Provider Payment Reforms: Lessons from Europe and America for South Eastern Europe

Policy Note

Pia Schneider

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Abstract: Provider payment systems provide critical incentives for improving quality, efficiency and cost containment. Evidence from the OECD demonstrates this and recent experiences in South Eastern Europe (SEE) suggest that this applies to lower income countries as well. While no single strategy is ever sufficient in providing incentives for health care delivery, well designed provider payment offers a set of tools to achieve multiple objectives. Several countries in the SEE region have embarked on payment reforms to set financial incentives to providers for improving access to better quality care, while at the same time promoting cost containment through the effective and efficient use of resources. At the same time, countries are implementing mechanisms to prevent unintended incentives caused by provider payment systems, such as increasing the number of services provided beyond what is necessary; reducing input used to provide care, “gaming” the system, cost shifting, and increased paperwork for providers.

This paper presents an overview on the current status of provider payment in South Eastern Europe, identifies strengths and weaknesses, and reform plans. The focus is on institutional and organizational strengthening on the provider and payer-side to support the effectiveness of financial incentives set through purchasing. The paper discusses payment methods for outpatient and hospital care and performance based payment in the reform context of SEE. Each section concludes with a series of practical policy measures for strengthening purchasing by drawing from the lessons learned from recent reforms in Europe and the US where changes in provider payment have been evaluated.

The paper provides practical policy advice to health policy-makers, management and staff working in purchasing agencies and in health facilities in countries that consider reforms to strengthen their purchasing function and use payment incentives to support the effectiveness of health systems. While the text is targeted to the context in South Eastern Europe, it may also be of interest to readers from other countries where provider payment reforms are contemplated.

Keywords: purchasing, provider payment, health care financing, capitation, diagnosis related groups (DRG), pay for performance

Disclaimer: The findings, interpretations and conclusions expressed in the paper are entirely those of the authors, and do not represent the views of the World Bank, its Executive Directors, or the countries they represent.

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# TABLE OF CONTENTS

List of Abbreviations and Acronyms ........................................................................................................ vii  
Acknowledgements ......................................................................................................................................... ix  
1. Introduction .............................................................................................................................................. 1  
2. Purchasing Health Care .......................................................................................................................... 4  
   2.1 Purchasing in OECD countries ........................................................................................................... 4  
   2.2 Purchasing in South East Europe ........................................................................................................ 4  
   2.3 Purchasing limited by provider autonomy ......................................................................................... 5  
   2.4 Policy recommendations to strengthen purchasing ........................................................................ 6  
3. Paying for Primary Health Care ............................................................................................................... 8  
   3.1 Paying for PHC in OECD countries .................................................................................................... 8  
   3.2 Paying for PHC in South East Europe ................................................................................................. 8  
   3.3 Provider response to incentives created by payment system ............................................................. 10  
   3.4 Policy recommendations to strengthen PHC payment reforms ..................................................... 10  
4. Paying for Hospital Care .......................................................................................................................... 11  
   4.1 Paying for hospital care in OECD countries and Central Europe .................................................... 11  
   4.2 Case-based payments for hospital care ............................................................................................... 12  
   4.4 Impact of DRG on hospital performance ......................................................................................... 14  
   4.5 The experience with DRGs in Hungary ............................................................................................. 15  
   4.6 Hospital payment in SEE ................................................................................................................... 16  
   4.7 Policy recommendations to support hospital payment reforms .................................................... 17  
5. Pay for Performance ................................................................................................................................... 18  
   5.1 Experience with P4P in the US ............................................................................................................ 18  
   5.2 Measuring and paying for performance under P4P ......................................................................... 19  
   5.3 Impact of P4P and of public reporting of performance results .......................................................... 20  
   5.4 Experience with P4P in the UK .......................................................................................................... 20  
   5.5 Impact of P4P and key challenges .................................................................................................... 21  
   5.6 Experience with P4P in middle- and low-income countries ............................................................. 22  
   5.7 Policy recommendations to support P4P payment reforms ............................................................ 22  
6. Discussion and Conclusion ....................................................................................................................... 23  
Annex ........................................................................................................................................................... 25  
References ...................................................................................................................................................... 28
List of Tables
Table 1: Overview on Provider Payment Methods and Related Incentives ........................................ 3
Table 2: Information System for Hospital Activity Minimum Data Set .......................................... 14
Table 3: Examples of HEDIS Indicators about Access/Availability of Care ........................................ 19
Table 4: Examples of Clinical Domain Process Indicators .............................................................. 20
Table A1: Definition of Terms ........................................................................................................ 25

List of Boxes
Box 1: Ten Steps for Implementing a Global Hospital Budget ......................................................... 11
Box 2: Seven Steps to Implement DRGs .......................................................................................... 13
## List of Abbreviations and Acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>ALOS</td>
<td>Average Length of Hospital Stay</td>
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<tr>
<td>GP</td>
<td>General Practitioner</td>
</tr>
<tr>
<td>DRG</td>
<td>Diagnosis-Related Group</td>
</tr>
<tr>
<td>ECA</td>
<td>Europe and Central Asia</td>
</tr>
<tr>
<td>ECSHD</td>
<td>Europe and Central Asia Human Development Department of the World Bank</td>
</tr>
<tr>
<td>FFS</td>
<td>Fee for Service Payment</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>HEDIS</td>
<td>Health plan Employer Data and Information Set</td>
</tr>
<tr>
<td>IT</td>
<td>Information Technology</td>
</tr>
<tr>
<td>NHA</td>
<td>National Health Accounts</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PHC</td>
<td>Primary Health Care</td>
</tr>
<tr>
<td>SEE</td>
<td>South Eastern Europe</td>
</tr>
<tr>
<td>PEIR</td>
<td>Public Expenditure and Institutional Review</td>
</tr>
<tr>
<td>P4P</td>
<td>Pay for Performance</td>
</tr>
<tr>
<td>NCQA</td>
<td>National Committee for Quality Assurance</td>
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</table>
Acknowledgements

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1. Introduction

Between 1990 and 2004, total health expenditure has grown faster than GDP in OECD and many ECA countries. It accounted for 7% of GDP on average across OECD countries in 1990 and reached 8.9% in 2004 (OECD, 2006). Hospitals capture the largest share of health moneys. OECD countries spent on average about 38% of total health expenditure on hospital care (Orosz et al. (2004). In South Eastern Europe\(^1\) (SEE) the share of GDP spent on total health expenditures is at a similar level and has been growing during the past years. However, SEE spends a larger proportion of total health expenditures on hospitals than OECD countries, reaching 47% of total recurrent health expenditures in 2004 in Serbia and more than 50% in Bosnia and Herzegovina. Growing health expenditures are putting financial pressure on these health systems. In Serbia, the health insurance fund deficit amounted to 0.2% of GDP in 2004, while total health sector arrears in BiH reflected 0.9% of GDP in 2005 (PEIR, BiH, 2006; Serbia NHA, 2006).

While hospitals in SEE account for a higher proportion of total health expenditures, they report lower productivity, and provide limited and often low-quality information on outcomes including patient experience and quality of care. SEE hospitals report considerably longer average lengths stays (ALOS) (9.5 and 11 days) than EU-10 countries (8 days). Annual inpatient admission rates range from 8.7 per 100 people in Albania to 12 per 100 people in Serbia, compared to 17 in Croatia, 18 in Slovenia, and 21 in the EU-12. As a result – and despite longer ALOS - bed occupancy rates in SEE acute care hospitals are between 5 and 10 percentage points lower than the EU average of 76%\(^2\).

Growing health expenditures, relatively high hospital expenditures and low productivity have led to a debate in SEE about strategies to control the costs and improve efficiency in delivery, while ensuring access to quality care. Among the strategies that have gained attention are provider payment reforms that set financial incentives to providers for improving access to care, while at the same time promoting cost containment through the effective and efficient use of resources. The effects of provider payment mechanisms on the health care system vary widely depending on contextual factors, including the level of resources available for health care, the degree of choice, and the opportunities and constraints facing providers to respond to incentives (Cashin, et al. 2005). In addition, provider payment may lead to unintended incentives, such as increasing the number of services provided beyond what is necessary; reducing input used to provide care, “gaming” the system, cost shifting, and increased paperwork for providers (Ellis, 1998).

The objective of this study is to present an overview on the current status of provider payment in SEE, identify strengths and weaknesses, and reform plans for provider payment, and propose policy measures for strengthening purchasing in SEE countries, by drawing from the lessons learned from payment reforms in Europe and the US, where changes in payment have been evaluated. The study is addressed to health policy-makers, management and staff working in purchasing agencies and in health facilities. While the text is targeted to SEE countries that plan to strengthen purchasing and use payment incentives to support the effectiveness of health systems; it may also be of interest to readers from other countries where similar reforms are contemplated.

\(^1\) SEE includes Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro, Serbia.

\(^2\) Source: WHO HFA-DB, 2007
The revenue sources for health care providers in SEE include public funds from government and insurance; and patient out-of-pocket payment (OOP). In the absence of standard accounting in health facilities, OOP spending is estimated based on household survey data at about 20% of total health expenditures. OOP includes (i) co-payments from the insured, (ii) user fees for uninsured care, and (iii) informal payments. Co-payments and user fees can take the form of a fee paid for each service received based on the price lists developed by the health insurance fund, and a daily room rate in hospitals (Langenbrunner et al. 2005). Informal payment to staff is not allowed but is quite common and patients often pay informally for better service (Lewis, 2000; Ensor, 2004). Findings from Central Europe\(^3\) indicate that informal payments are made for inpatient care, mainly to get access to surgery. In Romania, informal payments appear to hamper access to inpatient care, as those who cannot afford paying are most likely to be excluded from care (Belli, 2002). Results from Albania suggest that patients pay informally to get faster access to better services; and to prevent being denied treatment (Vian et al. 2006). Informal payments contribute to inequity and inefficiency in health financing by creating discontinuity of care; uncertainties and anxiety for patients; and inducing unnecessary medical interventions.

