

FINANCIAL EFFICIENCY OF DAY CARE VERSUS HOSPITALIZATION

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Abstract: *Day hospitalization/day care is a service of which can benefit all patients that require thorough investigations to make the diagnosis of a disease, for monitoring chronic diseases, preoperative exploration, microsurgical interventions, postoperative inspections, that cannot be performed in ambulatory.*

Services required for the diagnosis, treatment or monitoring the patient which are carried out in a day care regime may have plurispecialized and/ or multidisciplinary character, may be invasive, may be followed by side effects or risk of emergency while performing them or correlated with the health condition of the patient, requiring medical supervision that cannot be carried out in ambulatory.

Day hospitalization is a modern concept within which, through advanced medical technologies, a series of medical procedures can take place during a single day.

Day hospitalization services have the advantage of providing patients the opportunity to perform in a reduced time (within 12 hours) all necessary investigations, no longer requiring continuous hospitalization.

Hospital medical assistance under continuous hospitalization regime includes acute type care and chronic type care , and factors which must be taken into account cumulatively when taking the decision of hospitalization under a continuous hospitalization regime are: the severity of signs and symptoms presented by the patient, medical predictability of a negative evolution, unwanted of the patient, the need and availability of the analysis / diagnostic investigations, depletion of diagnostic and therapeutic resource in other areas of healthcare.

A comparative study was conducted day hospitalization - continuous hospitalization, the three most common diagnoses of the hospitalized patients in day hospitalization: poorly controlled diabetes type 1 and 2 , essential hypertension. The study was conducted within the period 01.01.2015-31.12.2015 in clinical sections of Cardiology and Diabetes of the Clinical Emergency County Hospital Oradea. The aim of the study is to highlight the financial efficiency of day hospitalization compared to continuous hospitalization.

Keywords: hospitalization; costs; diabetes; arterial hypertension; internment; diagnostic.

JEL classification: I10; I11; I13; I18; G23

Introduction

Currently, hospital services are granted in regime of continuous hospitalization, the form of hospitalization through which the patient receives curative medical assistance and for recovery for the time necessary to fully solve the case, but also in regime of one day hospitalization, the type of hospitalization through which the medical assistance is provided for a maximum duration of 24 hours (Miriam E. Tucker,2014).

Day hospitalization is a form of internment, for a short period of time during which investigations for diagnosis can be made, monitorization of chronic or acute conditions which cannot be treated in ambulatory, postoperative observation in case laparoscopic interventions, investigations and preoperative analysis, controls or any postoperative treatments that cannot be performed in ambulatory medical assistance conditions (Marlene Busko,2015; Larry Bersford,2015).

There are situations, such as chronic cases, when for curing the disease, for the prevention of its complications, for the recovery or amelioration of the sufferings, it is needed caring and medical assistance within the department with beds, in regime of continuous hospitalization(Karen Appold,2016).

Material and methods

The study was performed in order to realize the financial efficiency of day hospitalization, compared to the costs of continuous hospitalization.

In order to demonstrate the financial efficiency in the case of day hospitalization we have studied the three most common diagnoses of the patients hospitalized in the Cardiology and Diabetes sections within the Emergency County Hospital Oradea.

Results

It is highlighted a larger number of day hospitalizations, for all the three diagnoses studied, compared to the number of continuous hospitalizations.

Table 1: Number of cases

Diagnostic	Hospitalization	Day care	The share continuous hospitalization (%)
Type 1 diabetes mellitus with poor control	40	345	10.39
Type 2 diabetes mellitus with poor control	58	288	16.76
Essential hypertension	60	605	9.02

We notice the small share of continuous hospitalizations in relation with day hospitalization (10.39% in type 1 DM, 16.76% in Type 2 DM respectively 9.02% in essential hypertension).

