

HELLENIC REPUBLIC

### HELLENIC STATISTICAL AUTHORITY

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# SURVEY ON IN-PATIENT HOSPITAL CARE, 2017

The Hellenic Statistical Authority (ELSTAT) announces the results of the In-patient Hospital Care Survey of the year 2017.

The In-patient Hospital Care Survey is a census survey and refers to the annual collection of data from public and private hospitals in Greece aiming at monitoring the morbidity at national and regional level. In particular, the aim is to record data on the number of patients discharged, their demographic characteristics and the disease for which they were hospitalized, in line with the International Statistical Classification of Diseases and Related Health Problems (ICD 10), provided that they stayed at least one night in the hospital.

The data were collected from 273 hospitals/clinics, of which 35.9% (98) of them are in Attiki and 24.5% (67) in Makedonia and Thraki, while as for their legal form 45.8% (125) were public hospitals/clinics.

In year 2017, the total number of discharges amounted to 1,505,257 presenting an increase of 1.5% (1,482,722) compared to 2016, out of which 755,229 (50.2%) were male and 750,028 (49.8%) female patients. The 75.1% (1,130,811) of patients discharged were hospitalized in public hospitals/clinics.

The largest number of patients discharged was recorded in the age group 60-79 with 496,445 patients (33.0%), out of which 286,866 (57.8%) were males and 209,579 (42.2%) females (Table 1).

Age groups	Number of discharges	%	Males	%	Females	%
Total	1,505,257	100.0	755,229	100.0	750,028	100.0
0 - 5 years	88,486	5.9	50 <i>,</i> 055	6.6	38,431	5.1
6 – 19 years	78,519	5.2	42,548	5.6	35,971	4.8
20 -39 years	243,486	16.2	81,009	10.7	162,477	21.7
40 -59 years	307,930	20.5	158,401	21.0	149,529	19.9
60 -79 years	496,445	33.0	286,866	38.0	209,579	27.9
80 years and over	286,156	19.0	134,092	17.8	152,064	20.3
Not reported	4,235	0.3	2,258	0.3	1,977	0.3

# Table 1. Total of hospital discharges by age group and gender, 2017

From the total number of 1,505,257 patients discharged, 85.8% were cured or presented an improvement in their health status, 10.6% had no change or deterioration in their health status and 3.6% passed away.

In 2017, data on day-care cases amounted to 1,215,526 presenting an increase of 5.3% (1,154,101) compared to 2016 (Table 5).

### Information on methodological issues:

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Tel: +30 213 135 2022, 2310, 2308 Email: <u>data.dissem@statistics.gr</u> The "Diseases of the circulatory system" accounted for the most of the patients discharged in 2017, with 209,156 (13.9%) incidents, followed by "Neoplasms" with 172,428 (11.5%), "Diseases of the digestive system" with 163,484 (10.9%), "Diseases of the respiratory system" with 137,096 (9.1%), "Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified" with 133,782 (8.9%) and "Diseases of the genitourinary system" with 124,492 (8.3%) (Table 2).

Category of diseases	Discharges	%	Males	%	Females	%
Grand total	1,505,257	100.0	755,229	100.0	750,028	100.0
Certain infectious and parasitic diseases	35,099	2.3	18,039	2.4	17,060	2.3
Neoplasms	172,428	11.5	93,941	12.4	78,487	10.5
Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism	26,462	1.8	12,170	1.6	14,292	1.9
Endocrine, nutritional and metabolic diseases	28,068	1.9	10,282	1.4	17,786	2.4
Mental and behavioural disorders	35,464	2.4	19,819	2.6	15,645	2.1
Diseases of the nervous system	46,471	3.1	25,210	3.3	21,261	2.8
Diseases of the eye and adnexa	37,295	2.5	18,511	2.5	18,784	2.5
Diseases of the ear and mastoid process	6,679	0.4	3,595	0.5	3,084	0.4
Diseases of the circulatory system	209,156	13.9	128,654	17.0	80,502	10.7
Diseases of the respiratory system	137,096	9.1	77,756	10.3	59,340	7.9
Diseases of the digestive system	163,484	10.9	92,543	12.3	70,941	9.5
Diseases of the skin and subcutaneous tissue	20,662	1.4	12,001	1.6	8,661	1.2
Diseases of the musculoskeletal system and connective tissue	57,189	3.8	23,674	3.1	33,515	4.5
Diseases of the genitourinary system	124,492	8.3	57,049	7.6	67,443	9.0
Pregnancy, childbirth and the puerperium	103,643	6.9	0	0.0	103,643	13.8
Certain conditions originating in the perinatal period	21,378	1.4	11,670	1.5	9,708	1.3
Congenital malformations, deformations and chromosomal abnormalities	6,728	0.4	4,023	0.5	2,705	0.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	133,782	8.9	73,020	9.7	60,762	8.1
Injury, poisoning and certain other consequences of external causes	114,081	7.6	60,088	8.0	53,993	7.2
External causes of morbidity and mortality	8,356	0.6	4,892	0.6	3,464	0.5
Factors influencing health status and contact with health services	17,244	1.1	8,292	1.1	8,952	1.2