Government and insurance funds can take different forms of payment methods. Table 1 provides an overview. Hospitals in the region are predominantly paid an annual line-item budget by the national health insurance fund to cover operating costs. Line-item budgets based on input factors such as bed and staffing norms, set incentives to hospitals to employ more input factors (i.e. staff) based on which the budget is defined and operate within the allocated budget. Rigid budget formulation and inflexibility limit the reallocation of funds across line-items to better respond to changes in utilization levels. For primary health care (PHC), most countries have started introducing fee-for-service (FFS) or capitation payment, at least in a pilot-program. Such reforms appear to be motivated by efforts to improve access to services, especially in rural areas. Under capitation payment, providers are paid a fixed amount for each individual registered, usually adjusted for factors such as age and gender. Capitation imposes the full insurance risk on providers and discourages them from oversupplying care (Ellis and McGuire 1993). To prevent negative effects including under-provision of care and exclusion of high risk patients, capitation often comprises some sort of case-mix adjustment and output-based incentives such as FFS payment for delivering specific services.

In the mid-1980s prior to hospital payment reform in Western and Central Europe, most public hospitals were paid a fixed line-item budget based on regulations of inputs such as the number of staff and hospital beds (Docteur et al. 2003). To improve activity management, countries moved from input-based payments first to fee-for-service and more recently to bundled case-based payment systems such as diagnosis-related groups (DRGs). Diagnosis-related groups classify each case according to the diagnosis and other characteristics of the case, and the payment rate varies according to the resource intensity of the DRG (Cashin, et al, 2005). The incentive under DRG payment is to treat more cases in hospitals and shorten their average length of stay. Consequently, some hospitals have decided to specialize on treatments where they are best, with the objective to improve efficiency and quality, as well as their financial situation.

A system that pays capitation to PHC providers and DRGs to hospitals provides an incentive to refer more patients from PHC facilities to hospitals. To prevent such negative consequences including inappropriate referrals and substandard quality, payers in the US and the UK have started paying providers for their performance. The underlying rationale is that quality varies

\(^{3}\) Czech Republic, Hungary, Poland, Romania.
across providers, which makes it difficult under payment systems such as DRGs to reward providers of higher-quality or more efficient care. In the US, pay-for-performance (P4P) is applied in managed care plans. In the UK, the National Health Service introduced a P4P contract with family practitioners (Doran, T. et al., 2006). In the SEE region, P4P has been proposed as a tool to set financial incentive that will lead to better outcomes of care.

### Table 1: Overview on Provider Payment Methods and Related Incentives

<table>
<thead>
<tr>
<th>Health facility</th>
<th>Payment method</th>
<th>Financial incentive set to provider</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary healthcare</td>
<td>Input-based line item</td>
<td>Increase input factors (bed, staff, etc) and use full budget</td>
</tr>
<tr>
<td></td>
<td>budget</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fee-for-service</td>
<td>Increase number of services per patient</td>
</tr>
<tr>
<td></td>
<td>Capitation adjusted</td>
<td>Treat patient within budget, or in worst case, provide sub-standard care and exclude high-risk patients; Refer patients to specialist and hospitals</td>
</tr>
<tr>
<td></td>
<td>by age and gender</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Capitation – Fee-for-</td>
<td>Treat within budget and increase number of fee-based services</td>
</tr>
<tr>
<td></td>
<td>service mix</td>
<td></td>
</tr>
<tr>
<td></td>
<td>P4P</td>
<td>Increase number of services that lead to improved performance indicator</td>
</tr>
<tr>
<td></td>
<td>Hospital payment</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Input-based line item</td>
<td>Increase number of staff, bed, etc.; reduce number of admissions; keep occupancy rate low but prolong patients’ average lengths of stay, refer high-risk/intensity patients to other hospitals</td>
</tr>
<tr>
<td></td>
<td>budget</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospital day</td>
<td>Increase number of admissions and prolong patients’ average length of stay (ALOS)</td>
</tr>
<tr>
<td></td>
<td>DRGs</td>
<td>Increase number of admissions, shorten ALOS, risk-select less severe patient case-mix</td>
</tr>
<tr>
<td></td>
<td>Global budget</td>
<td>Provide care within a budget ceiling</td>
</tr>
</tbody>
</table>

The rest of the paper is organized as follows: After this introduction, section 2 provides an overview on purchasing. Section 3 presents the reform experience in PHC. Section 4 discusses the lessons learned from hospital payment reforms. Section 5 introduces the concept of P4P, drawing from the experience in the US and the UK. Each of these four sections ends with practical advice for policy makers who wish to change their payment system. Section 6 concludes and presents recommendations for policy makers. Annex Table A1 includes a definition of terms often used in the purchasing and provider payment context.
2. Purchasing Health Care

Purchasing is the transfer of pooled funds to providers. Purchasers are insurers or agents who act on behalf of the Government. Under strategic forms of purchasing, purchasers take proactive decisions about which health care services should be purchased from providers, at what quantity and price, how and from whom (Figueras et al. 2005). To affect provider behavior, a purchaser will need adequate information to assess provider performance and use results in purchasing and contract enforcement; as well as to monitor utilization of care and implications for health financing.

2.1 Purchasing in OECD countries

In systems with health insurance, the insurer plays the role of the purchaser. In tax-funded systems (United Kingdom, Sweden, Italy, Portugal), purchasers are agencies or fundholders acting on behalf of the government. Purchasers are responsible to the budgetary authorities for cost control and to patients for the quality and accessibility of care through contracts with providers (Docteur et al. 2003). The United Kingdom experimented with using primary care doctors as purchasers (General Practitioner (GP) Fundholders). In 1992, volunteering GP Fundholders received a budget to purchase pharmaceutical drugs and elective care. After some experimentation this was extended in the form of Primary Care Trusts which regroup all GPs and form the main purchasing agencies including for hospital care. In Central Europe, primary care fundholding arrangements are emerging. Since 2002, Estonian family practitioners receive a virtual budget representing just fewer than 20% of the total capitation fee with which they can provide care or purchase selected services. Fundholding has strengthened the role of family practitioners in deciding how resources are allocated to hospitals and specialists (Langenbrunner et al., 2005).

Countries with a dualistic purchasing system use insurance to pay for recurrent expenditures and government budgets funds to finance capital cost and other functions that go beyond the interest of a purchaser organization, such as teaching students and training staff in teaching hospitals (Germany, Austria, and Switzerland). Under dualistic payment, decentralizing capital funding to local government budgets led to hospital oversupply, in particular in Switzerland and Germany, as capital costs are essentially free to hospitals. To make hospitals to some extent responsible for capital cost, the UK introduced capital charges into contracting arrangements, by estimating the value of capital, based on which hospitals pay a rate of return to owners (Docteur et al. 2003).

2.2. Purchasing in South East Europe

Health care in SEE is predominantly financed through social health insurance funds contributing around 60-70% of total health expenditures, while the government finances capital costs and patients pay out-of-pocket at the point of service use. The exception is Kosovo where the main payer is the central budget using tax-revenues (PEIR Kosovo, 2005). Being the major financers in SEE, insurers would have purchasing power. So far, few insurers have used this power strategically mainly with private providers. In the FYR Macedonia the insurance fund contracts selectively based on provider performance. In 2006, two private providers were excluded from contracting for at least one year. Most insurers and governments are passive purchasers who follow a predetermined budget or simply reimburse bills based on FFS. This is mainly because purchasers face strictly defined entitlements by providers and government price regulation, resulting in limited space for price negotiation between providers and purchasers.
Under passive purchasing, contracts between purchasers and providers are defined based on providers’ working plan for the future year and the related input factors (i.e. number of staff and beds). To operate within the available budget, hospitals modify their work plans resulting in volume ceilings for treatments and waiting lists. Under passive purchasing, provider performance or outcome results (i.e. patient satisfaction, infection rates, ALOS, or bed occupancy rate) have little relevance in contracting or provider payment. Strategic purchasing has not been introduced yet partly because providers and health insurers in SEE do not collect reliable information on provider performance, which could be used by the purchaser for performance analysis and selective contracting. In addition, there is no public reporting in the region about relative provider performance. As a result, consumers lack the necessary information to choose better performing and quality providers. Thus, purchasing does not include yet consumer behavior as a strategic factor in selective contracting with providers.

In some countries, multiple insurance has led to fragmented purchasing which weakens the negotiating power of each purchaser, and causes unequal access to care. In Bosnia and Herzegovina, fragmentation of insurance pools and little coordination between them has resulted in different benefit packages, prices and co-payment levels across insurance funds. The integration of fragmented pools into a single purchaser is key to the future development of purchasing. Fragmented insurance pools combined with an inability to redistribute funds across pools means the relative size of each pool reflects the contribution capacity as defined by the socio-economic situation of the population it serves. As a result, “richer” insurers can afford purchasing a larger benefit package, while “poorer” insurers charge higher co-payments to patients, thereby increasing the financial barriers in access to care. Bosnia could follow the experience of Kyrgyzstan, where fragmented pooling and purchasing has been integrated, which resulted in reduced fixed costs in service delivery and improved access to care (Kutzin J. et al. forthcoming).

Strategic purchasing requires data on patient characteristics, case-mix, utilization of services and drugs, resource-mix, finances, costs, quality of care and patient satisfaction to conduct performance analysis. In SEE, such detailed and valid data is hardly available, as many hospitals and PHC centers as well as purchasers lack the necessary IT. As a result, data collection is mostly on paper, causing the purchaser and Public Health Institute (PHI) to receive incomplete or low quality data. Also, information connectivity across facilities and payers is incomplete, and patient information tends to “get lost” once patients change providers.

