



## UNPRECEDENTED DECLINE IN THE NUMBER OF HEALTH CARE ACTS PERFORMED IN 2020

On the occasion of the World Health Day that will be celebrated tomorrow, Statistic Portugal publishes a new edition of the publication "Estatísticas da Saúde" (Health Statistics in English), with statistical indicators for 2020. This information is particularly relevant, given that it relates to the first year of the COVID-19 pandemic, although it was not possible to obtain some data, namely mortality by causes of death in 2020.

The following results stand out:

- In 2020, there were 57,198 doctors in Portugal, 3.2% more than in 2019, and 77,984 nurses, 2.9% more than in the previous year.
- Hospital activity was strongly affected by the pandemic context in 2020, leading to an unprecedented decline in the number of health care acts provided. Emergency care attendances and hospitalisations recorded the lowest values in the series started in 1999. There were also strong decreases in the number of surgeries in operating room, medical appointments and diagnostic and/or therapeutic complementary acts performed in hospitals.
- The epidemiological situation of 2020 had repercussions on the activity of both public and private providers. Urgency was the most affected hospital service, regardless of the type of provider. The activity of private hospitals suffered clear breaks in diagnosis and/or therapeutic acts (-20.6%) and medical external appointments (-18.3%).
- Public or public-private partnership hospitals continued in 2020 to be the main providers of health services, ensuring 83.2% of emergency care, 74.9% of hospitalisations, 69.6% of surgeries in operating room and 65.1% of medical appointments.
- People who have completed a higher education or with higher income are more likely to assess their health status as good or very good (22.2 pp more likely than those who have completed, at most, basic education; 0.10 pp more likely for a 1% increase in equivalent monetary income).
- Higher education and higher income are also related to a decrease in the probability of suffering limitations in carrying out usual activities: 10.1 pp less likely than for those who have completed higher education in comparison to those who have completed basic education or no level of education at all; 0.04 pp less likely for a 1% increase in equivalent monetary income.

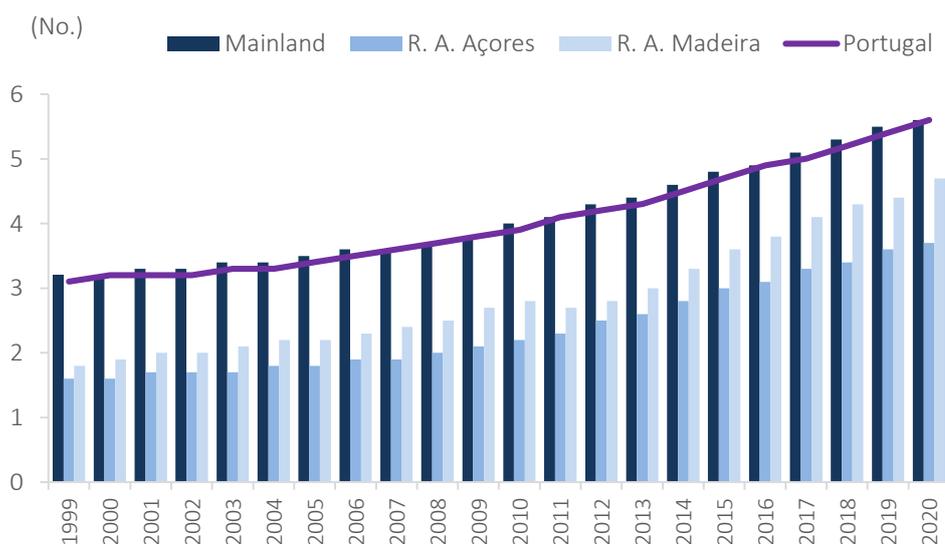


## The number of doctors increased to 5.6 per 100 thousand inhabitants in 2020

In 2020, 57,198 professionals were enrolled in the Portuguese Medical Association, of which 55,094 were registered in Mainland, 902 in the Região Autónoma dos Açores and 1,202 in the Região Autónoma da Madeira. Thus, there were 5.6 registered doctors per 1,000 inhabitants, 0.2 more doctors per 1,000 inhabitants than in 2019.

The increase in the number of doctors between 2019 and 2020 followed the trend of continuous growth of the series observed since 2004, with more intensity in the Região Autónoma dos Açores (on average, 4.6% more between 2004 and 2020) and in the Região Autónoma da Madeira (on average, 4.9% more in the same period). Despite the general increase, the Alentejo and the autonomous regions of the Açores and Madeira continued in 2020 to record numbers below the national average, respectively 3.2, 3.7 and 4.7 doctors per 1,000 inhabitants.

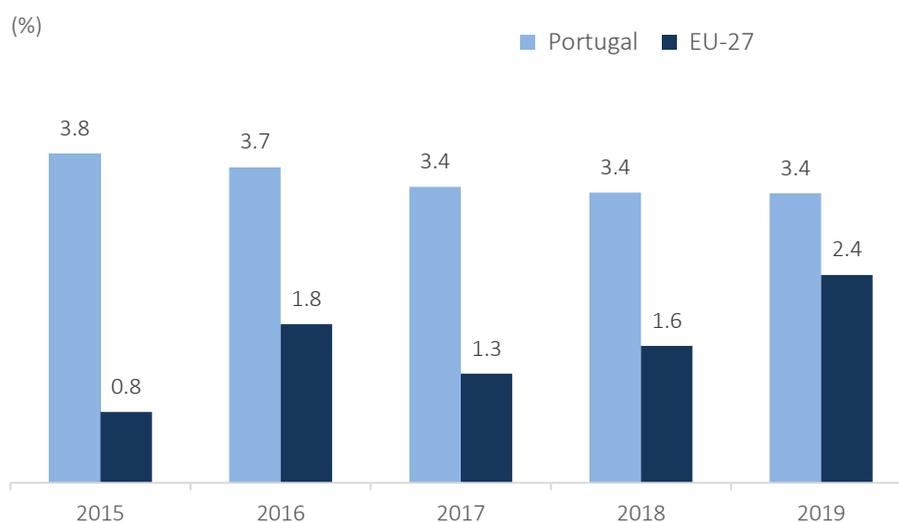
Figure 1. Doctors per 1,000 inhabitants, Portugal and NUTS 1, 1999-2020



Source: Statistics Portugal, Health professionals.

The comparison with the results currently available for the EU-27 indicates that the growth in the number of doctors was higher in Portugal: 18.9% between 2014 and 2019, with an average annual growth rate of 3.5%. In the same period, the number of doctors in the EU-27 increased by 8.3%, which translates into an average growth of 1.6% per year.

Figure 2. Variation rates in the number of doctors, Portugal and UE-27, 2015-2019



Sources: Portuguese Medical Association, Eurostat .

