



Comparative analysis of the current payment system for hospital services in Serbia and projected payments under diagnostic related groups system in urology

Komparativna analiza aktuelnog načina plaćanja bolničkih usluga u Srbiji i projektovanog plaćanja po sistemu dijagnostički srodnih grupa u urologiji

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Abstract

Background/Aim. Global budget *per* calendar year is a traditional method of funding hospitals in Serbia. Diagnose related groups (DGR) is a method of hospital payment based on classification of patients into groups with clinically similar problems and similar utilization of hospital resources. The aim of this study was to compare current methods of hospital services payment with the projected costs by DRG payment method in urology. **Methods.** The data were obtained from the information system used in the Clinical Hospital Center “Dr. Dragiša Mišović” – Dedinje in Belgrade, Serbia. The implemented hospital information system was the main criterion for selection of healthcare institutions. The study included 994 randomly selected patients treated surgically and conservatively in 2012. **Results.** Average costs under the current payment method were slightly higher than those projected by DRG, however, the variability was twice as high ($54,111 \pm 69,789$ compared to $53,434 \pm 32,509$, $p < 0,001$) respectively. The univariate analysis showed that the highest correlation with the current payment method as well as with the projected one by DRG was observed in relation to the number of days of hospitali-

zation ($\rho = 0.842$, $p < 0.001$, and $\rho = 0.637$, $p < 0.001$, respectively). Multivariate regression models confirmed the influence of the number of hospitalization days to costs under the current payment system ($\beta = 0.843$, $p < 0.001$) as well as under the projected DRG payment system ($\beta = 0.737$, $p < 0.001$). The same predictor was crucial for the difference in the current payment method and the projected DRG payment methods ($\beta = 0.501$, $p < 0.001$). **Conclusion.** Payment under the DRG system is administratively more complex because it requires detailed and standardized coding of diagnoses and procedures, as well as the information on the average consumption of resources (costs) *per* DRG. Given that aggregate costs of treatment under two hospital payment methods compared in the study are not significantly different, the focus on minor surgeries both under the current hospital payment method and under the introduced DRG system would be far more cost-effective for a hospital as great variations in treatment performance (reduction of days of hospitalization and complications), and consequently invoiced amounts would be reduced.

Key words: hospitals; financial management; urology; serbia.

Apstrakt

Uvod/Cilj. Ukupni određeni budžet za kalendarsku godinu je tradicionalni način finansiranja bolnica u Srbiji. Dijagnostički srodne grupe (DSG) je način plaćanja u bolnicama koji je baziran na klasifikaciji bolesnika po grupama sa sličnim dijagnozama, gde se očekuje slična iskorišćenost bolničkih resursa. Cilj ovog rada bilo je poređenje aktuelnog načina plaćanja bolnice i projektovanih troškova pomoću metode plaćanja prema DSG u urologiji. **Metode.** Podaci su dobi-

jeni iz informacionog sistema koji se koristi u Kliničko-bolničkom centru (KBC) „Dr Dragiša Mišović“ – Dedinje u Beogradu, Srbija. Glavni kriterijum izbora ustanova bio je uspostavljen bolnički informacioni sistem. U studiju je uključeno nasumično izabranih 994 bolesnika lečenih operativno i konzervativno u 2012. godini. **Rezultati.** Prosečni troškovi po aktuelnom načinu plaćanja bili su malo veći od projektovanog DSG, ali je varijabilitet bio dva puta veći ($54\ 111 \pm 69\ 789$ prema $53\ 434 \pm 32\ 509$; $p < 0,001$). Univarijantnom analizom utvrđeno je da najveću korelaciju sa

aktuelnim načinom plaćanja, kao i sa projektovanim pomoću DSG, ima broj dana hospitalizacije ($q = 0,842$; $p < 0,001$ i $q = 0,637$; $p < 0,001$). Multivarijantnim regresionim modelima potvrđen je uticaj broja dana hospitalizacije na troškove prema aktuelnom sistemu plaćanja ($\beta = 0,843$; $p < 0,001$), kao i prema projektovanom DSG sistemu plaćanja ($\beta = 0,737$; $p < 0,001$). Isti prediktor bio je i ključni za razliku aktuelnog načina plaćanja i projektovanog DSG načina plaćanja ($\beta = 0,501$; $p < 0,001$). **Zaključak.** Plaćanje prema DSG administrativno je složenije jer zahteva detaljno i standardizovano kodiranje dijagnoza i procedura, kao i in-

formacije o prosečnoj potrošnji resursa (troškova) prema DSG. S obzirom na to da zbirni troškovi lečenja koji se plaćaju na dva načina, poređena u istraživanju, nisu bitno različiti, fokus na manje hirurške intervencije i u aktuelnom načinu plaćanja bolnica i po uvođenju plaćanja po DSG bio bi daleko isplativiji za bolnicu jer bi se smanjile velike varijacije u performansama lečenja (smanjenje dana hospitalizacije i komplikacija), a posledično i računa.

