

Annual Report on the National Health System of Spain 2016

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Ministerio de Sanidad, Servicios Sociales e Igualdad (Ministry of Health, Social Services and Equality)

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Annual Report on the National Health System of Spain 2016



GOBIERNO DE ESPAÑA MINISTERIO DE SANIDAD, SERVICIOS SOCIALES E IGUALDAD

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Introduction

The Annual Report on the National Health System of Spain 2016 is the twelfth report issued in this series¹ that began in 2003. Since the 2015 report, by decision of the Interterritorial Council of the SNS (CISNS), the name of the document alludes to the year of publication. Along with the general information about Spain's *Sistema Nacional de Salud* (hereinafter SNS), the report has an additional focal point that changes from year to year, alternating between two formats: one year the report reviews the situation in Spain relative to other countries of the European Union and the following year, the case of the 2016 edition, the general analysis of the SNS is complemented by an annex written by each one of Spain's autonomous communities and INGESA (National Institute of Health Management, the body that manages health care in the autonomous cities of Ceuta and Melilla) about the specific and noteworthy actions undertaken within their spheres of responsibility.²

The general part of the 2016 edition includes, in nine sections, data about:

1. Demographics and health status
2. Lifestyle habits
3. Health care resources
4. Promotion, prevention and health problems attended
5. Professional regulation and ongoing training
6. Pharmaceutical benefits
7. Health expenditure
8. e-Health
9. Citizen opinions and perception

As in past editions, this report was prepared with the participation of the general directorates and subdirectorates of the Ministry of Health, Social Services and Equality responsible for the different areas covered. Due to the calendar of closing dates affecting centralized SNS information, the figures appearing in the report correspond to data that became available before October 2016. In most cases the data refers to the years 2014 and 2015, although in the e-Health section the reference period is September 2016.

The reports written by the autonomous communities and INGESA focus on the policies, strategies and specific and noteworthy actions undertaken in their respective territories in the sphere of public health, health care activity, infrastructure, human resources and economic-financial management.

In general the authors were asked to include information and statistics available between 2005 and 31 December 2015, with 30 April 2016 being the deadline set for delivery of the documents. Even in the few cases that the delivery deadline was not met, the period of reference ending 31 December 2015 was respected.

For the first time, this part of the report has a monographic section about the organisation of health care in border areas between autonomous communities and in cases of insularity: accessibility of health care to the resident population. The table of contents of this part of the report is thus as follows:

¹ The Annual Reports of the National Health System of Spain are available on the web site of the Ministry of Health, Social Services and Equality. <http://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/tablasEstadisticas/InfAnSNS.htm>

² The web site has an English version of the Annual Report 2016; the individualised reports by the autonomous communities and INGESA have not been translated.

1. Public Health
2. Health care provided
3. Health care infrastructures
4. Human resources
5. Economic-financial management
6. Monographic section. The organisation of the health care system in border areas between autonomous communities and in cases of insularity: accessibility of health care to the resident population.

The topic of the monographic section was suggested by the Sub-Directorate General of Health Information and Innovation, in order to gain a better understanding of how the regional health services overcome obstacles that may hinder health care provision without regard to place of residence and also of how the resources that ensure excellent health care services to a territory's residents are effectively coordinated.

Aware of the great diversity of possible situations, the autonomous communities and INGESA were asked to provide the following information, always in reference to the resident population:

1. Agreements, accords and protocols in effect and their period of validity.
2. For each agreement, accord or protocol, a list of towns and villages covered indicating the province to which they belong and the number of residents.
3. Economic regime: compensation and method of payment agreed.
4. Oversight committees, joint committees: constitution, organisation, functions.
5. Access to health records.
6. The Individual Health Card in these conditions of care provision: do the users in the border areas have an individual health card issued by the regional health service providing care?
7. For each agreement, accord or protocol, the content of the basket of services available:
 - a. Primary Care: family and community medicine, paediatrics, nursing, home care, urgent care, diagnostic tests. Others to be specified.
 - b. Specialised Care: outpatient consultations with specialists, in-hospital care, diagnostic tests, hospital pharmacy services. Urgent care. Others to be specified.
 - c. Health service transport
 - d. Emergency services
 - e. Public health laboratory
 - f. Others to be specified

We are grateful to all members of the work teams at both the Ministry of Health, Social Services and Equality and the autonomous communities and INGESA, for their collaboration and the information and statistics provided, so essential in the preparation of this Annual Report on the Health System of Spain 2016.

