DIAGNOSIS RELATED GROUPS – HOSPITAL PERFORMANCE AND FINANCING IMPACT

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DRG is a system of patients classification based on the diagnostic, procedures and other clinical information which offers the possibility of a correlation between the type of cases that are trated by the hospital (the index of cases complexity – IMC) and the costs. Diagnostic groups have two main characteristics: clinical homogeneity – in a particular DRG the cases are clinicaly similar, without being identical and costs homogeneity – each DRG contains cases that need the same resources. Diagnostic groups are medical and surgical – based on the presence or absence of a surgery - being conceived for covering the pathology associated to the patients with acute diseases that require surgery.

Entering a patient in a group of diagnostic requires for major steps:
- the availability of clinical data for patients;
- coding the necessary data (for diagnostics and procedures);
- colecting data in a electronic form, by respecting the collection of a minimal set of clinical data for each patient (SMDP);
- automaticaly sending of each case in a diagnostic group using an application called grouper.

DRG system can be used as a method of classifing patients in order to evaluate the hospitale's performances or for financing hospitales. Using the DRG system for hospitale's financing requires the following:
- cost allocation for each diagnostic group (relative values costs);
- budgeting for hospitale's assistance towards hospitales function of number of patients, type of patients (Case-mix of each hospital) and costs list (relative values) for each DRG.

There are many types of DRG classification which are divided into three major groups: DRG system used by HCFA in U.S.A, AP-DRG (*All patients* DRG) used in Hungary and the north countries and R-DRG system (*Refined* DRG).

The differences between DRG classes depend on type coding of diagnostics and procedures, the using of complications and comorbidityes and the levels of severity.

AR-DRG system (Australian Refined –DRG) was used in 1997 in Autralia and the AR-DRG v.5 was aquired with license in Romania and implemented in hospitale's financing in July 2007.

Assumption of Australian values has the inconvenience of failure the specific of our country pathology, Endocrinology being one of the most afected speciality as long as endocrine diseases that require important resources for diagnostic and treatment are quated with smaller relative values than diseases like anemia or urinary infection.

Endocrine pathology – from endemic goiter to osteoporosis and from growth disorders of children to tumors is very important in Romania, with a high morbidity, extending in all geographic regions, affecting people of any age or gender. Epidemiological data confirm this: for example, 30% of romanian people has endemic goiter witch is the most important between endocrine diseases and one third of postmenopausal women has osteoporosis.

Analysing the clinical activity of C.I. Parhon National Institute in 2006 and comparing general parameters of Institute with national parameters it seems that the institute realised at that time only 80% of ICM at the national level of similar sections (fig

1). As a consequence the primar objectiv followed by supplying medical services was to grow the performance by implementing strategies based on true data. Thus, they followed the true coding and reporting of the cases trated in the Institute for growing the complexity index and thus providing the Institute the real money for medical services truely realised.
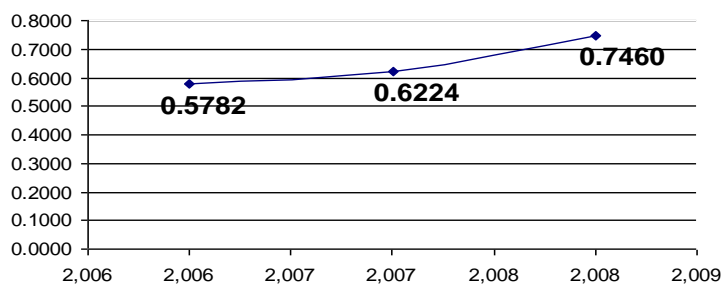
Gradul de realizare a indicatorilor la nivel național
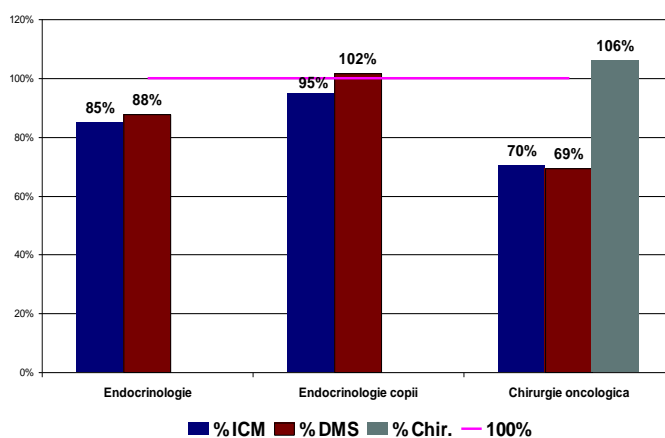
Figure 1

