

The Efficiency of Ambulatory Medical Services. Case Study - The Integrated Ambulatory Units of the Psychiatric Hospital "Dr. Gheorghe Preda" Sibiu

Nicoară (Ana) Florentina Denisa
"Lucian Blaga" University of Sibiu, Doctoral School
denicoara@yahoo.com

Abstract

Healthcare costs are an important issue for developed countries, focusing on accessibility, the quality of service and financial efficiency. The global direction of health insurance systems is to resolve the case through primary care, ambulatory and day hospital care. Hospitalizations need to be reduced. In psychiatry, however, there is a particular situation due to the increased incidence of new cases that cannot be treated by ambulatory care units. Efforts have been made to develop ambulances and service accessibility, to capitalize on benefits and to provide quality to patients. Although the number of services rendered significantly increased, in psychiatry there is an increase in the number of hospitalizations.

For the psychiatric field a distinct national strategy is needed, for efficiency and adaptation to the concrete needs of the population. The development of the community service network in the medical-social field may be the solution for reducing the costs of long-term hospitalization.

Key words: efficiency, mental health, ambulatory care, inpatient

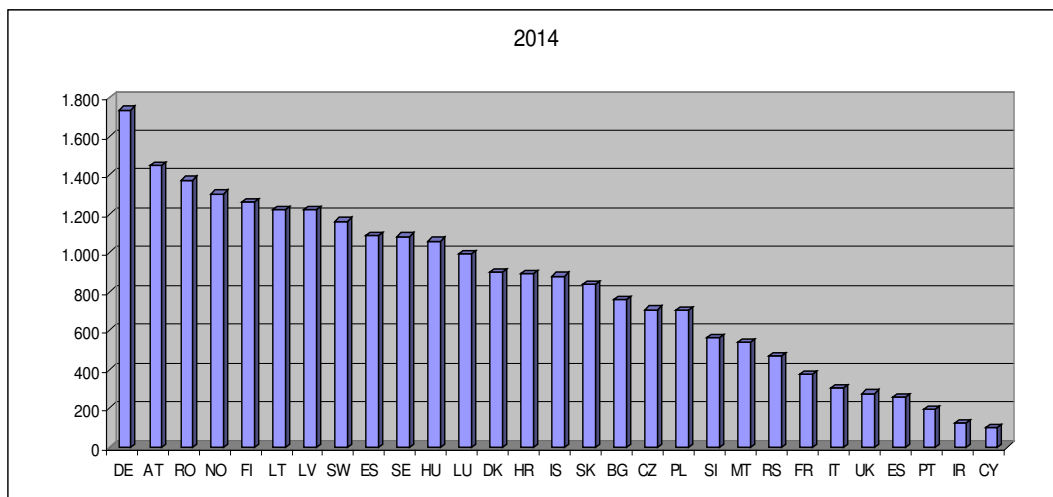
J.E.L. classification: D61, I18, O52

1. Introduction

The issue of mental health is extremely common in modern society, mental and behavioral disorders are broad categories of illnesses, nearly 1/3 of the total burden of illnesses, and depression prevails as the main disease in Europe. In the European Union were recorded approximately 3.5 million patients who suffered from mental and behavioral disorders who were displaced from hospitals, the number of hospitalization days exceeding 82 million, occupying the second place after circulatory system's diseases. Patients diagnosed with Alzheimer's disease have had over 2 million days of hospitalization (in 2014).

Average hospitalization time (AHT) for mental and behavioral disorders has generally decreased between 2009 and 2014, with only 9 member states of EU registering an increase in AHT: Germany, Estonia, Croatia, Latvia, Luxembourg, Hungary, Austria and Romania which reported increases of less than 4 days, and Malta which reported a very high increase from 27.0 days to 44.5 days. The discharging of patients diagnosed with mental and behavioral disorders- per 100,000 inhabitants in 2014- places Romania on the third place, after Germany and Austria, with 1,376 discharges per 100,000 inhabitants, 14 times more than Cyprus, which reported 98 discharges per 100,000 inhabitants (Figure 1).

