

Da li je plaćanje prema dijagnozi uporedivo sa stvarnim troškovima lečenja?

Is the payment according to the diagnosis comparable with the real cost of treatments?

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APSTRAKT

Cilj. Model DSG (Dijagnostičkih srodnih grupa) je trenutni metod plaćanja zdravstvenih usluga. On se zasniva na principu podele pacijenata u grupe koristeći sličnu količinu resursa za sve slučajeve dodeljene u istu grupu. Troškovi lečenja u jednom slučaju se određuju na osnovu težine DSG i njenoj ceni. Studija je istraživala da li su troškovi lečenja u jednom slučaju DSG bili unutar vrednosti DSG utvrđenih od strane finansijera.

Metode. Na odeljenju hirurgije, Opšta bolnica Ptuj, Slovenija, izabrane su česti načini lečenja, pojedinačno, slučaj pacijenta koji je imao potres mozga sa ranom na glavi u akutno alkoholisanom stanju, zatim lečenje pacijenta sa akutnim apendicitisom, pacijent sa prelomom kuka i pacijent koji je operisan od preponske kile. Sačinjena je analiza troškova i upoređen je sa prihodom koji, za takve slučajeve, bolnica dobija od svog finansijera.

Rezultati. Naplaćeni prihod analiziranih slučajeva je iznosio, prema DSG, 422 EUR, 1474 EUR, 3865 EUR i 894 EUR, a stvarni troškovi su iznosili 502, 1105, 1881 i 544 evra.

Zaključak. Metod merenja troškova, tzv. "pristup mikrotroškova" pripisan svakom pojedinačnom slučaju je osnovno sredstvo u proceni smanjenja troškova. Ovaj pristup pruža dokaze na terenu da li je moguća ušteda novca a, takođe, omogućava nadzor efikasnosti svakog pojedinačnog lekara u pogledu troškova.

Ključne reči: troškovi; zdravstvo; ekonomija; plaćanje.

ABSTRACT

Objective. The model of DRG (Diagnosis Related Groups) is the current method of paying for the health-care services. It is based on the principle of dividing the patients into groups using the similar quantity of resources for all cases assigned to the same group. The treatment costs of a single case are determined by the weight of DRG and the cost of that weight. The study investigated if the treatment costs of a single DRG case are within the values of DRG determined by the payer.

Methods. At the department of Surgery, General Hospital Ptuj, Slovenia, the four frequent treatments, were chosen namely, observation of a patient having a brain concussion with a fissured wound on the head and being acutely intoxicated, then the treatment of a patient with appendicitis acute, a patient with a hip fracture and a patient who was operated for inguinal hernia. The cost analysis was made and it was compared with the payment that, for such cases, the hospital gets from its financier.

Results. The incomes of observation cases amounted, according to the DRG, to 422, 1474, 3865 and 894 EUR, and, real costs of treatments amounted to 502 EUR, 1105 EUR, 1881 EUR and 544 EUR.

Conclusion. The method of measuring the costs, so called "micro-costing approach", attributable to each single case is the basic tool in the assessment of cost reduction. Micro-costing approach provides field evidence if saving money is possible and it also enables supervision of cost efficiency of each individual physician.

Key words: costs; health care; economy; payment.

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INTRODUCTION

In the recent years the countries within the European Union encountered a problem how to ensure quality health care while containing the costs at the same time. Financing of the health care system means raising funds on one hand, and paying the executive performers on the other.¹ The payment models have changed in the course of time; one of the most important objectives is the equity of payment for the executive performers (equal payment for equal services.² In the year 2004 Slovenia has introduced the payment of the acute hospital treatment according to the Diagnosis Related Groups – DRG.³ In this system the patients are divided in groups in which equal source quantities have been used. The price of treatment of an individual case determines the weight of the DRG and the price of a weight.⁴ It is important, for a financially balanced hospital, that the patients' treatment costs of individual DRG groups do not exceed the incomes needed for the treatment of these groups. It is also necessary to consider the fact that the hospitals such as Ptuj General Hospital, Slovenia are not paid according to the implemented average weight, but according to a predetermined value. This value is arguably well below the planned weight, a crucial fact that increases the significance of cost reduction within the case.

METHODS

Four frequently performed treatments at the department of surgery were selected. These conditions were, at the same time, treated in the same manner in order to reduce the heterogeneity of costs. Three cases are paid as cases of acute treatment according to the DRG weight, the treatment of the patient being operated for inguinal hernia according to the so called prospective case.^{5,6} They were as following: the observation of the patient who had brain concussion with a wound on the pericranium and who was alcoholically intoxicated; a treatment of the patient with appendicitis acute; a patient with a hip fracture and a patient being operated for inguinal hernia.

In all cases the direct medical costs was split to the following domains: surgery costs, costs of radiological examinations where used the point value from the so called Green Book⁷ of radiological examinations, laboratory costs, drug acquisition costs, "hotel costs" – nursing costs with food, cost of histological examination, indirect labor costs (the labor costs of the management employees divided according to a distributional coefficient for the department of surgery), direct labor costs (labor costs which are linked with the direct executive performers of treatments) and costs of performing anesthesia with related consumables.