Ključne reči:
bolnice; finansije, upravljanje; urologija; srbija.

Introduction

Hospital services costs account for a large share of total spending on health care, regardless of whether the global budget, payment-for-service, case-based payment of diagnosis-related groups (DRG) are used as hospital services funding mechanism¹. The problem of financing secondary and tertiary level healthcare institutions as the greatest “consumers” in the health care system has been analyzed for more than 100 years including recently published national assessments². The methods of hospital services payment are numerous, but neither of them is perfect enough in terms of ensuring both fair remuneration for performed work and medical supplies, and the control of costs of hospital treatment and care³.

In view of developing programs to assess the utilization and quality of health insurance in a local hospital, in 1960s, Robert Vettel and his colleagues from the Yale University calculated all possible costs of optimal treatment of patients classified in DRG based on certain characteristics and severity of illness⁴. Thirty years later, a case-based payment and DRG-based payment are the main methods of hospital services payment for patients with acute conditions in most high income countries⁵⁻⁸. Measuring of costs *per* DRG creates opportunities for improving efficiency, because patients with certain characteristics and within clinically similar problems are classified into groups with similar costs of treatment and care under this approach⁹. By categorizing patients into groups with similar utilization of hospital resources, DRGs describe hospital activities in standardized units and enable the analysis, which otherwise would not be easy because hospitals treat many patients, each of whom seem to have unique health condition. The basic idea of DRG-based payment is the payment *per* episode, where the episode is deemed a period from admission to discharge, while all the costs incurred during that period are included in the price. This method of payment is commonly called “case-based payment”¹⁰.

Under the DRG system, hospital managers and policy makers can compare hospitals or different hospital departments by length of stay, costs and quality¹¹. DRG-based payment method in developed countries has clearly demonstrated to bring better quality of work and resource savings¹². In countries in which global budget is used as a model for hospital payment, hospital management has little information on what types of services have been provided to

patients and at what price in hospital wards or departments. Theoretically, the DRG-based payment provides a strong incentive for increasing the number of cases of treatment (as opposed to the global budget) and for rationalizing the number of services provided per case (as opposed to the payment-for-service system).

The global budget is a traditional method of funding hospitals in Serbia¹³. By purchasing the healthcare plan of certain healthcare institutions by Health Insurance Fund (HIF) for a calendar year, the budget of the institution is “prospectively” defined, and a fixed payment for a specified level of activity (usually determined by the number of cases or the number of hospital days) narrows the scope for improving technical and allocative efficiency and performance quality^{14,15}. By adopting the healthcare development plan by 2015, the Ministry of Health has envisaged the implementation of the DRG system for reimbursing costs of hospitalized patients with acute conditions. The induction program should be implemented in stages; originally it would be used as an analytical tool for coding, then for obtaining statistical data on hospital treatment performance, and in the final stage it would be introduced as a system for the collection of payment for rendered hospital services.

In order to identify comparative strengths and weaknesses of two methods of hospital payment and formulate recommendations to decision makers, the objective of this paper was to compare current hospital payment methods and DRG-based payment methods at the Department of Urology at the Clinical Hospital Center (CHC) “Dr. Dragiša Mišović” – Dedinje, Belgrade, Serbia.

Methods

For the purposes of this study, the data obtained from the information system used in the CHC “Dr Dragiša Mišović” – Dedinje, were processed under the pilot project of implementation of the Australian DRG model in acute patients hospital care in four healthcare institutions and the CHC “Dr Dragiša Mišović” – Dedinje was one of such institutions (the main criterion of healthcare institution selection was the implementation of the hospital information system).