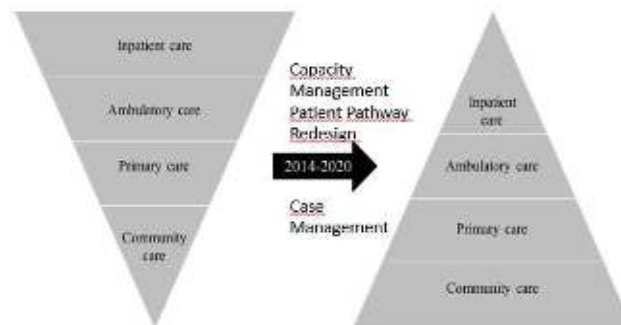
Figure no. 1. Discharges per 100 000 inhabitants



Source: http://ec.europa.eu/eurostat/statistics-explained/index.php/Mental_health_and_related_issues_statistics

The tendency of EU countries and most countries in the world is to focus on providing healthcare in primary care, ambulatory units and day-care systems, so that continued hospitalization and related costs decrease, a direction in which Romania has been heading. It is enlightening in this aspect the takeover of the concept of the "reversed pyramid" from the National Health Strategy, which states that the basis of the healthcare system are the community care and primary care whereas the treatment through hospitalization has a lower share.

Figure no. 2. The vision of the National Health Strategy



Source: Order no. 1.376 for the approval of Regional Health Service Plans

2. National Health Strategy

Currently, in Romania, many of the health services are provided directly in the hospital. The ambulatory units should have a much greater weight in providing specialist medical services and to be an effective filter in reducing avoidable hospitalizations. Ambulatory care is a better option in terms of patient safety and operability, replacing the expensive medical treatments with cost-effective ones.

The performance of a healthcare system can be judged by its direct dimensions, namely the capacity to respond to the needs of the beneficiary (responsiveness), equity and financial protection, efficiency and sustainability.

The vision of the Ministry of Health for the period 2014-2020 is to ensure gradual coverage of the health needs of the population through system-based services (community assistance services,

family medicine and ambulatory care services). The patients will need more expensive hospital services only when the situations require the provision of services of a higher level of complexity.

The Strategic Area for interventions 2: "Health Services" provides for strategic objectives:

- S.O.4.3. The strengthening of specialty ambulatory services to increase the number of the diseases treated in ambulatory care units and reducing the burden of continuous hospitalization
- S.O. 7.2. The improvement of the healthcare infrastructure through the offering of community medical assistance, family medicine and specialized ambulatory units.

Explicating the strategic goal 4.3 includes the development of a specialized ambulatory network (special ambulatory care, Paraclinical specialties, imaging services, laboratory, functional explorations) as alternatives of improving the accessibility to specialized services and to make efficient use of the hospitals' capacity and it is an essential directive for the development of healthcare-services.

Result indicators for assessing and monitoring the implementation of measures to achieve the objective refer both to the National Health Insurance Fund share of ambulatory care costs for clinical and Paraclinical specialties and to the percentage of ambulatory cases contracted annually. The implementation of the measures aims to save a percentage applied to the whole health fund, which is the source of financing for new investments, including the construction of sanitary units.

3. The evolution of the discount of the medical services in ambulatory care units

With the introduction of the Framework Contract on the conditions for the provision of medical assistance in the health insurance system, a methodology for the payment of these services to the healthcare providers was established.

