals (that is, through patient classification, measuring hospital output, etc); and 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.

Table 2.1 shows how the purpose of DRG introduction varied according to when the country in question introduced the DRG-based system. Interestingly,

Table 2.1 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

Source: Authors' own compilation based on information presented in the country-specific chapters of Part Two of this volume.

Note: Even if the stated original purpose was to pay hospitals on the basis of DRGs, most countries began this process only after a conversion period (see Figure 2.1).

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.

Figure 2.1 illustrates the DRG introduction process in different countries since the early 1980s. Every country took a different route at a different time to introduce a DRG-based system, often initially for the purpose of patient classification, and later also for payment purposes. Some countries used DRGs over an extended period of time exclusively for the purpose of patient classification and increasing transparency (for example, up to ten years in England), in order to become acquainted with the DRG grouping logic before they started paying hospitals on the basis of DRGs. Others introduced DRGs after a short period of conversion (for example, in Ireland DRGs were introduced in 1992 and first used for budgetary allocation in 1993).

The reason why the introduction of DRG systems was thought to improve transparency is that such systems condense the extremely large number of patients that all appear to be unique into a limited number of groups that have a set of certain characteristics in common (Fetter et al., 1980). By categorizing patients with similar resource utilization and clinical characteristics into groups, DRGs describe hospital activity in standardized units and enable analyses, which

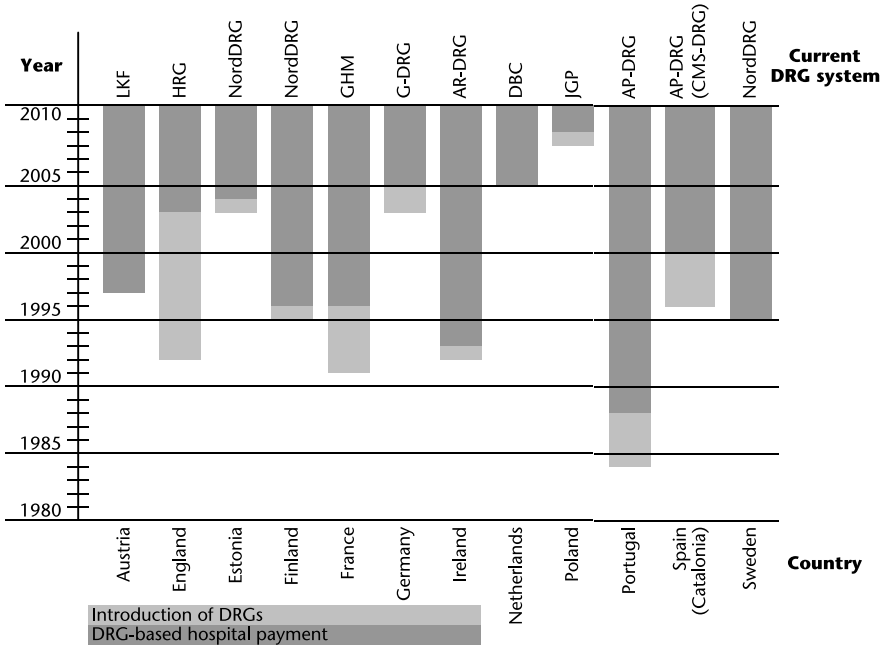

Figure 2.1 From DRG introduction to DRG-based budget allocation and payment

Source: Authors' own compilation based on information presented in the country-specific chapters of Part Two of this volume.

Note: Ireland started with HCFA-DRGs in 1992 and switched in 2003 to AR-DRGs.

otherwise would not be possible. For example, hospital managers and policy-makers can compare length of stay, costs, and quality of patients within the same DRG across different hospitals or across different hospital departments. In addition, DRGs offer a framework for an accurate assessment of the costs of treating a given patient, taking account of observable and measurable patient and service characteristics such as diagnoses and performed procedures. Consequently, DRGs facilitate performance comparisons and benchmarking, as well as contributing to increased transparency in an area of policy-making that previously was characterized by extreme agency problems. Especially in countries that traditionally used global budgets as their mode of hospital payment, the hospital management had very little information on what types of services were delivered and at what costs clinicians delivered these within their wards or departments.