2.3. Purchasing limited by provider autonomy

In SEE, strategic purchasing is further limited by health facility managers who have restricted or no management autonomy in public hospitals and PHC centers. Facility directors often have no decision power about the staff to be hired as staffing is still decided centrally. Directors often lack the necessary training and decision-making capacity to change the input-mix in a health facility (e.g. fire staff to increase availability of drugs), to reinvest profits from efficiency gains in improvements of quality and process of care, to merge facilities and close inefficient departments and contract out these services to the private sector (e.g. laundry, cleaning, etc).

Limited autonomy and flexibility to respond to the new financial incentives under capitation and activity-based payment are major causes of purchasing failure (Langenbrunner, et al. 2005). Purchasing failure is particularly problematic where management structures are fragmented. In Kosovo the mayor’s health administrator manages the PHC budget and hires staff, while the facility director is responsible for providing care, leading to misallocation of funds, overstaffing,
insufficient resources to purchase drugs, and rationing of care; though nobody is held accountable (Gaumer 2007). To correct such system failures, management decisions need to be centralized at the facility level to achieve greater autonomy and more flexibility for providers to respond to payment incentives. This requires expanding management responsibility for key areas including hiring and firing; determining the number of staff and its skill mix; financial management, determining the level and scope of activities, decisions on capital developments, and the number of beds and the technology mix. Yet, provider autonomy needs to be accompanied by increased transparency, reporting, and annual financial and performance audits to prevent management failure (Widmer, 2007).

2.4. Policy recommendations to strengthen purchasing

To strengthen strategic purchasing in SEE, health policy makers would have to invest in the following six activities:

(i) **Institutional and legal changes to strengthen pooling and purchasing; and enable contracting units to monitor and evaluate provider performance, negotiate prices and volumes with providers, set incentives to contain growth of expenditures, contract selectively with accredited providers, and control for capital costs.**

(ii) **Support proactive and strategic forms of purchasing to define which interventions should be purchased, how they should be purchased and from whom, and support the related necessary investment in information technology. Ensure the purchaser’s strategic objectives are in line with the overall health sector strategy.**

(iii) **Establish some degree of pooling of health funds to strengthen the purchasing power in price and volume negotiations. Revisiting pooling in preparation for provider payment reform, in particular for capitation and DRG implementation, is important where pooling is fragmented across different socio-economic geographic areas as for example in Bosnia and Herzegovina.**

(iv) **Providers must have some degree of autonomy with respect to re-organizing service delivery and managing their resource-mix. Educate providers about payment reforms to ensure an understanding about which operational changes in the production of care will be necessary to benefit from payment reforms. To ensure providers can react to the new financial incentives set by provider payment reforms, SEE countries will need to implement provider autonomy and management in the following key-areas:**

a. **Facility manager:** Takes the role of a CEO, who is responsible and will be made accountable for cost and outcome; and who will be fired if performance targets (i.e. financial results, patient satisfaction, staff satisfaction) are not met.

b. **Staff management:** Devolve decision about hiring and firing, remuneration and fringe benefits to facility director who selects staffing-mix that increases revenues, productivity, quality of care, and patient satisfaction. Facility manager releases redundant staff; introduces part-time employment, and pays performance-based salaries to all staff based on patient satisfaction.

c. **Financial management:** Train providers on how to work under the new payment systems, how to use and invest profits and prevent financial loss; and to allocate funds efficiently to pay for recurrent costs.

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d. **Other input factors:** Identify ways in provision of care to improve efficiency by changing the quantity and type of drugs, supplies, and other input factors, and by working in networks with other providers.

e. **Physical assets:** Disposing of existing capital stock, including buildings and equipment, or acquiring new capital, merging of departments, and entering into private-public partnerships etc. Providers pay a capital fee based on return of investment to owner.

f. **Organizational structure:** Provider implements most efficient management structure, organization of departments and ancillary services, and has power to contract out services to the private sectors (e.g. laundry, cleaning, laboratory etc.).

g. **Output mix:** Shift from inpatient care to outpatient and day-surgery which are less resource intense and less costly. Shorten average length of stay and increase number of cases treated.

h. **Data and analysis:** Collect and analyze cost and utilization data for unit cost analysis and process evaluation; patient satisfaction survey with each patient, use results for salary definition and publish results on webpage or local newspaper; conduct quality and performance analysis on infection rate, re-admission rate, bed turnover, productivity etc, and use results to change production of care and input-mix (including staffing) and in decision to contract out specific services to private sector.

i. **Use of surplus revenues:** Use profits generated from efficiency gains for investment in quality and facility improvement, staff training, and innovation to make facility more attractive.

(v) Invest in **collection of financial and performance data** including service use, pharmaceutical procurement and quality of care to conduct cost and performance analysis; use results from analysis to ensure transparency and accountability of providers, and to develop and improve coding.

(vi) Use results from **provider performance analysis in purchasing.** Collect provider and patient data on the provision of care, demographics and health status, and finances to evaluate provider performance and use results in purchasing decisions to contract selectively with providers.
3. Paying for Primary Health Care

PHC providers are either paid FFS, capitation or input-based, or a combination thereof. Input based line-item budgets allow payers to control PHC costs directly; while providers have an incentive for under-provision of services and excessive referrals to secondary providers. FFS sets an incentive to providers to expand the volumes of services they provide and negotiate for higher prices. It is expected that capitation will improve access to care by improving funding to PHC; and increase patients choice over their doctor (Cashin et al. 2005).

3.1. Paying for PHC in OECD countries

Primary health care in most European countries is provided by private sector providers who contract with insurance companies. FFS is widely used for specialists working in ambulatory care and gives physicians full discretion over the level and mix of services, referrals and other treatment options. Fee levels are either negotiated centrally (as in Japan, Germany, Canada and in France) or set by the individual practitioners (Docteur et al. 2003). In the 1990s, with the adoption of social health insurance systems, several ECA countries, including Czech Republic, Croatia, Slovakia, and Ukraine, moved from input-based payment to reimbursement by fee-for-service. FFS quickly led to increased activity levels and put financial pressures on purchasers, causing them to put ceilings on the total amount, or negotiate volume contracts within a capped budget, or prospective global budgets with activity caps. Ireland shifted from a FFS to a capitation system leading to an estimated decline in doctor visits of 20%. The Czech Republic moved from salaries to FFS and then to capitation. In Slovakia, the cost increase caused by FFS led to a quick move to capitation in 1994, and in 1998 to a 60:40 capitation/FFS mix (Langenbrunner, et al. 2005). Additional demand-side measures are used to contain growth of service use under FFS. Insurers try to influence the patient care-seeking behavior and charge co-payments to patients for services provided, or increase the amount of annual deductibles.

In Greece, Finland, Iceland and Mexico, general practitioners (GPs) are Government employees and paid a salary. Salaried staff faces no financial incentives to improve the quality of care and patient satisfaction or increase the number of services. Salaries constitute the main component in input-based budgeting; and tend to be determined by seniority and length of service. Salaries are generally negotiated centrally (e.g., between physicians' associations and the government). Individual salary adjustments include experience and other rewards (Docteur et al. 2003).

The capitation budget paid to PHC providers is based on the number of individuals registered with the provider. Capitation sets an incentive to produce efficiently by adjusting the treatment intensity within a medically acceptable quality range. Providers also have an incentive to reduce their costs by encouraging healthier individuals to register, and discourage individuals with costlier health problems. Capitation in OECD countries is generally case-mix adjusted to account for differences in the severity of illness in the registered population. Capitation is used in Italy (with some fees), the UK (performance adjusted), Austria (fees for specific services), Denmark (two third of income fee for service), Ireland, the Netherlands and Sweden. Spain is progressively moving from a capitation system towards a salary payment. Mixed payment is applied in Norway (salary and fees), Portugal, Spain (with some capitation), Turkey (salary and performance bonuses based on volume and quality) and Sweden (some capitation) (Docteur et al. 2003).

3.2. Paying for PHC in South East Europe

SEE is in the process of moving from input-based line item budgets to some sort of capitation payment for PHC. The motivation for this reform is that rigidly defined line-item budgets make reallocation across lines difficult, leading to inefficient resource allocation and a lack of
flexibility in response to changes in the production of care. So far, results achieved have been mixed. Most SEE countries apply simple capitation, adjusted based on age and gender, and geographical differences resulting in higher production costs; combined with salary funding to limit the providers’ financial risk. Countries do not compute case-mix adjustments as they lack the necessary information on cost relevant factors of the registered population such as severity of illness, the presence of co-morbidity or chronic diseases.

In Albania, the health insurance fund pays PHC general practitioners based on a modified capitation basis (base salary plus capitation supplement depending on location and registered patients) which in principle depends on the number of registered patients. In practice, the population registration system is not properly implemented, as demonstrated by the fact that the number of people that GPs declare as being registered amounts to about 1 million more than Albania’s total population. While the system allows for higher pay in remote areas to attract and retain GPs in such areas, it does not include any performance rewards linked to quality targets. Primary care personnel, operations and maintenance costs are paid from a different source, which gives primary care physicians limited control over the performance of their entire operation (Albania Health Sector Note, 2006). In Kosovo, PHC is financed through a simple capitation health grant transferred from the central budget to municipalities. At the mayor’s level the PHC budget is defined by input categories, with about 50% for wages, 30% goods and 20% for capital. While some population norms define the capitation amount, the actual distribution is influenced by the number of facilities and staff, and political factors (Kosovo, PEIR, 2005).