Summary

Demographics and Health Status

Population figures and basic demographic indicators

- As of 1 January 2016 Spain has a population of 46.4 million, a crude birth rate of 9.2 births per 1,000 inhabitants and a mean maternal age of 31.9 years. The dependency ratio is 53.0%, 4.1 points higher than in 2000.
- Life expectancy at birth is 83.2 years; 80.3 years for men and 86.1 years for women. Since 2001 life expectancy at birth has increased by 3.5 years. Life expectancy at age 65 is 21.5 years, 19.3 years for men and 23.4 years for women, who can thus expect to live 4.1 years longer than men.
- The number of healthy life years at birth is estimated to be 66.9 years: in the case of men 67.6 and in the case of women 66.2. Between 2006 and 2014 the number of healthy life years has increased, overall, by 4 years, somewhat more for men (4.7 years) than for women (3.3 years).
- Persons aged 65 can expect to have another 12.4 healthy life years; men 12.7 and women 12.1. Between 2006 and 2014 the figure has increased by 1 year for this population as a whole.

Mortality

- The crude death rate is 852.1 deaths per 100,000 inhabitants. Since 2001, the risk of death in Spain has fallen by 25.3%. The leading causes of death are diseases of the circulatory system (this disease group represents 29.7% of the total number of deaths) and tumours (which represent 26.8%).
- Among cardiovascular diseases, the predominant cause of death is ischaemic heart disease, which causes 8% of the total deaths in Spain, although the risk of death from this cause has fallen by 45.3% since the beginning of this century. Within the same disease group, cerebrovascular diseases cause 7% of the total number of deaths. The risk of death from this cause has decreased by 50.5% since the beginning of this century.
- Lung cancer causes 20% of the deaths from malignant tumours in Spain. It is the neoplasia that causes the most deaths in men: about 26%. The percentage is 10% in women. Changes in the risk of dying from lung cancer have been different for men and women: while in men the age-adjusted rate of death from this cause fell by 20.1% during the 2001/2014 period, in women it increased by 70.9%. Malignant breast tumours, however, are still the most frequent neoplasia among women, causing over 3% of all deaths in women and 15% of deaths from malignant tumours. Since the beginning of this century, women's risk of dying from breast cancer has fallen by 24.6%.
- Liver cirrhosis is responsible for 1.1% of the total number of deaths, 1.6% in men and 0.6% in women. In Spain as a whole, since 2001 the risk of dying from liver cirrhosis has dropped by 34.2%.
- With regard to deaths from external causes, in recent years there has been a reduction in the number and relative importance of traffic accidents, which are currently the cause of 13% of

the total number of deaths due to external causes. The risk of dying from this cause has fallen by 72.6% since 2001. Suicide now occupies top position in this group: it represents 26% of the deaths by external causes and 1% of all deaths recorded.

- The infant mortality rate is 2.9 deaths of children under one year of age per 1,000 live births, meaning there was a reduction of almost 30% in the 2001-2014 period.
- As for the perinatal mortality rate, a more sensitive indicator than infant mortality for evaluating the coverage and quality of mother and child health care services, the figure is 4,6 deaths for every 1,000 live births. Between 2001 and 2014, perinatal deaths have fallen by 18% in Spain.
- The rate of maternal death reflects the risk of mothers dying during gestation and delivery and is influenced by general socio-economic conditions and the conditions of mother and child health care services. In 2014 in Spain 9 women died due to complications during pregnancy, delivery and puerperium, the lowest number since 1999, when there were 15 maternal deaths.