The main purpose behind the introduction of DRGs in the countries that introduced them in the late 1990s and 2000s – namely, to use DRGs as a basis for hospital payment – was extremely ambitious. This is because the aim is not only to pay providers fairly, but also to discourage the provision of unnecessary services and to encourage the efficient delivery of appropriate care. In the context of the increasing health care costs in many European countries, DRG-based hospital payment systems fitted well with the paradigm of designing public policy according to general economic principles, in order to exert financial pressure and to incentivize efficient resource use (see Chapter 7) by mimicking product markets that produce at marginal costs (Shleifer, 1985).

In Europe, Portugal was the front-runner in operating a DRG-based hospital payment system for payments from occupational health insurance schemes in the late 1980s. More recently, in many other European countries (such as England, France and Germany) DRG-based hospital payment systems have evolved to become the main hospital payment system, with the objectives generally comprising, *inter alia*, increasing efficiency, activity and transparency; reducing waiting times and length of stay; supporting patient choice; enhancing quality of care; and encouraging competition between hospitals. In Sweden and Finland, however, DRGs are still primarily used to aid transparency in the planning and management of hospital services.

As illustrated in the top row of Figure 2.1, most countries are using country-specific DRG systems. Only Ireland, Portugal and Spain are operating DRG systems that were imported from Australia (Australian Refined (AR-)DRGs) or the United States (All Patient (AP-)DRGs, Centers for Medicare and Medicaid Services (CMS-)DRGs). However, many other countries also imported DRG systems from abroad and used these as the starting point for developing their own systems (see Chapter 4). The Nordic countries (Finland, Sweden and Estonia) are special, in that they decided to collaborate and share the development effort in order to create a common NordDRG system that is further adjustable to country-specific conditions (see Chapter 16), which may serve as an example for a pan-European model of coordinating DRG models or even developing a uniform system.

It is important to emphasize that countries introduced DRG-based payment systems irrespective of (1) which kind of hospital payment system was in place

before (see section 2.3) and (2) their very different structural circumstances (see section 2.4).

2.3 Hospital payment systems and incentives

The move in most countries towards DRG-based hospital payment systems was driven by the objective of incentivizing hospitals to improve their performance (Langenbrunner & Wiley, 2002). Prior to the introduction of DRG-based hospital payment systems, countries used two basic mechanisms to pay for hospital care: fee-for-service payments and global budgets. These systems provide a specific set of incentives, which are different from the incentives of DRG-based systems. Therefore, in order to understand the international success of DRG-based systems, it is necessary to be aware of the incentives of theses alternative systems, and of the objectives that hospital payment systems are supposed to achieve. Hospital payment systems should motivate providers to treat patients in need of care and to deliver an adequate number of necessary services (level of activity), while taking into account the appropriateness of the services and patient outcomes (i.e. quality). Finally, a hospital payment system should balance activity and expenditure control incentives, thus contributing to increasing efficiency, while minimizing administrative effort and maximizing transparency. This demonstrates two things: (1) the design of 'good' payment systems needs to take into account various dimensions; namely, those of patients and of providers, of the provided services, of payers, and possibly of society at large; and (2) because of this complexity, it simply cannot be expected that any payment system is 'optimal' in all respects. Rather, all payment systems have their strengths and weaknesses in relation to the various objectives. Table 2.2 summarizes the advantages and disadvantages of the above-mentioned payment systems by evaluating their characteristics in relation to the requirements of modern hospital payment systems.

Table 2.2 Hospital payment systems and their theoretical advantages and disadvantages

Dimension / *System*	*Activity*		*Expenditure control*	*Technical efficiency*	*Quality*	*Administrative simplicity*	*Transparency*
	Number of cases	*Number of services/ case*					
Fee-for-service/ Cost reimbursement	+	+	–	0	0	–	0
DRG-based payment	+	–	0	+	0	–	+
Global budget	–	–	+	0	0	+	–

Sources: Authors' own compilation, based on Barnum et al. (1995) and WHO (2000).

Notes: +/–: increase/decrease; 0: neutral or unclear; for a definition of technical efficiency, see Chapter 7 of this volume.