In Bosnia and Herzegovina (BH), the reaction to the incentives set by a mix of capitation and salary payments for PHC led to over-staffed health facilities, low utilization and low productivity. Physicians in PHC facilities report a caseload of about 19 patients per physician per day. These numbers compare with 33 visits in the USA, a level that is reasonable to apply as a standard for capacity. Moreover, PHC physicians in BH refer about one-half of the PHC cases to the more expensive secondary and tertiary care level, suggesting that PHC providers respond to the adverse incentives set by capitation and line item budget, and under-provide care (BiH PEIR, 2006). Serbia has pilot-tested simple capitation in some PHC centers and is now in the process of developing and implementing a capitation formula that includes demographic and geographic criteria, to be scaled up nationwide. Montenegro is pilot-testing a mixed capitation and FFS formula, to prevent PHC providers from skimping on services.

In the FYR of Macedonia, the capitation amount for PHC providers is adjusted by age, gender and region, with higher amounts being paid providers residing in mountainous areas. To limit skimping on care, performance is measured for a series of indicators related to preventive care, immunization, diabetes, cardio-vascular diseases, cancer prevention, prescription medicines, referrals and the issuing of sick-leave certificates etc. Of the total monthly capitation amount, the 70% base payment is paid monthly while 30% is withheld to be paid at the end of each quarter, based on quarterly performance evaluation of the agreed benchmarks (Gjorgiev, et al, 2006). Capitation covers all recurrent expenditures including salaries of privatized physicians and other input factors such as material to treat patients. The performance component aims to eliminate the

5 The US full capacity norm for PHC physicians is 33 visits per day. See: US Department for Health and Human Services, http://bphc.hrsa.gov/

incentive to use the capitation funds for paying mainly salaries, and refer patients to the next level. So far, this capitation model has not been evaluated yet; however, performance reporting may be a strain on PHC facilities who lack necessary IT and related data management capacity.

3.3. Provider response to incentives created by payment system

Studies conducted in industrialized countries on provider behavior suggest that providers respond to financial incentives embedded in the payment method and adjust treatment intensity within a clinically acceptable range to keep cost low (Dor et al. 1996). In the worst case, treatment adjustment in response to capitation or to input-based payment may lead to dumping and skimping of patients, resulting in medically inadequate quality levels (Ellis et al. 1996). Performance measurement is still underdeveloped, and few purchasers use performance measures to detect and exclude providers from contracting (Dudley et al. 2004).

While it is argued that consumer choice over PHC doctors, coupled with the principle of "money following the patient" may moderate the negative effects related to capitation, using consumers as control agents would require several conditions to be in place, including a PHC market large enough to choose from, patient mobility, and consumers having the necessary information and ability to judge providers’ quality of care. In reality it may be difficult for patients to identify substandard technical quality. Also, when providers are government-owned, effective choice is limited. Choice is particularly limited in remote geographic areas with only one provider available, providing little opportunity for patients, who are dissatisfied, to change provider (Cashin et al. 2005). Thus, to prevent negative effects under capitation, performance targets should be established and provider performance monitored and evaluated, including quality and efficiency of care and finances.

3.4. Policy recommendations to strengthen PHC payment reforms

Experience with capitation from the SEE region shows a need for further strengthening of purchasing reforms to ensure their success. In addition to the six activities for strategic purchasing, identified in the previous section, SEE countries would have to strengthen the following seven enabling factors to support the effectiveness of capitation payment:

(i) A population census with socio-demographic and economic data to calculate the overall capitation budget and project adjustment payments for higher risk patients leading to improved fund allocation across facilities; and to prevent that vulnerable groups and minorities are excluded from PHC registration.

(ii) Population registers with PHC providers and compatible with census data.

(iii) Support data collection in PHC to ensure demographic, health and socio-economic data of the population registered with PHC providers, and to use information for population profiling and case-mix adjustment.

(iv) Ensure capacity in health facilities and purchasing agency for establishing claims database and provider performance analysis. Claims data should report utilization and quality of care and finances, and are collected from providers and analyzed by the purchaser to evaluate provider performance and detect under-provision or substandard quality care.

(v) Disseminate information on provider performance to consumers to improve their information base when choosing their preferred GP. Publish annual performance results regarding patient satisfaction, cleanliness, infection rates etc in a local newspaper and on the webpage of the purchaser and the MOH.

(vi) Strengthen management autonomy of PHC providers by supporting the devolution of management responsibility and accountability to health facility managers, thereby ensuring providers can react to financial incentives under capitation.
Institutionalize capacity for monitoring and evaluation of the impact of PHC provider payment reforms on provider costs, quality and utilization of care. Based on findings, the capitation formula should be further refined to ensure the resulting financial incentives contribute to overall health policy goals.

4. Paying for Hospital Care

The types of hospital payments include: (i) line item budgets; (ii) per diem (per bed day); (iii) fee for service; (iv) case-based payment such as diagnosis-related groups (DRGs); (v) global budget, (vi) per episode of illness; and (vii) capitation per insured member. Per diems, DRGs, and FFS all set an incentive to increase the number of days, cases or services; and they pose less financial risk to the hospital than simple capitation. Most countries in the SEE region are in the process or have already started the process for hospital payment reform, with most of them moving from input-based to some kind of case-based payment. Therefore, the focus of this chapter will be on DRGs while the remaining payment methods are only touched briefly. The DRG experience of Hungary – a transition economy bordering to the SEE region - will be portrayed in more details.

4.1. Paying for hospital care in OECD countries and Central Europe

In the Czech Republic, the move to FFS payment in hospitals led to a 46% growth in hospital expenditures from 1992 to 1995 (Langenbrunner et al. 2005). To contain growth of hospital expenditures and improve hospital productivity, hospital payment in Western Europe has gradually moved from FFS and per diems, to global budgeting and, to case based payments, such as DRGs (Docteur et al. 2003). In the United States, renewed focus on quality improvement and on medical-error reduction has heightened interest in paying for performance, rather than just reimbursing providers FFS for services rendered (Nichols et al. 2006).

<table>
<thead>
<tr>
<th>Box 1: Ten Steps for Implementing a Global Hospital Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Develop a “baseline” (1-3 year) data base of patient utilization and costs</td>
</tr>
<tr>
<td>2. Analyze utilization patterns, including patient flows, across facilities and geographic areas</td>
</tr>
<tr>
<td>3. Analyze expenditure patterns by:</td>
</tr>
<tr>
<td>–demographics (age/sex)</td>
</tr>
<tr>
<td>–mix of patients (e.g., by diagnostic categories)</td>
</tr>
<tr>
<td>4. Adjust per capita budgets for differences in costs across age/sex groups in a particular catchment area served</td>
</tr>
<tr>
<td>5. Adjust budgets for differences in patterns of utilization</td>
</tr>
<tr>
<td>6. Subtract from this “base budget” target levels of inappropriate and unnecessary patterns of care and associated costs. For example, inappropriate admissions, pre-admission duplication of testing, and, alternatives to hospital care, such as care on an outpatient basis or in day care centers for &quot;social cases&quot;</td>
</tr>
<tr>
<td>7. Develop draft budget of appropriate and necessary care, based on expected volume and case-mix</td>
</tr>
<tr>
<td>8. Develop sharing agreement on who receives expected surpluses generated by new efficiencies, typically some portion to both facility and to the payer</td>
</tr>
<tr>
<td>9. Develop rules for unexpected risk related to levels of patient demand and or expenditures</td>
</tr>
<tr>
<td>10. Final negotiation and signing of contract</td>
</tr>
</tbody>
</table>


Global budgets are being developed in several countries and mainly in response to volume problems under per diem and per case payment systems. A global budget at the hospital level is a payment fixed in advance to cover the aggregate expenditures of that hospital over a given period.
to provide a set of services that have been broadly agreed upon. A global budget may be based on either inputs or outputs, or a combination of the two (Langenbrunner et al. 2005). Budgetary caps are widely used for setting volume limits and controlling hospital expenditure, and are often complemented by spending caps on subsectors, including ambulatory care and pharmaceuticals. They are most successful in countries with integrated models of health-care financing and supply (Denmark, Ireland, and the United Kingdom) and in single payer countries, such as Canada, where health budgets are explicitly set through the budget process (Docteur et al. 2003). Budgetary caps are less effective where hospitals have several payers, as they may try to shift costs across different financers (Newhouse, 1996).

4.2. Case-based payments for hospital care

Case-based payments such as DRGs\(^7\) reflect the average cost of producing a “case” in an average hospital, which may be adjusted to account for regional economic conditions, and pay for indirect costs such as teaching and capital cost. The US Medicare system began reimbursing hospitals with a case-based payment using DRGs in 1983 (Cashin, et al. 2005). Australia and several countries in Europe started experimenting with DRGs by 1985. In Finland, hospitals are increasingly billing municipalities on a DRG basis. A number of middle-income countries have introduced case-based payment systems, including Korea, Taiwan, Thailand, and Hungary (Langenbrunner et al. 2005).

To develop DRGs, hospitals have to document and report all diagnosis cases. The clinical data for each case that are necessary to develop DRGs include age and sex of the patient, the International Classification of Diseases (ICD-9 or ICD-10) code for the primary diagnosis, the length of stay, and other details of the case, such as whether there was a surgery and whether the patient spent time in intensive care, which may be associated with the cost of treatment. Diagnoses cases are sorted into groups of diagnoses. Classification criteria include principle diagnosis, co-morbidities, specific procedures, age and other parameters. A relative weight is assigned to each group based on the case complexity and intensity of services required to treat patients given their diagnosis, disease severity, and patient characteristics. Actual cost data need to be collected on the patient and department level to represent the relative costliness of producing a DRG. The parameters for calculating the payment rate per case include a base rate, or average cost per case, and case group weights to differentiate between cases with different resource intensities. Case group weights reflect the average cost per case in a given case group relative to the global average cost per case. DRG payments at average costs increase the awareness of resource utilization and set the incentive to increase the number of discharges and productivity. Paying actual cost for each case would create little or no incentive for increased efficiency. In a DRG payment system, the hospital revenue is the total sum of DRG points multiplied by the base rate, which reflects the aggregated average cost per hospital case across all or a representative group of hospitals (Cashin, et al. 2005).