All costs were acquired according to the method of "the code reader software at the cash desk in a shop", which means that evaluation all patient-related-activities according to the price-list of the so called Green Book was performed, as well as the labor and other hospital costs on the basis of documents from the accounting department and the payroll accounting department.⁷

RESULTS

Incomes of individual cases are described in the table 1. Costs of individual cases are described in the table 2. So it is clear that only in the easiest case, in the patient with an alcoholic intoxication and a burst wound, the treatment cost is higher than the scheduled payment; in the other three cases the payment is 10% higher than the scheduled costs (the difference between the completed and the paid average weight for the hospital is about 10%).

Table 1. Basic characteristics of the four treatments with data being important for the income

Diagnosis	Diagnostic ICD-10 code	DRG group	Weight value	Value in EUR
Acute brain concussion, alcoholic intoxication, wound in pericranium	S 06.0 F 10.0 S 01.0	X 60C	0,35	422
Acute appendicitis	K 35.9	G 07B	1,22	1474
Fracture in the hip joint area	S 72.1	I 08B	3,2	3865
Inguinal hernia	K 40.9	G 09Z	0,74	894

Table 2. Expenses account of the cases discussed in the article

Cost Domain	Case 1 Observation	Case 2 Appendix	Case 3 Hip	Case 4 Hernia
Surgery – Services + Consumables	10.34	256.3	760	122.7
Radiological examinations	151	199	36	0
Laboratory	22	32	48	2.2
Drugs and blood	1.8	31	114	5.2
"Hotel costs" – nursing costs with food	66	99	198	66
Histology	0	72.3	0	0
Labor costs - indirect	106	159	318	106
Labor costs - direct	145	198	184	280
Anesthesia - Services + Consumables	0	58	127	58
TOTAL	502.1	1104,6	544,1	1881

DISCUSSION

The purpose of my research was to find out, whether the treatment costs of the cases at the department of surgery are in accordance with the payment for those cases. The hospital has no influence on the payment policy which is based on the legal act,⁶ therefore it is very important for the hospital to contain all of its treatment costs below the payment level.⁸ For the analysis the study chooses frequent and, at the same time, standard surgical procedures where there are only small varieties in treatments. In this way a real picture of activities at the department was given, but on the other hand such homogeneity is highly unlikely among surgical patients keeping in mind unique nature of each single case and high rate of unpredictable hospital acquired bacterial infections.

There were four cases belonging to quite standardized procedures and represent a frequent pathology at the department of surgery, but there was an awareness of these particular cases might be too small or too large compared to the true average value established in large cohort of similar patients.

The first case is an injured person who cannot be treated as an outpatient, because of unconsciousness caused by a head injury and alcoholic intoxication, so he should be observed for one day at least; in order to find out the neurological status a CT examination is necessary which, in this case, represents a great deal of costs. In the patient with acute appendicitis we can state that the change of surgical approach, this means the shift from the classic to the laparoscopic method, would raise the cost of the operation, namely, the cost of renting the operating room for a classic operation is 70 EUR and for a laparoscopic one is 256 EUR. At our department practically almost each surgical treatment of acute appendicitis is performed by the latter method. It is more expensive, but undoubtedly better for the patient because it enables him/her an opportunity for quick recovery. Laparoscopic surgery, after all, represents the technological progress and increases quality standards of the department. It would certainly be advisable, if the payment would follow the higher costs. Only a decade ago the patients with such a diagnosis were hospitalized for even seven days after the operation. Contemporary length of stay and the costs linked with it have drastically been lowered.

The third case is the operation of inguinal hernia. That sort of operation belongs to the so called prospective program which means that we have a contract with the payer determining how many operations of the kind can be performed yearly. In the past year this was the most frequent surgical procedure at our department. The length of stay,

according to the patients' expectations and the rural area, has been reduced to the minimum. The cost of consumables in the operation theatre is above all determined by the acquisition price of the net implant. Hospital management try to find the compromise between the surgeon's wishes (the price can reach quite high figures) and the market offer.

The last case was the patient with a hip fracture. It is a frequent case of an injury especially in elderly people, which will be in the future even more frequent, because life expectancy is getting higher. Here we encounter the same problem as in patients with acute appendicitis because there are many different surgical solutions at disposal. It is clear that the methods, offering the patients the fastest rehabilitation, are the most expensive ones. And it is happening again that the payment does not follow the method, but it is equal, no matter which method we choose.

At surgical treatments, as well, the so called Basket of Rights should probably be well defined. It should be noticeable which methods and which materials belong to the price determined by the payer, and when could we choose more expensive materials and better methods. Potential patients should have the possibility to insure themselves for different options of a surgical treatment. The method of cost monitoring, according to a case, is a strong analytic tool in an effort to keep the costs under control. It enables that, in each treatment stage, we can analyze the costs and plan cost saving strategies. It also enables monitoring the efficiency of an individual physician, because we can monitor why are the costs of an equal treatment with the doctor A higher than with the doctor B. This is something that has not been known until now. For the everyday use of this method we need a relatively undemanding information system (a code reader that we give to the patient and register the costs per patient). After all, it also orientates the hospitals towards more economically acceptable cases.⁹ This fact is rather important due to dealing with the hospital's tendency towards specialization. In reality, there is a constant pressure of management on the general hospitals health care providers, in a sense, that the most difficult patients with high weighting points should be treated in a tertiary center. But, because the medical profession still dominates over the economic pressure, almost all of the Slovenian general hospitals have financial difficulties.

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