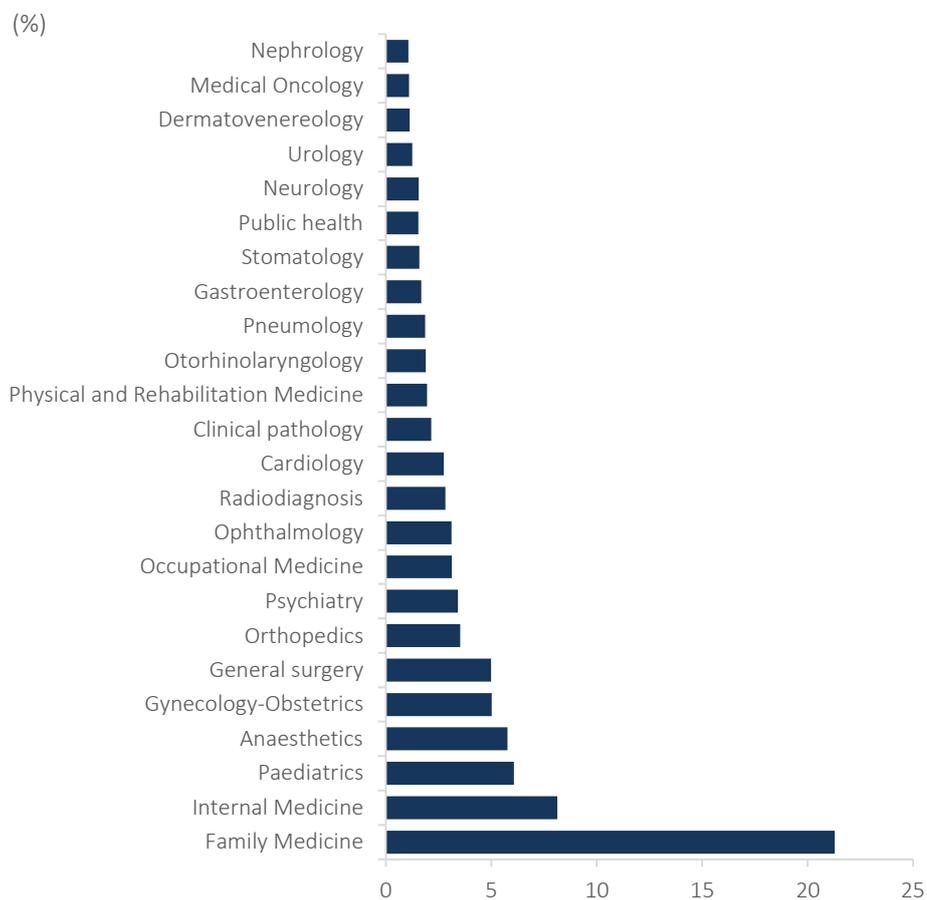
In 20 years, the ratio of , the ratio between women doctors and men doctors changed significantly in Portugal, from 81.4 women per 100 men in 2000 to 128.6 women per 100 men in 2020, well above the ratio of 103.8 obtained for the EU-27 in 2019.

Of the total number of doctors enrolled in the Portuguese Medical Association in 2020, more than 60% were specialists (34,836), that is, they were qualified to practice at least one specialty in Medicine. In 2020, Family Medicine, Paediatrics, Internal Medicine and Anaesthetics continued to be the specialties held by a larger number of specialist doctors.

In that year, there were 0.9 specialists in Family Medicine per 1,000 inhabitants aged 15 years or older and 1.6 specialists in Paediatrics per 1,000 inhabitants under 15 years of age. Between 2000 and 2020, the number of specialists in Family Medicine increased by 70.8% (on average, 2.7% per year), representing an increase of 0.9 doctors specialized in Family Medicine per 1,000 inhabitants aged 15 or over, and the number of specialists in Paediatrics increased by 68.6%.

Also in 2020, regarding some medical specialties with more interest in the context of the COVID-19 pandemic, there were 209 specialists in Infectious Diseases (more than doubling those existing in 2000 and 1/3 more than in 2014), 667 doctors specialists in Pulmonology (more than 40% compared to 2000 and 14.6% compared to 2014) and 562 specialists in Public Health (an increase of more than 1/3 compared to 2000 and 16.1% in 2014 compared to 2014).

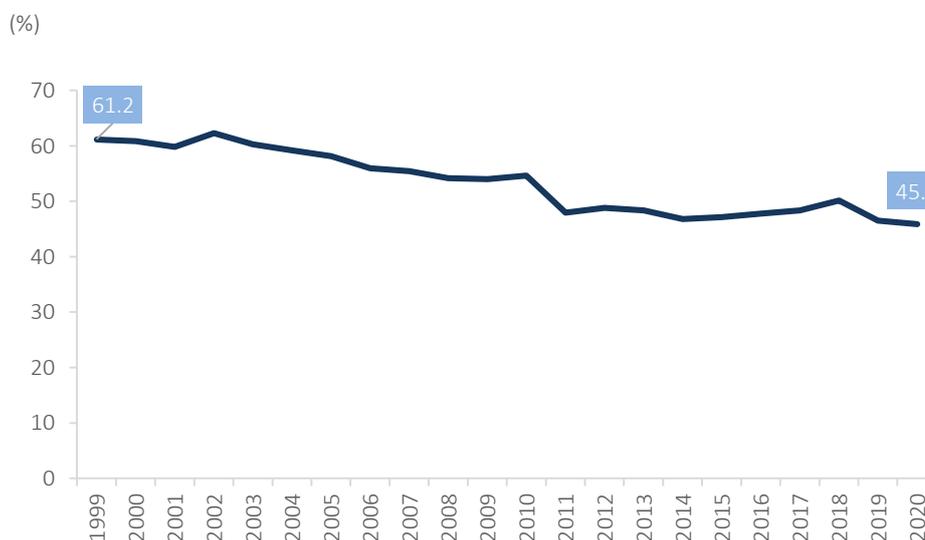
Figure 3. Main medical specialties, Portugal, 2020



Source: Statistics Portugal, Health professionals.

About 46.0% (26,249) of all doctors enrolled in the Portuguese Medical Association in 2020 worked in a hospital, 0.6 p.p. less than in 2019. The proportion of doctors working in hospitals has been decreasing in the last 20 years: in 2000 it was 58.2%.

Figure 4. Proportion of doctors working in Portuguese hospitals, Portugal, 1999-2020



Sources: Statistics Portugal, Hospitals Survey; Statistics Portugal, Health professionals.

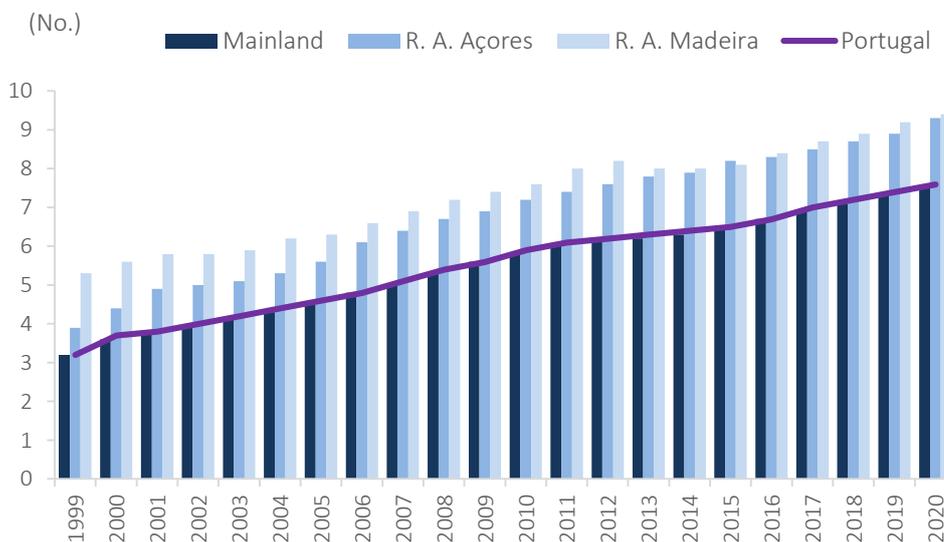
### The number of nurses kept the 2.9% annual increasing trend

In 2020, 77,984 professionals were certified by the Portuguese Nurses Association, i.e. 7.6 nurses per 1,000 inhabitants, representing an increase of 0.2 nurses per 1,000 inhabitants compared to 2019 (when there were 7.4 nurses per 1,000 inhabitants).

The increase in the number of nurses from 2019 to 2020 followed the trend of continuous growth of the series started in 1999, in particular the 2.9% annual increasing trend of 2.9% observed since 2017.

The number of nurses per 1,000 inhabitants remains consistently higher in the autonomous regions, with 9.3 and 9.4 nurses per 1,000 inhabitants in 2020, respectively in the Região Autónoma dos Açores and in the Região Autónoma da Madeira.