Adjustment parameters (e.g. region-specific adjustment coefficients or facility-type adjustment coefficients) may be added to the DRG formula to determine the final payment rate. A coefficient may be added to increase payment to teaching hospitals or hospitals serving a disproportionate share of socially vulnerable patients, or to reflect regional variations in the cost of hospital inputs, such as heating costs. To ensure the supply of care in hospitals in remote areas, the US Medicare program exempts many rural hospitals from case-based payment. They

\(^7\) Cashin et al (2005) provide detailed technical information in a user manual on the development and implementation of DRGs.
are paid based on incurred costs to account for the lesser ability of small, low-volume institutions to match the efficiencies of larger urban hospitals (Cashin, et al. 2005).

**Box 2: Seven Steps to Implement DRGs**

The process of developing a case based hospital payment system includes seven steps, which can be implemented simultaneously:

1. Developing case grouping criteria;
2. Calculating case group weights;
3. Calculating the base rate;
4. Developing additional payment parameters;
5. Designing the information system;
6. Designing the billing system; and
7. Refining the case grouping.

While case grouping criteria are being developed, some cost analysis should be initiated to calculate variation in resource intensity across cases to inform the definition of the groups. The average cost per case within each group is recalculated after the groups are defined and refined as more data become available during implementation. The development of the billing system can start simultaneously with the design of the payment system.


Implementing DRG payment should be paced to ensure that the hospital system remains stable during a period of change. Phases of implementation can be staggered in accordance with the adequacy of information systems and available technical facilities and support. An overseeing body needs to ensure that procedures are legitimate and fairly applied to eligible participants. Additional staff will be needed and trained in the collection of activity and cost data and clinical coding. An agency needs to be made responsible for receiving the relevant data, applying the case mix grouper, monitoring quality standards, and benchmarking (Wiley, 2007).

DRG requires investment in information systems (see Table 2). Hospitals will have to invest in administration systems (information and billing system) to report their cases and be reimbursed by the purchaser. The purchaser will need an information system that computerizes the recording of cases by hospitals and the grouping of cases into payment categories. The standardization of data systems and accuracy, comprehensiveness and timeliness of reported data needs to be monitored (Wiley, 2007).

DRG software should be purchased from a reliable vendor, selected based on experience and track record, availability of technical support and upgrades, allowance for changes, time period covered, national and local license, and cost. Most important, technical support must ensure that software feeder systems are available to enable interface between activity and cost data and case mix grouper software. Technical support people need to be trained and quickly available to help hospitals and purchasing agencies. The responsibility for their training must be organized (Wiley, 2007).

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8 Note: The manual written by Cashin et al gives detailed explanations and guidance about how to implement DRG payments in hospitals.
Table 2: Information System for Hospital Activity Minimum Data Set

<table>
<thead>
<tr>
<th>i.</th>
<th>Hospital Number</th>
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<tbody>
<tr>
<td>ii.</td>
<td>Patient Number</td>
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<tr>
<td>iii.</td>
<td>Sex</td>
</tr>
<tr>
<td>iv.</td>
<td>Age</td>
</tr>
<tr>
<td>v.</td>
<td>Marital Status</td>
</tr>
<tr>
<td>vi.</td>
<td>Place of Residence</td>
</tr>
<tr>
<td>vii.</td>
<td>Month and Year of Admission</td>
</tr>
<tr>
<td>viii.</td>
<td>Duration of Stay</td>
</tr>
<tr>
<td>ix.</td>
<td>Discharge Status</td>
</tr>
<tr>
<td>x.</td>
<td>Main Diagnosis</td>
</tr>
<tr>
<td>xi.</td>
<td>Other Diagnoses</td>
</tr>
<tr>
<td>xii.</td>
<td>Surgical and Obstetric Procedures</td>
</tr>
<tr>
<td>xiii.</td>
<td>Other Significant Procedures</td>
</tr>
</tbody>
</table>


4.4. Impact of DRG on hospital performance

Managing hospitals under DRG payment requires substantial changes. To respond to financial incentives, hospitals will have to improve productivity, which requires flexibility in the mix of input factors including staff, drugs, equipment etc to select the mix that allows producing a case at the lowest costs while maintaining quality levels. Hospital managers will need to be held accountable for results (Widmer, 2007). For example, when a hospital reaches a 10% deficit in Hungary a public agent is sent to the hospital to manage the hospital tightly and bring back the budget into balance (Evetovits, 2007).

Moving from input-based payment to case-based payments led to a reduction in the average length of hospital stay (ALOS). In the US Medicare system, the ALOS fell by 15% in the first three years after the DRG payment was implemented; and fell as much as 24% for some diagnoses (Cashin, et al. 2005). DRGs may conflict with overall expenditure controls by setting an incentive to increase the number of hospitalized cases, which will result in growing hospital expenditures, where there is excess supply and soft budget constraints. Also hospitals may hospitalize a patient who could be treated more efficiently in an outpatient or day-surgery setting. During the past 20 years, the number of total hospital discharges increased markedly in countries with output-based payment, while it remained on a similar low level in Spain, Canada and the Netherlands, where physicians are paid a monthly salary independent of their workload. The introduction of DRGs in Stockholm County led to a sharp rise in activity and spending and the re-imposition of central expenditure control through penalties for exceeding volume limits. To prevent growing hospital expenditures under case-based payment, combinations of global budgeting with DRG/case-mix adjusters have been introduced in Austria, Belgium, France, Germany, Italy, Ireland, Portugal and Spain, and the Nordic countries (Docteur et al. 2003).

DRGs stimulate changes in hospital care that will be felt in other parts of the health care system. For example, if DRGs create incentives for shorter hospital stays, outpatient or community care must be ready to provide a greater degree of follow-up; or if DRGs lead to an increased admission rate then referral practice should be revisited to prevent unnecessary referrals particularly when paying capitation for PHC. Therefore, planning of the new hospital payment system should include an analysis of the expected and potential unintended impacts within the hospital sector and other parts of the health care system (Cashin, et al. 2005).
4.5. The experience with DRGs in Hungary

In the late eighties, Hungary\(^9\) started implementing DRGs with the objective to move away from the politically influenced input based line-item budgets towards a payment system that leads to increased efficiency and cost-consciousness among hospital managers, and reduces regional differences in resource allocation. The implementation of DRGs in Hungary started with an assessment of outputs across hospitals. The HIF budget was divided into 20 sub-budgets, including one for inpatient care. Based on data analysis of cases and actual costs, DRGs were grouped in major disease categories. For example, the major category “eye disease” includes 18 DRGs. Of the 780 DRGs in Hungary, 200 cover 85% of all cases. DRGs cover all recurrent costs including salaries of all staff. Most hospital staff are public servants and as such their pay is regulated by public service law. Capital costs continue to be paid by the owner, including local municipality or national governments.

Implementing DRGs takes time. Hungary started in 1987 with a pilot to report activity and actual cost data. Six years later, in 1993, the country-wide implementation of DRGs with hospital specific prices started. In 1997, DRGs for all hospitals were equalized to pay for average costs, regardless of actual cost differences between hospitals. Centralized price setting combined with payment of DRGs based on an average flat rate created surpluses in more efficient hospitals. It also set an incentive to reduce costs on more expensive cases or shift (refer) those expensive cases to other providers. Government regulation is needed to prevent DRGs from causing providers to treat some patients in hospitals who could easily be treated in a less-costly outpatient setting. In Hungary, there is a cap on overall hospital expenditure at the national level and a reserve fund is created to compensate for modest volume increase. If reserves are exhausted, the national base fee is recalculated, which proved to be an effective overall cost-control mechanism. To prevent substandard quality of care, the provision of care needs to be monitored and evaluated, and results reported back to providers to adjust care processes and limit adverse effect.

From 1993 until 2006, cost weights in Hungary have been regularly adjusted to better reflect actual cost, change in technology and care process, different policy priorities, and to address cheating and DRG creep. Cheating includes counting a re-admission as an admission. Some hospitals bill for “paper cases,” that is patients who in reality were treated in outpatient setting, but billed as DRGs with inpatient treatment. As DRG is an activity-based payment and independent of quality of care, the contract with hospitals must control for negative effects. For example, if a patient is dismissed earlier and sicker without the support of home care, and needs to be readmitted, the cost is to be covered by the hospital to set a disincentive against unqualified early discharges. Upcoding (DRG creep) is the practice of providers miscoding and misclassifying patient data to report higher severity per case than actual, as reflected by a sudden increase in high risk deliveries; resulting in higher reimbursements for services provided (Steinbusch, 2006). Monitoring and evaluation of provider performance and additional measures to correct for negative effects on quality of care are necessary to make the DRGs system function well.

The development and implementation of DRGs is an ongoing iterative process of collecting and analyzing data, developing payment parameters and other components of the system, implementing the system, collecting more data, monitoring system behavior and refining the

payment system. Hungary revised its DRG system several times over the past decade to fine-tune the system, limit cheating, and negative effects and to make the system more efficient. In addition, inefficiency such as provider-induced hospitalization was reduced by charging co-payments to patients, and by monitoring and controlling provider reporting of cases.

Hungary also applied volume control and put hospitals under strict deficit control. Under a hard budget cap, the base rate has to be adjusted periodically if either the total number of cases or the average severity of cases is higher than projected, causing the total payments to hospitals to exceed the budget cap. Alternatively, the purchaser can try to keep the base rate stable and limit the volume of cases. Hungary used the year 2003 to define the baseline volume; any higher volume in consecutive years was paid at a regressive fee. In 2006, the system changed to pay 95% of the DRG volume at full fee, whereas the rest was not paid. The Government decided to manage overall cost control in hospitals with a capped DRG budget, which helped to facilitate a substantial decrease in the ALOS and overall spending in acute care hospitals, despite an increase in admissions (Orosz et al. 2000).