Perceived health status

- In Spain 71% of the population perceive their health to be good or very good. More men than women report a good state of health: 75.4% and 67.0% respectively.
- The perception of a positive state of health decreases with age: in the group aged 65 and over, 50.5% of men and 34.3% of women perceive their health to be good or very good, while in the population aged 85 and over, the assessment is positive in 36.8% of the men and 26.8% of the women. The greatest difference between men and women is found in the group aged 65 to 74 years, where the difference is 13 points, and the smallest difference is between 45 and 54 years, with only a 4 point difference.

Chronic health problems

- The most frequent chronic health problems in the adult population are arterial hypertension (18.4%), pain in the lumbar spine (17.3%), high cholesterol (16.5%), osteoarthritis (16.3%), and cervical back pain (14.7%).
- Some of these problems have shown an upward trend over time: in the last 20 years the prevalence of hypertension has risen from 11.2% to 18.4% in the adult population, the prevalence of diabetes has risen from 4.1% to 6.8% and that of high cholesterol has risen from 8.2% to 16.6%.

Limitations in the basic activities of daily living

- In the group aged 65 and over, 20.7% of the population (15.0% of men and 25.2% of women) have difficulty performing some of the basic activities of daily living. These difficulties increase with age. In the population aged 85 and over limitations affect 53.7% (38.8% of men and 61.8% of women).
- By type of limitation, bathing or showering, at 17.3%, is the most frequently reported limitation in the population aged 65 and over, both by men (11.7%) and by women (21.6%). At 5.4%, eating is the limitation least often reported by the population aged 65 and over, both in men (4.6%) and in women (6.0%).

Limitations in the instrumental activities of daily living

- In this regard, 47.2% of the population aged 65 and over (34.1% of men and 57.3% of women) have difficulty performing some of the instrumental activities of daily living. These difficulties increase with age; in the group aged 85 and over, 82.6% report some degree of difficulty in performing everyday household activities, 68.5% of the men and 90.3% of the women.
- By type of limitation, housework chores, both heavy (49.7%) and light (31.9%), are the biggest limitations, in both men and women. Using the telephone and taking medication are the least frequently reported limitations in the population aged 65 and over (13.5%).

Epidemiological surveillance

- Rubella, measles and mumps, which are included in the standard vaccination calendar, have shown a downward trend since the 1990s, although mumps exhibits epidemic waves, the last of which occurred between 2010 and 2014. In 2015 the incidence of mumps increased slightly, with a rate of 8.11 reported cases per 100,000 inhabitants. That same year in Spain 0.08 cases of measles and 0.01 cases of rubella were reported for every 100,000 inhabitants. Pertussis maintains its cyclical epidemic pattern and since 2010 a progressive increase has been observed in incidence, hospitalisation and mortality from this disease. The number of reported pertussis cases was 17.99 per 100,000 inhabitants.
- In 2015, a total of 4,578 cases of tuberculosis were reported in Spain, which corresponds to an incidence rate of 9.9 cases per 100,000 inhabitants, 8.3% less than in 2014. The incidence of tuberculosis in this country continues to fall, mainly due to the significant decrease observed recently in the respiratory forms, which have dropped from a rate of 14.2 per 100,000 inhabitants in 2007 to a rate of 7.6 per 100,000 inhabitants in 2015.
- The number of new HIV diagnoses has remained stable in recent years, while the number of AIDS cases is showing a downward trend.
- In the 1995-2015 period there was a marked decrease in the incidence of gonococcal infection; the rate fell from 11.7 per 100,000 inhabitants in 1995 to 10.4 in 2015. However, this trend is not homogeneous, since the initial decrease between 1995 and 2001 there has been a steady increase.
- The syphilis data over these years also shows a decline in the rates of incidence in the 1995-2001 period, falling from 2.6 to 1.8 cases per 100,000 inhabitants, with an increase starting that year and reaching 8.0 per 100,000 inhabitants in 2015. That year the incidence rates of gonococcal infection exceed the incidence rate of syphilis.
- Hepatitis A has decreased significantly in recent years, falling from 5.9 cases per 100,000 inhabitants in 2009 to 1.3 cases in 2015; also decreasing, but not as dramatically, are the cases of hepatitis B and other forms of viral hepatitis, which present an incidence of 1.7 and 1.5 cases per 100,000 inhabitants respectively.
- As for hepatitis C, the prevalence of antibodies among adults is estimated to be 1.7%. Because hepatitis C poses a significant health problem in Spain the Interterritorial Council of the SNS (CISNS) unanimously resolved to draw up a Strategic Plan for dealing with hepatitis C in the SNS, for the three-year period 2015-2017.

