



RECOVERY OF HOSPITAL ACTIVITY IN 2022

On the occasion of World Health Day, which will be celebrated on April 7, Statistics Portugal is releasing a new edition of "Health Statistics", mainly with indicators for 2022.

The following results stand out:

- In 2022, there were 60,396 doctors and 81,799 nurses in Portugal, 2.8% more doctors and 1.9% more nurses than in 2021. The indicator for the number of doctors per thousand inhabitants was highest in Grande Lisboa region (8.3 doctors per thousand inhabitants) and lowest in the Oeste e Vale do Tejo region (2.5 doctors per thousand inhabitants), while the indicator for the number of nurses per thousand inhabitants was highest in the Região Autónoma da Madeira e in Região Autónoma dos Açores (9.8 and 10.1 nurses per thousand inhabitants, respectively) and lowest in the Oeste e Vale do Tejo region (4.9).
- After hospital activity was strongly affected by the pandemic context, in 2022 there continues to be a recovery in care provided in hospital settings. Medical appointments, operating room surgeries and diagnostic and/or therapeutic complementary acts have increased to values higher than those recorded before the COVID-19 pandemic.
- Emergency care was the aspect of hospital activity that saw the biggest increase compared to 2021, with 1.5 million more attendances (+23.9%). The recovery seen in 2022 allows us to get closer to the figure prior to 2020, the year in which hospital emergency attendances fell by 30.3% and reached the lowest value since 1999.
- In 2022, public or public-private partnership hospitals continued to be the main providers of health services, providing 86.2% of diagnostic and/or therapeutic complementary acts, 81.6% of emergency care attendances, 74.6% of hospitalizations and 71.5% of operating room surgeries. Public sector hospitals also provided the majority of medical appointments, but this is the component of activity in which private hospitals were able to achieve the most significant weight, accounting for 38.0% of the total.
- The proportion of the population with long-standing limitations in their usual activities due to health problems, which is an internationally recognized approximation to the concept of disability, continued to fall in 2023 to 33.4%, representing 0.6 percentage points (p.p.) lower than the result of 2022 (34.0%).
- The "Healthy life years" indicator, which combines information of the life expectancy of the population and the existence long-standing limitations due to health problems, shows that in 2021 the average life expectancy for a man aged 65 was 18.3 years and for a woman aged 65 was 22.0, but taking into account limitations due to health problems results in a healthy life expectancy of only 8.4 years for a man aged 65



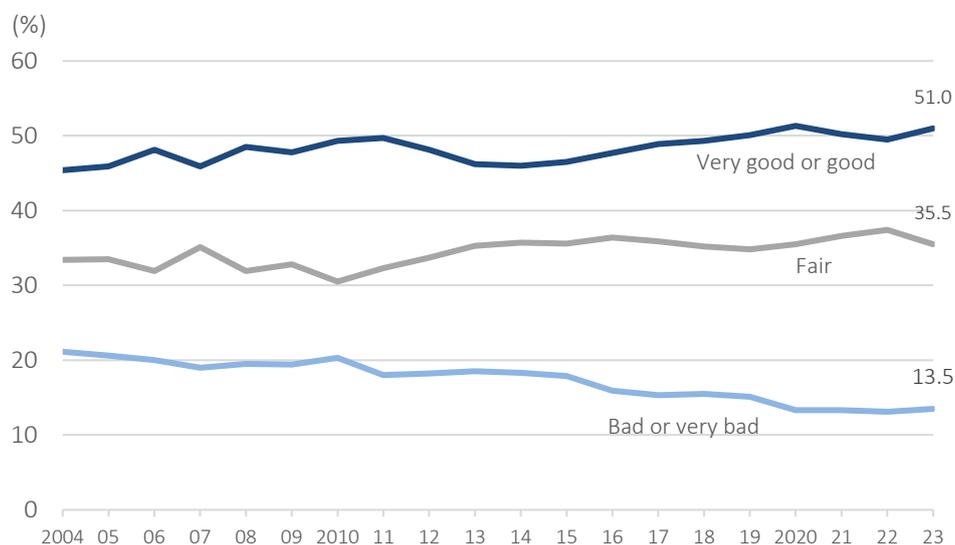
and 7.4 years for a woman of the same age, in both cases lower than the averages in the European Union (EU-27) of 9.5 years for men and 9.9 years for women.

- In 2023, according to the Generalized Anxiety Disorder 2-item (GAD-2) model, 34.3% of the population aged 16 and over had symptoms of generalized anxiety, including 11.1% with more severe levels of anxiety. The results of a logistic regression model associating the probability of generalized anxiety disorder with some personal characteristics and territorial and family context for the adult population suggest that women and the unemployed are more likely to have symptoms of generalized anxiety, but that age and schooling are negatively related to that probability. Situations of food insufficiency, chronic (long-standing) illness and the existence of limitation in activities because of health problems contribute to an increase in the probability of generalized anxiety symptoms.
- A logistic regression model was also developed to check whether the available statistical data empirically supports the association of high satisfaction with life in general among the population aged 18 and over with certain personal characteristics and their territorial and family context, when considered simultaneously. The results obtained are particularly robust and significant in terms of the relationship between satisfaction with life in general and self-perceived health status – the probability of revealing high satisfaction with life in general decreases as self-perceived health status worsens; for example, perceiving one's own health status as very bad decreases the probability of assessing satisfaction with life in general as high by 49.4 p.p. compared to self-perceiving health status as very good.

In Portugal, the proportion of people who perceived their health status positively is one of the lowest in the EU-27

In 2023, 51.0% of the population aged 16 and over perceived their health as good or very good, reflecting an increase in the indicator compared to the previous two years (49.5% in 2022 and 50.2% in 2021). The proportion of people who reported their health status as fair decreased by 1.9 p.p. compared to 2022 and by 1.1 p.p. compared to 2021, while the proportion of people with negative self-perception of health (13.5% in 2023) increased slightly compared to the previous two years.

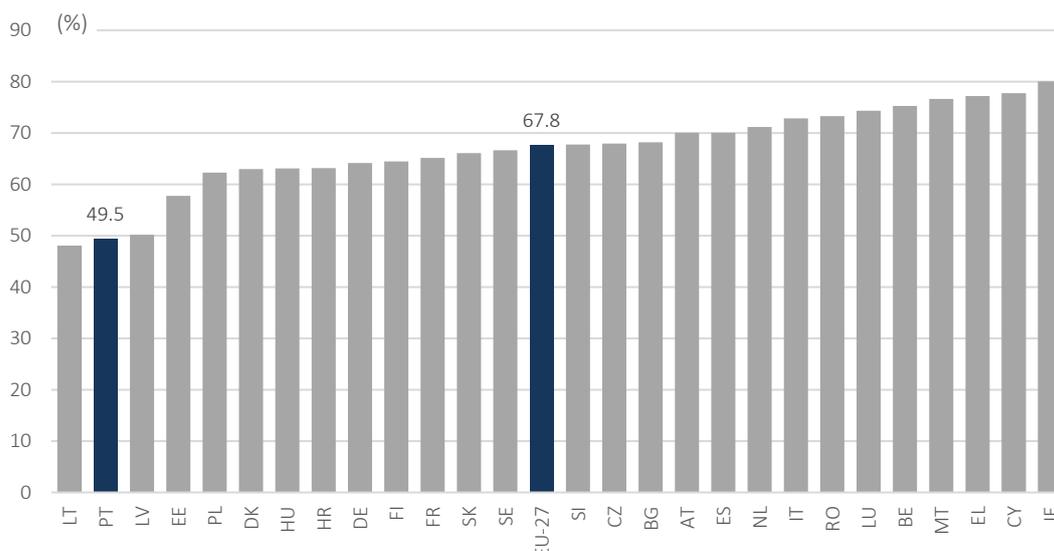
Figure 1. Proportion of population aged 16 or over by self perception of health, Portugal, 2004-2023



Source: INE, Survey on Income and Living Conditions.

As in previous years, in 2022 (the last year available for the EU-27), Portugal was one of the EU-27 countries in which the self-perception of a good or very good health was lower: 49.5%, 18.3 p.p. less than the average for the EU-27 (67.8%).

Figure 2. Proportion of population aged 16 or over with self perception of health as "good or very good", EU-27, 2022



Source: Eurostat [hlth_silc_10].

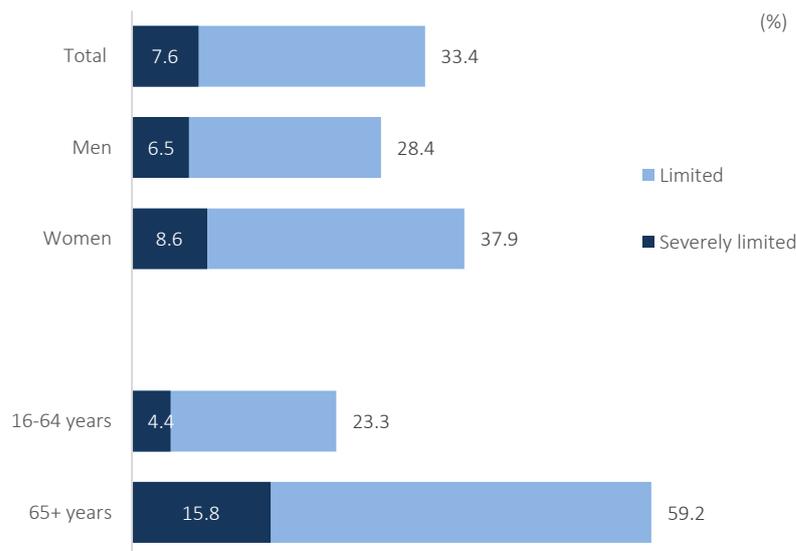


The proportion of persons reporting long-standing limitations in their usual activities is one of the highest in the EU-27

In 2023, more than a third of the population aged 16 and over (33.4%) reported long-standing limitations in their usual activities due to health problems – in particular, 25.8% reported some long-standing limitations, while 7.6% reported severe limitation.