Table 2. Total of hospital discharges by diseases category and gender, 2017

Table 3 shows the average length of hospital stay by category of diseases (ICD-10). The longest average length of stay in 2017 was observed in the category "Mental and behavioural disorders" (70.4 days), followed by "Certain conditions originating in the perinatal period" (9.3 days), "Congenital malformations, deformations and chromosomal abnormalities" (6.4 days), and "Neoplasms" (6.3 days).

Category of diseases	Days
Certain infectious and parasitic diseases	6.1
Neoplasms	6.3
Diseases of the blood and bloodforming organs and certain disorders involving the immune mechanism	4.6
Endocrine, nutritional and metabolic diseases	5.1
Mental and behavioural disorders	70.4
Diseases of the nervous system	6.1
Diseases of the eye and adnexa	1.7
Diseases of the ear and mastoid process	4.1
Diseases of the circulatory system	5.6
Diseases of the respiratory system	5.7
Diseases of the digestive system	4.2
Diseases of the skin and subcutaneous tissue	5.4
Diseases of the musculoskeletal system and connective tissue	5.0
Diseases of the genitourinary system	4.2
Pregnancy, childbirth and the puerperium	3.8
Certain conditions originating in the perinatal period	9.3
Congenital malformations, deformations and chromosomal abnormalities	6.4
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	4.1
Injury, poisoning and certain other consequences of external causes	5.7
External causes of morbidity and mortality	3.1
Factors influencing health status and contact with health services	4.1

Table 3. Average length <sup>1</sup> of hospital stay by diseases catego	orv. 2017
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Patients with over 1-year length of stay are also included in the data

A total of 423,342 operations were carried out in 1,505,257 patients hospitalised in year 2017. Most of them were carried out in the category "Diseases of the digestive system" accounting for 18.2% of the total number of operations (Table 4), followed by the "Pregnancy, childbirth and the puerperium" with 13.1%, "Injury, poisoning and certain other consequences of external causes" with 12.7% and "Diseases of the genitourinary system" with 11.9%.

As regards males, the three categories with the highest number of operations concerned "Diseases of the digestive system" (24.5%), "Injury, poisoning and certain other consequences of external causes" (14.2%) and "Neoplasms" (11.4%). As regards females, the three categories with the highest number of operations concerned "Pregnancy, childbirth and the puerperium" (23.3%), "Diseases of the digestive system" and "Diseases of the genitourinary system" (13.2%).

Category of diseases	Operation s	%	Males	%	Females	%
Grand total	423,342	100.0	185,711	100.0	237,631	100.0
Certain infectious and parasitic diseases	40	0.0	17	0.0	23	0.0
Neoplasms	47,128	11.1	21,233	11.4	25,895	10.9
Diseases of the blood and bloodforming						
organs and certain disorders involving the	62	0.0	26	0.0	36	0.0
immune mechanism						
Endocrine, nutritional and metabolic diseases	7,899	1.9	2,202	1.2	5,697	2.4
Diseases of the nervous system	2,403	0.6	1,014	0.5	1,389	0.6
Diseases of the eye and adnexa	28,467	6.7	13,888	7.5	14,579	6.1
Diseases of the ear and mastoid process	1,273	0.3	676	0.4	597	0.3
Diseases of the circulatory system	31,396	7.4	20,769	11.2	10,627	4.5
Diseases of the respiratory system	22,508	5.3	13,615	7.3	8,893	3.7
Diseases of the digestive system	76,871	18.2	45,407	24.5	31,464	13.2
Diseases of the skin and subcutaneous tissue	6,645	1.6	4,328	2.3	2,317	1.0
Diseases of the musculoskeletal system and	29,843	7.0	11,553	6.2	18,290	7.7
connective tissue						
Diseases of the genitourinary system	50,487	11.9	19,206	10.3	31,281	13.2
Pregnancy, childbirth and the puerperium	55,291	13.1	0	0.0	55,291	23.3
Certain conditions originating in the perinatal period	30	0.0	22	0.0	8	0.0
Congenital malformations, deformations and	3,183	0.8	2,193	1.2	990	0.4
chromosomal abnormalities	5,105	0.8	2,155	1.2	550	0.4
Symptom,, signs and abnormal clinical and	1,274	0.3	853	0.5	421	0.2
laboratory findings, not elsewhere classified	1,274	0.5	000	0.5	721	0.2
Injury, poisoning and certain other	53,804	12.7	26,381	14.2	27,423	11.5
consequences of external causes	·				27,123	
External causes of morbidity and mortality	393	0.1	295	0.2	98	0.0
Factors influencing health status and contact with health services	4,345	1.0	2,033	1.1	2,312	1.0