The study included 994 randomly selected patients treated surgically and conservatively at the Department of Urology, CHC “Dr Dragiša Mišović” – Dedinje, in 2012. The following variables were monitored: age categorized in-

to ten-year intervals, sex, place of residence, hospital, diagnose under the International Classification of Diseases – ICD-10, medical procedures performed during hospitalization, co-morbidities accompanying the main cause of hospitalization [(based on the ASA score created by American Society of Anesthesiologists (ASA) for the assessment of physical status of patients before surgery¹⁶], postoperative complications (according to the Clavien scale which is a global score that assesses postoperative course¹⁷) and the final report on the treatment (electronic report on electronic invoices issued to the Serbian Health Insurance Fund). All the patients were determined the ASA score on admission, while the complications were monitored against the Clavien scale. The hypothetical price *per* DRG model was calculated by using the Croatian DRG grouper and the coding rules available at the website of the Croatian Institute for Health Insurance in force since 2007¹⁸. The price obtained by using the Croatian grouper for a particular DRG group was converted in RSD based on the real exchange rate between two countries and divided by two as the spending on healthcare in Croatia was by twice higher than in Serbia in absolute figures in Euro.

Descriptive and analytical statistical methods were used in this study. As regards the descriptive methods, absolute and relative numbers, measures of central tendency (arithmetic mean, median) and the measures of dispersion [statistical deviation (SD) and interval of variation] were used. As regards analytical methods, difference tests (*t*-test and Kruskal-Wallis test) and correlation analysis (Spearman's and Pearson's correlation analysis, linear regression analysis) were used. All the data were processed by SPSS 15.0 (Chicago, Illinois, USA) statistical software.

Results

The study covered 994 patients in total. Of the total number of patients, 781 (78.6%) patients were male, while 213 (21.4%) patients were female. The average age of patients was 63.9 ± 14.7 years, with the median age of 66 years. Of the total number of patients who entered the study, 835 (84%) patients came from urban, while 159 (16%) patients came from rural areas. The patients with the diagnosed bladder cancer (C67) (32.3%) accounted for the highest percentage, followed by patients with benign prostate enlargement (N40) (16.8%), urinary tract calculosis (N20) (9.9%), prostate cancer (C61) (7.7%), urethral stenosis N35 (6.4%), while the remaining 23 diagnoses accounted for the percentage less than 5%. One-third of patients, i.e. 310 (31.2%) pa-

tients respectively had the ASA score of 0, while 278 (28%) of them had the ASA score of 1, 309 (31.1 %) patients had the ASA score of 2, while only 67 (6.7%) patients had the ASA score of 3. Age correlated with ASA score and among older patients those with the highest ASA score were the most numerous ($\tau = 0.433$; $p < 0.001$).

The majority of patients were treated surgically, 961 (96.7%) patients, while 33 (3.3%) patients were treated conservatively. The procedures of transurethral resection of bladder tumors, 230 (23.9%) and prostate cancer 129 (13.4%), accounted for the highest number, followed by 83 (8.6%) ureteroscopic lithotripsy (URS) and lithotripsy procedures and 82 (8.5%) cystoscopy procedures. According to the Clavien scale, the majority of patients, 817 (82.2%), had no complications, while less than one-fifth of patients had surgery complications: 62 (6.2%) patients had the Clavien scale score of 1 48 (4.8%) patients had the Clavien score of 3, and 34 (3.4%) patients had the Clavien score of 2. The highest rate of complications was observed in radical cystectomy, followed by transvesical prostatectomy, ureterorenoscopy, pyelolithotomy.

The average number of days of hospitalization was 4.9 ± 4.4 days, with the median of 4 days. The minimum number of days of hospitalization was 1, while the highest number of hospitalization days was 37. The highest average number of days was observed in patients who underwent radical cystectomy (18.6), followed by patients who underwent pyelolithotomy (15.0). The highest total number of hospital days was observed in patients with transurethral resection (TUR) of bladder tumors (731) and transurethral resection of the prostate (TURP) (598). There is a weak positive correlation between the age and the number of days of hospitalization ($\rho = 0.197$; $p < 0.001$). Further analysis identified a positive correlation between the average number of days of hospitalization and the ASA score ($\rho = 0.301$; $p < 0.001$). Analogously to the ASA score, the average number of days of hospitalization grew in parallel with the Clavien score growth ($\rho = 0.457$; $p < 0.001$).