Hungary encountered several challenges in the implementation of DRGs including insufficient data in health facilities, powerful interest groups who try to negotiate higher case group weights, the need to adjust DRGs to reflect some capital costs and include depreciation and to pay differently for teaching tasks in hospitals, and the need for institutional and legal changes to support hospital autonomy and enable managers to react to changing financial incentives.

4.6. Hospital payment in SEE

In SEE health care systems, hospitals are still paid a line item budget to cover operating costs of providing services. Line item budgets are both determined and made prospectively, at the beginning of the budget year. The budget is based on projected input use, including specification of the number and type of staff employed in the hospital and controls on non-salary expenditures, which are determined by past patterns of input or government regulations on the level and composition of inputs used. Line-item budget formulation creates relatively low administration costs, and there is limited need for information systems. It sets weak incentives to providers for innovative hospital management, including increasing output, improving efficiency, quality and responsiveness to patient. Rather the incentive is to under-provide services, and increase the numbers of staff and beds based on which the budget is defined. Unsurprisingly, non-medical staff amounts to 33% of all health employees in Bosnia and Herzegovina, and 28% in Serbia, which is considerably higher than in the UK (13 percent) (B&H PEIR, 2006). In Albania, input-based hospital payment has resulted in skewed regional resource allocation, a lack of provider accountability for low quality performance and a high level of informal payments at the hospital level (Albania Health Sector Note, 2006).

The FYR of Macedonia has briefly experimented with hospital payment following the German point system, which is similar to a FFS payment. However, the resulting expenditure increase for the health insurance led to a swift return to input-based line item budgets. In line with the incentives set by input-based payment, primary care doctors see only one-fourth as many patients as the EU norm; and the average length of stay in hospital remains markedly higher than OECD countries (FYR Macedonia PEIR, 2002). In Serbia, line-item hospital budget based on the number of beds led to 5.8 beds per 1000 population, which is high compared to more efficient European health systems. High bed numbers combined with considerably longer ALOS than in

10 In 2003, the number of beds per 1,000 population was: 4.4 in Estonia, 2.3 in Finland, 3.9 in France, and 3.6 in Italy. Source: www.data.euro.who.int
European countries\textsuperscript{11}, point to low productivity in terms of patient caseloads per medical staff (Serbia NHA, 2006).

Under line-item budgets, hospital directors in the SEE region have limited expenditure autonomy. Directors can hire and dismiss staff within the MOH-set norms which often requires ministerial approval, and can select vendors for supplies other than pharmaceuticals. However, they cannot reallocate funds across budget categories - and adjust the overall staffing levels or reduce spending on salaries to increase funds for drugs – to better respond to the hospital’s needs. As a result, many hospitals use “vendor financing” when they reach their line-item ceiling to overcome shortages until they receive the new budget, when they will eventually pay outstanding bills to vendors (Gaumer, 2007). The inability of hospitals to work within a budget led to the accumulation of hospital debts in Bosnia and Herzegovina amounting to 0.5% of GDP in 2004, causing the government to finance the cost over-runs of hospitals and health insurers, and patients to eventually pay higher fees for service use (B&H PEIR, 2006).

4.7. Policy recommendations to support hospital payment reforms

To move from input-based to some case based payment such as DRGs with a hard budget cap, SEE countries would have to invest in number of factors, including the following eight activities\textsuperscript{12}:

(i) Ensure enabling **legal and institutional settings** that support the effectiveness of hospital payment reforms. For example, labor laws and regulations may interfere with policies to grant hospitals autonomy over hiring and firing staff or setting salary levels.

(ii) Define **contract between purchasers and providers**, particularly with private providers. Develop contracts that specify which services providers agree to deliver and what prices the purchaser agrees to pay, which party has the authority to make which decisions, and what recourse is available to each party if the terms of the contract are not met.

(iii) Develop the **analytical and management capacity** of the purchaser and provider to manage the new payment system, including capacity to develop and implement purchasing contracts, manage information systems and quality assurance systems, and monitor and evaluate purchasing policies.

(iv) Build **information and financial management capacity** among providers to manage their internal resources, including accounting, billing, and information system.

(v) Invest in two main components of a **basic information system** to support the development and implementation of a case-based hospital payment system, both of which are established at both the provider and the purchaser level: (a) Hospital case database, including basic discharge information about each case at each hospital included in the payment system; and (b) Financial database, including cost accounting and expenditure information.

(vi) Build necessary **care management capacity** at the provider level in the wider health system to support implementation of DRGs; including setting up continuum of care paths, home care agencies and improved referral practice.

\textsuperscript{11} In 2003, ALOS in acute hospitals was 9 days in Serbia, 6.4 days in Austria, 3.6 days in Denmark, 4.3 days in Finland, 6.8 days in Italy, and 7.9 days in Lithuania. Source: \url{www.data.euro.who.int}.

\textsuperscript{12} Cashin et al. (2005) provide a thorough description about the enabling factors for implementing DRGs.
Develop and implement the DRG process as suggested in Box 2 and described above. Define the payment rate per case as an average across a group of hospitals (a critical aspect of case-based payment), and for payment to follow hospital cases.

Before investing into the above steps, Governments would have to ensure the conditions needed for strategic purchasing are in place (see section 2.4 of this chapter).

5. Pay for Performance

The motivation to pay providers based on performance comes from a response to rising medical cost trends, the growth in chronic care costs and healthcare utilization, and demands by purchasers and patients for improvements in the quality of care (Dudley, et al. 2004). Traditional strategies that stimulate quality improvement include regulation, measurement of performance and subsequent feedback, and marketplace competition (Lindauer, et al. 2007). Output-based reimbursement methods provide little financial reward for improvements in quality of care. The current trend in payment reform is therefore to add a performance-based financial incentive to provider payment, to reward better quality performance and to prevent negative consequences such as inappropriate referrals to hospitals and specialists and substandard quality of care. (Nichols, et al. 2006).

Pay-for-performance (P4P) aligns financial reward with improved performance outcomes and pays different amounts to providers based on their performance differences. Financial incentives need to be tied only to performance measures that can be influenced through changes in medical practice. Performance measurement can include five dimensions: (i) patient satisfaction, (ii) clinical process, (iii) outcome, (iv) information technology, and (v) efficiency indicators to identify areas of inappropriate utilization (Rosenthal et al. 2006). Efficiency indicators need to be risk-adjusted to account for providers’ different case-mix severity when comparing performance across hospitals and when using comparative results for P4P. Developing valid measures for specialist care is particularly challenging as different performance measures are needed for each specialty (Lindauer, et al. 2007).

5.1. Experience with P4P in the US

Payers in the US and the UK have started paying providers for their outcomes. In the US, hospital- or physician-based pay-for-performance is mainly applied in managed care plans. More than half the HMOs use pay for performance in their provider contracts. P4P programs show substantial design variation to reflect local conditions including information technology capabilities, data availability, relative leverage of purchaser and providers, and willingness of providers to participate. Of the health plans with P4P, 90% have programs for physicians and 38% for hospitals (Rosenthal, 2006).

Results are still largely anecdotal (Dudley, et al. 2004); and P4P participation among providers is largely voluntary and focuses on PHC measures e.g., improving the Health Plan Employer Data and Information Set13 (HEDIS) scores (see Table 3), patient satisfaction, physician access or

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13 HEDIS is a tool created by the National Committee for Quality Assurance (NCQA) to collect data about the quality of care and services provided by the health plans in the United States. HEDIS consists of a set of performance measures that compare how well health plans perform in key areas: quality of care, access to care and member satisfaction with the health plan and doctors. NCQA requires health plans to collect this information in the same manner so that results can be fairly compared to one another. Health plans can arrange to have their HEDIS results verified by an independent auditor.
electronic claims submission (Baker, 2003). In the US most P4P programs are pilots. Currently, the U.S. Medicare programming has a major development effort underway to pay hospitals a “value based payment” by 2009 (Lindenauer, et al. 2007). P4P for hospitals still requires addressing several limitations before it can be more widely implemented, including defining and unifying measures across different reporting initiatives, risk adjustment for outcome measures, resource burdens on smaller versus larger hospitals, and the need for data on the effectiveness of P4P in improving processes and outcomes (Nichols, et al. 2006).

### Table 3: Examples of HEDIS Indicators about Access/Availability of Care

<table>
<thead>
<tr>
<th>Indicator</th>
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<tbody>
<tr>
<td>Adults’ access to preventive and ambulatory health services</td>
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<tr>
<td>Children and adolescent’s access to primary care practitioners</td>
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<tr>
<td>Prenatal and postpartum care visits</td>
</tr>
<tr>
<td>Annual dental visit</td>
</tr>
<tr>
<td>Initiation and engagement of alcohol and other drug dependence treatment</td>
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<tr>
<td>Call answer timeliness</td>
</tr>
</tbody>
</table>

*Source: HEDIS. USA. [www.ncqa.org](http://www.ncqa.org)*

### 5.2. Measuring and paying for performance under P4P

Provider performance is measured and rewarded based on the scoring results achieved within each indicator. Performance results are assessed and providers scored in three categories:

(i) Scoring based on rank: comparing performance with that of their peers,

(ii) Threshold scoring: reaching absolute targets of performance, and

(iii) Scoring based on change: demonstrating improvement over previous scores.

These categories are also applied in combination. As targets are achieved, measures can be replaced with others that are relevant. A balanced scorecard of different categories should be constructed to account for evolving quality, cost management and other priorities of the purchaser and providers (Baker, 2003).

P4P incentives take several forms resulting in different amounts and methodologies used across programs. About one third of the US programs only reward the top-rated providers. Most commonly used incentives are bonuses and withholds (Baker, 2003):

- **Bonuses** - These generally take the form of annual payments ranging from 5-20 % of total reimbursement based on meeting minimum target requirements for several measures. For example, a purchaser provides mean bonus rewards of $4000 per physician, with a maximum possible reward of $12 000 per physician; or the purchaser negotiates the performance-based incentive separately from the capitation rate, with the incentive ranging from 1% to 5% of the capitation rate.