# Table 4. Surgical operations of patients discharged by diseases category and gender, 2017

The one-day clinic patients (Table 5) amounted to 1,215,526 out of which 597,344 (49.1%) were males and 618,182 (50.9%) were females. The total number of discharges of one-day clinic patients in 2017 represented the 44.7% of total 2,720,783 discharges. The category of diseases with the largest share of day care patients was "Neoplasms" (38.5%), followed by "Diseases of the genitourinary system" with 10.2%, "Diseases of the eye and adnexa" with 9.8% and "Diseases of the blood and blood forming organs and certain disorders involving the immune mechanism" with 8.7%.

Category of diseases	Patients discharged	%	Males	%	Females	%
Grand total	1,215,526	100.0	597,344	100.0	618,182	100.0
Certain infectious and parasitic diseases	6,476	0.5	3,252	0.5	3,224	0.5
Neoplasms	467,399	38.5	241,032	40.4	226,367	36.6
Diseases of the blood and bloodforming organs						
and certain disorders involving the immune mechanism	105,382	8.7	48,582	8.1	56,800	9.2
Endocrine, nutritional and metabolic diseases	10,683	0.9	4,930	0.8	5,753	0.9
Mental and behavioural disorders	4,427	0.4	2,334	0.4	2,093	0.3
Diseases of the nervous system	32,952	2.7	12,117	2.0	20,835	3.4
Diseases of the eye and adnexa	118,947	9.8	57,081	9.6	61,866	10.0
Diseases of the ear and mastoid process	2,014	0.2	1,144	0.2	870	0.1
Diseases of the circulatory system	38,946	3.2	23,789	4.0	15,157	2.5
Diseases of the respiratory system	14,882	1.2	8,683	1.5	6,199	1.0
Diseases of the digestive system	49,128	4.0	26,620	4.5	22,508	3.6
Diseases of the skin and subcutaneous tissue	21,393	1.8	11,987	2.0	9,406	1.5
Diseases of the musculoskeletal system and connective tissue	49,993	4.1	19,012	3.2	30,981	5.0
Diseases of the genitourinary system	123,472	10.2	55,355	9.3	68,117	11.0
Pregnancy, childbirth and the puerperium	18,562	1.5	0	0.0	18,562	3.0
Certain conditions originating in the perinatal period	1,215	0.1	675	0.1	540	0.1
Congenital malformations, deformations and chromosomal abnormalities	2,988	0.2	1,655	0.3	1,333	0.2
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	75,845	6.2	41,043	6.9	34,802	5.6
Injury, poisoning and certain other consequences of external causes	22,486	1.9	13,077	2.2	9,409	1.5
External causes of morbidity and mortality	2,743	0.2	1,638	0.3	1,105	0.2
Factors influencing health status and contact with health services	45,593	3.8	23,338	3.9	22,255	3.6

## Table 5. Discharges of day care patients by diseases category and gender, 2017

The average age of adult patients discharged in 2017 was 61.4 years (males 63.2 and females 59.6). Table 6 presents the average age of discharged patients over 18 years old for the most frequent categories of diseases by gender.

Category of diseases	Average age	Patients discharged	Average age	Males	Average age	Females
Diseases of the circulatory system	69.7	206,976	67.7	127,234	72.8	79,742
Neoplasms	64.5	167,607	66.8	91,245	61.7	76,362
Diseases of the digestive system	61.3	150,800	61.5	85,449	61.1	65,351
Diseases of the genitourinary system	61.1	117,217	66.0	52,474	57.1	64,743
Diseases of the respiratory system	66.3	110,308	65.0	62,208	68.1	48,100
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified	63.2	109,701	63.4	60,682	63.1	49,019
Pregnancy, childbirth and the puerperium	32.2	100,823	-	-	32.2	100,823
Injury, poisoning and certain other consequences of external causes	60.7	99,369	53.2	50,748	68.6	48,621

Table 6. Average age of patients discharged aged 18 years and over by diseases category and gender, 201	17

As regards the breakdown of discharges by patient's place of residence (Table 7), the largest share of discharges was recorded in the Region of Attiki (31.8%), followed by the Region of Kentriki Makedonia (17.0%) and Thessalia (7.1%).