Figure 5. Nurses per 1,000 inhabitants, Portugal and NUTS I, 1999-2020



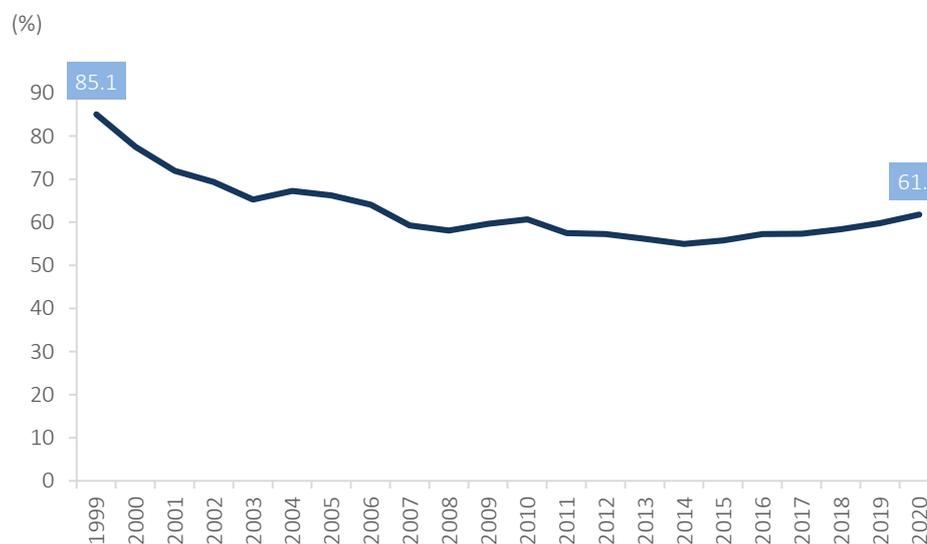
Source: Statistics Portugal, Health professionals.

In 2020, like 20 years before, women continued to represent more than 80% of nursing professionals, with a 1% increase in the ratio between women nurses and men nurses in relation to 2000 (from 461.3 to 465.1).

Of the total number of nurses in activity in 2020, 57,613 were generalists (73.9%) and 20,371 were specialists (26.1%), with a predominance of specialists in Rehabilitation nursing (22.1%) and Medical-Surgical nursing (21.8%).

More than half of the nurses worked in a hospital in Portugal in 2020: 48,255, i.e. 61.9% of the total number of nurses enrolled in 2020, 2.0 more p.p. than in 2019 and 6.8 p.p. more than in 2014. The proportion of nurses working in hospitals decreased broadly until 2014 (from 85.1% in 1999 to 55.1% in 2014), followed by a period of continuous annual growth since 2015.

Figure 6. Proportion of nurses working in Portuguese hospitals, Portugal, 1999-2020



Sources: Statistics Portugal, Hospitals Survey; Statistics Portugal, Health professionals.

Although the increase in working nurses was higher in hospitals with non-universal access, it were hospitals with universal access that contributed the most for the growth of nurses' employment between 2015 and 2020 (78.1% of the overall increase). From 2019 to 2020, the contribution of universal access hospitals was even greater, since it represented 91.1% of the increase in the number of nurses.

#### There was an increase in the number of beds in Intensive Care Units in 2020

In 2020, there were 241 hospitals in Portugal, 113 of which belonged to official health services. The number of public sector hospitals has remained relatively stable since 2016, but there has been a decrease of 14 hospitals in relation to 2010. The ratio of universal access hospitals (public hospitals with universal access or in public-private partnership) per 100 thousand inhabitants was 1.1 in 2020, as in the previous year.

By 2020, 128 private hospitals were in operation, 26 more than in 2010. The predominance of private hospitals began in 2016 and covers the mainland and the autonomous regions.



Figure 7. Hospitals by institutional nature, Portugal, 2010-2020



Source: Statistics Portugal, Hospitals Survey.

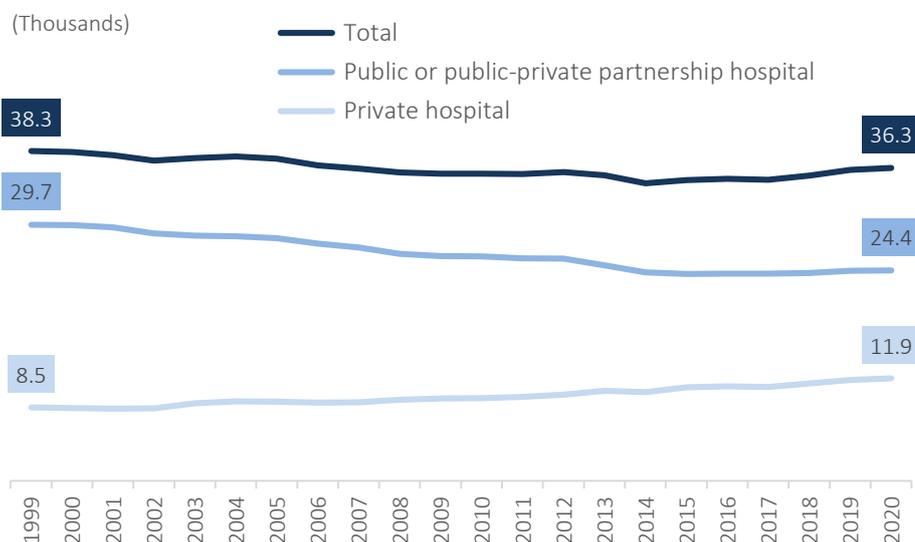
About 74% of the existing hospitals in 2020 were general hospitals, that is, they had more than one area of expertise. Among the 62 specialized hospitals, Psychiatry was kept as the predominant area (23 hospitals).

In 2020, hospitals had 36,3 thousand beds available and equipped for immediate hospitalisation, 230 more beds than in 2019 and corresponding to 3.5 beds per 1,000 inhabitants. Of the total beds, 67.2% were in public or public-private partnership hospitals.

In relation to the beginning of the series, in 1999, there was a reduction in the total number of inpatient beds in Portuguese hospitals (minus 1,9 thousand beds, equivalent to -5.1%) mainly caused by developments in public or public-private partnership hospitals (minus 5,3 thousand beds, equivalent to -17.9%). In turn, between 1999 and 2020 there was an increase of 3,4 thousand inpatient beds in private hospitals (+39.6%).



Figure 8. Hospital inpatient beds by institutional nature, Portugal, 1999-2020



Source: Statistics Portugal, Hospitals Survey, provisional data for 2020.

Of the total beds available for hospitalisation in 2020, 26,6 thousand were infirmery beds (functional unit equipped with a minimum of three beds). In public or in a public-private partnership hospitals, these beds accounted for 86.3% of the total. In private hospitals, infirmery beds accounted for less than half of the available beds (46.5%) and semi-private or private rooms accounted for 47.6% (about 5,7 thousand beds, compared to 281 beds in public or in a public-private partnership hospitals).

Between 2019 and 2020, there was a decrease in the number of infirmery beds (minus 281) and an increase in the number of beds for hospitalisation in Intensive Care Units (plus 286). These changes result from the evolution observed in public sector hospitals, since in 2020 they had 331 fewer beds for infirmery hospitalisation and 302 more beds for hospitalisation in Intensive Care Units.

In 2020, there were 1,528 beds for hospitalisation in Intensive Care Units and 716 beds for hospitalisation in Intermediate Care Units (45 more than in 2019). In 2020, beds in Intensive Care Units included 255 for neonatal care, 73 for pediatric care and 1,200 for adult hospitalisation.