Despite the slight decrease in the indicator compared to the previous year, the pattern observed in recent years in Portugal is maintained, with women and the elderly population more frequently reporting some limitation in performing usual activities (37.9% of women compared to 28.4% of men, and, 59.2% of population aged 65 and over, compared to 23.3% for the population under 65 years of age). The age difference was more evident in the population with severe limitations: 15.8% in persons aged 65 and over and 4.4% in persons under 65 years old.

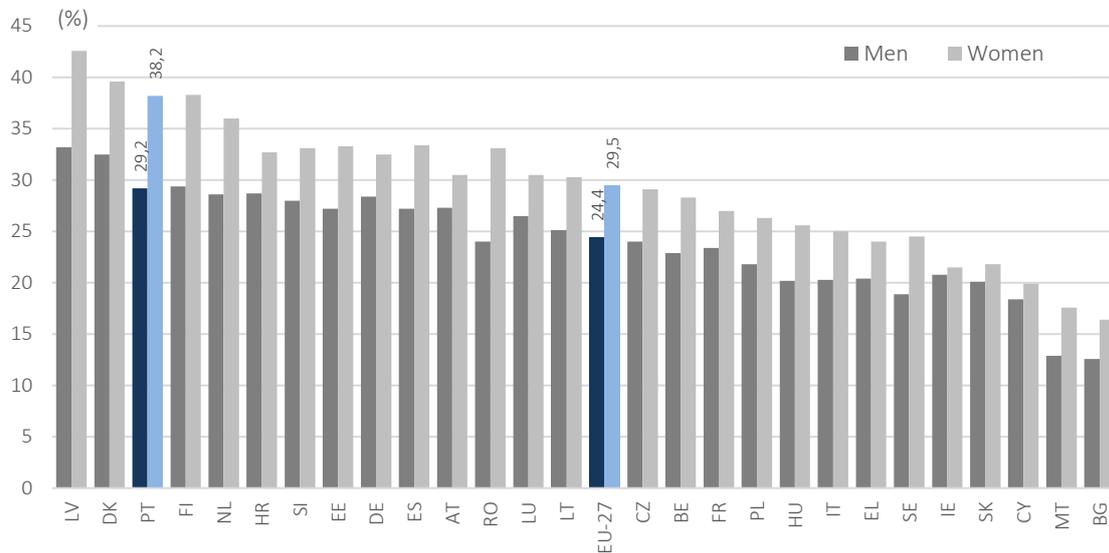
Figure 3. Proportion of the population aged 16 or over with limitation in usual activities due to health problems, Portugal, 2023



Source: INE, Survey on Income and Living Conditions.

Compared to the most recent data for the European Union, for 2022, Portugal continues to be one of the countries in which the proportion of persons with long-standing limitations in their usual activities due to health problems is highest (3rd country with the highest value), and the position is much worse in the case of women (38.2%, 8.7 p.p. more than the EU-27 average of 29.5%) than men (29.2%, 4.8 p.p. more than the EU-27 average of 24.4%).

Figure 4. Proportion of population aged 16 or over with limitation in usual activities due to health problems, by sex, EU-27, 2022



Source: Eurostat [hlth_silc_12].

Note: data are ordered by total of both sex.

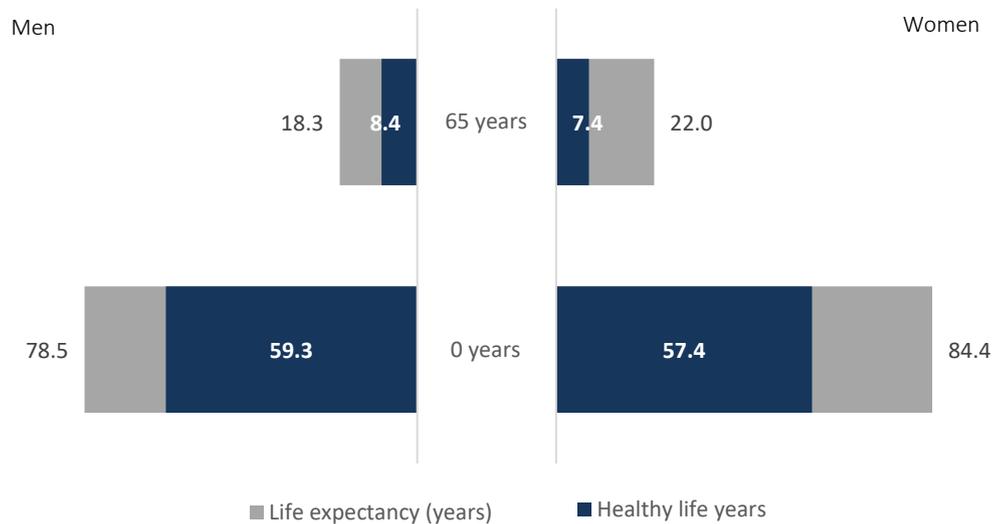
The expected number of healthy life years at birth is lower for women

The results of the indicator relating to the existence of long-standing limitations in usual activities are normally considered as an estimate of the proportion of people with disabilities and, to that extent, integrated into the calculation of the indicator "Healthy life years", which allows to assess whether or not the increase in life expectancy is accompanied by an increase in the time spent in good health. The "Healthy life years" indicator combines morbidity with mortality, using information on the life expectancy of the population (mortality) as well as the rates of existence of long-standing limitations due to health problems (morbidity).

Life expectancy at birth in Portugal was estimated at 81.5 years for the total population in 2021, higher for women (84.4 years) than for men (78.5 years). Considering the information regarding the existence of limitations due to health problems, the estimated number of years of healthy life at birth was 57.4 years for women, 1.9 years less than for men (59.3 years).

In the same period, the average life expectancy for a 65-year-old was 18.3 years for men and 22.0 years for women. The adjustment for limitations due to health problems reduces the expectancy of life of men at 65 years of age by almost 10 years (with 8.4 years of healthy life) and is even more penalizing for women of the same age, decreasing by 14.6 years to 7.4 healthy life years.

Figure 5. Life expectancy and healthy life years at birth and at 65 years, by sex, Portugal, 2021

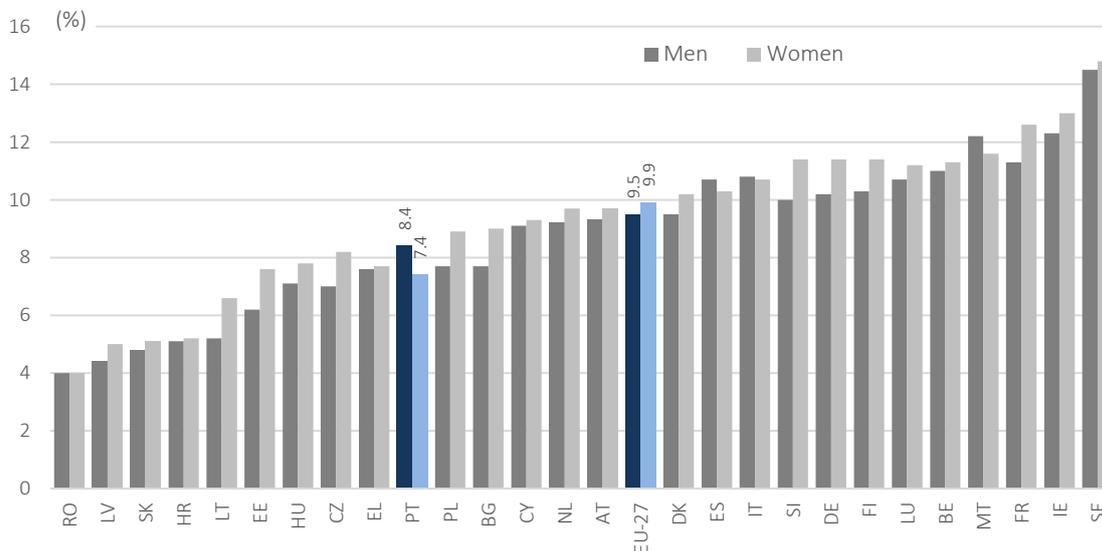


Source: Eurostat [hlth_hlye].

In 2021 and compared to the other EU-27 countries by reference to healthy life years at 65 years, Portugal ranked 10th, with a value of 8.4 years for men and 7.4 years for women, corresponding to 1.1 and 2.5 years less, respectively, compared to the European average, which was 9.5 for men and 9.9 years for women.

In 2021, Portugal was one of the countries in the European Union with the largest difference between healthy life expectancy at 65 years for men and women (1.0 more years in favor of men). Malta, Spain and Italy also recorded higher healthy life years for men, although with smaller differences. For the average EU-27 country, women could expect to live 0.4 years longer in health than men.

Figure 6. Healthy life years at 65 years by sex, EU-27, 2021



Source: Eurostat [hlth_hlye].

Note: data are ordered by total of both sex.

4 out of 10 women with generalized anxiety disorder

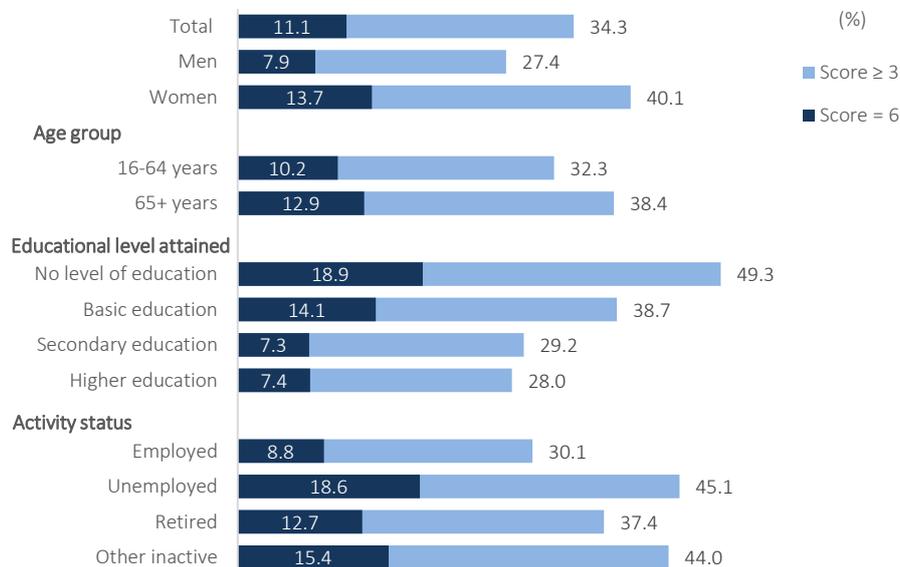
Also according to the results of the 2023 Survey on Income and Living Conditions (ICOR), 34.3% of the population aged 16 and over revealed symptoms of generalized anxiety disorder, corresponding to a score of 3 or more points, according to the *Generalized Anxiety Disorder 2-item (GAD-2)*¹ model. Of these, 11.1% revealed levels of anxiety more severe, i.e., corresponding to a score of 6 points (maximum score for the adopted model).