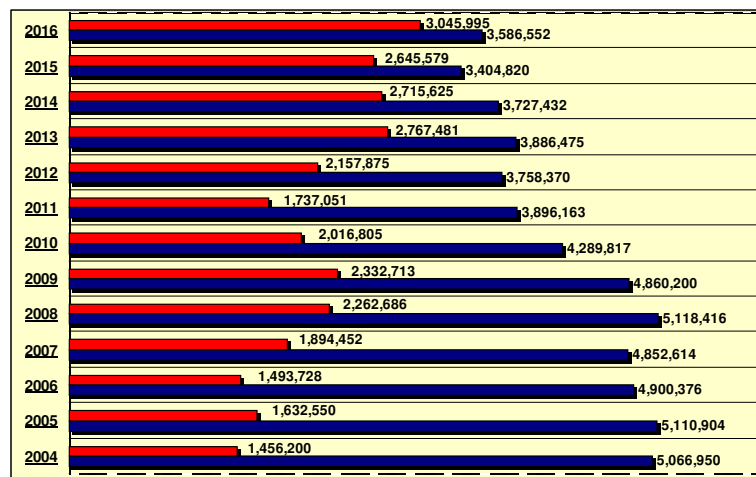
Annually, according to the methodological norms issued by the Ministry of Health and the National Health Insurance House, the guaranteed minimum value of the point in primary medicine and the specialized clinical ambulatory is established. The point represents the payment by medical service tariff, for the medical services provided in the basic services package, the minimum package of medical services and the package of medical services for the persons who are voluntarily insured. There is a differentiation of the tariff in relation to the professional degree of the doctor, so the reference value of the medical tariff is that of the specialist doctor and for the performance of the primary physician the total number of points for the medical services granted is increased by 20% and for a doctor who did not pass a specialty exam, the points decrease by 10%.

From the data analysis at a national level of the minimum guaranteed value of the point and the regularized point between 2004 and 2016 a significant increase of the average value of the cost can be seen, from 9,15 lei in 2008, to 31,68 lei in 2016. In the same time, a decrease in the number of consultations and services rendered between 2008-2016.

Table no. 1 Evolution of the long term hospitalization/day care average cost per service

Year	Budget execution (millions lei)	No of consultations and services (millions)	Average cost lei/ service
2004	197,40	21,58	9,15
2005	247,10	23,17	10,66
2006	261,50	23,09	11,33
2007	330,20	25,17	13,12
2008	390,65	26,04	15,00
2009	321,94	25,86	12,45
2010	289,42	20,88	13,86
2011	309,96	20,94	14,80
2012	387,42	21,94	17,66
2013	549,58	22,31	24,64
2014	623,34	22,24	28,03
2015	661,91	23,06	28,70
2016	777,96	24,56	31,68

Figure no.3 The evolution of long term hospitalization/day care average cost per service



Source: www.cnas.ro

At a national level there was a significant decrease in the number of cases resolved by continuous hospitalization, from 5,066,950 hospitalizations in 2004 to 3,586,552 in 2016, with the increase in the number of cases solved in day hospitalization, which doubled in the same period of time, from 1,456,200 cases in 2004 to 3,045,995 cases in 2016. The survey indicates a clear direction followed by the health care system, in accordance with the action plans and strategies adopted, with the reduction of cases resolved by continuous hospitalization and the provision of ambulatory care and day-care services.

4. Case Study - The integrated ambulatory units of the Psychiatric Hospital Sibiu

The hospital provides preventive medical services, curative services, neuropsychotic recovery, expert services, counseling, social assistance. The hospital ensures continuity of care through two guard lines organized in the clinical specialties of adult / pediatric psychiatry and pediatric neurology and covering the diversity of needs for evaluation, treatment, rehabilitation and reintegration of people with mental disorders. needs of assessment, treatment, rehabilitation and reintegration of people with mental disorders.

The structure of the hospital includes 7 sections with adult beds for the psychiatry specialty – for acute and chronic illnesses- and 3 children's departments for each of the three specialties: psychiatry, neurology and neuro-psychomotor recovery, two mental health centers (adults and children), two day care centers, integrated ambulatory units with cabinets in adult and children's psychiatry and neurology specialties, and recovery, children's physiotherapy and balneology, pharmacy, ergo therapy, occupational therapy and social assistance.

The admission capacity is 453 beds for continuous hospitalization, of which 255 beds are for people suffering from acute illnesses and 198 are for those with chronic illnesses, 90 beds are for children, 30 beds are for those who accompany the children who are hospitalized, 50 seats are in the daycare for CSM Adults and 25 places in NPM recovery day care and pediatric psychiatry centers.

In 2010, through the Operational Regio - Priority Axis 3, DMI 3.1 - "Rehabilitation, modernization and equipping of health services infrastructure" was implemented a project whose total budget was 2,618,384 lei through which the three integrated hospital ambulatory units: adult psychiatry, neurology and pediatric psychiatry and neuro-psychomotor recovery for children were upgraded and equipped. The buildings were rehabilitated, equipped with furniture and medical equipment for investigation and treatment.