### The lowest number of hospitalisations in the last 20 years

In 2020, there were 987,2 thousand hospitalisations in Portuguese hospitals and 9.4 million days of hospitalisation. The number of hospitalisations and days of hospitalisation in 2020 are the lowest values in the series started in 1999. For the first time, the number of hospitalisations did not reach 1 million and the number

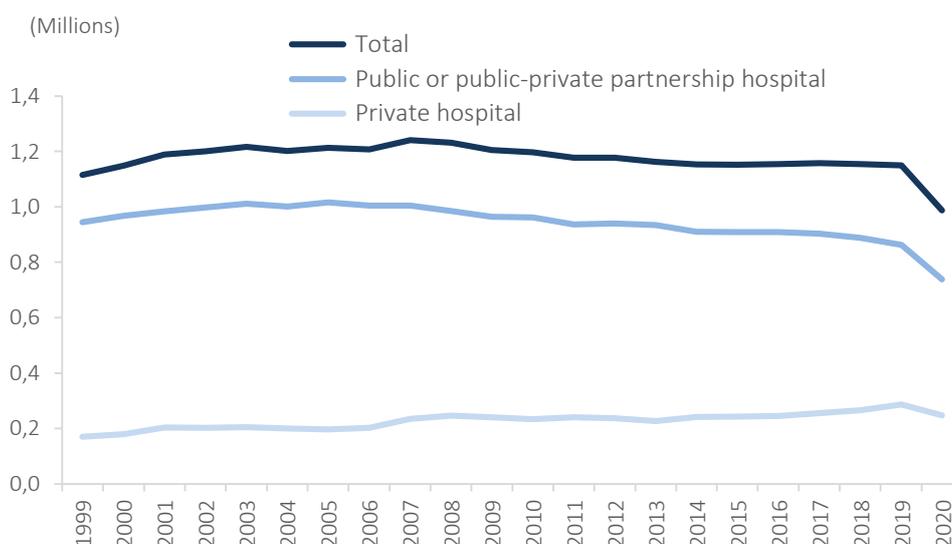


of days of hospitalisation was below 10 million, as a result of 162,9 thousand fewer hospitalisations and 968,4 thousand fewer days of hospitalisation than in 2019 (-14.2% and -9.3%, respectively)<sup>1</sup>.

In 2020, public or in public-private partnership hospitals ensured 739 thousand hospitalisations (74.9% of the total) and 6.7 million days of hospitalisation (71.1% of the total). These quantities reflect a reduction of approximately 124 thousand hospitalisations and 821 thousand days of hospitalisation, equivalent to -14.3% and -10.9% compared to the activity recorded in 2019. Hospitalisations in private hospitals also suffered an annual drop: about 39 thousand less hospitalisations (-13.6%) and 148 thousand less days of hospitalisation (-5.1%).

Of the total number of hospitalisations in 2020, 77.5% occupied infirmary beds, with special emphasis on the specialties of Internal Medicine, General Surgery and Gynecology-Obstetrics, respectively with 25.2%, 14.2% and 13.0% of the total hospitalisations in infirmary. The specialty of Infectious Diseases represented less than 2% of hospitalisations that occurred in infirmary in 2020, but stood out for having an increase of more than 10 thousand hospitalisations, more than doubling those recorded in this specialty in the previous year.

Figure 9. Hospitalisations by institutional nature, Portugal, 1999-2020



Source: Statistics Portugal, Hospitals Survey, provisional data for 2020.

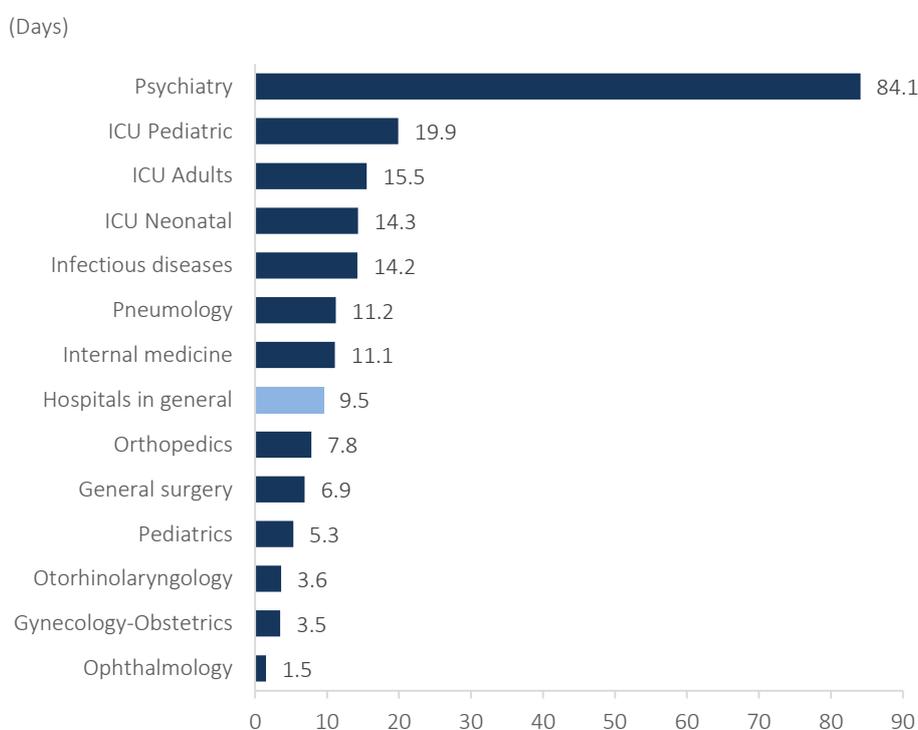
In 2020, patients remained hospitalised 9.5 days on average in Portuguese hospitals, 0.5 days more than in 2019. In public and in public-private partnership hospitals, the average length of stay was 9.0 days (8.7 days in 2019), while in private hospitals the average length of hospital stay was 11.0 days (10.0 days in 2019).

<sup>1</sup> The Portuguese Central Administration of the Health System confirmed that the COVID-19 related activity in 2020 did not offset all the hospitalisation activity that was cancelled or delayed.



The average length of stay in Infectious Diseases, Pulmonology and Internal Medicine was higher than that observed in hospitalisations in general: 14.2 days in the Infectious Diseases infirmaries, 11.2 days in the Pulmonology infirmaries and 11.1 days in the Internal Medicine infirmaries. The stay for a longer period of time is also characteristic of the hospitalisation in Intensive Care Units, with an overall value of 15.5 days in 2020. The average length of stay is different according to the nature of intensive care: 19.9 days in pediatric intensive care, 15.5 days in adult intensive care and 14.3 days in neonatal intensive care. In 1999, the average length of stay in Intensive Care Units was 10.7 days, and in 2019 12.7 days.

Figure 10. Average length of stay in hospital infirmaries, by specialty, and in Intensive Care Units (ICU), Portugal, 2020



Source: Statistics Portugal, Hospitals Survey, provisional data.

The specialty with a longer hospitalisation period is, however, Psychiatry, with an average of 84.1 days in Portuguese hospitals in 2020 (70.7 days in the previous year), with a marked difference between the average duration in private hospitals (216.8 days per hospitalisation) and the average duration in public or public-private partnership hospitals (with 22.5 days per hospitalisation).



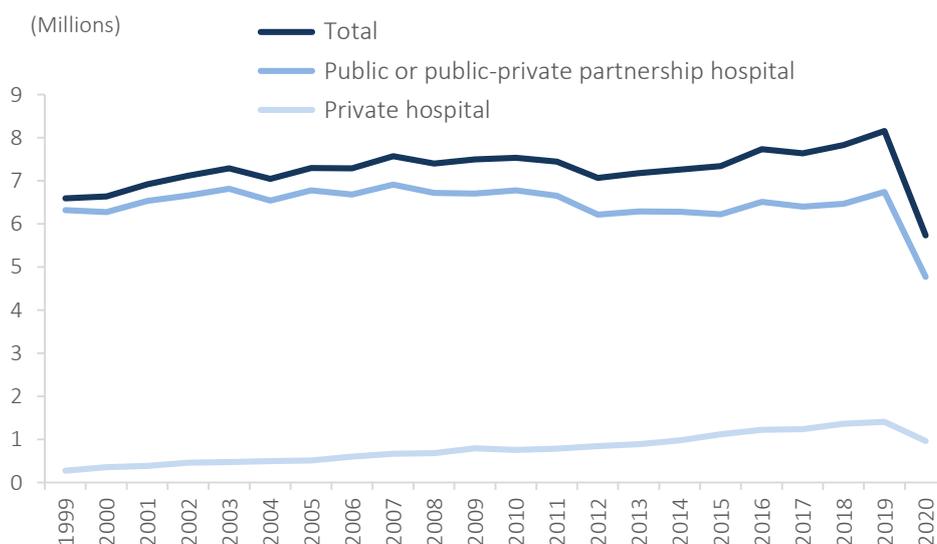
## 2.4 million fewer attendances in the hospital emergency services in 2020

During 2020, approximately 5.7 million attendances were performed in the emergency services of Portuguese hospitals, 2.4 million fewer attendances than in 2019. This outcome is the lowest value recorded between 1999 and 2020, with the emergency services being the hospital services recording the sharpest drop in activity provided, (29.6% less in relation to the previous year).