- **Withholds** - Purchasers may withhold a percentage of reimbursement. For example, a purchaser withholds about 5% of a provider’s monthly reimbursement. Subsequently, the purchaser returns all or portions of the withhold, based on the provider meeting minimum target requirements for performance measures.

P4P is not budget neutral, and new money needs to be infused into the payment system. Budget neutrality would require the size of any bonuses to be balanced by reducing reimbursements to underperforming providers, which creates concern about the possibility of harm to patients (Lindenauer, et al. 2007). Withholds can be used to redistribute funds from low- to high-performing providers. Providers performing in the top decile would receive a 2% increment in payments, and those in the second decile receive a 1% increment. Providers that fail to exceed the performance benchmarks and are classified in the lowest two deciles are liable for a 1 to 2%
financial penalty which is redistributed to the top-ranking providers. Experience from the US suggests that plans must tie at least 10% of provider compensation to performance to change medical practices (Rosenthal et al. 2006).

5.3. Impact of P4P and of public reporting of performance results

In the US, the evidence base linking P4P programs to better quality of care is thin. Most studies showing efficacy are inconsistent, or have revealed unintended effects, such as improvement in documentation without much change in the underlying quality of care (Epstein, 2007). P4P is often introduced in combination with public reporting of performance results, which stimulates interest in quality on the part of providers, but few studies have identified the incremental effect of P4P over public reporting (Dudley et al. 2004). Recent research suggests that the incremental effect of P4P over public reporting is small resulting in around 3% performance improvement over two years, and varies according to baseline performance with the largest improvements observed among hospitals who were poorest performers (Lindenauer, et al. 2007).

The costs of administering P4P programs are likely to be higher than those for public-reporting programs. It will therefore be important to determine the additional effect of P4P on performance improvement compared to public reporting alone, and whether the additional benefits of adding P4P to public reporting are worth the added cost and complexity (Lindenauer, et al. 2007).

5.4. Experience with P4P in the UK

In the UK, the National Health Service had introduced a P4P contract with family practitioners in 2004. The Health Service committed $3.2 billion in additional funding over a period of three years for the P4P program, which was intended to increase family practitioners’ income by up to 25%, depending on their performance with respect to 146 performance indicators relating to clinical care for 10 chronic diseases, organization of care, and patient experience. Table 4 presents a selection of process indicators used in the UK. In preparation for the P4P program, family practitioners employed more nurses and administrative staff, established chronic-disease clinics, and increased the use of electronic medical records (Doran et al., 2006).

<table>
<thead>
<tr>
<th>Disease</th>
<th>Process Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td>% of patients with asthma who have had an asthma review in the previous 15 months</td>
</tr>
<tr>
<td>Cancer</td>
<td>% of patients with cancer reviewed within 6 months of confirmed diagnosis</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease (COPD)</td>
<td>% of patients with COPD with diagnosis confirmed by spirometry and reversibility testing</td>
</tr>
<tr>
<td>Coronary heart disease (CHD)</td>
<td>% of patients with CHD whose last blood pressure measurement was 150/90 mm Hg or less</td>
</tr>
<tr>
<td>Diabetes</td>
<td>% of patients with diabetes whose last blood pressure measurement was 145/85 mm Hg or less</td>
</tr>
<tr>
<td>Hypertension</td>
<td>% of patients with hypertension with last blood pressure measurement was 150/90 mm Hg or less</td>
</tr>
<tr>
<td>Hypothyroidism</td>
<td>% of patients with hypothyroidism with thyroid function tests recorded in the previous 15 months</td>
</tr>
<tr>
<td>Mental health</td>
<td>% of patients with severe long-term mental health problems reviewed in the preceding 15 months</td>
</tr>
</tbody>
</table>

Source: Pay for Performance Program, UK. www.nejm.org
5.5. Impact of P4P and key challenges

Results from the first year of P4P program in the UK show that financial incentives affect physicians’ behavior. However, there is no way to establish how much of behavior change is due to P4P and how much is caused by other factors such as availability of information to providers or peer pressure.

In the UK, providers attained a median of 96.7% of the available points for clinical indicators, which greatly exceeded the 75% predicted. Consequently the cost to the payer was considerably more than expected. The P4P program increased the gross annual income of the average family practitioner by $40,200. Of this amount the family practitioner paid for any additional nursing and administrative costs of meeting the targets.

The high levels of achievement might suggest that the targets were too easy to achieve, or that there is misreporting by providers. To counter misreporting, Primary Care Trusts, statutory bodies responsible for the delivery of health care in local areas, inspect all local practices and undertake detailed audits of randomly selected practices. P4P contracts allow providers to exclude patients from eligibility for specific indicators in the performance calculations (termed “exception reports”), because of reasons related to patients’ non-cooperation, contraindication or unavailability of service. Exception reporting also provides an opportunity for providers to increase their income by inappropriately excluding patients for whom they have missed the targets (Doran et al. 2006).

Key challenges related to P4P programs include gaining acceptance from providers. As a result, payers tend to develop their P4P programs collaboratively with providers, by consulting groups of physicians on the program design or by starting with a pilot program with providers that are interested in P4P. Of major concerns is the administrative burden created by P4P and resulting cost, the potential for conflicting financial incentives, and the lack of standardized measures which increases the reporting burden for providers (Baker, 2003). In the UK, many smaller practices are believed to have merged in the face of the administrative pressures under P4P (Doran et al. 2006).

While there are still many uncertainties concerning the level of financial incentives needed and the optimal formula for improving performance, the experience with P4P in the UK and the US shows six main lessons (Lindenauer, et al. 2007; Doran et al. 2006; Dudley et al. 2004)

First, P4P programs can be costly and require substantial additional monies, in particular when targets are easy to reach, and additional investment in information-technology systems is required to monitor performance.

Second, a baseline and careful monitoring and evaluation of progress are needed to avoid paying for improvements that have already occurred and to prevent abuse.

Third, incremental and geographically staggered introduction would enable policymakers to better estimate the quality effects of the program and reduce risks for providers and payers.

Fourth, information about provider performance needs to be transparent and made available to consumers;

Fifth, P4P needs to be part of wider health strategy of quality and cost management; and

Sixth, the incremental performance effect of P4P over public reporting is small resulting in around 3% performance improvement over two years. However, the cost and complexity to develop and implement P4P is substantially higher than public reporting.
5.6. Experience with P4P in middle- and low-income countries

P4P programs have started in Central and Latin America (Costa Rica, Nicaragua, Haiti), where quality-based payments are using financial incentives and measure performance against structural, process, and outcome standards. In Nicaragua, six public hospitals are offered an incentive bonus of 17% of hospital revenue for achieving performance targets. Targets include technical quality standards (e.g. re-infection rates) and interpersonal quality standards (e.g. rates of complaints). In Haiti, targets set for PHC providers included technical quality standards (i.e. availability of modern methods of family planning) and an interpersonal quality standard (i.e. average waiting time for attention to children). Providers were paid a portion (95%) of their historical budget, and were allowed to earn back the withheld 5% plus an additional 5% if targets were achieved (Eichler, 2005). Both evaluations found P4P to have a positive impact, although the ability to generalize from these findings is limited (McNamara, 2005).

In SEE, some degree of P4P is currently introduced in the FYR of Macedonia, which aims at implementing DRGs. In preparation, hospitals started quarterly activity-reporting, and performance reporting on ALOS, inpatient admissions, referrals, re-admission and patient satisfaction. Of the current historically defined global hospital budget, the HIF pays 60% monthly base payment, 30% monthly payment based on the number of cases, and since the beginning of 2007, the remaining ten percent are paid based on the above five performance indicators.

5.7. Policy recommendations to support P4P payment reforms

SEE countries that consider developing and implementing P4P programs, would have to invest in several activities to ensure the critical success factors are in place. These investments would be in addition to the conditions that need to be set up for strategic purchasing, and include the following five key factors (Nichols, et al. 2006; Lindenauer, et al. 2007):

(i) Ensure **provider acceptance**
   a. Develop P4P programs collaboratively with providers
   b. Start with a pilot program with providers that are interested in pay for performance

(ii) Invest in **information technology** in health facilities and purchasers to monitor and evaluate performance and project financial impact of P4P
   a. Depending on the P4P design, a standardized minimal hospital data set is needed with discharge abstracts, including clinical coding, patient level data on demographic and diagnoses, treatment, outcome, quality of care; data on case-mix for risk-adjusted comparison, and on patient satisfaction.
   b. Increase investment in hospital medical records staffing and auditing.

(iii) Ensure a sound **program design for P4P**, grounded in overall health strategy
   a. Select measures that are in line with overall health strategy
   b. Consider using performance rewards that are budget neutral
   c. Conduct financial projections of the impact of P4P in a feasibility study to estimate the performance effect and financial risk for providers and payers, against public reporting.
   d. Building a comprehensive, evidence-based reporting platform that generates compliance reports and follow-up information for providers

(iv) Support the **development and implementation process**

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a. Build capacity to design, negotiate, monitor and manage performance and contracts at the purchaser and provider
b. Support transparency and use of peer pressure to improve performance through public reporting of performance results
c. Minimize administrative burden

(v) **Monitor and evaluate**

a. Examine the effectiveness of P4P in improving care processes and outcomes and make adjustments to targets, thresholds, and contracts to ensure financial viability.
b. Evaluate administrative cost of P4P to ensure sustainable administration
c. Consider impact of public reporting on performance improvement versus P4P

6. **Discussion and Conclusion**

The health care systems in South Eastern European countries are at a crossroad. Growing costs, combined with increased utilization for more sophisticated care by an aging and newly empowered consumer population, has put considerable strain on both healthcare delivery and finance. These cost issues are compounded by a growing chorus among purchasers and consumers alike calling for improvements in efficiency and quality of care.