This condition affected women more than men (40.1% of women, compared to 27.4% of men, considering the indicator with a score of 3 or more points, and 13.7% of women, compared to 7.9% of men, with regard to more severe levels of anxiety (score of 6 points). By age group, the indicator indicated higher proportions in the elderly population (65 years or older) compared to the population under 65 years of age: 6.1 p.p. more, considering the global generalized anxiety disorder indicator; and more 2.7 p.p. considering the most severe criteria.

The same condition (generalized anxiety disorder) was reported less frequently by persons with higher education (28.0%) or with secondary education (29.2%), compared to those who had no level of education (49.3%) or who had only basic education (38.7%). In the same sense, the analysis by activity status indicates that 30.1% of the employed population registered some generalized anxiety disorder in 2023, which compares with higher levels of anxiety in the unemployed population (45.1%), and in the economically inactive (among 37.4% in retired persons and 44.0% in other inactive).

¹ This is a simplified version of the GAD-7 model presented in <https://www.phqscreeners.com>, see Methodological note.

Figure 7. Proportion of the population aged 16 or over with generalized anxiety disorder (GAD-2), Portugal, 2023



Source: INE, Survey on Income and Living Conditions.

Prevalence of food insecurity increased to 4.8% in 2023

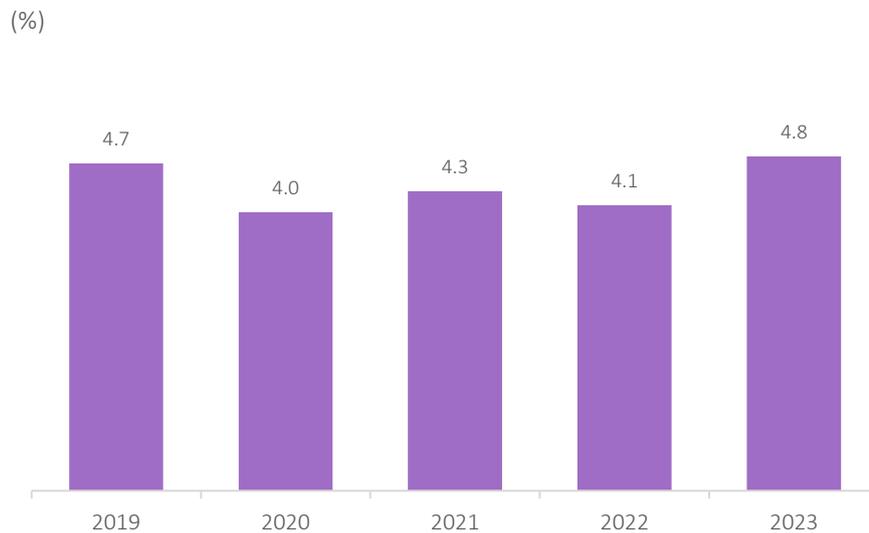
The Survey on Income and Living Conditions also allows to calculate the prevalence of food insecurity in the population, using an indicator based on the Food Insecurity Experience Scale (FIES)² that contributes to the monitoring of progress in access to sufficient, safe and nutritious food by the population.

In 2023, 4.8% of the resident population in Portugal was in a situation of moderate or severe food insecurity, that is, with a low-quality diet or with a reduction in the quantity of food a few times during the year. This value is 0.7 p.p. higher than in the previous year and the highest since 2019.

Severe food insecurity, i.e. the situation in which people stand several days without eating due to a lack of resources, financial or otherwise, to obtain food, affected less than 1% of the population in the same period.

² See Methodological note.

Figure 8. Prevalence rate of moderate or severe food insecurity of resident population, Portugal, 2019-2023



Source: INE, Survey on Income and Living Conditions.

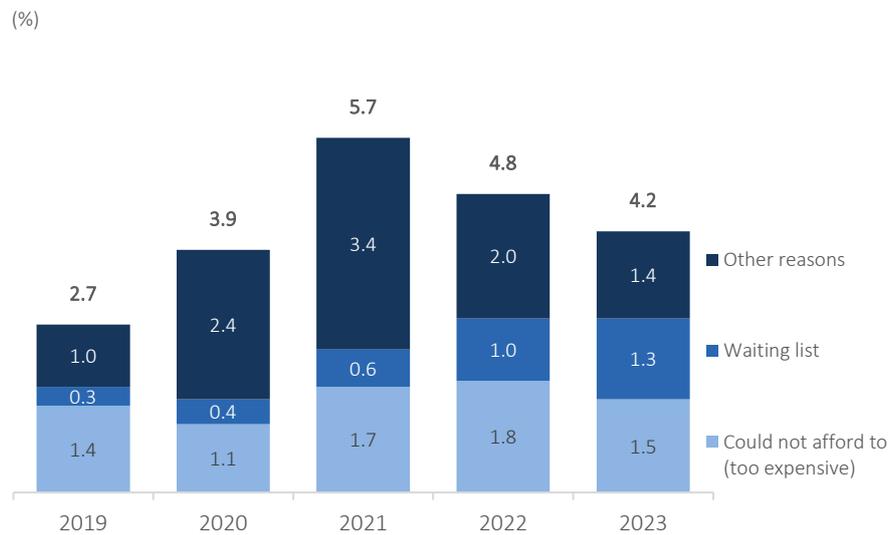
The unmet need for medical examination decreases, but increases for dental care

In 2023, 4.2% of people aged 16 and over could not get a medical consultation when needed, in the 12 months prior to the interview. The indicator decreased for the second year (1.5 p.p. less than in 2021).

In 2023, 35.7% of persons who reported this situation pointed the financial difficulties as the main reason, 31,0% indicate that was mainly due to waiting lists and 33,3% mentioned other reasons³.

³ Other reasons include lack of time (due to professional, domestic or other activities), distance (too far or lack of transportation), fear of doctors, hospitals, treatments, etc., the decision to wait to see if the problem improves, or not to know a good doctor/dentist, among others; in 2021, the reason related to the COVID-19 pandemic was also included.

Figure 9. Proportion of population aged 16 or over with unmet need for medical examination or treatment in the previous 12 months by main reason, Portugal, 2019-2023

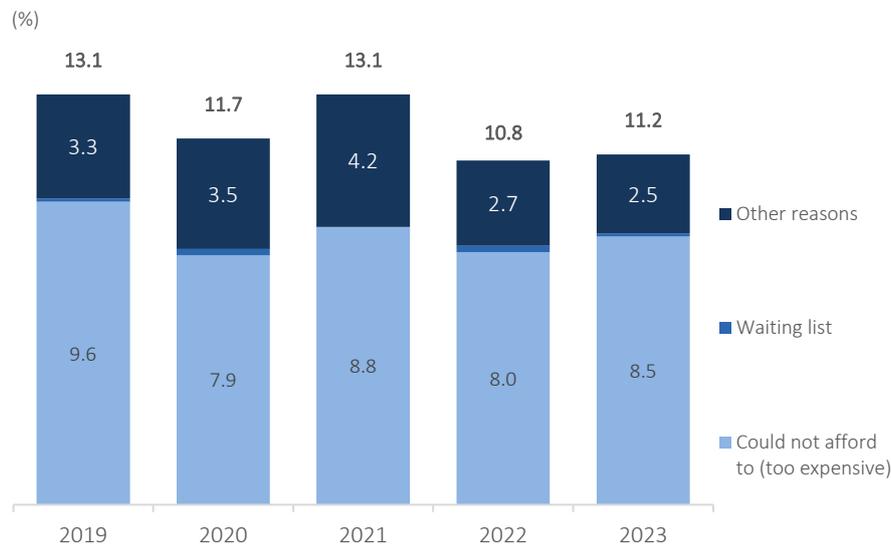


Source: INE, Survey on Income and Living Conditions.

The proportion of people who needed dental care in the 12 months prior to the interview and could not satisfy this need was 11.2% in 2023, a proportion slightly higher than the previous year (0.4 p.p. more) but lower than in 2021 (with 13.1% of the population).

The financial difficulties was the main reason pointed out by the population throughout the period 2019-2023. In 2023, this reason accounted for more than $\frac{3}{4}$ of persons with unmet dental care needs.

Figure 10. Proportion of population aged 16 or over with unmet need for dental examination or treatment in the previous 12 months by main reason, Portugal, 2019-2023



Source: INE, Survey on Income and Living Conditions.

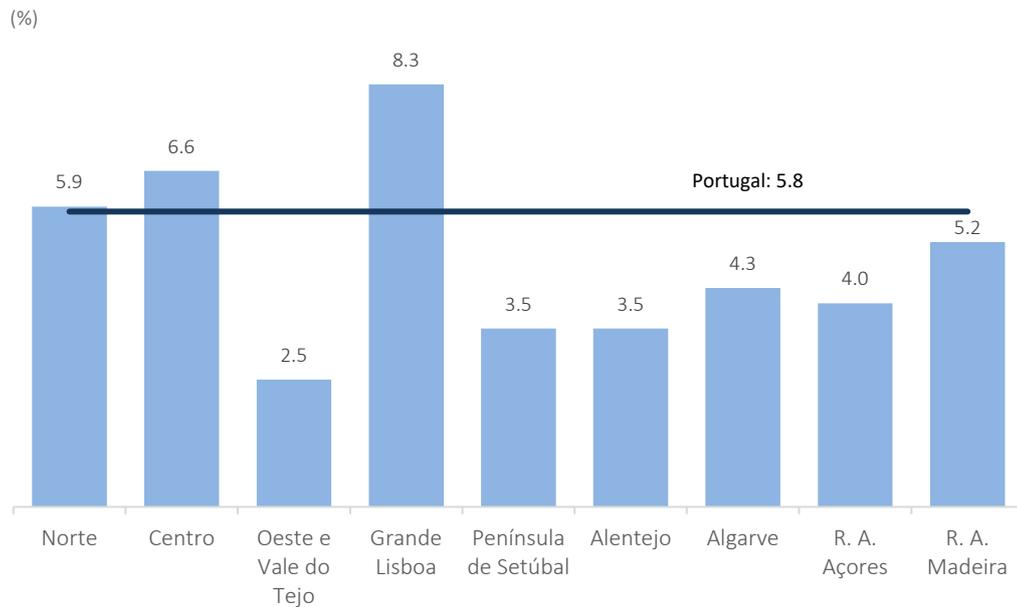
The number of doctors increased to 5.8 per 1,000 inhabitants in 2022

In 2022, 60,396 professionals were enrolled in the Portuguese Medical Association, of which 58,120 were registered in Mainland, 958 in the Região Autónoma dos Açores and 1,318 in the Região Autónoma da Madeira. Thus, there were 5.8 registered doctors per 1,000 inhabitants, 0.1 more doctors per 1,000 inhabitants than in 2021.