In public sector hospitals, 4.8 million attendances were performed in 2020, representing 2.0 million fewer attendances than in 2019 (-29.2%) and the minimum number of attendances between 1999 and 2020. In private hospitals, there were 964 thousand attendances in 2020, 447 thousand fewer than in the previous year (-31.7%) and the lowest outcome since 2014.

In 2020, public or public-private hospitals provided 83.2% of all emergency service attendances (82.7% in 2019) and private hospitals 16.8% (17.3% in 2019).

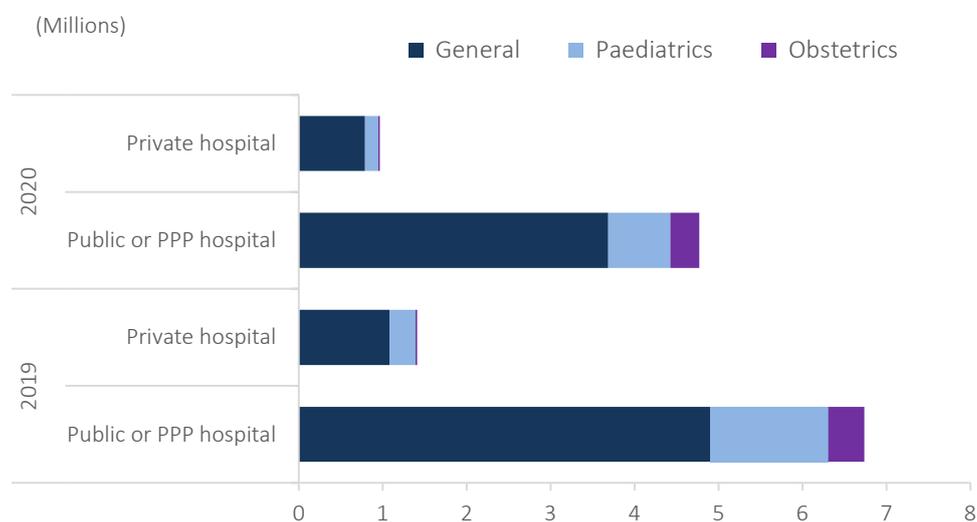
Figure 11. **Attendances in the emergency services by institucional nature, Portugal, 1999-2020**



Source: INE, Hospital Survey, provisional data for 2020.

In 2020, the vast majority of emergency attendances in hospitals were provided by general urgency (78.0%), while Paediatrics and Obstetrics accounted, respectively, for 15.6% and 6.3% of all attendances. Paediatric urgency was the type of urgency with the highest percentual decrease in relation to 2019. In total, in 2020, 896 thousand attendances were performed in the pediatric emergency service of Portuguese hospitals, 47.7% less than in the previous year.

Figure 12. **Attendances in the emergency services by type of emergency, Portugal, 2019 and 2020**

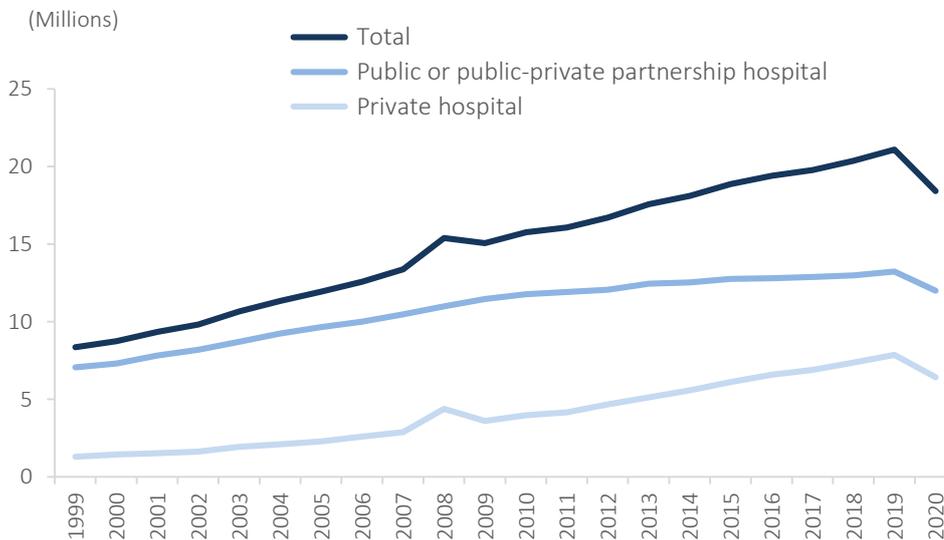


Source: Statistics Portugal, Hospitals Survey, provisional data for 2020.

### 2.7 million fewer medical appointments in hospitals

In 2020, approximately 18.4 million medical appointments were made in the external appointment unit of Portuguese hospitals, 2.7 million in few, that is, 12.7% less than in the previous year. The decrease in this activity was more significant in private hospitals, with a decrease of 1.4 million appointments and 18.3% compared to 2019. In public sector hospitals, on the other hand, 1.2 million fewer appointments were performed, representing a decrease of 9.3%.

Figure 13. Medical appointments in external appointment unit by institutional nature, Portugal, 1999-2020



Source: Statistics Portugal, Hospitals Survey, provisional data for 2020.

In 2020, Ophthalmology, Gynecology-Obstetrics, Orthopedics, Psychiatry and General Surgery were, in descending order, the specialties from the external appointment unit of public or public-private partnership hospitals with the highest number of medical appointments. In private hospitals, the specialties with more external appointments were Orthopedics, Ophthalmology, Gynecology-Obstetrics, Otorhinolaryngology and Physical Medicine and Rehabilitation.

When compared to 2019, fewer appointments were made in almost all specialties, except for Medical Oncology which increased by 3.6% in 2020 (3.7% in public sector hospitals and 2.6% in private hospitals), and Psychiatric in public or public-private partnership hospitals which increased by 1.7%.

In contrast to the decrease in the number of medical appointments performed in the external unit of hospitals, there was a strong increase in the number of virtual appointments. In all Portuguese hospitals, there were 137 thousand virtual appointments in 2020, 4.5 times the number recorded in the previous year. Almost 60% of the virtual appointments were performed in private sector hospitals.

### 176,0 thousand fewer surgeries in operating room and 55,2 thousand fewer minor surgeries

In Portuguese hospitals, 858,1 thousand surgeries were performed in operating room in 2020, the lowest figure since 2008. In total, there were 176,0 thousand fewer surgeries in operating room than in the previous year, which means a reduction of 17.0%. In public and private sector hospitals it declined by 17.7% and 15.4%, respectively.



Ophthalmology, General Surgery and Orthopedics were the specialties with the largest reductions in surgeries performed in operating room, with respectively 47 thousand fewer, 33 thousand fewer and 28 thousand fewer surgeries, results that depend mainly on changes in public sector hospitals. In private hospitals the number of surgeries of Gynecology-Obstetrics (+17.8%) and Cardiothoracic Surgery (+9.1%) increased.

About 70% of surgeries in operating room took place in public or public-private partnership hospitals, of which 84.0% were scheduled, i.e., resulted from prior appointments. In private hospitals, scheduled surgeries had a higher weight, representing 95.1% of the total.