2.3.1 Fee-for-service payments

In the United States and some European countries (such as Estonia), the ('retrospectively' determined) fee-for-service system was the principal means of allocating resources to hospitals prior to the use of – in comparison to fee-for-service payment – 'prospectively' determined DRG-based hospital payment systems. The sum of the fees in fee-for-service payment systems should ideally reflect the actual individual patient costs. This approach was often considered as fair or favourable by providers as long as fees covered at least their costs – preferably costs plus profit, of course. Fee-for-service payment provides strong incentives to be productive and to offer a large of number services per patient and therefore ensures that those hospitals treating more complex patients are adequately reimbursed. However, fee-for-service payment may lead to the provision of unnecessary services or may even encourage oversupply of inappropriate services, which negatively affects patient outcomes and the efficient delivery of services. In addition, providers under a pure fee-for-service regime (that is, without budget limitations) are incentivized to neglect expenditure considerations, which also contributes to an inefficient service delivery. Paying hospitals according to a fee-for-service scheme is administratively complex, as such systems require detailed and up-to-date price lists, as well as registration and billing of all service items provided. Furthermore, the only instrument for cost control is the specification of the price list, which details the unit payment for each item (Street et al., 2007).

2.3.2 Global budgets

In Europe global budgets were a common approach used for allocating financial resources to hospitals before the introduction of DRG-based hospital payment systems. In the context of global budgets a fixed payment for a certain activity level (typically determined in terms of number of cases or number of bed days) was negotiated and agreed between payers and hospitals, usually for the approaching year; namely, really 'prospectively'. In some countries global budgets were defined at or adjusted for specialty. Global budgets are administratively simple and can effectively contribute to cost-containment because of their expenditure cap characteristic. However, they run the risk of hospitals not producing sufficient services to meet patient or population needs, hence disregarding patient needs and therefore health outcomes. Some European countries were using target budgets blended with per diem payments as billing units (for example, Germany). Consequently, hospitals were provided with clear incentives to increase bed occupancy by prolonging the length of stay.

Fee-for-service systems and global budgets provide conflicting incentives for 'activity' and 'expenditure control' (see Table 2.2). Both are problematic in terms of ensuring high-quality care due to the inherent incentive to over-provide (fee-for-service) or to under-provide (global budgets) hospital services. Policy-makers (first in the United States and later in Europe) were therefore attracted by the idea of paying hospitals through DRGs, which to a certain

extent provide incentives somewhere in between a fee-for-service system and global budgets.

2.3.3 DRG-based payments

The term DRGs is used here to highlight the theoretical incentives of DRG-based payments, which do not necessarily correspond to the actual incentives of the systems operated in the countries included in this book. Theoretically, DRG-based payments provide strong incentives to increase the number of cases treated and to reduce the number of services per case. In contrast to fee-for-service systems, DRGs incentivize hospitals to limit their activity to necessary services and – in contrast to global budgets – DRGs incentivize hospitals to treat more patients. In terms of expenditure control, the effect of DRG-based payments thus depends on which effect prevails: increasing the number of cases or reducing the number of services per case. In principle, this will also depend on the previous system in place; that is, moving from fee-for-service payment to DRGs can result in cost-containment, while moving from global budgets to DRGs does not.

If DRGs do not sufficiently control for differences between patient groups or for differences in provided services (within DRGs), payments for highly complex cases are too low, while payments for less-complex cases are too high. Consequently, hospitals could try to avoid the risk of treating more complex patients. Furthermore, DRG-based payment systems are administratively complex as they require detailed and standardized coding of diagnoses and procedures, as well as information on the average resource consumption (costs) per DRG.

However, as already outlined, each of the presented payment systems has certain advantages and disadvantages (see Table 2.2). Therefore, policy-makers across Europe have combined features of the different systems: current DRG-based hospital payment relies heavily on service characteristics to define DRGs. Consequently, hospitals are paid partly on the basis of the services that they provide, which introduces aspects of fee-for-service payment into DRG-based hospital payment. Furthermore, the systems are operated within global budgets and provide additional payments for specified services, high-cost drugs and patients with exceptionally long lengths of stay (see Figure 10.2). Interestingly, these payment reforms have been implemented in very diverse hospital environments, which are described in the following section (2.4).