More than half of the doctors in 2022 (57.3%) were women, and 48.5% were aged between 31 and 60. The number of doctors aged up to 30 (10,323, 0.2% less than in the previous year) was higher than those aged 61 to 65 (5,231, 9.0% less than in 2021). Going back to 2017, there was a 5.5 p.p. drop in the proportion of doctors aged 61 to 65 (from 14.2% in 2017 to 8.7% in 2022), mainly offset by an increase in the proportion of those over 65 (from 17.5% in 2017 to 25.3% in 2022). Over the same period, the proportion of doctors aged up to 30 fell from 18.9% to 17.1%, and the proportion of doctors aged 31 to 60 fell from 49.3% to 48.9%.

According to the breakdown by place of residence, 35.3% were in the Norte region and 28.4% in the Grande Lisboa region. The indicator for the number of doctors per thousand inhabitants was highest in the Grande Lisboa region (8.3 doctors per thousand inhabitants) and lowest in the Oeste e Vale do Tejo region (2.5 doctors per thousand inhabitants).

Figure 11. Number of doctors registered with the Portuguese Medical Association per 1,000 inhabitants, NUTS II-2024, 2022



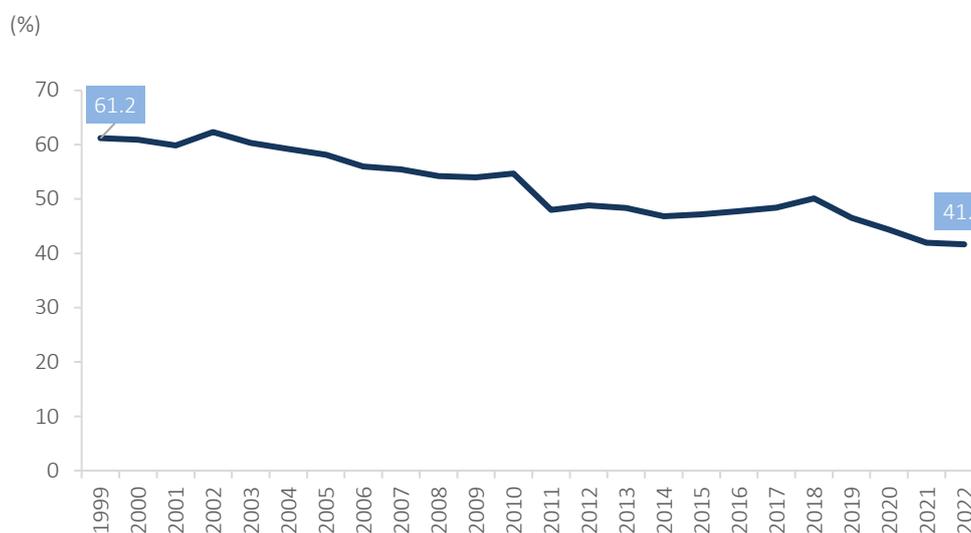
Source: Statistics Portugal, Health professionals.

Of the total of 60,396 doctors enrolled in the Portuguese Medical Association in 2022, more than 60% were specialists (37,341), that is, they were qualified to practice at least one specialty in Medicine. In 2022, Family Medicine, Paediatrics, Internal Medicine and Anaesthetics continued to be the specialties held by a larger number of medical specialists.

In that year, there were 0.9 specialists in Family Medicine per 1,000 inhabitants aged 15 years or older and 1.7 specialists in Paediatrics per 1,000 inhabitants under 15 years of age. Between 2000 and 2022, the number of specialists in Paediatrics increased by 78.0% and the number of specialists in Family Medicine increased by 88.0% (on average, 2.9% per year), representing an increase of 0.9 doctors specialized in Family Medicine per 1,000 inhabitants aged 15 or over.

In 2022, 41.6% (25,153) of all doctors enrolled in the Portuguese Medical Association worked in a hospital, 0.3 p.p. less than in 2021. The proportion of doctors working in hospitals has been decreasing in the last 23 years: in 1999 it was 61.2%.

Figure 12. Proportion of doctors working in Portuguese hospitals, Portugal, 1999-2022



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

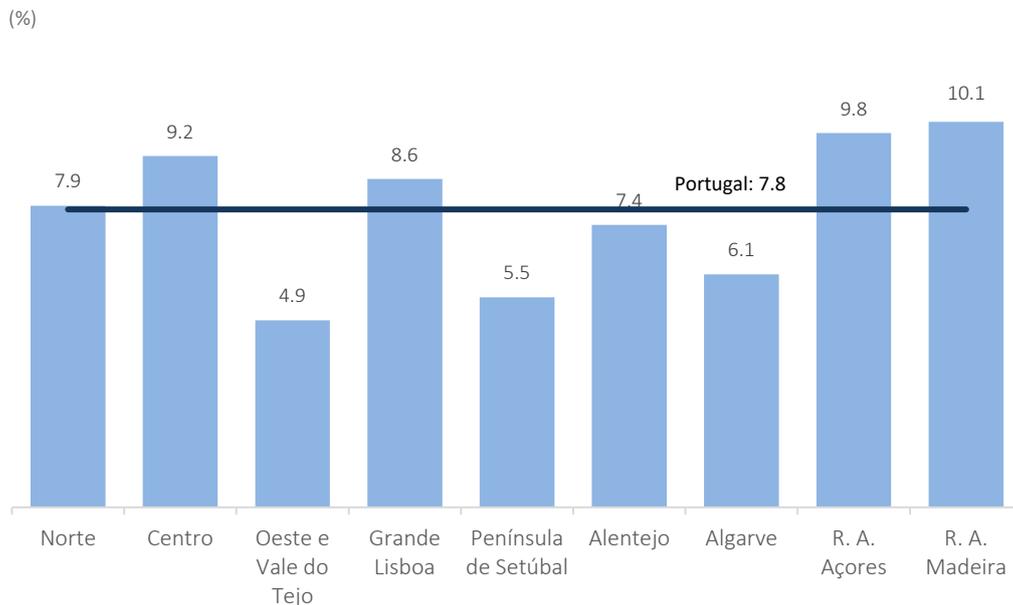
The number of nurses kept the 1.9% annual growth trend

In 2022, 81,799 professionals were certified by the Portuguese Nurses Association, i.e. 7.8 nurses per 1,000 inhabitants, the same value of 2021.

The increase in the number of nurses between 2021 and 2022 was 1.9%, not following the trend of an annual increase of 2.9% on average since 2017.

According to the breakdown by place of work, 35.2% of nurses were in the Norte, 21.9% in Grande Lisboa and 18.7% in the Centro region. The indicator for the number of nurses per thousand inhabitants was higher in the Região Autónoma da Madeira e and in the Região Autónoma dos Açores (9.8 and 10.1 nurses per thousand inhabitants, respectively) and lower for residents in the Oeste e Vale do Tejo region (4.9).

Figure 13. Number of nurses registered with the Portuguese Nurses Association per 1,000 inhabitants, NUTS II-2024, 2022

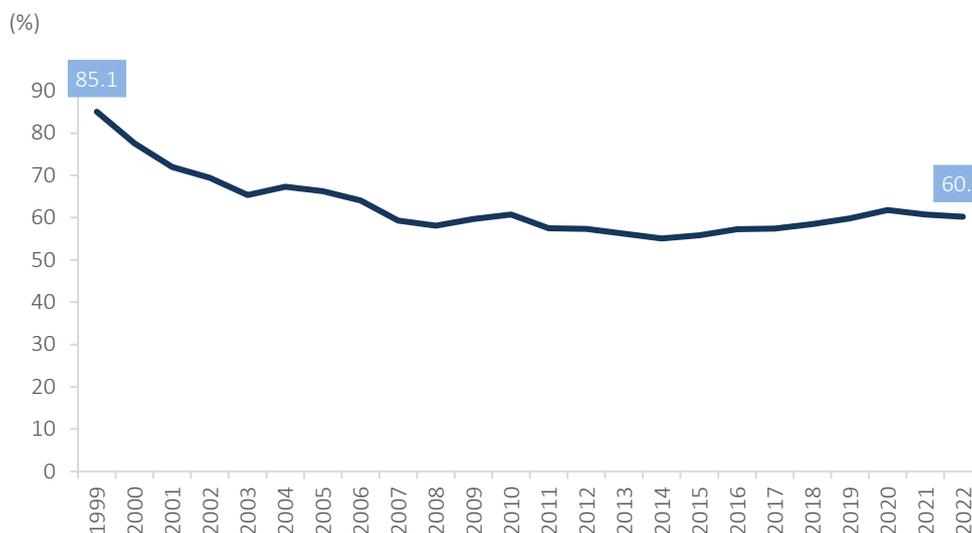


Source: Statistics Portugal, Health professionals.

Of the total number of nurses in activity in 2022, 58,183 were generalists (71.1%) and 23,616 were specialists (28.9%), with a predominance of specialists in Rehabilitation nursing (21.7%) and Medical-Surgical nursing (20.6%).