Evidence from OECD and SEE countries show that provider payment reforms hold promise for improving system performance by changing the financial incentives to providers for improving access to better quality health care, while at the same time promoting effectiveness and the efficient use of resources and cost containment. However, provider payment reform should not be seen as a remedy for reducing oversupply and rationalizing the health sector. Rather central leadership is needed for health sector rationalization including closing and merging of facilities or departments, to ensure system level efficiency.

Provider payment reforms need to be embedded in overall health strategies and undertaken in conjunction with other reforms. In some countries this may require institutional and legal changes; ownership changes; provider autonomy allowing facility managers to adjust their resource- and output-mix; investment in information technology; training of staff; public reporting of performance results; and standard treatment protocols for providers.

European countries including the Central and South Eastern European region have already launched pilot programs, or are well advanced in purchasing reforms. Evidence from these countries shows that capitation payment combined with performance-based payment for PHC providers, and DRG hospital payment with a hard budget constraint may lead to improved access and productivity and better quality of health care, within a defined budget. Provider payment reform takes time to develop and implement and appears to be in constant refinement. For example, the Netherlands are currently considering developing a DRG that is based on a full episode of treatment independent on whether the patient is treated in outpatient or inpatient setting or uses a home care agency after discharge. While numerous challenges exist to implementing purchasing reforms, evidence shows that changing financial incentives to providers affects their behavior, in particular if supported by public reporting of results (Lindenaue et al. 2007). However, some payment reforms may come with substantial administrative costs and complexity for providers and purchasers.

The experience with purchasing reforms in other countries provides key lessons for SEE countries including the need for:

- **Stakeholder support, and a supportive institutional and legal framework**;
➢ **Broader health sector delivery reforms** to ensure the system can cope with wider effects of providers’ reaction (e.g. paying for long-term care and developing home care where hospital stays will be shortened);

➢ **Information technology**, training of staff, and administrative simplicity;

➢ **Sound program design** to guarantee the reforms are financially sustainable;

➢ **Adaptation of management** to ensure providers can react to financial incentives;

➢ **Monitoring and evaluation** of payment reforms/

These measures should be considered for implementation to support the success of provider payment reforms.
## Annex

### Table A1: Definition of Terms

<table>
<thead>
<tr>
<th>Term</th>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Allocation basis</td>
<td></td>
<td>A rule used to allocate indirect costs to a cost center (hospital clinical department) in the step-down cost accounting process.</td>
</tr>
<tr>
<td>Allocation statistics</td>
<td></td>
<td>The data needed to apply the allocation basis to allocate indirect costs to a cost center (hospital clinical department) in the step-down cost accounting process.</td>
</tr>
<tr>
<td>Average length of stay</td>
<td>ALOS</td>
<td>Average number of days per hospital stay.</td>
</tr>
<tr>
<td>Base rate</td>
<td>BR</td>
<td>Aggregate average cost per hospital case across a group of hospitals</td>
</tr>
<tr>
<td>Bottom-up costing</td>
<td></td>
<td>A costing method that determines the unit cost of a service summing the cost of all inputs used to provide the service in the most recent year and divided by the annual total number of the service provided.</td>
</tr>
<tr>
<td>Budget neutral</td>
<td></td>
<td>The payment system is designed so that the total payment to providers the health sector, or a sub-sector such as the hospital sector, in a budget period is equal to the total amount of resources allocated to the sector.</td>
</tr>
<tr>
<td>Bundling of services</td>
<td></td>
<td>Grouping health care services into a higher level aggregated unit (e.g. hospital bed-days and all tests and procedures are grouped into a “discharge”), and charging or paying for the group of services rather than for each individual service.</td>
</tr>
<tr>
<td>Case-based payment method</td>
<td></td>
<td>A hospital payment method that reimburses hospitals a pre-determined fixed rate for each treated case.</td>
</tr>
<tr>
<td>Case group</td>
<td>CG</td>
<td>A group of hospital cases defined for a case-based hospital payment system to include cases with similar clinical characteristics and resources required to diagnose and treat the cases, or to complete a phase of case management.</td>
</tr>
<tr>
<td>Case grouping of cases</td>
<td></td>
<td>A set of criteria and a process for allocating hospital cases into clinical groups that have similar clinical characteristics and resource intensities.</td>
</tr>
<tr>
<td>Case group weight</td>
<td>CGW</td>
<td>The ratio of the average cost per case in a given case group divided by the global average cost per case, which reflects the resource intensity of diagnosing and treating cases in the case group relative to the average.</td>
</tr>
<tr>
<td>Case mix</td>
<td>CM</td>
<td>The relative complexity and intensity of services required to treat patients in a hospital due to diagnosis, disease severity, and patient characteristics.</td>
</tr>
<tr>
<td>Case mix index</td>
<td>CMI</td>
<td>A summary measure that describes the number and types of patients treated in a hospital according to the complexity and intensity of services required to treat the patients due to diagnosis, disease severity, and personal characteristics, such as age.</td>
</tr>
<tr>
<td>Term</td>
<td>Acronym</td>
<td>Definition</td>
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</tr>
<tr>
<td>Coefficient of variation</td>
<td>CV</td>
<td>The variation (standard deviation) of a variable expressed as a percentage of the average (mean) of that variable.</td>
</tr>
<tr>
<td>Co-morbidity</td>
<td></td>
<td>A condition that is not related causally to a patient’s principal disease process, but increases a patient’s total burden of illness.</td>
</tr>
<tr>
<td>Diagnosis-related group</td>
<td>DRG</td>
<td>A classification of hospital case types into groups that are clinically similar and are expected to have similar hospital resource use. The groupings are based on diagnoses, and may also based on procedures, age, sex and the presence of complications or comorbidities.</td>
</tr>
<tr>
<td>Economic adjustment coefficient</td>
<td></td>
<td>An adjustment factor multiplied by the base rate in a case-based hospital payment system to adjust for economic factors external to the hospital sector that would affect expenditures, such as inflation or regional variations in resource cost.</td>
</tr>
<tr>
<td>Hard budget cap</td>
<td></td>
<td>The amount of resources allocated to the health sector, or a sub-sector such as the hospital sector, which serves as a firm limit on expenditures in that sector during the budget period.</td>
</tr>
<tr>
<td>Health purchaser</td>
<td></td>
<td>An entity that transfers pooled health care resources to providers to pay for services for a defined population.</td>
</tr>
<tr>
<td>Hospital pool</td>
<td>HP</td>
<td>An estimate of the amount of funds that will be available to pay for hospital services in a defined geographic or administrative region for a specified time period.</td>
</tr>
<tr>
<td>Incentive</td>
<td></td>
<td>An economic signal that directs individuals or organizations (economic entities) toward self-interested behavior.</td>
</tr>
<tr>
<td>International Classification of Diseases</td>
<td>ICD</td>
<td>A system of categories used to classify morbidities according to established criteria. The classification system is currently in its 10th edition (ICD-10) and is published by the World Health Organization.</td>
</tr>
<tr>
<td>Major diagnostic category</td>
<td>MDC</td>
<td>A category of diagnoses generally based on a single body system or disease etiology that is associated with a particular medical specialty.</td>
</tr>
<tr>
<td>Outlier case</td>
<td></td>
<td>A hospital case with an atypically long or atypically short length of stay for a particular case group. The outlier case threshold is sometimes called the “trim point.”</td>
</tr>
<tr>
<td>Prospective payment</td>
<td></td>
<td>The payment rate for a set of services is determined prior to the services being delivered.</td>
</tr>
<tr>
<td>Provider payment method</td>
<td></td>
<td>The mechanism used to transfer resources from the payers of health care services to the providers.</td>
</tr>
<tr>
<td>Provider payment system</td>
<td>PPS</td>
<td>The provider payment method combined with all supporting systems, such as information systems and accountability mechanisms, considered in the context of surrounding payment systems (e.g. for outpatient services) and referral rules.</td>
</tr>
<tr>
<td>Term</td>
<td>Acronym</td>
<td>Definition</td>
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<tr>
<td>Reserve fund</td>
<td></td>
<td>A portion of the hospital pool that is set aside and not used to calculate the base rate of the case-based payment system. The reserve fund is used to accumulate funds in surplus months and to pay for budget over-runs in deficit months. Also referred to as a risk pool or contingency fund.</td>
</tr>
<tr>
<td>Retrospective</td>
<td></td>
<td>The payment rate for a set of services is determined after the services are delivered.</td>
</tr>
<tr>
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<td></td>
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</tr>
<tr>
<td>payment</td>
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<tr>
<td>Soft budget cap</td>
<td></td>
<td>The amount of resources allocated to the health sector, or a sub-sector such as the hospital sector, which serves as a target, but providers are compensated for overruns if expenditures exceed the target in the budget period.</td>
</tr>
<tr>
<td>Top-down allocation</td>
<td></td>
<td>The proportion of total available funds allocated to a sector, or sub-sector such as the hospital, is determined administratively rather than based on the actual share of total costs.</td>
</tr>
<tr>
<td>Unbundling services</td>
<td></td>
<td>Ungrouping aggregated, or “bundled,” units of health care services into individual service components (e.g. hospital discharge is ungrouped into bed-days and all tests and procedures), and charging or paying for the individual services rather than the higher level “bundled” unit.</td>
</tr>
<tr>
<td>Upcoding</td>
<td></td>
<td>The practice of assigning hospital cases to a case group that is reimbursed at a higher rate than the case group to which the case actually belongs based on the observed clinical characteristics of the case. Also called “DRG creep”.</td>
</tr>
</tbody>
</table>

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The World Bank: Kosovo. Public Expenditure and Institutional Review. 2005


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