All of the factors (age, ASA score, and Clavien scale) were statistically significant predictors of the average number of days of hospitalization, but on the basis of the standardized beta coefficient it was established that the Clavien was the most important predictor in terms of extending the number of days of hospitalization (Table 1). The explained variability of the number of days of hospitalization with these three predictors was $r^2 = 0.260$.

The total treatment costs under the current payment system and projected DRG for patients treated at the Depart-

Table 1
Regression models with days of hospitalization, the method of payment, and the difference between the models of payment as dependents

Predictor	Method of payment		Difference between actual and DRG	Days of hospitalization
	Actual	DRG		
Age	-0.040 (0.035)	-0.044 (0.092)	-0.053 (0.068)	0.092 (0.004)
ASA score	0.023 (0.243)	-0.003 (0.924)	0.053 (0.075)	0.171 (< 0.001)
Clavien	0.036 (0.057)	-0.046 (0.074)	0.208 (< 0.001)	0.418 (< 0.001)
Days of hospitalization	0.843 (< 0.001)	0.737 (< 0.001)	0.501 (< 0.001)	

The results are presented as std. β (*p* - value); DRG – diagnostic-related groups; ASA – American Society of Anesthesiologists.

ment of Urology, though they seemed to be similar, were statistically significantly different ($t = -15\ 516$; $p < 0.001$) as the variability of costs was twice as higher under the current

Average differences and amounts for certain diagnoses were attributable to DRG model, while some were attributable to the current payment system.

Table 2
Costs of therapy in RS dinar by the current method and the projected by DRG

Method of payment	$\bar{x} \pm SD$	Median (min-max)	Sum
Actual	54,111 \pm 69,789	30,533.5 (1,594–858,882)	53,786,466
DRG	53,434 \pm 32,509	41,152.0 (14,524–201,764)	53,060,346

DRG – diagnostic-related groups.

payment method (Table 2). The highest average costs under the current payment model were observed in case of radical cystectomy, pyelolithomy, nephrectomy and nephroureterectomy, and also the highest total cost of cystectomy; however, great costs were incurred in case of prostatectomy, nephrectomy. The average costs of certain procedures *per* DRG model were quite different from the costs incurred under the current payment model, while certain costs were similar. Also, there are differences and similarities in the amounts, depending on the type of surgery.

Further analysis revealed a high statistical correlation between the number of days of hospitalization and the costs under the current payment system ($\rho = 0.842$; $p < 0.001$), as well as between the number of days of hospitalization and DRG ($\rho = 0.637$; $p < 0.001$).

Regression models showed that the number of days of hospitalization was the most important predictor of the amount of invoice for hospitalization based on the current calculation method and based on the DRG projected model (Table 1). The explained variability was rather high ($r^2_{\text{current method}} = 0.739$; $r^2_{\text{DSG}} = 0.502$).

Complicated and expensive surgeries are more favorable for the clinic if the costs are calculated under the DRG model, rather than on the current payment system (Table 3).

A new variable has been created and it represents the difference in invoiced costs based on current payment method and DRG model (Table 1). The correlation analysis revealed a highly significant statistical correlation between the Clavien scale and the difference in invoiced amounts and DRG ($\rho = 0.381$; $p < 0.001$). This correlation was by far greater than in case of ASA score ($\rho = 0.225$; $p < 0.001$).

In view of identifying the correlation between the two methods of cost calculation for hospitalization and the number of days of hospitalization, it was established that this correlation is weak in the first ten days but that it became stronger by the increase of the number of days of hospitalization ($\rho = 0.685$; $p < 0.001$). Finally, the number of days of hospitalization and complications in the form of the Clavien score were the most important predictors of the difference between the current payment method and DRG model (Table 1).

Discussion

The main reason for the popularity of the hospital payment system based on DRG is that it is considered to have the most desirable effect on the efficiency and quality as it encourages hospitals to reduce costs and increase revenue

Table 3
Differences in the costs of procedures between the actual method of payment and the projected DRG in RS dinar