More than half of the nurses worked in a hospital in Portugal in 2022: 49,254, i.e. 60.2% of the total number of nurses enrolled in 2022, 0.6 p.p. less than in 2021 and 5.1 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 annual growth between 2015 and 2020 and a decrease from 61.8% in 2020 to 60.2% in 2022.

Figure 14. Proportion of nurses working in Portuguese hospitals, Portugal, 1999-2022



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

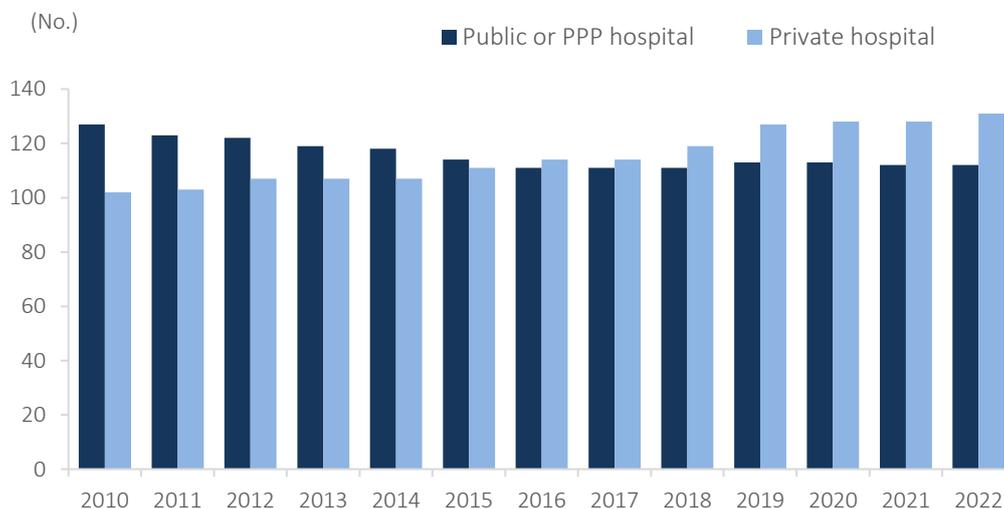
Although the increase in working nurses was higher in private hospitals, it were the public hospitals or in public-private partnership that contributed the most for the growth of nurses' employment between 2015 and 2022 (80.0% of the overall increase).

32.6 thousand inpatient beds in 2022

In 2022, there were 243 hospitals in Portugal, 112 of which belonged to public 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 per 100 thousand inhabitants was 1.1 in 2022, as in the previous year.

By 2022, 131 private hospitals were in operation, 29 more than in 2010. The predominance of private hospitals began in 2016 and covers the mainland and the autonomous regions.

Figure 15. Hospitals by institutional nature, Portugal, 2010-2022



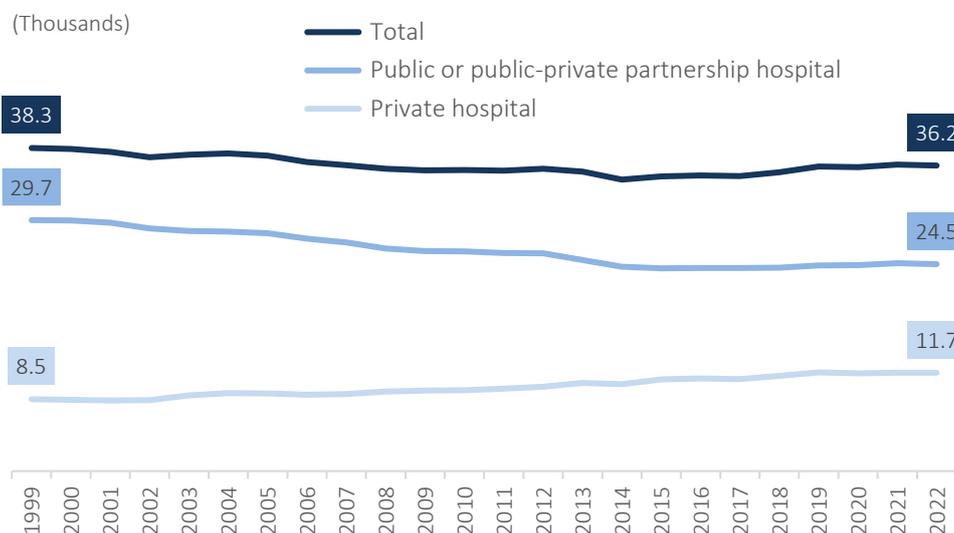
Source: Statistics Portugal, Hospitals Survey, provisional data for 2022.

About 75% of the existing hospitals in 2022 were general hospitals, that is, they had more than one area of expertise. Among the 60 specialized hospitals, Psychiatry was kept as the predominant area (23 hospitals).

In 2022, hospitals had 36.2 thousand beds available and equipped for immediate hospitalisation, 87 less beds than in 2021 and corresponding to 3.5 beds per 1,000 inhabitants. Of the total beds, 67.7% 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 (2.1 thousand fewer beds, equivalent to 5.4% less) mainly due to developments in public or public-private partnership hospitals (5.2 thousand fewer beds, equivalent to 17.5% less). On the other hand, between 1999 and 2022 there was an increase of 3.2 thousand inpatient beds in private hospitals (37.0% more).

Figure 16. Hospital inpatient beds by institutional nature, Portugal, 1999-2022



Source: Statistics Portugal, Hospitals Survey, provisional data for 2022.

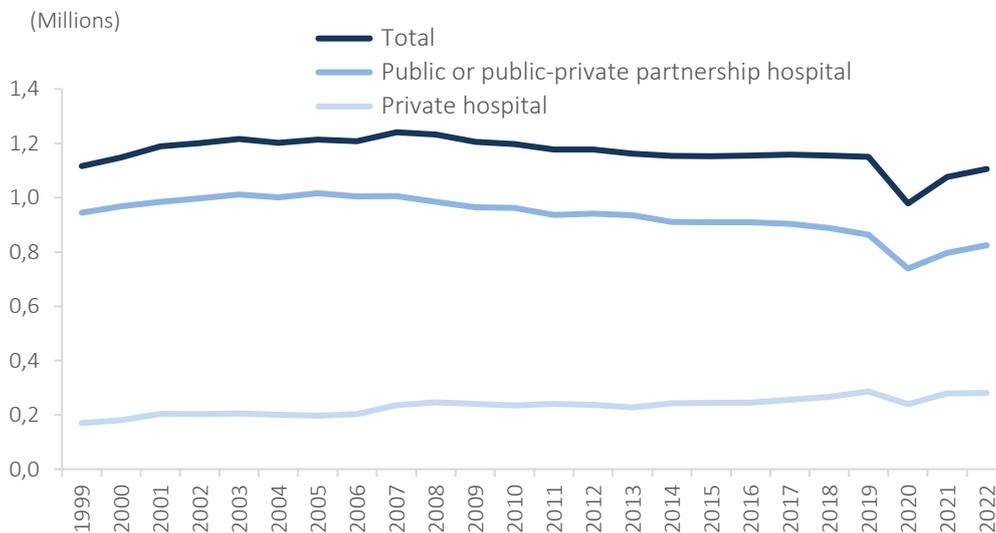
1.1 million hospitalizations and 10.2 million hospital days

In 2022, there were around 1.1 million hospitalizations in Portuguese hospitals and 10.2 million days of hospitalization. After 2020 recorded the lowest values in the series that started in 1999, the number of hospitalizations in 2022 exceeded again 1 million and the number of days of hospitalization surpassed 10 million, as a result of 29.4 thousand more hospitalizations and 351.8 thousand more days of hospitalization than in 2021 (+2.7% and +3.6%, respectively).

In 2022, public or in public-private partnership hospitals ensured around 825 thousand hospitalisations (74.6% of the total) and 7.4 million days of hospitalisation (72.6% of the total). These quantities reflect an increase of approximately 28 thousand hospitalisations and 317 thousand days of hospitalisation, equivalent to 3.5% more and 4.5% more compared to the activity recorded in 2021. Close to 281 thousand hospitalizations were carried out in private hospitals which originated 2.8 million days of stay, that is, about 1,500 more hospitalizations (+0.5%) and more 35 thousand days of hospitalization (+1.3%).

Of the total number of hospitalisations in 2022, 76.4% occupied infirmary beds, with special emphasis on the specialties of Internal Medicine, General Surgery and Gynecology-Obstetrics, respectively with 24.9%, 14.4% and 11.9% of the total hospitalisations in infirmary. In the case of public and public-private partnership hospitals, these were the three specialties with the highest percentages, but the specialties of Orthopaedics (19.6%) and Psychiatry (12.9%) stand out in private hospitals.

Figure 17. Hospitalisations by institutional nature, Portugal, 1999-2022



Source: Statistics Portugal, Hospitals Survey, provisional data for 2022.

In 2022, patients remained hospitalised 9.2 days on average in Portuguese hospitals, 0.1 more days than in 2021. In public and in public-private partnership hospitals, the average length of stay was 8.9 days (8.9 days in 2021), while in private hospitals the average length of hospital stay was 9.9 days (9.8 days in 2021).

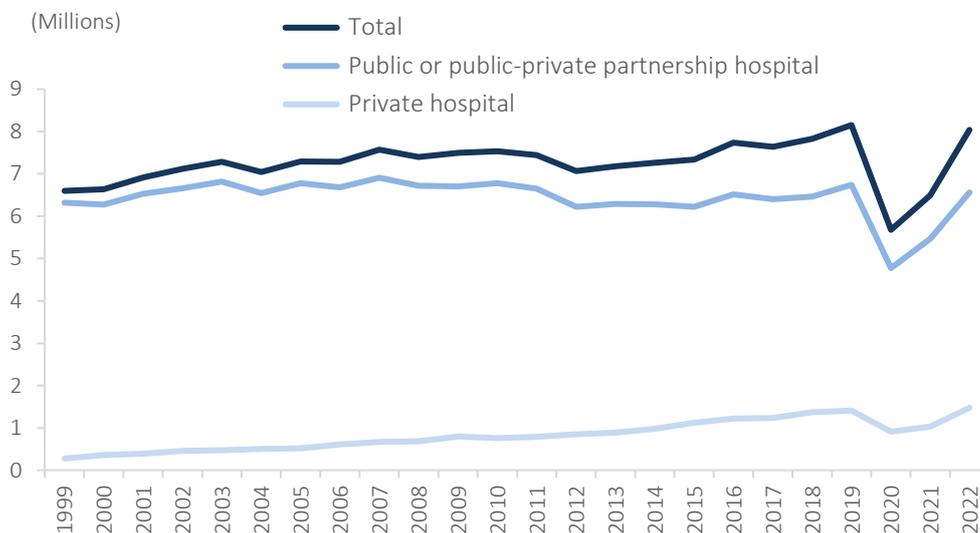
Around 8 million in hospital emergency services

During 2022, around 8.0 million attendances were performed in the emergency services of Portuguese hospitals, 1.5 million more attendances than in 2021 (+23.9%). The recovery observed in 2022 allows to get closer to the figure prior to 2020, when emergency room attendances fell by 30.3% and reached the lowest value in the time series started in 1999.