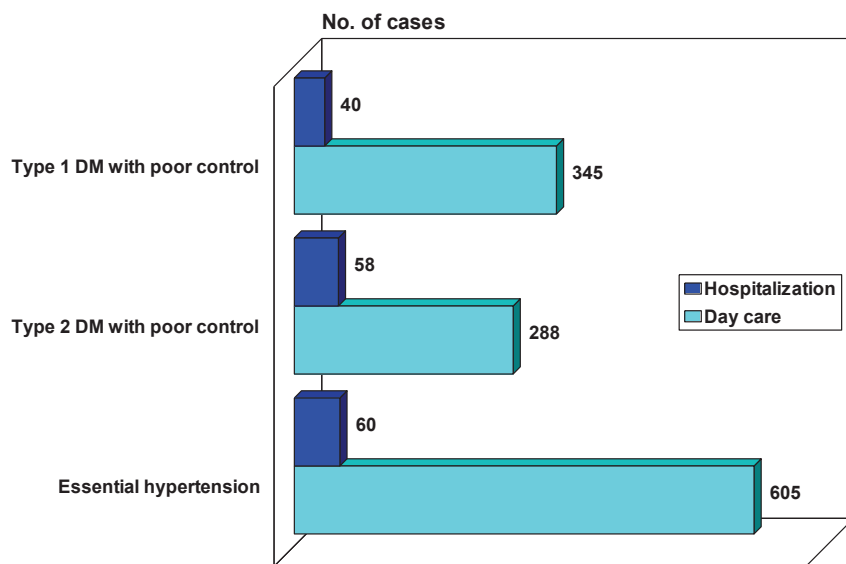


Fig. no.1. The number of cases in hospitalization and day care

Table 2. Average length of stay

Diagnostic	DMS continuous hospitalization
Type 1 diabetes mellitus with poor control	3.27 days
Type 2 diabetes mellitus with poor control	3.52 days
Essential hypertension	2.61 days

The average hospitalization period was between 2.61 days in the case of hypertension and 3.52 days in the case of type 2 DM with poor control.

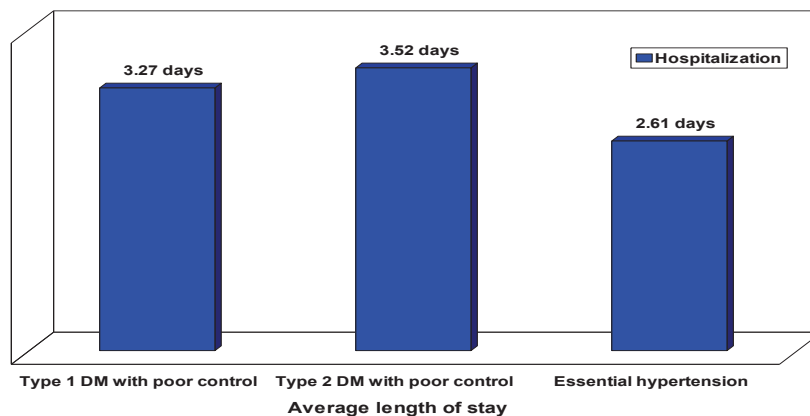


Fig.no.2. Average length of stay

Table 3. Average cost

Average cost (lei)	Hospitalization	Day care
Type 1 DM with poor control		
Medicines and medical supplies	175.50	16.50
Medical tests	125.78	85.22
Other investigations and proceedings	145.75	32.46
Costs hotel	565.00	0
Total	1012.03	134.18
Type 2 DM with poor control		
Medicines and medical supplies	74.74	3.77
Medical tests	135.28	86.07
Other investigations and proceedings	134.75	30.25
Costs hotel	624.00	0
Total	968.77	120.09
Essential hypertension		
Medicines and medical supplies	29.14	2.52
Medical tests	173.19	110.62
Other investigations and proceedings	99.00	68.87
Costs hotel	565.00	0
Total	866.33	182.01

Compared to continuous hospitalization, the total cost of day hospitalization is 8.1 times lower in the case of type 2 DM, 7.5 times lower in the case of type 1 DM and 4.5 times lower in hypertension. This difference is mainly due to the hotel costs, medicines and sanitary materials.