2.4 The hospital landscape

For a long time, a hospital was seen simply as 'an institution which provides beds, meals, and constant nursing care for its patients while they undergo medical therapy at the hands of professional physicians. In carrying out these services, the hospital is striving to restore its patients to health' (Miller, 1997). Clearly, this definition describes very broadly the activities of a hospital and must therefore be constantly refined and extended by taking into account the

key previous, ongoing and future changes in hospital care. Since the early 1980s, many European countries have shifted inpatient treatments towards outpatient settings in order to reduce and improve efficiency in the use of hospital resources. This development has led to enormous structural challenges for hospitals (McKee & Healy, 2002). Technological improvements and redesigned care pathways made it possible to extend the number of day cases and outpatient surgery cases treated outside the hospital or in specialized departments within the hospital. However, countries vary in terms of their level of integration between the ambulatory and inpatient sectors.

Table 2.3 provides an overview of these differences based on selected hospital-related indicators for the 12 countries included in Part Two of this book – for 1995 (that is, before DRGs were introduced for payment purposes) and 2008. The numbers and change rates (trends) indicate that different treatment patterns and organizational differences existed before DRGs were in use across Europe, and continue to exist.

All countries (except the United Kingdom) reduced to a different extent the amount of acute care hospitals and beds between the mid-1990s and 2008. However, the number of acute care hospitals and beds per capita differs by a factor of between 5 and 3 across the 12 countries for the year 2008, only slightly down from the sixfold and threefold differences seen in 1995. In terms of the trend in acute care hospital admissions, the picture is less clear: France and the United Kingdom show reduction rates between 1995 and 2008 of 18.1 per cent and 42.5 per cent, respectively, while the Nordic countries (Estonia, Finland and Sweden) and Ireland only slightly reduced the number of acute care admissions (from 2.6 per cent in Estonia up to 7.2 per cent in Ireland). In contrast, in Austria and the Netherlands the number of admissions to acute care hospitals increased by 22 per cent and 15 per cent, respectively.

The average length of stay (ALOS) in acute care hospitals decreased more (Estonia: 45 per cent) or less (France: 2 per cent) in each country except Sweden. However, as in 1995, in 2008 the ALOS still differed by up to a factor of 2 between countries (for example, Germany versus Finland). Unlike Estonia, Germany and the Netherlands, four countries (Austria, France, Spain and the United Kingdom) were able to increase the bed occupancy rates during 1995 and 2008. Nevertheless, in 2008 the bed occupancy rates varied by a factor of 1.6 between Ireland (89 per cent) and the Netherlands (56 per cent), a larger variation than in 1995.

In addition, comparing the inpatient expenditure as a share of the total health expenditure (which decreased in each country) – as a proxy for the relative importance of the hospital sector – shows that countries rely on different strategies to treat the same patients in different settings (namely, inpatient versus outpatient). This also becomes evident when comparing the number of hospital-based physicians across countries in 2008. Compared to Finland, only half as many physicians work in Dutch hospitals. Despite the fact that international comparisons are always accompanied by inconsistencies in the definition of variables (for example, acute care hospital beds were defined slightly differently across European countries), it becomes apparent that the range of services delivered in acute care hospitals is somehow different from one country to another.