In public sector hospitals, 6.6 million attendances were performed in 2022, representing 1.1 million more attendances than in 2021 (+20.1%). In private hospitals, there were 1.5 million attendances in 2022, 448.9 thousand more than in the previous year (+43.7%) and the highest number since 1999.

In 2022, public or public-private hospitals provided 81.6% of all emergency service attendances (84.2% in 2021 e 95.8% in 1999) and private hospitals 18.4% (15.8% in 2021 and 4.2% in 1999).

Figure 18. **Attendances in the emergency services by institucional nature, Portugal, 1999-2022**

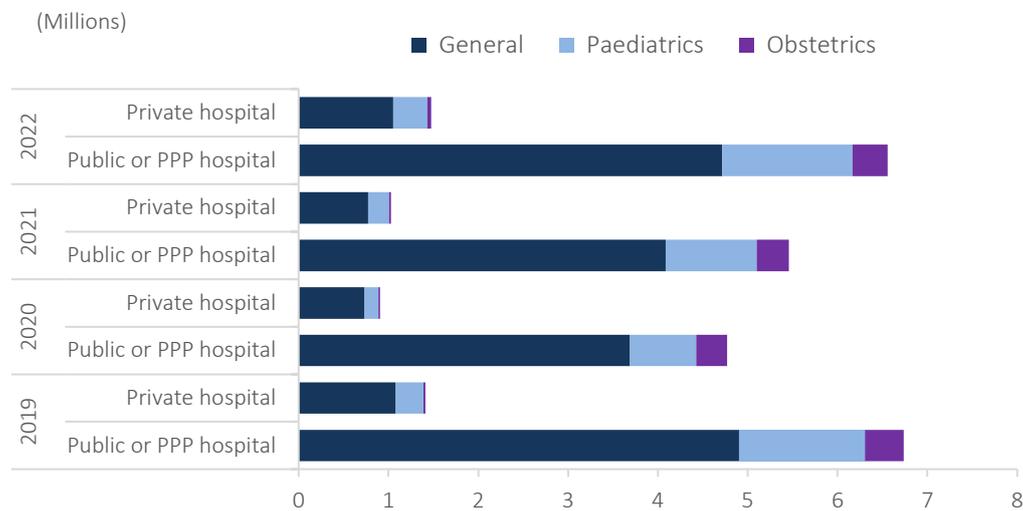


Source: INE, Hospital Survey, provisional data for 2022.

In 2022, the vast majority of emergency attendances in hospitals were provided by general urgency (71.8%), while Paediatrics and Obstetrics accounted, respectively, for 22.8% and 5.4% of all attendances.

Paediatric urgency was the type of urgency with the highest percentage increase in 2022 (+46.5%), after having suffered the sharpest drop in 2020 (-47.7%). In total, in 2022, 1.8 million attendances were performed in the pediatric emergency service of Portuguese hospitals, which represents 580.8 thousand more than in the previous year. Of these 580.8 thousand more attendances, 435.8 thousand were carried out in the public sector and 145.0 thousand in private hospitals, which corresponds respectively to increases of 43.0% and 61.8% when compared to 2021.

Figure 19. **Attendances in the emergency services by type of emergency, Portugal, 2019 to 2022**



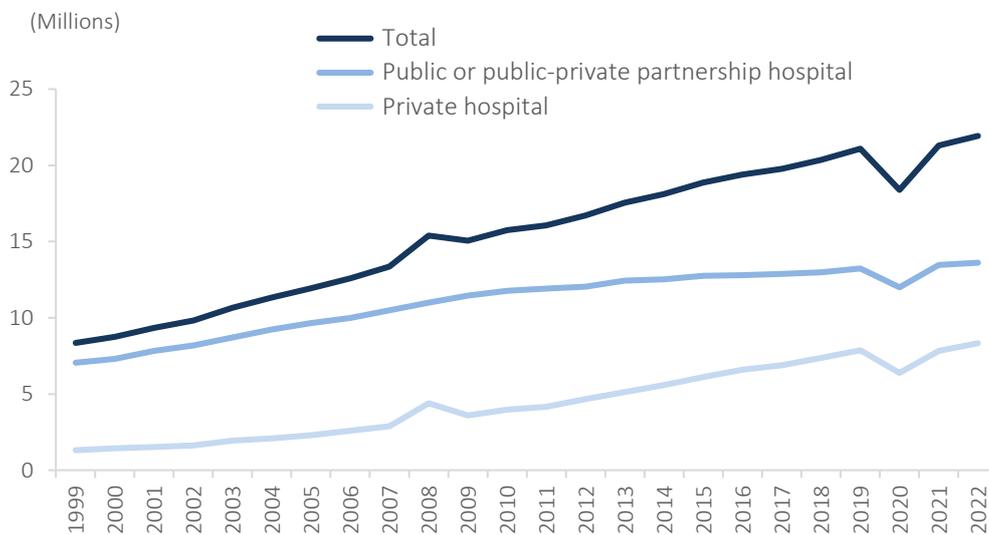
Source: Statistics Portugal, Hospitals Survey, provisional data for 2022.

The number of medical appointments in hospitals reaches a new maximum value

In 2022, around 21.9 million medical appointments were made in the external appointment unit of Portuguese hospitals, 637.2 thousand more appointments (+3.0%) than in the previous year. This increase in medical appointments carried out in a hospital context made it possible to exceed the pre-COVID-19 pandemic number and reach the highest value for the period starting in 1999.

Compared to 2021, public or public-private partnership hospitals carried out 148.4 thousand more medical appointments (+1.1%), accounting for 62.0% of all appointments carried out in Portuguese hospitals' outpatient units (84.4% in 1999). Private sector hospitals carried out 488.9 thousand more medical appointments (+6.2%), accounting for 38.0% of the total (15.6% in 1999). This is the area where private hospitals have achieved the highest percentage of the total.

Figure 20. Medical appointments in external appointment unit by institutional nature, Portugal, 1999-2022



Source: Statistics Portugal, Hospitals Survey, provisional data for 2022.

In 2022, Ophthalmology, Orthopaedics, Gynecology-Obstetrics, General Surgery and Paediatrics 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 Orthopaedics, Ophthalmology, Gynecology-Obstetrics, Physical Medicine and Rehabilitation and Otorhinolaryngology.

When compared to 2021, the increases in the number of appointments in Orthopaedics (114.1 thousand more), Otorhinolaryngology (95.8 thousand more) and Pulmonology (84.7 thousand more) stand out. Private hospitals contributed the most to the increase in activity in these specialties, as they were responsible for 76.3% of the increase in Orthopaedics appointments, 83.9% of the increase in Otorhinolaryngology appointments and 70.7% of the increase in Pulmonology appointments.

In 2022, 282.2 thousand virtual appointments were carried out in Portuguese hospitals, 182.2 thousand fewer than the previous year (-39.2%). This decrease is common to both types of hospitals under analysis, although it is more pronounced in public sector hospitals. These hospitals carried out 164.5 thousand fewer virtual appointments (-42.7%), while private hospitals carried out 17.8 thousand fewer virtual appointments (-22.4%).

New maximum of operating room surgeries, with 1.1 million in 2022

In Portuguese hospitals, 1.1 million surgeries were performed in operating room in 2022, 71.1 thousand more surgeries than in the previous year and the highest figure in the series that began in 1999.



In public sector hospitals, 780.5 thousand operating room surgeries were carried out, which represents an increase of 6.8% on the previous year. In private hospitals, 310.7 thousand surgeries of this nature were performed, representing an increase of 7.5%.

Ophthalmology, General Surgery and Orthopaedics saw the biggest increases in the number of surgeries performed in operating room, with respectively 21.8 thousand more, 10.7 thousand more and 9.6 thousand more surgeries. In the case of the Ophthalmology and General Surgery specialties, it was the public sector hospitals that contributed most to the increase in activity, while the increase in Orthopaedic surgeries is the result of the contribution of both public and private hospitals.

About 72% of operating room surgeries took place in public or public-private partnership hospitals, of which 86.9% were scheduled, i.e., resulted from prior appointments. In private hospitals, scheduled surgeries had a higher weight, accounting 96.3% of the total.

In 2022, 183.8 thousand minor surgeries were carried out in Portuguese hospitals, 116.0 thousand of which (63.0%) were performed in public sector hospitals. The total number of minor surgeries performed in 2022 means an increase of 11.4 thousand over the previous year (+6.6%).

More than 200 million complementary diagnostic and/or therapeutic acts carried out by hospitals

In 2022, 207.0 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).

The figure for 2022 corresponds to an increase of 14.9 million complementary acts compared to 2021 (+7.8%) and sets a new maximum for the period 1999 to 2022.

The three main complementary acts performed in hospitals increased in 2022. Overall, 137.6 million clinical analyses, 16.5 million complementary acts of Physical Medicine and Rehabilitation and 14.0 million of Radiology exams, i.e. 8.3 million more clinical analyses, 1.3 million more complementary acts of Physical Medicine and Rehabilitation, and 1.1 million more Radiology exams in relation to 2021.

A proportion of 86.2% of these exams or curative care took place in public or public-private partnership hospitals (94.5% in 1999), while private hospitals were responsible for the remaining 13.8% of diagnostic and/or therapeutic complementary acts carried out in the country (5.5% in 1999).