Procedure	n	\bar{x}	Sum	Procedure	n	\bar{x}	Sum
Circumcision	10	-6,417.3	-6,417.3	Transvesical prostatectomy	39	10,031.3	391,222
Placement of renal stent	13	-2,537.1	-32,983	Radical cystectomy with ileal conduit	22	193,795.4	4,263,499
Transurethral resection of the bladder tumor	230	-15,364.8	-3,533,925	Radical prostatectomy	41	32,575.6	1,335,601
Radical orchiectomy	9	770.0	6,930	Radical nephrectomy	27	4,224.2	114,054
Transurethral resection of the prostate (TURP)	129	-4,066.8	-524,622	Partial nephrectomy	21	-4,116.7	-86,451
Bilateral orchiectomy	30	-1,994.2	-59,826	Ureterolithotomy	5	28,460.6	142,303
Ureterorenoscopy lithotripsy	83	-5,210.6	-432,487	Percutaneous nephrolithotomy	4	16,243.5	64,974
Transurethral resection of bladder neck	12	-7,596.6	-91,160	Nephrectomy	10	62,385.4	623,854
Cystoscopy	82	-13,779.1	-1,129,886	Ureterocystoneostomy	5	9,776.2	48,881
TURP with uretrotomy	10	-10,885.6	-108,856	Pyelolithotomy	3	147,930.6	443,792
Testicular biopsy	1	-133,62.0	-13,362	Nephroureterectomy	8	28,182.6	225,461
Ligation of spermatic vein	16	-16,964.4	-271,430	Explorative laparotomy	3	14,444.3	43,333
Punction of renal cyst	7	-39,434.7	-276,043	Cystolithotomy	2	25,533.5	51,067
Internal uretrotomy	38	-41.2	-1,566	Pyeloplasty	4	16,823.0	67,292
Marsupielisation	21	-17,996.6	-377,929	Laparoscopic nephrectomy	1	10,726.0	10,726
Orchiectomy	11	13,070.8	143,779	Hydrocele operation	34	-2,046.4	-69,578
Transobturator tape	8	28,268.0	226,144	Penile surgery	9	-3,171.2	-28,541
Percutaneous nephrostomy	7	-18,688.3	-130,818	Prostate biopsy	5	-19,569.2	-97,846

DRG – diagnostic-related groups.

per treated patient and to increase the number of patients¹⁸. Case-based costs in hospitals can be reduced by shortening the length of stay, reducing the intensity of service and selecting patients to whom hospitals may provide treatment at costs below the payment rates under DRG¹⁹⁻²⁰. The results of this study confirmed that the total amount of a hospital invoice was really affected mostly by the number of treatment days and treatment complications measured by Clavien scale. It has been established that as the age increases, the larger the proportion of patients with co-morbidities and complications, and that the incidence of complications is higher in patients with higher ASA score.

By replacing the system of retrospectively determined fee-for-service with the DRG payment model, hospitals in the USA and some European countries have received strong incentives to reduce costs since DRG contributed to increased transparency in the provision of healthcare services and hospitals are encouraged to invest in quality improvement which leads to cost reduction (for example, by infection control measures and improving surgical technology)²¹. However, in Europe the replacement of the global hospital budgeting was supposed to increase hospital efficiency¹, and since by the introduction of DRG system hospitals have received an incentive to reduce costs, the effects of the DRG payment system on the quality of healthcare services should be indicated²². The hospital performance efficiency increase is contributed by the shortened length of stay, optimized treatment and care, and reduced intensity of providing unnecessary and duplicated services²³. However, shortening of the stay can lead to inappropriate early (“bloody”) discharge, and the intensity of services may be reduced to ensuring minimum services, resulting in poor quality services²⁴. Hospitals can be more efficient and ensure better quality by specializing in treatments available only to patients with whom they can achieve a competitive advantage (as they have more qualified staff or ensure better quality services). However, there is a risk that hospitals will focus only to those patients whose treatment costs are expected to be lower than DRG group costs (so-called “cream skimming”), for example, by selecting patients without adverse effects if they are not adequately included in the DRG system, or that they “will” reject unprofitable patients transferring them to other hospitals, or just avoid them²⁵⁻²⁶. The abovementioned is demonstrated by this study, according to which in case of introduction of DRG system it would be more cost effective for a hospital to carry out less costly interventions than expensive surgical procedures. Therefore, the application of the DRG-based payment method must be continuously improved and revised dynamically through mutual cooperation of healthcare professionals and health insurance organizations⁵. For example, in Germany and Netherlands, the DRG payment system operates within the global budget and the incentives to hospital productivity are lower than in England, where hospital activity is not limited by the global budget.