Low birth weight

- The trend towards higher numbers of newborns with low birth weight continues, although it has stabilised in recent years. In 1990 the percentage of newborns with low birth weight was slightly over 5%, while in 2000 it was 6.9%, and in 2014 it was 8.2%.

Elective termination of pregnancy

- The number of elective terminations of pregnancy (ETOPs) in 2014 was 94,796, which represents an incidence of 10.5 per 1,000 women aged between 15 and 44 and confirms the downward trend of the last four years, the rate being 2.0 points less than in 2011. In the group of women under the age of 20 the incidence rate is 9.9 voluntary terminations of pregnancy, 3.8 points less than in 2011.
- The number of elective terminations of pregnancy and the incidence rate in the group of women of fertile age (between 15 and 44 years) show clear signs of descent. Looking at the number of abortions relative to the number of births this tendency is confirmed, with 221.7 ETOPs for every 1,000 live births.

Traffic, workplace, home and leisure accidents

- Over the last twenty-five years the number of victims of traffic accidents has shown a clear decrease in relation to both the number of accidents and the number of inhabitants. The number of victims per 1,000 accidents fell from 1,582 in 1991 to 1,393 in 2015. The rate per 100,000 inhabitants fell from 399 in 1991 to 293, although a slight increase has been visible since 2012.
- Construction is the economic sector in which the most workplace accidents occur, followed by industry. In 2015, the number of workplace accidents causing absence from work per million hours worked is 39.3 in the construction sector and 30.4 in industry. Generally, over the last decade the frequency of accidents during the workday that cause absence from work shows a downward trend. Specifically, between 2006 and 2016, the frequency of workplace accidents resulting in absence from work leave fell in Spain by 15.1 points.
- Home and leisure accidents, in addition to being of the greatest magnitude, are the most frequent. Their importance lies in the different way they affect the population; they are more frequent in old age and among women. In Spain, 7.2% of the population reports having had an accident at home or during leisure time at some point during the past 12 months, 8.1% in women and 6.2% in men.

Lifestyle habits

Tobacco use

- Of the population aged 15 and over, 23% smoke on a daily basis, 2.4% are occasional smokers and 25.7% say they are ex-smokers. The percentage of daily smokers is 27.6% in men and 18.6% in women. Looking at socio-economic and professional levels, in men a clear upward slope is visible from the lower rates of the more privileged classes to the higher

rates of the less advantaged classes. In women no clear pattern is observed in the use of tobacco.

Alcohol use

- Of the population aged 15 and over, 67.3% has consumed alcohol some time within the past year, with differences by sex; in men the percentage is 77.5% and in women it is 57.7%.
- In the same age group, 1.6% report drinking above the risk threshold regularly. This is a reduction with respect to the percentage observed 10 years ago. The drop has occurred in both sexes but is greater in men.
- As regards heavy episodic drinking, 9.1% report having engaged in this activity within the last month, men with greater frequency; the percentage in men (13.5%) is more than twice the percentage in women (5%).