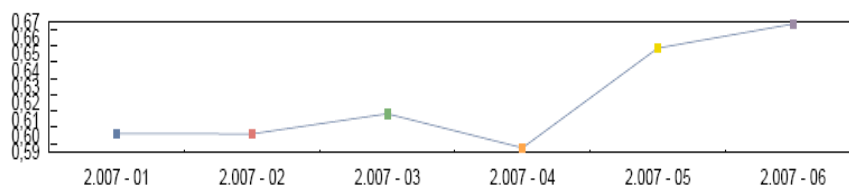Thus, the evolution of ICM in 2006-2009 was the following (**fig. 2):**

ICM REALIZAT

Figure 2

In 2007, the IMC of the National Institute of Endocrinology raised continuosly since january untill fin of june, when there was the switch to Australian system of coding. (**fig. 3**).

Variatia ICM la nivelul spitalului

After the switch to Australian system at the midlle of the year, hospital IMC values oscillated, but the general direction was ascendent. (**fig. 4**).

Variatia ICM la nivelul spitalului
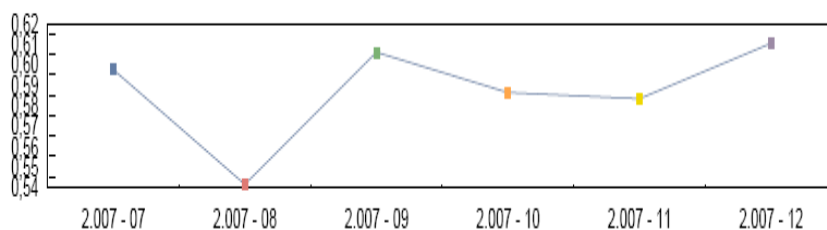
The case`s patology analisys that covers about 80% of the total discharged patients from The National Institute of Endocrinology reveals the fact that most of the cases discharged, complicated or simple endocrine disorders, have relative low values that reduces the posibility of a proper hospital financing. An important procent of the hospital patients are the ones diagnosed with postmenopausal osteoporosis, with or without fractures; towards our hospital are directed for investigations all patients at risc, mostly postmenopausal women. Necessary investigations for appropriate diagnosys, involving dual X ray absortiometry and bone markers, and terapy for this illlness imply important funds that can not be equated by the income of a discharged osteoporosis case, acordingly the reffered relative value**. (tabel 1**).

DRG CODE	DRG NAME	Relative value	No. Discharged cases/ 9 months
K64B	Endocrine disorders without CC	0.4851	8229
K64A	Endocrine disorders with CC	1.4239	3585
K06Z	Thyroid procedures	1.1152	1632
I69C	Bone and joint disease <75 without CC	0.2898	1403
K61Z	Severe nutritional disorder	2.3060	798
I68B	Bone and joint disease >75 or with CC	0.5923	761

Relative values of several DRG codes (**tabel 2**):

DRG CODE	DRG NAME	RELATIVE VALUE
A06Z	Traheostomy or ventilation >95 hours	14.2331
U66Z	Overeating and obsesive-compulsive disorders	3.3204
I66A	Muscle-scheletal inflamatory disorders with CC	2.2178
H60A	Alcoholic cirrhosis and hepatitis with CC	1.9406
F62A	Heart failure and cardigenic shock	1.6886
U63B	Major afective disorders <70 y.o.	1.4996

Relative values of endocrine codes versus other DRG codes (**tabel 3**):

DRG Code	DRG Name	Relative value
K64A	Endocrine disorders with CC	1.4239
K64B	Endocrine disorders without CC	0.4851
K61Z	Severe nutritional disorder	2.3060
U65Z	Anxiety disorder	0.6553
L63A	Kidney and urinary tract disorders	1.6445
Q61B	Red cells disorders with	0.6490
N62B	Menstrual disorders without CC	0.1827

Relative value analisys of the Australian DRG showed the relative low value of the charges for endocrine diagnostics. Thus, certain endocrine illnesses have extremly low relative values despite the complexity and gravity of the diagnostic: e.g. diabetes melitus uncomplicated (K60B) has almost the same value (0.5734) as age related (>65 y.o.) muscle-skeleton disorder (I76B) (0.4788) or minor skin lesions (J67A) (0.5923).

So it`s necesary to implement a set of relative values that should be based on the mesurement of the actual charges in our country.Thus the endocrine illnesses , that have a high prevalence rate and a significant gravity in our country, will be apreciated at their true value.

References

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