The introduction of DRG-based payment method should facilitate monitoring and comparison of hospital service quality since hospitals are encouraged to improve the coding of diagnoses and procedures which improves the

quality of data on hospital activity and costs are reduced if measures to improve the quality of work are introduced, such as better coordination between hospitals, providers of outpatient services, and facilities providing long-term care. However, hospitals may be tempted to “make savings” on the quality by avoiding to conduct certain diagnostic tests, neglecting hygiene standards and reducing the number of staff per bed, since DRG does not specify which services should be provided during the treatment of a particular patient. In the famous article from 2012, Volkmer et al.²² came to the conclusion that physician and anesthetic skills and practices influenced the results of treatments in urology and stressed the need to adapt, amend and adjust the German DRG hospital payment method at least once a year, and even more frequently as appropriate. Every year since 2007, German urologist German Wenke et al.²⁷ have analyzed the effects of coefficients, comorbidities and the introduction of new treatment options to the DRG payment method, and propose necessary amendments to the content and adaptations to the National Centre for DRG Monitoring.

DRGs are different with respect to the criteria for defining patient groups: health problems similarity (diagnosis, condition, need for healthcare), treatment outcome (real health condition), the treatment method (intervention, procedure, etc.), usefulness of treatment (value, counter-value in money, health benefits), prognosis (expected health condition) and the treatment costs (resources utilization). Some methods combine several criteria, such as clinical attributes of patients and the treatment costs, widely known as the “case-mix”. However, both methods can not accurately classify each patient into a particular category, and therefore we have the episodes of treatment with costs higher than average costs of DRG to which the patient belongs, called “episodes of extreme outliers”²⁸. In our research, the episodes of extreme outliers are the maximum values observed in patients who have underwent radical cystectomy. “Episodes of high outliers” are usually additionally paid for each day above a certain threshold, which is called “a trim day”. A trim day is usually three times longer than the average stay for a particular DRG. So the trim day for a DRG with an average length of stay of five days would be the day 15 which means that the hospital is entitled to additional payment for each day after the day 16 onwards²⁹⁻³⁰.

The DRG payment method for hospital services ensures “benchmark competition” because DRG prices are set against the level of average costs of all hospitals³¹. If a hospital defines a DRG at the price below average costs compared to other hospitals, it has a direct benefit and retains the generated financial surplus; if the hospital does not perform as expected it generates a deficit, and it will be ultimately exposed to the risk of bankruptcy. All hospitals, including the most effective are motivated to continually reduce costs. If a DRG does not control the differences between the patient groups or differences in services provided (within the DRG) sufficiently, the amounts due for very complicated cases may be too low, while the amounts due for less complex cases may be too high. Accordingly, hospitals may try to avoid the risks of treating complex patients.

Along with the implementation of the DRG-based payment method, there are a number of options in practice for hospitals to increase (technical and financial) efficiency, as well as to avoid duplication and unnecessary tests, replace costly hospitalization with less expensive alternative treatments with similar efficiency, and improve treatment technologies (for example, using the Protocol for evaluating the reasons for hospitalization, clinical protocols and clinical guidelines), thus reducing the length of stay, as some studies have shown that about 20% of hospital days are completely unjustified, and that clinical guidelines are not used in the daily work to an extent in which they should be used³²⁻³⁶. In the field of urology, Serbian hospitals can apply clinical practice guidelines, which are published annually by the European Association of Urologists and the American Association of Urologists.

Conclusion

Payment under the DRG system is administratively more complex because it requires detailed and standardized coding of diagnoses and procedures as well as the informa-

tion on the average consumption of resources (costs) per DRG. Given that aggregate costs of treatment under the two hospital payment methods compared in the study are not significantly different, the focus on minor surgeries both under the current hospital payment method and under the introduced DRG system would be far more cost-effective for a hospital as great variations in treatment performance (reduction of days of hospitalization and complications), and consequently invoiced amounts, would be reduced.

DRG can be a good tool for measuring the efficiency and performance of each hospital units and departments in the field of urology, as well as surgical branches and can show how much revenue is generated by the work of health professionals, and how much money is paid because the "installed capacities" are in place, i.e., services and the staff in place. It is important that the hospital payment method based on DRG be always carefully monitored and adjusted to the advances made in medical science and the profession. Therefore, it would be useful to establish a kind of a center, or at least a department in the Ministry of Health or in the Insurance Fond responsible for monitoring the implementation and continuous modification of DRG.

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