Drug use among secondary school students

- The use of drugs among secondary school students displays a downward trend. In reference to the last twelve months, the drugs most used by students aged 14 to 18 are alcohol (76.8%) and tobacco (31.4%) followed by cannabis (25.4%). These are followed, in this order, by: tranquilisers, with or without prescription (10.8%), cocaine (2.8%), hallucinogens (1.2%), ecstasy (0.9%), amphetamines (0.9%), volatile inhalants (0.7%) and heroin (0.7%).
- The consumption of legal psychoactive drugs (tobacco, alcohol, tranquilisers) is more widespread among women than among men; in contrast, the use of illegal drugs is more widespread among men.

Obesity and overweight

- Obesity affects 16.9% of the population aged 15 and over (17.1% of men and 16.7% of women). This year, for the first time since 1987, no increase is observed in the reported prevalence of obesity in Spain. Obesity becomes more frequent as the level of education decreases: it affects 8.7% of the population with a university education, as compared to 26.4% of the population with a primary school education or less. Obesity or overweight affects 52.7% of the population aged 18 and over.
- The prevalence of overweight in the school-going population aged 6 to 9 is 23.2% (22.4% in boys and 23.9% in girls). The prevalence of obesity in this group is 18.1% (20.4% in boys and 15.8% in girls). Looking at the trends over time, the prevalence of overweight has decreased and that of obesity has stabilised.
- Among the possible factors associated with obesity, significant correlations continue to be found between the factors related to dietary habits and the lack of physical activity, such as not eating breakfast every day, having a television, computer or videogames in the bedroom, watching television for over 2 hours a day, sleeping less, and also low family income and low educational level of the parents.

Intake of fruit and vegetables

- The percentage of the population aged 15 and over that eats fresh fruit on a daily basis (not including juice) is 62.7%. By sex, 58.2% of men and 67.1% of women eat fresh fruit every

day. This difference in favour of women is present in all social classes. The difference in the intake of fresh fruit between women of the most privileged social class and women of the least privileged social class is 8 points and the difference between men of the most privileged social class and those of least privileged is 8.4 points.

- The percentage of the population aged 15 and over that eats salads, vegetables and garden produce on a daily basis is 44.6%. By sex, 39.1% of men and 50.0% of women eat these foods every day. Again, the difference in favour of women is present in all social classes. The difference in the intake of such items between women of the most privileged social class and women of the least privileged class is 5.9 points while between men of the most privileged social class and those of the least privileged class it is 7.5 points.

Physical activity

- With respect to physical activity, 36.7% of persons aged 15 and over describe themselves as sedentary in their free time, the habit being more widespread among women (42.0%) than among men (31.1%). The percentage of persons who describe themselves as sedentary in their free time shows a downward trend in both men and women.
- In the population aged 5 to 14 years of age, 12.1% do not do any physical activity during their free time, with the percentage of sedentarism in girls being twice that of boys.
- As for physical activity at the workplace, men (7.4%) perform activities that require great physical effort more frequently than women (1.9%) and they also perform activities that require walking, carrying weight and moving objects from place to place more often, 21.6% compared to 15.0% of women. In women there is a predominance of work that requires standing most of the day but does not involve moving objects or physical effort (46.4%).

Care Resources: Physical Equipment and Workforce

Medical and nursing professionals

- As for doctors working in patient care, either in the public or the private sector, the rate of doctors per 1,000 population is 3.8. More than half of practising doctors are women (51.5%). The group with the most women in it is the group under 35 years of age, while the group aged 65 and over has the fewest women. The group of doctors over 44 years of age represents 54.7% of the total number of practising doctors.
- The SNS care network has a total of 116,711 doctors and 169,601 nurses, the latter being the most numerous group, with a ratio of 1.5 nursing professionals for every doctor. In the primary care level there are 34,888 doctors and 29,441 nurses. Hospitals employ a higher number of professionals: 78,285 doctors and 136,699 nurses. A total of 3,538 doctors and 3,093 nurses work for the Urgent Care and Emergency Services 112/061.
- The density of professionals remains stable, with 0.8 doctors per 1,000 population in primary care and 1.7 per 1,000 population doctors in specialised care.
- In nursing the figures are 0.6 professionals per 1,000 population in primary care and 2.9 in specialised care.
- The skill of the doctors and nurses is one aspect of the public system that citizens most highly value.