Table 2.3 Key figures of the European acute care landscape in 1995 and 2008

Country	Austria			Estonia			Finland			France			Germany			Ireland			Factor minimum–maximum 2008
Data years	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	
Acute care hospitals per 100 000	1.8	1.6	–12.8	5.1	2.8	–45.7	n.a.	n.a.	n.a.	3.8[d]	*3.2*	–16.8	2.6	2.2	–14.9	1.7	1.2	–29.3	*5.0*
Acute care hospital beds per 1 000	6.5	5.6	–13.2	6.6	3.9	–41.9	3.0	*1.9*	–36.2	4.9[a]	3.6	–27.1	6.9	*5.7*	–18.2	3.1	2.7[i]	–13.1	*3.0*
Acute care hospital admissions per 100	21.9	*26.7*	22.0	17.2	16.8	–2.6	19.9	19.0	–4.7	20.3	16.7	–18.1	19.2	20.7	8.0	14.6	13.6	–7.2	*2.4*
ALOS, acute care hospitals only	9.7	6.8	–29.9	10.5	5.8	–45.2	5.4	*3.9*	–27.8	5.9	5.8	–2.2	10.8	*7.6*	–29.6	6.6	6.2	–5.8	*1.9*
Bed occupancy rate in %, acute care hospitals only	77.0	80.4	4.4	74.9	69.7	–7.0	74.0	n.a.	n.a.	75.3	76.4	1.5	81.8	76.2	–6.8	82.5	*88.9*	7.8	*1.6*
Total inpatient expenditure as % of total health expenditure	40.4	*40.0*	–1.0	35.7[c]	33.0	–7.6	42.1	35.0	–16.9	40.9	37.3	–8.8	36.4	34.1	–6.3	n.a.	n.a.	n.a.	*1.9*
Physicians per 1 000	3.5	*4.6*	32.4	3.2	3.3	4.9	2.2	2.7	24.1	3.3	3.4	4.5	3.1	3.6	16.1	2.1	3.1	48.2	*2.1*
% of physicians working in hospitals	56.2	55.1	–1.9	n.a.	67.1	n.a.	85.1	*81.2*[j]	–4.6	47.1	54.1	14.9	48.2	51.1	6.0	53.2	47.1	–11.4	*2.1*

Continued overleaf

Table 2.3 *Continued*

Country	Netherlands			Poland			Portugal			Spain			Sweden			United Kingdom			Factor minimum–maximum 2008
Data years	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	**1995**	**2008**	**Change rate**	
Acute care hospitals per 100 000	0.8	*0.6*	–23.2	2.2[g]	2.0	–6.9	1.4	1.3	–7.1	1.5	1.2	–17.6	1.1	0.9[f]	–21.6	n.a.	n.a.	n.a.	*5.0*
Acute care hospital beds per 1 000	3.5	2.9	–19.2	5.8	4.4	–23.4	3.2	2.8	–13.6	3.0	2.5	–18.0	3.0	2.2[h]	–28.2	2.3	2.7	19.2	*3.0*
Acute care hospital admissions per 100	9.6	*11.1*	15.4	n.a.	n.a.	n.a.	11.1	11.2[j]	0.9	10.7	11.4	6.7	16.3	15.2[j]	–6.6	21.2	12.2	–42.5	*2.4*
ALOS, acute care hospitals only	9.9	5.9	–40.4	n.a.	n.a.	n.a.	7.9	6.8[j]	–13.9	8.2	6.5	–20.7	5.2	6.0[j]	15.4	8.5[d]	7.4	–12.8	*1.9*
Bed occupancy rate in %, acute care hospitals only	73.3	*55.7*	–24.0	n.a.	n.a.	n.a.	72.6	72.6[j]	0.0	76.4	77.7	1.7	75.9	n.a.	n.a.	82.3[d]	84.8	3.1	*1.6*
Total inpatient expenditure as % of total health expenditure	49.1	39.6[e]	–19.3	n.a.	32.0	n.a.	33.9	*20.8*[i]	–38.6	31.0	28.2	–9.0	54.7	29.6[j]	–45.9	n.a.	n.a.	n.a.	*1.9*
Physicians per 1 000	2.9[b]	3.7[j]	26.1	2.3	*2.2*	–6.7	2.9	3.7	25.2	2.7	3.5	30.1	2.9	3.6[j]	24.0	1.8	2.6	46.4	*2.1*
% of physicians working in hospitals	n.a.	*38.1*[j]	n.a.	n.a.	52.1	n.a.	60.2	54.1	–10.1	53.1	61.1	15.1	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	*2.1*

Key: [a]1993; [b]1997; [c]1999; [d]2000; [e]2001; [f]2003; [g]2004; [h]2005; [i]2006; [j]2007 due to lack of available data for 1995/2008.

Source: WHO Regional Office for Europe, 2011.

Notes: n/a not available; minimum and maximum values are prepared in italics.