In 2020, 149,4 thousand minor surgeries were performed in Portuguese hospitals. This number reflects a decrease of 55,2 thousand minor surgeries and a decline of 27.0% compared to 2019.

### 19.6 million fewer diagnostic and/or therapeutic complementary acts

In 2020, 162.6 million diagnostic and/or therapeutic complementary acts were performed in Portuguese hospitals, i.e., exams or tests needed for diagnosis (laboratory testing, imaging tests, endoscopies, biopsies, among others) or curative care after diagnosis and therapeutic prescription (physical therapy, radiotherapy, lithotripsy, immunohemotherapy, among others), less 19.6 million than in the previous year.

Of this negative balance, 14.3 million refer to public sector hospitals, which a drop of 9.2% in the activity between 2019 and 2020. Private hospitals performed 5.3 million less diagnostic and/or therapeutic complementary acts, a reduction of 20.6% compared to 2019.

The three main complementary acts performed in hospitals decreased. In 2020, 110.6 million clinical analyses, 11.6 million complementary acts of Physical Medicine and Rehabilitation and 10.7 million of Radiology exams were performed in Portuguese hospitals, i.e. 10.0 million fewer clinical analyses, 5.3 million fewer complementary acts of Physical Medicine and Rehabilitation, and 2.7 million fewer Radiology exams in relation to 2019.

On the other hand, there was an increase in the number of complementary acts of Pulmonology performed in public sector hospitals (170.4 thousand, or 7.3%, more) and complementary acts of Gynecology performed in private hospitals (31.1 thousand, or 19.3%, more).

Approximately 88% of these exams or curative care were carried out in public or public-private partnership hospitals. Private hospitals accounted for the remaining 12.5% of the diagnostic and/or therapeutic complementary acts performed in the country, less 1.6 p.p. than in 2019.

### The number of medicines (brands) in the pharmaceutical market decreased in 2020

In 2020, there were 2,922 pharmacies and 191 mobile medicine depots in Portugal, less 2 pharmacies and 4 mobile medicine depots than in the previous year. The average number of pharmaceutical units remained at 0.3 per 1,000 inhabitants.



In the country, there were 8,889 medicines (brands) in the pharmaceutical market in 2020, corresponding to 50,498 pharmaceutical presentations. Between 2019 and 2020, the number of medicines (brands) decreased (from 9,121 to 8,889), as well as the number of presentations, from 52,885 to 50,498.

In 2020, 42.7% of medicines (brands) and 19.7% of existing presentations were reimbursed (42.4% and 19.3%, respectively, in 2019). In terms of pharmacotherapeutic groups, more than half of the presentations reported in 2020 concerned the cardiovascular system (31.7%) and the central nervous system (29.2%).

### More than half of current health spending was funded by the SNS and the SRS

Between 2018 and 2020, the National Health Service (SNS in Portuguese) and the Regional Health Services of the Autonomous Regions (SRS in Portuguese), as a whole, were the main funding agents of current expenditure on health, supporting, on average, 54.7% of the total. In those years, on average, 28.9% of current expenditure was paid directly by households.

In structural terms, between 2018 and 2020, there was an increase in the relative weight of the expenditure by SNS and SRS (56.6% of current expenditure in 2020, 2.7 p.p. more than in 2018) and a decrease of 3.5 p.p. in the relative weight of household expenditure.



## The influence of a set of individual and socio-economic characteristics on health status and on the existence of limitations in carrying out usual activities

In addition to a wide range of data on the demographic and socio-economic characteristics of households and their members, including data on income, deprivation and housing, the Survey on Income and Living Conditions (ICOR in Portuguese) collects annual data on the health of individuals aged 16 and over since 2004. In 2021, these data were also obtained for children under 16 years of age using a specific module on "Children's health and material deprivation".

These data allowed, among other aspects, to obtain some results<sup>2</sup> on the self-reported health status and on the existence of limitations in carrying out usual activities due to long-standing health problems. In particular, the data collected in 2021 showed:

- the decrease of the proportion of people with positive evaluation in 2021, from 93.2% in the first 10 years of life to 11.3% after 80 years, and a strong increase in the intensity of variation as from 40-49 years. In reverse, there is an increasing behaviour of the proportion of people with fair health over the first 60 years, and a reduction in the elderly age groups.;
- the increasing behaviour of the prevalence of limitations due to longstanding health problems with age, and with greater intensity from the age of 40 in the case of women.

This press release presents the results of an exploratory analysis of these data to determine the relation, simultaneously, of some individual characteristics (sex, age group, region of residence, level of education, activity status and equivalent monetary income<sup>3</sup>) with: 1) the probability of self-reporting health status as "good or very good"; and 2) the probability of having limitations.

For the model (1) it was estimated a binomial Logit<sup>4</sup> in which the dependent variable "Self-reported health status" takes the value 1 when the evaluation is "good or very good" and 0 when it corresponds to "fair, bad or very bad". The "good or very good" condition, which is comprehensive to almost all individuals at birth, was chosen as the reference category.

For the model (2) it was estimated a binomial Logit in which the dependent variable "Existence of limitations" takes the value 1 when there are limitations and 0 when they do not, the latter being the reference category.

The results of the Logit models (see tables in attachment) should be interpreted as approximations to the single relations of each selected explanatory variable with the probabilities of occurrence of a given state of the dependent variable, when all other variables are controlled simultaneously.

For the explanatory variables that were defined as dummy variables (0/1) with more than one category (age group, NUTS 2 region of residence, attained level of education and activity status), the reference classes (base

<sup>2</sup> Statistics Portugal, press release on "Income and Living Conditions - Health Status – 2021", published on February 25, 2022.

<sup>3</sup> Similar models were also estimated, not shown in this press release, in which the income variable was replaced by the indicator related to the state of poverty, without results significantly different.

<sup>4</sup> See the methodological note.



categories) were the following: 0 to 15 years, Norte, attained level of education up to the 3rd cycle of basic education, and employed.

The coefficients presented correspond to the variations in the probabilities (marginal effects) associated with each of the explanatory variables (in relation to the base category), keeping all other constants.

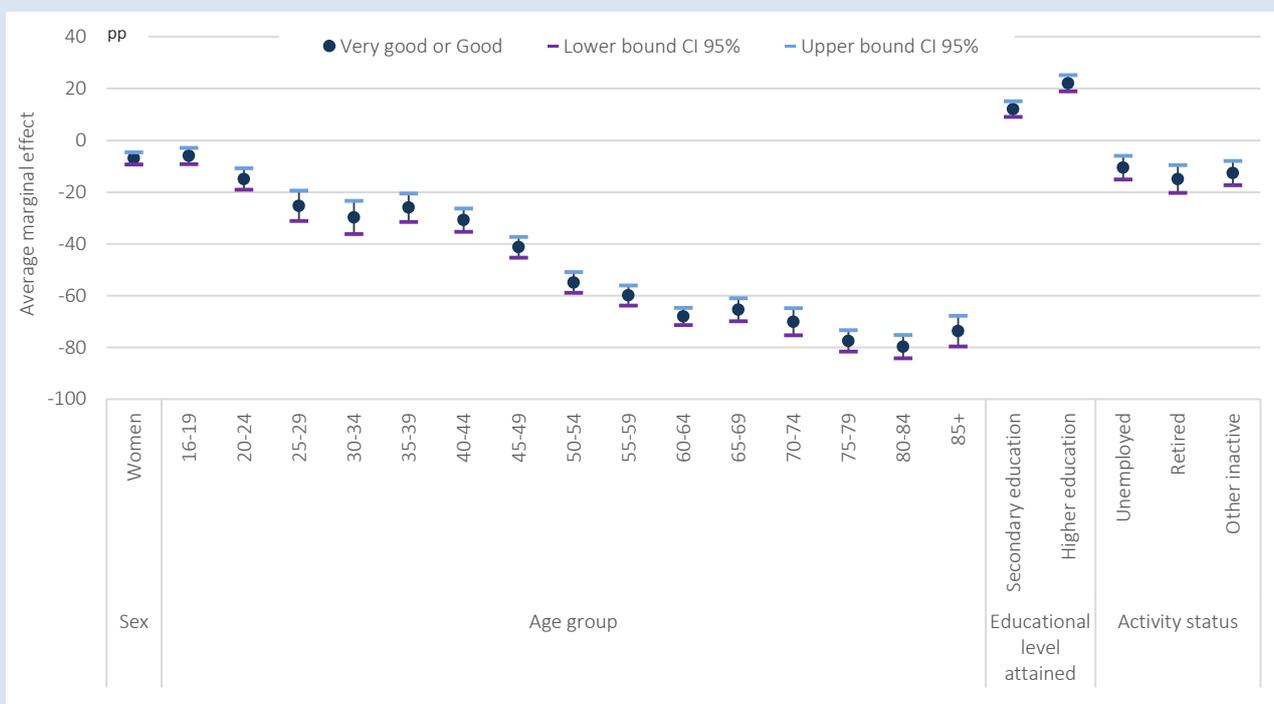
The results obtained allow us to conclude that:

### Self-assessment of the health status

- being a woman decreases by 6.9 percentage points (p.p.) the probability of self-reporting health status as "good or very good" in relation to being a man;
- the probability of self-reporting health status as "good or very good" decreases as age increases, especially from 45 to 64 years;
- the probability of self-reporting health status as "good or very good" is higher for people who have completed secondary or higher education, respectively 12.2 p.p. more and 22.2 p.p. more compared to a person who has finished basic education or has not finished any level of education;
- the probability of self-reporting health status as "good or very good" is lower when in unemployment than in employment (10.4 p.p. less), as well as in retirement (14.8 p.p. less) or in other inactivity (12.5 p.p. less);
- the probability of self-reporting health status as "fair, bad or very bad" is symmetrical in relation to the probability of assessing it as "good or very good": from 45 to 49 years it increases by more than 40 p.p., and by more than 65 p.p. from 60 years onwards;
- from the age of 75, the probability of assessing health status as "fair, bad or very bad" increases by more than 75 p.p. compared to the probability of assessing it as "good or very good";
- the probability of self-reporting health status as "good or very good" increases by 10.1 p.p. for a 1% increase in equivalent monetary income;
- the probability of self-reporting health status as "good or very good" increases by 0.10 p.p. for a 1% of increase in equivalent monetary income.



Figure 14. Average marginal effects – relation with the probability of self-reporting health status as good or very good, 2021



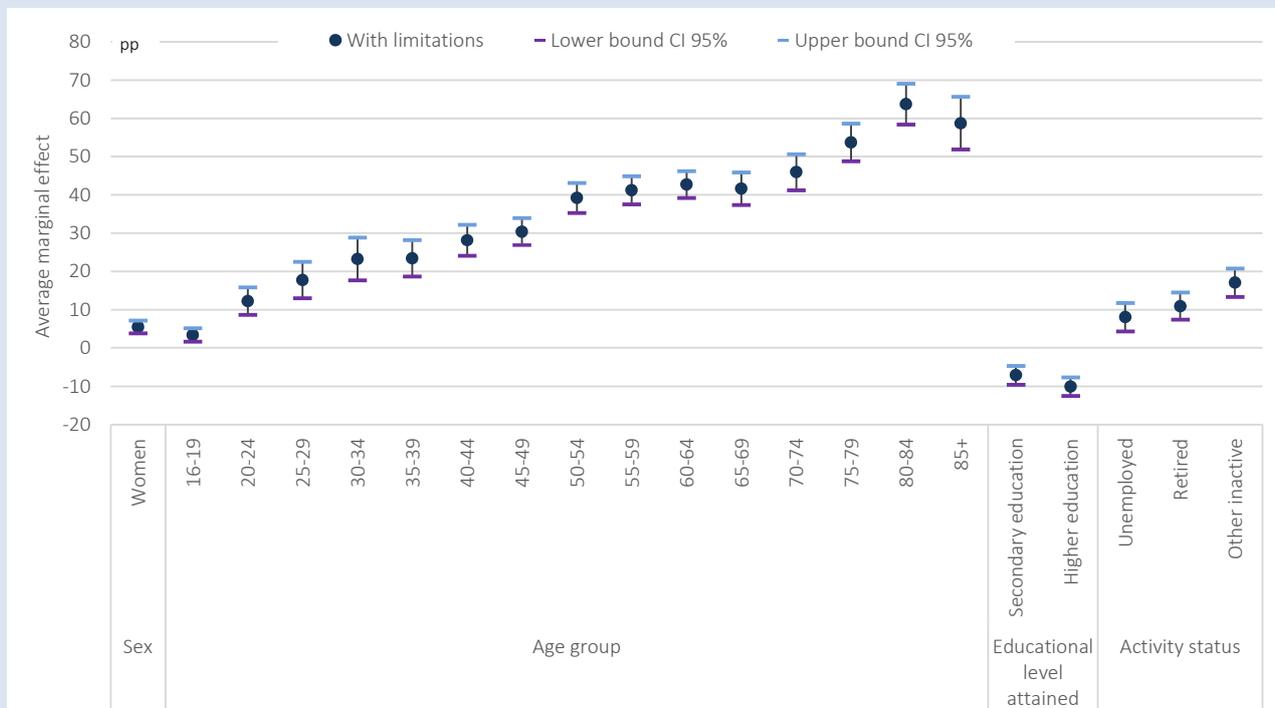
Source: Statistics Portugal, Statistics on income and living conditions.

### Existence of limitations in carrying out usual activities

- being a woman increases the probability of referring limitations in performing usual activities by 5.4 p.p.;
- the probability of having limitations increases with age: in comparison with someone less than 16 years of age, the probability of facing limitations increases by 23.2 p.p. at 30-34 years, 39.2 p.p. at 50-54 years, 53.5 p.p. at 75-79 years and 63.7 p.p. at 80-84 years;
- and is higher in unemployment than in employment (8.0 p.p. more), as well as in retirement (10.9 p.p. more) or in other type of inactivity (17.0 p.p. more);
- the probability of having limitations decreases by 7.2 p.p. for people who have completed secondary education and 10.1 p.p. for those who have completed higher education, in relation to an individual who has completed basic education or has not completed any level of education;
- and decreases by 0,04 p.p. for a 1% increase in equivalent monetary income.



Figure 15. Average marginal effects – relation with the probability of having limitations in carrying out usual activities, 2021



Source: Statistics Portugal, Statistics on income and living conditions.



## METHODOLOGICAL NOTE

### Survey on Income and Living Conditions

The Inquérito às Condições de Vida e Rendimento das Famílias (in english, Survey on Income and Living Conditions) is carried out annually aiming to estimate data on the sources of income of households, their socioeconomic characteristics and also a large number of variables related to their living conditions, including those related to health. Its implementation, by means of a representative sample of households living in Portugal, allows for the annual dissemination of statistical indicators on the at-risk-of-poverty and inequality in income distribution, as well as the material and housing deprivation, besides being the source of data for the annual update of population-based indicators on health status and for the calculation of indicators related to healthy life years.

The survey follows the harmonised program of EU statistics on income and living conditions, EU-SILC.

### Hospitals Survey

The Hospital Survey collects data on equipment and facilities, human resources and the activity carried out by hospitals located in mainland and in the autonomous regions. This survey was first implemented in 1986 (on data from 1985) and has since been carried out annually.

Since 2020 (2019 data), it has integrated administrative-based data for public hospitals with universal access located in mainland and survey data for private hospitals, for public hospitals with restricted access in mainland and for all hospitals, public and private, in the Região Autónoma dos Açores and Região Autónoma da Madeira. The use of administrative data for statistical purposes is carried out under a cooperation protocol established between Statistics Portugal (INE, I.P.), Central Administration of the Health System (ACSS, I.P.) and Shared Services of the Ministry of Health (SPMS, E.P.E.).