The number of medicines (brands) in the pharmaceutical market increased in 2022

In 2022, there were 2,921 pharmacies and 197 mobile medicine depots in Portugal, i.e., the same number of pharmacies as in the previous year and more 6 mobile medicine depots. The average number of pharmaceutical units remained at 0.3 per 1,000 inhabitants.



In the country, there were 8,985 medicines (brands) in the pharmaceutical market in 2022, corresponding to 49,888 pharmaceutical presentations. Between 2021 and 2022, the number of medicines (brands) increased (from 8,855 to 8,985), as well as the number of presentations, from 49,874 to 49,888.

In 2022, 41.4% of medicines (brands) and 19.3% of existing presentations were reimbursed (41.5% and 19.4%, respectively, in 2021). In terms of pharmacotherapeutic groups, more than half of the presentations reported in 2022 concerned the central nervous system (30.4%) and the cardiovascular system (30.2%).

Mortality by causes of death in 2021⁴

In 2021, diseases of the circulatory system continued to cause the highest number of deaths in Portugal (32,452), despite a 6.2% drop compared to the previous year. They accounted for 25.9% of all deaths, 2.0 p.p. less than in the previous year.

In this group of diseases, the 9,613 deaths from cerebrovascular diseases, deaths from ischemic heart diseases (6,683 deaths) and acute myocardial infarction (3,977 deaths) continued to stand out, in both cases 2.4% less than in 2020.

The COVID-19 disease was one of the main causes of death in the year, with 12,986 deaths, representing 10.4% of all deaths in the country. The number of deaths from COVID-19 refers to the underlying cause of death, that is, the disease that started the chain of pathological events that led to death.

Diseases of the respiratory system, which, in accordance with the World Health Organization definition for the ICD-10 classification, do not include the disease COVID-19, caused 10,273 deaths and accounted for 8.2% of total mortality in the country. In this group, deaths caused by pneumonia stood out, with 3,765 deaths and representing 3.0% of mortality in 2021.

Malignant neoplasms caused 27,644 deaths in 2021, 2.6% less than in the previous year, representing 22.1% of total mortality in the country in 2021.

Among malignant neoplasms, 4,675 deaths were caused by malignant neoplasms of the trachea, bronchi and lungs, which represented 3.7% of total deaths in the country and increased by 1.2% compared to the previous year.

Deaths from malignant neoplasms of the colon, rectum and anus decreased in 2021 (from 3,810 deaths in 2020 to 3,609 deaths in 2021), representing 2.9% of mortality in 2021.

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

Between 2020 and 2022, 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

⁴ The results for 2022 are scheduled to be available on May 16, 2024.



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health, supporting, on average, 55.8% of the total. In those years, on average, 28.5% of current expenditure was paid directly by households.

In structural terms, between 2020 and 2022, there was an increase in the relative weight of the expenditure by SNS and SRS (56.0% of current expenditure in 2022, 0.2 p.p. less than in 2020) and an increase of 0.6 p.p. in the relative weight of household expenditure.



Box 1. THE IMPORTANCE OF HEALTH STATUS SELF-PERCEPTION FOR THE OVERALL LIFE SATISFACTION

The Survey on Income and Living Conditions (SILC) includes a question that captures the degree of the overall life satisfaction, measured on a scale ranging from 0 (not at all satisfied) to 10 (completely satisfied). The approach developed here aims to deepen the association between subjective well-being, resulting from a very positive self-perception of satisfaction with life in general (based on response score equal to or greater than 8⁵), and the relevant individual and contextual factors in terms of the contribution to this self-perception. In particular, the purpose is to verify whether the association between self-perceived health status and satisfaction with life in general finds empirical support in the results of the 2023 SILC, with individuals aged 18 years or older as the target population⁶.

The results presented here are based on relationships between the characteristics of the individual and his/her territorial and family context and the **probability of evaluating very positively the overall life satisfaction**, estimated based on a model capable of capturing these relationships when considering all characteristics simultaneously. It is an attempt to identify which individual or contextual factors are most relevant to a person's overall satisfaction. It is a question of evaluating, for example, the relationship between a person's self-assessment of his or her state of health and his or her assessment of life in general, when one simultaneously controls (i.e., with everything else constant) for the individual's condition of poverty.

The results suggest that there are factors with no significant impact on life satisfaction, such as the location (urban/rural) of the accommodation in the national territory and the individual's gender (Figure 21). There are, however, factors that seem to enhance a more positive self-assessment of overall satisfaction. In fact, the probability of showing high satisfaction with life is higher among older people – the probability increases monotonously with age, although at slightly decreasing rates, and having completed a tertiary education degree increases that probability by 6.1 percentage points (p.p.) compared to an individual who has completed at most basic education.

On the other hand, not living in a marital relationship or being in conditions of poverty or unemployment decreases the probability of greater satisfaction with life – that probability decreases by 6.6 p.p. for a person who does not live in a conjugal relationship, by 8.7 p.p. for a person at risk of poverty⁷ and by 12.9 p.p. for an unemployed person compared to someone who is employed. The results also point to the importance of food insecurity in the individual's overall satisfaction – the indication that someone in the individual's household has consumed only certain types of food due to lack of money or other means in the last two weeks is associated with a lower likelihood of satisfaction with life in general (minus 19.4 p.p.).

The results are particularly robust and significant regarding the relationship between satisfaction with life in general and self-perceived health status – the likelihood of being generally satisfied with life in general

⁵ This option is supported by the study 'Analysis of determinants of life satisfaction' developed by ISTAT and published in 'BES 2019: Equitable and sustainable well-being in Italy', available in <https://www.istat.it/it/files//2019/12/BES-2019-en.pdf>.

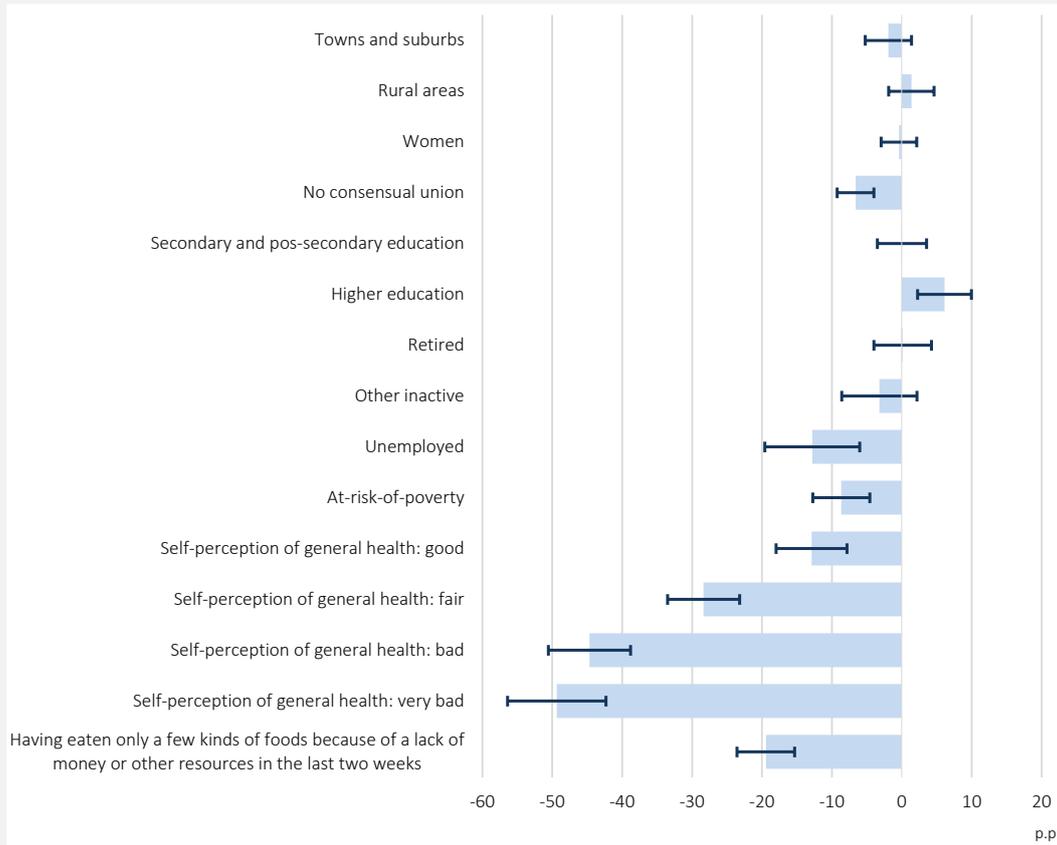
⁶ See the note at the end of this press release for details on the model's technical specifications.

⁷ The meaning of the outcome remains the same when considering income level rather than risk of poverty in the model specification.



decreases as the self-assessment of health status worsens; for example, assessing one's own health status as very poor decreases the probability of assessing satisfaction with life in general as high by 49.4 p.p. compared to a self-perceived health status as very good.

Figure 21. Change in the probability of high overall life satisfaction (average marginal effects in p.p.), 2023



In summary, the results point to a positive impact of education on the probability of high satisfaction with life. Living in a situation of non-marital and food insecurity or conditions of poverty and unemployment are associated with a lower probability of evaluating life satisfaction in general in a very positive way. As expected, self-perception of the health status has a significant and positive impact on the qualification of satisfaction with life in general.



Box 2. THE EXPLANATION OF THE OCCURRENCE OF GENERALIZED ANXIETY DISORDER

The Survey on Income and Living Conditions (SILC) provides information on the disclosure of symptoms of generalized anxiety as a result of a response *score* equal to or greater than 3, according to the *Generalized Anxiety Disorder 2-item (GAD-2)* model⁸. The approach developed aims to deepen the association between the occurrence of generalized anxiety disorder and the individual and contextual factors that contribute to this occurrence, with individuals aged 18 years or older as the target population. Thus, the results presented are based on relationships between the characteristics of the individual and his/her territorial and family context and the **probability of generalized anxiety disorder**⁹.

The results indicate that the location (urban/rural) of the accommodation where the individual resides does not have a significant impact on the disclosure of generalized anxiety symptoms, nor does the at-risk-of-poverty condition. Note that these results are conditional on all other characteristics presented in Figure 22, considered together to estimate the probability of disorder.