Table 2.4 Share of ownership types across countries (% of acute care beds), 2008

Country	*Publically owned hospitals (%)*	*Non-profit-making, privately owned hospitals (%)*	*Profit-making, privately owned hospitals (%)*
Austria	73	19	9
Finland	89	0	11
France	66	9	25
Germany	49	36	15
Ireland	88	0	12
Netherlands	0	100	0
Poland	95	0	5
Portugal	86	7	8
Spain	74	17	9
Sweden	98	0	2
United Kingdom	96	4	0

Source: Paris et al., 2010.

Note: In Estonia all hospitals operate under private law and most of them are publically owned (see Chapter 17 of this volume).

The ownership structure of hospitals also varies widely. In some countries (such as France and Germany) private profit-making hospitals play an important role in the health system, but in many others, most hospital beds are operated under public or private non-profit-making ownership (Table 2.4).

In summary, DRGs were introduced in countries that were characterized by large structural differences in their hospital sectors. Furthermore, despite the introduction of DRG-based hospital payment systems, structural differences persist. Apparently, DRG-based hospital payment systems can be flexibly implemented in different settings and do not prescribe any clear development path. Therefore, the analysis of how these systems have been implemented in different health care contexts – as well as their impact on the efficiency and quality of service delivery – is the main aim of this book.

2.5 The book and its structure

Comparative information from different European countries regarding the specific characteristics of their DRG systems and how these characteristics contribute to achieving the aims of transparency, efficiency and quality in hospitals is largely absent. This book aims to contribute towards filling this gap.

This book is structured in two parts: **Part One** (up to and including Chapter 10) deals with the essential building blocks of DRG-based hospital payment systems and discusses the impact of these systems on quality and efficiency of service delivery, and on adoption and use of technological innovation. The aim of this first part is to highlight similarities and differences between different countries' systems, and to provide an overview of the key issues that need to be considered when developing and optimizing DRG-based hospital payment systems. At the same time, the discussion of these issues paves the way for

considering the potential for harmonization of DRG systems and of DRG-based hospital payment across Europe. The 'building blocks' of DRG systems and of DRG-based hospital payment systems are described in detail in Chapter 3. The differences in DRG systems and similar patient classification systems (PCSs) across Europe are analysed in Chapter 4. The main challenges and differences in cost-accounting systems used in European countries are highlighted in Chapter 5. The intended and unintended consequences of using DRGs for hospital payment (rather than just patient classification) are discussed in Chapter 6. The available evidence of the impact of DRGs on the efficiency and quality of hospital care is discussed in chapters 7 and 8. Chapter 9 describes how the 12 countries included in this book attempt to overcome the potential problems relating to technological innovation that are associated with DRG-based hospital payment systems. Finally, the first part of the book closes in Chapter 10 with a summary of the main findings, and provides policy recommendations for further DRG developments.

Part Two of the book – that is, chapters 11 to 23 – provides clearly structured and detailed information about the most important DRG system characteristics in each of the 12 countries that participated in the EuroDRG project (Austria, England, Estonia, Finland, France, Germany, Ireland, Poland, Portugal, Spain, Sweden and the Netherlands). Each country has an interesting story to tell, which is contextualized within the prevailing health system. Part Two aims to overcome some of the difficulties that have existed for both researchers and policy-makers aiming to compare European DRG systems: information used to be mostly available only in national languages, and national descriptions of DRG systems often used country-specific terminology that complicated the task of making cross-border comparisons. Each country-specific chapter starts with a background section that provides an overview to hospital services and to the role of DRGs in the country (section 1). The developments and updates of the DRG systems are outlined in the second section. The current DRG system(s), which is (are) used to group patients into clinically meaningful and cost-homogeneous groups, is (are) described in section 3 of each country-specific chapter, while section 4 in each case deals with the countries' cost-accounting systems that are essential for determining DRG-based payments rates. The DRG-based hospital payment system of the country in question is described in section 5, and the countries' methods to integrate new and innovative treatments into their existing DRG-based payment systems are presented in section 6. Finally, each chapter closes with an assessment of the country's DRG system (section 7) and a summary of the outlook, in terms of future developments and reform (section 8).

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