NUTS 2 Region	Patients discharged	(%)
Anatoliki Makedonia, Thraki	88,133	5.9
Kentriki Makedonia	256,312	17.0
Dytiki Makedonia	39,851	2.6
Ipeiros	49,030	3.3
Thessalia	106,802	7.1
Sterea Ellada	54,040	3.6
Ionia Nisia	29,716	2.0
Dytiki Ellada	85,413	5.7
Peloponnisos	69,829	4.6
Attiki	478,130	31.8
Voreio Aigaio	27,274	1.8
Notio Aigaio	36,431	2.4
Kriti	91,150	6.1
Out of Greece	13,467	0.9
Not reported	79,679	5.3
Total	1,505,257	100.0

Table 7. Number of discharges by NUTS 2 region of the place of permanent residence, 2017

### **EXPLANATORY NOTES**

In-patient The Survey on In-patient Hospital Care (hospital discharges) is conducted for national needs on a yearly basis. The main purpose of the survey is to provide users with reliable and comprehensive information on the morbidity of the population. The questionnaires are filled in by the administrative departments of the hospitals in electronic format and are transmitted to ELSTAT.

Legal framework The survey on in-patient hospital care is conducted by virtue of the Circular 795/27.11.1959 by the Ministers of Coordination and Social Welfare on the "Collection of statistical data on incoming and outcoming patients of all hospitals in Greece". Moreover, it is conducted in accordance with the Regulation (EC)1338/2008 for statistics on public health and health and safety at work.

**Reference Period** The calendar year when the patient was discharged from the hospital.

**Statistical** The hospitals (public hospitals, Legal Entities of Private and Public Law, private clinics) and the patient who was hospitalized. The survey refers to all the patients who were hospitalized at least once in all the hospitals/clinics of Greece. From 2013 onwards, the survey also records day care incidents, surgical operations and other medical activities requiring the hospitalization of patients only for some hours, without staying in the hospital and refer to several medical specialties.

**Definitions** - "Hospital" is a health care institution where health care treatment is provided to patients by specialised medical or non-medical personnel. Hospitals, depending on their legal form, are classified as Legal Entities under Public Law, Legal Entities under Private Law, and private hospitals. Depending on the medical cases hospitalized, hospitals are distinguished into General, Mixed and Specialised (depending on the Medical Specialties: to cancer, dermatological, cardiological, gynaecological, psychiatric, orthopaedics, pathological, paediatrics, surgical and otolaryngology hospitals).

- "**Patient**" is the person who has been hospitalized for at least one day in the above mentioned hospitals. The survey refers to patients discharged from hospitals and their personal data are recorded every month once the patient is discharged.

- "Category of the disease" according to the International Classification of Diseases and Related Health Problems ICD-10 is the main disease diagnosed for which the patient was hospitalised, irrespectively whether another less important disease was diagnosed.

- "Agency which is bearing the expenditure" is the agency disbursing the payment, i.e. the social security fund or the patient himself.

- "Number of operations" is the number of operations which the patient had.

- "**The outcome of the hospitalisation**" may be a full recovery, a health improvement, a stable condition, a worsening of patients' condition, or death.

- "**Days of hospitalisation**" are the days during which the patient was hospitalized starting from the day the patient was admitted to hospital until the day when the patient was discharged.

Methodology, Until 2012, the data processing was conducted on a sample representing 12.5% of the total of the hospital discharges. Furthermore, the total number of discharges (2,169,864 in 2012) also included the one-day operations. From 2013 onwards, the data processing is conducted on a census basis. Data on the patient's occupation are classified according to ISCO-08. The diseases are classified in accordance with the International Classification of Disease and Related Health Problems, ICD-10. The geographical break down of data is in accordance with NUTS II classification.



### Map of 13 NUTS 2 Regions of Greece

**References** More information on the Survey on In-patient Hospital Care can be found on the website of ELSTAT, at the link:

https://www.statistics.gr/en/statistics/-/publication/SHE12/-