Women and unemployed people are more likely to have symptoms of generalised anxiety – it increases in women by 9.5 percentage points (p.p.) compared to men and by 6.6 p.p. in the unemployed compared to the employed. Conversely, age and education tend to contribute to a reduction in the probability of occurrence of generalized anxiety disorder – the probability decreases monotonously with age, although at moderately increasing rates, and having completed a higher education degree decreases that probability by 5.7 p.p. compared to someone who has completed at most basic education.

Food insecurity is associated with a higher probability of the individual having a generalized anxiety disorder – when someone in the household consumed only a few types of food due to lack of money or other means in the last two weeks, that probability increases by 13.6 p.p. On the contrary, the probability decreases by 7.8 p.p. if the individual does not have a chronic disease or long-term health problem. Also, the absence of limitation in the performance of activities due to health problems decreases the probability of generalized anxiety disorder by 21.1 p.p. and, in the case of non-severe limitation, the probability is reduced by 8.0 p.p., compared to a situation of severe limitation.

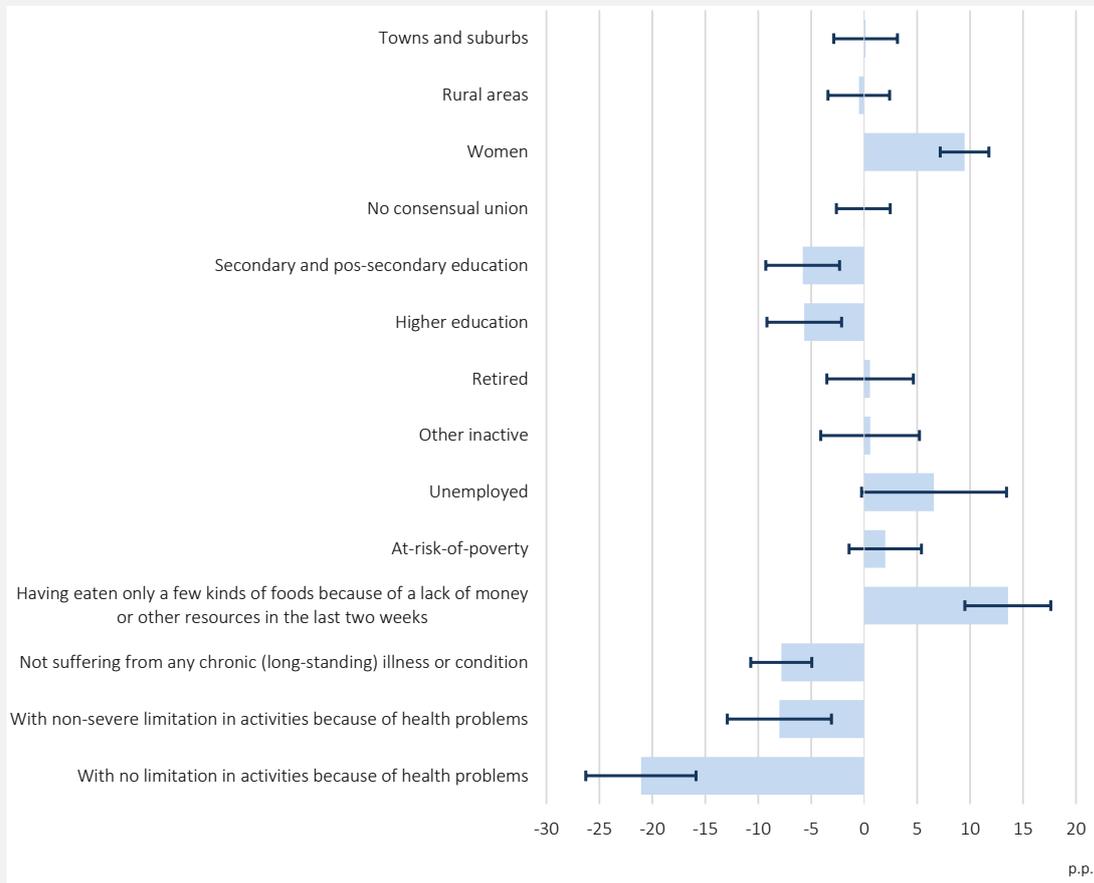
In summary, the results suggest that women and the unemployed are more likely to have symptoms of generalized anxiety, but that age and education are negatively related to this likelihood. Situations of food insecurity, chronic or prolonged illness and the existence of limitations for health reasons contribute to the increased likelihood of generalized anxiety symptoms.

⁸ It is a simplified version of the GAD-7 model presented in <https://www.phqscreeners.com/>.

⁹ See the note at the end of this press release for details on the model's technical specifications.



Figure 22. Change in the probability of generalized anxiety disorder (average marginal effects in p.p.), 2023





METHODOLOGICAL NOTE

Survey on Income and Living Conditions

The Survey on Living Conditions and Income is a statistical operation carried out annually with a representative sample of households residing in Portugal, whose scope covers the valuation of the various sources of income of households, their socioeconomic characterization and also a wide range of variables related to living conditions, of which those related to health stand out. Its implementation allows the annual dissemination of statistical indicators on the at-risk-of-poverty rate and inequality in income distribution and on material and housing deprivation, and is also the source of data for the annual update of population-based indicators on health status and for the calculation of indicators related to disability-free life expectancy (years of healthy life). In this context, the survey is part of the harmonised programme of European statistics on the income and living conditions of private households, EU-SILC.

It also collects a set of information that can only be provided by the respondent himself, namely the overall satisfaction with life; the *generalized anxiety disorder 2-item* (GAD-2) screening instrument, consisting of two questions assessing the likelihood of generalized anxiety disorder and other anxiety disorders in the past two weeks; and the *Food Insecurity Experience Scale* (FIES) of eight questions that allow two indicators to be calculated: an indicator that considers segments of the population in moderate or severe food insecurity.

In the GAD-2 (*Generalized Anxiety Disorder 2-item*) model, the score results from the sum of both. A score of 3 points is the suggested cut-off point for identifying possible cases with additional diagnostic evaluation for generalized anxiety disorder which, however, alone is not sufficient to diagnose, monitor treatment or classify severity.

The items of the Food Insecurity Experience Scale (FIES) were designed to cover the severity of food insecurity and should be analyzed together. The scale's data are analysed through the application of the *Rasch* model, widely used in health studies, and provides the statistical basis for the measurement of food security based on experience, and makes it possible to produce comparable data on food insecurity across countries. The scale makes it possible to calculate two indicators: an indicator that considers segments of the population in moderate or severe food insecurity, that is, people with a low-quality diet or with a reduction in the amount of food a few times during the year; and a second indicator that makes it possible to estimate the proportion of the population that suffers from severe food insecurity, i.e. people that stands several days without eating due to a lack of resources, financial or otherwise, to obtain food.

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.



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.

Statistics on deaths by cause of death

Data on deaths by cause of death is the result of using administrative data for statistical purposes, information subject to civil registration and collected from civil registry offices through the Integrated Civil Registration and Identification System (SIRIC in portuguese) and the Death Certificates Information System (SICO in portuguese). The Directorate-General for Health collaborates with Statistics Portugal by coding causes of death according to the International Classification of Diseases and Health-Related Problems (ICD-10) of the World Health Organization (WHO).

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 – TECHNICAL SPECIFICATIONS

The results presented in boxes, resulting from the estimation of Logit models, seek to complement the explanation for (1) the overall life satisfaction, with special focus on the individual's health status, and for (2) the occurrence of generalized anxiety disorder. For this purpose and based on the results of the 2023 Survey on Income and Living Conditions (SILC) for individuals aged 18 and over residing in Portugal, we used the estimation of two binomial Logit models whose dependent variable is defined: in the first model, by 0 – if the individual does not evaluate overall life satisfaction in a very positive way, 1 – whether the individual evaluates overall life satisfaction in a very positive way; and, in the second model, by 0 – if the individual does not have a generalized anxiety disorder, 1 – if the individual has a generalized anxiety disorder.

The marginal effects presented can be interpreted as changes in the probabilities of occurrence of the event associated with each of the explanatory variables (in relation to the reference class), keeping the remaining variables unchanged. Full results on the average marginal effects and statistical significance of the estimates can be found in the data file annexed to this publication, which also includes the other result tables.

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.

Death: The permanent disappearance of vital functions.

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.

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

Health problem: Health-related problem leading to the need for healthcare.



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

Healthy life years: Average number of years that an individual of a certain age is expected to live without long-term limitations to perform activities people usually does, on the assumption that the mortality pattern observed in the period of reference remains unchanged.

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.

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

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.

Disability: Interaction of a person's health condition with his/her contextual, environmental and personal factors resulting in a limitation in activity or participation.

Food insecurity: Deprivation of guaranteed access to a sufficient quantity of food adequate for normal growth and development for an active and healthy life. Note: food insecurity can occur due to the unavailability of food, the inability to acquire it, inappropriate distribution or inadequate utilisation of food at household level. Food insecurity can be chronic, seasonal or transitory.

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.

Life expectancy at birth (e0): The mean number of years that a newborn child can expect to live if subjected throughout his life to the current mortality conditions (age specific probabilities of dying).

Life expectancy at certain ages (ex): The mean number of years still to be lived by a person who have reached a certain exact age, if subjected throughout the rest of his life to the current age specific probabilities of dying.

Long-standing health problem: Health problem that lasts or is expected to last for six months or more.

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.

Mental health: Health condition related to a person's ability to realise their own potential, cope with daily stress, work productively and contribute to his/her community.



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.

Moderate food insecurity: Food insecurity that stems from uncertainty in obtaining food, the risk of missing meals or running out of food, being forced to compromise on the nutritional quality and/or quantity of food consumed.

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

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

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.

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.

Severe food insecurity: Food insecurity that stems from the total absence of food or for a day or two, extreme hunger.

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.

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.



Underlying cause of death: Disease or injury that initiated the chain of pathological events leading to death or the circumstances of the accident or act of violence that produce the fatal injury. Note: the cause of death is classified according to the International Classification of Diseases and Related Health Problems (ICD) in use.

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.