### Pharmacies and medicines

Data on pharmacies and medicines result from the use of administrative data for statistical purposes provided annually by INFARMED - National Authority of Medicines and Health Products, I. P., for the mainland, and by the Regional Statistical Services of Açores and Madeira, for the autonomous regions. Statistics Portugal later organizes the data for dissemination.

### Data on health professionals

The data of registered health professionals result from the use of administrative data for statistical purposes provided by the respective professional associations. Information on doctors registered in the Portuguese Medical Association (active or not) and dentists registered with the Medical Dentists Association (active or not) is made available geographically according to the residence declared by health professionals, while that relating to nurses registered in the Portuguese Nurses Association



(active) and pharmacists registered in the Pharmacists Association (active) is obtained according to the place of activity of health professionals.

## Health Satellite Account

The main objective of the Health Satellite Account is to evaluate the economic resources of a country used in the provision of health care services. In general, it seeks to measure total expenditure on health care, integrating the different dimensions that constitute a National Health System, i.e. health care providers, funding agents and health care functions.

## Logit models

The probabilities of a person self-reporting his/her health status as good or very good (model 1) and of having limitations in carrying out usual activities (model 2) were estimated from the following equation:

$$Pr(Y = 1|X_i) = F(X_i\beta)$$

Where  $Pr(Y = 1|X_i) = F(X_i\beta)$  is the cumulative logistic function and  $X_i$  is the vector of explanatory variables mentioned above.

This exercise used 26,822 sample observations collected by ICOR 2021, weighted, so that the results are valid for the population.



## CONCEPTS

**Age group:** The age interval in years to which a person belongs at the time of reference.

**Appointment:** Health act in which a health professional evaluates the clinical situation of a person and plans the provision of health care.

**Bed:** Equipment intended for the stay of an individual in a health care establishment.

**Complementary act of diagnosis:** Examination or test that provides results necessary for the establishment of a diagnosis.

**Complementary act of therapy:** Provision of curative care, after diagnosis and therapeutic prescription.

**Disease:** Disturbance of the normal state of a living being that disrupts the performance of vital functions, manifests itself through signs and symptoms and is a response to environmental factors, specific infectious agents, organic changes or combinations of these factors.

**Emergency service:** Clinical functional unit of a health establishment that provides health care to individuals who access from outside with a sudden change or worsening of health status, at any time of the day or night during 24 hours.

**Equivalent income:** Result obtained by dividing the income of each household by its size in terms of “equivalent adults”, using the modified OECD equivalence scale. Note: “Adult equivalents” is a unit of measurement of the size of households that results from the application of the modified OECD scale.

**External appointment unit:** Organic-functional unit of a hospital where the patients are admitted for appointment.

**Family medicine:** Specialty in medicine that deals with the health problems of individuals and families on an ongoing basis and in the context of the community.

**General hospital:** Hospital that integrates several specialties.

**Health status:** Health profile of an individual or population that can be measured using an organized set of indicators.

**Health:** A state of complete physical, mental and social well-being and not merely the absence of disease.

**Hospital emergency service:** Emergency service of a hospital equipped with specialised physical, technical and human resources for the treatment of emergency situations.

**Hospital:** Health establishment that provides curative and rehabilitation health care in inpatient and outpatient services, which may collaborate in the prevention of diseases, teaching and scientific research.

**Hospitalisation:** Modality of health care to individuals who, after admission to a health establishment, occupy a bed (or neonatal bed or paediatric bed) for diagnosis, treatment or palliative care, with a stay of at least 24 hours.

**Household net monetary income:** Total monetary net annual income of a household from all sources: wages and salaries, self-employment and capital income, public and private transfers and other income sources, net of income taxes and social security contributions.

**Infirmary:** Functional unit of the inpatient services of a health establishment where patients remain and which has at least three beds.



**Inpatient bed-days:** Total days used by all patients hospitalized in the various services of a health establishment in a reference period, except for the days of discharge of the same patients of that health establishment.

**Length of stay:** Total days used by all patients hospitalized in the various services of a health establishment in a reference period, except for the days of discharge from the health facility.

**Medical appointment:** Appointment made by a doctor.

**Medical doctor:** Health professional with a degree in medicine and authorization by the respective professional order for the practise of medicine.

**Medical specialist:** Doctor qualified to practice a specialty in medicine.

**Medicine:** Substance or combination of substances with curative or preventive properties of diseases and their signs or symptoms, aiming to establish a medical diagnosis or to restore, correct or modify their physiological functions.

**Minor surgery:** Surgery that, although performed in safety and asepsis conditions, and with the use of local anesthesia, does not require to be performed in an operating room, direct support of a helper, anesthesia monitoring and the stay in recovery, having immediate discharge after the intervention.

**Mobile pharmaceutical station:** Establishment that provides medicines and health products to the public, under the supervision of a pharmacist and dependent on a pharmacy to whose license is associated.

**Modified OECD equivalence scale:** an equivalence scale that assigns a weight of 1.0 to the first household member aged 14 or over, 0.5 to each additional member aged 14 or more and 0.3 to each member aged less than 14 years old. The use of this scale accounts for differences in size and age composition among households.

**Net monetary income:** Monetary income earned by households and by each of their members from work (employed and self-employed), from other private income (income from capital, property and private transfers), from pensions and from other social transfers, after deduction of taxes and social security contributions.

**Nurse:** Qualified health professional with a degree in Nursing and authorization of the respective professional council for the exercise of Nursing.

**OECD Modified Equivalence Scale:** This scale assigns a weight of 1 to the first adult in a household; 0.5 for the remaining adults and 0.3 for each child, within each household. Using this scale allows for differences in the size and composition of households to be taken into account.

**Pathological anatomy:** Specialty in medicine dedicated to the scientific study of functional and structural changes (macroscopic, microscopic, cellular and molecular) of diseases with the objective of identifying their causes, to allow the practice of a suitable predictive and preventive medicine, as well as the effective therapy and prognosis of diseases.

**Pharmacy:** Establishment duly authorized to dispense to the public medicines that are or are not subject to a prescription.

**Physiotherapy:** Treatment of diseases and their alterations or injuries through physical agents (heat, cold, water, light, electricity, ultrasound, diathermy, among others) or mechanical means (massages, gymnastics, active or passive movements, among others).



**Presentation of a medicine:** Contents of a package of a medicinal product, expressed in number of units or volume of a pharmaceutical form, at a given dosage.

**Private hospital:** Hospital whose owner and main financier is a private entity, whether or not for profit, having universal or restricted access.

**Private room:** Single room with private bathroom.

**Public hospital:** Hospital whose owner, main financier or administrative guardian is the State, having universal or restricted access.

**Public-private partnership hospital:** Hospital whose main financier or administrative guardian is the State and whose management is controlled and carried out by a private entity through a contract established with the State, having universal or restricted access.

**Scheduled surgery:** Surgery following a scheduled admission.

**Self-assessment of health status:** Subjective appreciation that each person makes of his health.

**Semi-private room:** Room for two patients with private bathroom.

**Specialist nurse:** Nurse qualified to practice a specialty in nursing.

**Specialized hospital:** Hospital in which predominates a number of beds assigned to a specific specialty or that provides care only or especially to patients of a certain age group.

**Specialty appointment:** Medical appointment carried out within a specialty or subspecialty of hospital basis that should follow a clinical indication.

**Specialty in Medicine:** Set of specific knowledge and skills, obtained after successful attendance of postgraduate training and which gives a specialisation in a particular field of Medicine.

**Subspecialty in Medicine:** Title that recognizes a differentiation in a particular area of a specialty in Medicine to members of the respective College of the Medical Doctors' Council.

**Surgery:** One or more surgical procedures with the same therapeutic and/or diagnostic goal, performed by a surgeon in the operating room in the same session.

**Virtual appointment:** Appointment performed at a distance using interactive, audiovisual and data communications (includes video call, mobile or landline telephone, email and other digital media), with optional registration in the equipment and mandatory registration in the patient's clinical process.