The evolution of the provision of medical services in the serviced specialties was monitored for a period of 4 years, with the definite tendency to considerably increase the number of services provided by integrated ambulatory units.

The medical services in ambulatory medical care for clinical specialties are: curative medical services - consultations for acute, subacute and aggravating chronic illnesses and chronic diseases.

Diagnostic and therapeutic services are composed of individual and family non-specific psychiatric counseling, group psychotherapy (psychoses, obsessive compulsive disorder, phobic disorders, anxiety disorders, dysthymia, addictions), individual psychotherapy (psychosis, obsessive-compulsive disorder, phobic disorder, Anxiety, dysthymia, addictions, autistic spectrum disorders) and cognitive-behavioral therapy.

The medical-related services, clinical psychological evaluation, psych-diagnostic and clinical psychological counseling, are provided by psychologists in the field of clinical psychology, psychological counseling and psychotherapy.

The adult psychiatric counseling is evaluated at 21.60 points, the value of a point is 2.2 lei, the disbursement being 47.52 lei for the specialist doctor's performance, and for the primary physician it increases by 20%, respectively 57.02 lei (Reference year 2017).

Table no 2. Psychiatric consultation and pediatric psychiatric consultation for children over the age of 4

Year	Number of points	Value of one point (RON/point)	Consultation tariff (RON) specialist doctor	Primary physician
2007	15,0	0,64	9,60	11,52
2008	15,0	0,75	11,25	13,50
2009	15,0	0,70	10,50	12,60
2010	21,6	0,90	19,44	23,33
2011	21,6	0,90	19,44	23,33
2012	21,6	1,20	25,92	31,10
2013	21,6	1,70	36,72	44,06
2014	21,6	1,70	36,72	44,06
2015	21,6	1,80	38,88	46,66
2016	21,6	1,80	38,88	46,66
2017	21,6	2,20	47,52	57,02

Source: www.cnas.ro <http://www.cnas.ro/page/valoarea-minim-garantata-a-punctului.html>

Note: The ambulatory care unit for the neuro-psychomotor recovery was not included due to the fact that the services and disbursement differs.

Table no.3 No. of consultations/ integrated ambulatory care unit, doctors, hours per day and incomes between 2013-2016

Year	Ambulatory Care Unit- adults	Ambulatory Care Unit – children	Total	No. doctors	Hours / Day	Income (lei)
2013	6.037	3.169	9.206	17	22,80	493.106,42
2014	8.284	3.204	11.488	19	33,00	691.931,85
2015	9.911	3.684	13.595	18	52,00	937.706,07
2016	10.420	4.373	14.793	18	47,40	801.471,23

Source: hospital statistics

Despite the fact that after the modernization of the ambulatory care units and the increasing of the accessibility to the specialized medical services, their activity having an ascendant evolution, the number of cases discharged (solved by continuous hospitalization) has increased slightly but visible in recent years.

Starting from a total of 7,124 patients discharged in 2013, a total of 7,410 patients were discharged in 2016. This increase - especially in the 45-64 age segment - reveals the reality of the rise of the mental health problems of the adult population in Romania today. The particular case of psychiatric specialization seems to fall short of achieving the objective of decreasing continuous hospitalization, with the obvious contribution of medical services offered by integrated ambulatories.

Hospital statistics show an increase in the number of new patients, and the evolution of the main diagnoses treated over the last 4 years indicates an increase in depression (from 1,156 depressive episodes in 2013 to 2,817 cases in 2016), Alzheimer's disease (from 975 cases in 2013 to 1,821 cases in 2016) and schizophrenia (from 491 cases in 2013 to 881 cases in 2016).

Table no. 4 Hospital statistics no cases discharged in continuous hospitalization

Year/ No. discharged	2013	2014	2015	2016
No. discharged adults	4,907	4,973	4,880	5,281
No. discharged children	2,217	2,244	2,297	2,129
Total discharges	7,124	7,217	7,177	7,410

Source: hospital statistics

From the financial perspective, ambulatory services have become attractive for both providers and patients. The CJAS settlement from the health fund indicates (at national level - see table 1) a 3.95 times multiplication of the amounts allocated to the ambulatory care unit services.