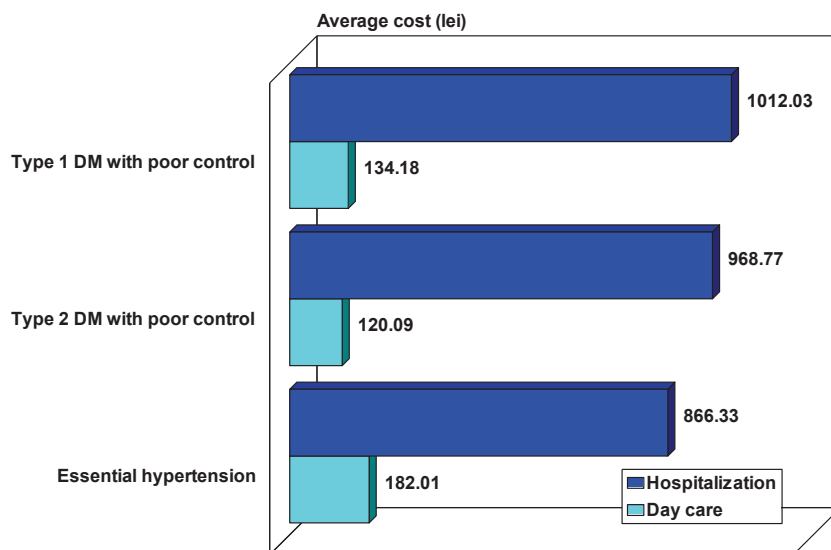


Fig.no.3. The average cost in hospitalization and day care

Table 4. The difference between the discounted and cost

Diagnostic	Continuous hospitalization			Day hospitalization		
	Discounted by CAS	Costs	Difference	Discounted by CAS	Costs	Difference
Type 1 DM with poor control	917.44	1012.03	-94.59	273.00	134.18	138.82
Type 2 DM with poor control	917.44	968.77	-51.33	307.00	120.09	186.91
Essential hypertension	564.48	866.33	-301.85	202.00	182.01	19.99

On the 3 types of diagnoses, in the case of continuous hospitalization costs are not covered, while day hospitalization, regardless of diagnosis the difference between the amount discounted by CAS (Health Insurance House) and costs is positive.

If we evaluate the 158 cases performed in continuous hospitalization, results a financial loss of 42464.72 lei.

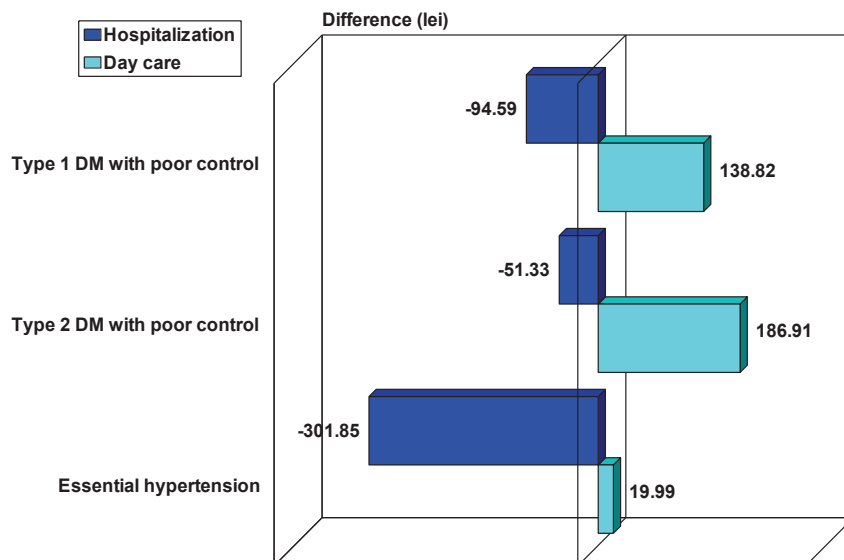


Fig.no.4. The difference between the discounted and cost

Conclusion

Through the introduction of day hospitalization in the contract with CAS, the number of internments in continuous hospitalization regime for the 3 diagnoses analyzed, decrease. At the same time, restricting by contract the number of cases of day hospitalization has as effect the internment of some cases in continuous hospitalization, cases that would require day hospitalization. Any case of day hospitalization day that is hospitalized in continuous hospitalization has negative financial effect.

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