Considering, however, the average rate per case solved in continuous hospitalization, of 2.179,37 lei at the national level and of 1,916.47 lei for the "Dr. Gheorghe Preda ", studied in context, it is more advantageous to treat a case in the continuous hospitalization system, from the angle of hospital financing. By making calculations based on the tariffs by the type of the case solved, we notice that the value of a single hospitalized continuous episode equals 68,8 ambulatory consultations see table no. 5.

Table no. 5 The analysis of the ratio cost/type of medical service

Year	2008		2016		
	Ambulatory assistance	CH beds sanitary units	Ambulatory assistance	CH beds sanitary units	DC beds sanitary units
Execuție bugetară (milioane lei)	390,65	7.522,04	777,96	7.816,43	782,07
No. services: consultations, respectively discharges (millions)	26,04	5,12	24,56	3,59	3,05
Average cost lei/ service	15,00	1.469,60	31,68	2.179,37	256,75
CH/Amb – Cost ratio	-	97,95	2,11	68,80	8,49

Source: www.cnas.ro; CH = Continuously hospitalization; DC= Day care

5. Conclusions

In order to propose viable, long-term solutions that improve both the financial performance of medical services but cover the concrete needs of psychiatric patients, a systematic analysis of the psychiatric sector is needed at national level. The health insurance system is inadequate for certain categories of beneficiaries, for which the community-based medical-social services are adequate. Although there was a significant increase in the number of outpatient services and day hospitalization in the country, there were decreases in the continuous hospitalization, and the tariff for these services, including in psychiatry, was increased, it is observed from the studied case that the illness dynamics (new patients, prevalent diagnoses) is a factor that was not considered in the strategic approach.

In order to achieve financial efficiency indicators, while ensuring the quality of care, the entire psychiatric sector needs to be rethought in the health strategy and the solutions adopted to be based on current statistical data. Otherwise, the financial burden of mental health will be higher in the long run.

Two main solutions, with immediate applicability, are mentioned:

- the inclusion of as many health units in national mental health prevention programs - the initiation of new preventive programs in sensitive segments as triggering factors of psychiatric disorders (stress, anxiety, depression)

- providing better conditions for service providers - doctors, stimulating them to offer consultations and medical services in integrated ambulatory care units, equal treatment with doctors in the private system in contract with CNAS and eliminating discrepancies based on professional criteria.

6. References

- *Mental health and related issues statistics*, [online]. Available at: <http://ec.europa.eu/eurostat/statistics_explained/index.php/Mental_health_and_related_issues_statistics>, [Accessed 03 June 2017]
- *Hotărâre nr. 1028 din 18 noiembrie 2014 privind aprobarea Strategiei naționale de sănătate 2014 - 2020* [online]. Available at: <<http://www.ms.ro/wp-content/uploads/2016/10/Anexa-1-Strategia-Nationala-de-Sanatate-2014-2020.pdf>> , [Accessed 30 June 2017]
- *Ordin nr. 1.376 pentru aprobarea Planurilor regionale de servicii de sanatate*, Monitorul Oficial nr. 988 Bis din 8 decembrie 2016 [Accessed 23 May 2017]
- *Rapoarte privind activitatea Casei Naționale de Asigurări de Sănătate, 2013-2016*, Available at: <<http://www.cnas.ro/page/rapoarte-de-activitate.html>> , [Accessed 03 June 2017]
- *Sinteza evaluării activității desfășurată de furnizori pe tipuri de asistență medicală*, Available at: <<http://www.casan.ro/page/rapoarte-si-situatii.html>>, 2012-2016, [Accessed 23 July 2017]
- *Valoarea minim garantata a punctului*, Available at: <<http://www.cnas.ro/page/valoarea-minim-garantata-a-punctului.html>>, 2012-2016, [Accessed 31 May 2017]
- *Rapoarte si statistici ale Spitalului de Psihiatrie "Dr. Gheorghe Preda" Sibiu*