Newly graduated doctors and nurses

- Over 5,500 students completed studies in medicine in 2014. The rate of newly graduated doctors per 1,000 population is therefore 0.1. In relation to practising doctors, Spain has 33.2 new doctors per 1,000 practising doctors.
- In 2014 a total of 11,700 students completed studies in nursing, which means Spain has 0.3 newly graduated nurses per 1,000 population and 48.9 new nurses per 1,000 practising nurses.

Pharmacists

- The rate of pharmacists who are working in either the private or the public sector is 1.2 per 1,000 population. The most frequent place of employment for this type of professional is dispensing pharmacies, where over 48,000 work. The hospitals of the SNS employ 1,753 pharmacists, which means the system has 0.04 pharmacists per 1,000 population. SNS primary care also has pharmacists who act in an advisory capacity and to promote the rational use of medicines.

Primary Care Centres and hospitals

- The SNS has 3,039 Primary Care Centres and 10,055 Local Primary Care Centres. The mean ratio of 3.3 Local Primary Care Centres to each Primary Care Centre reveals a wide range of values (14.8 – 0.0), the result of the variations in geographic dispersion in Spain. Although geographic variability is high, for every 100,000 SNS users there is an average of 28.2 primary care health centres.
- The SNS also has a network of 451 hospitals, of which 324 are public. The hospitals of the SNS network offer 79.4% of the total number of hospital beds available. The total rate of available beds in Spain is 3.0 for every 1,000 inhabitants; for the SNS the rate is 2.4.
- The network of public hospitals has 16,820 day beds (36.2 for every 100,000 inhabitants); this resource is increasing progressively in consonance with the rise in outpatient care provided in processes that do not require an overnight stay.

Medical technologies

- The SNS has 538 Computerized Axial Tomography (CAT) scanners (71.8% of the total number of scanners of this type in use in Spain) and a rate of 11.6 per million population. With respect to Magnetic Resonance Imaging (MRI), the SNS has 308 scanners (53.4% of the total number of this type of equipment in use in Spain) and a rate of 6.6 per million population. The number of mammogram machines in the SNS is 418 (65.8% of the total number of registered machines) and a rate of 9.0 per million population. The network of SNS hospitals has 184 radiotherapy devices (cobalt bombs and linear accelerators) (79.0% of the total in existence), which is a rate of 4.0 devices per million population.
- The purpose of the Spanish Network of Health Technology Assessment Agencies is to evaluate medical techniques and procedures and decide upon the inclusion or exclusion, or the modification of the conditions of use, of these technologies in the SNS basket of services. The Spanish Network of Assessment Agencies also takes part in the activities of the European Network for Health Technology Assessment. In the European Network the

Spanish Ministry of Health, Social Services and Equality acts as the representative of Spain, as a member state.

Dispensing pharmacies

- A network of 21,919 dispensing pharmacies collaborate in the provision of SNS pharmaceutical benefits, through agreements made between the health authorities of the autonomous communities and the professional organisations of pharmacists. There are 47 dispensing pharmacies per 1,000 population.

Reference Centres, Services and Units

- The SNS now has 227 Reference Centres, Services and Units in 46 different health care centres, to provide care to patients with 52 pathologies and/or perform especially complex procedures.
- In the first call for proposals for inclusion in the European Reference Networks (ERN) plan, the European Commission accepted 42 SNS services or units for consideration in the selection process.

Network of transplant teams

- Forty-four hospitals have authorized organ transplant programmes; participating in these programmes are 186 integrated co-ordination teams comprising 267 doctors and 173 nurses.

Blood transfusion centres

- The blood transfusion network consists of 20 public Transfusion Centres that organise transfusion therapy through 400 smaller Transfusion Services located within the network of public and private hospitals.

Promotion, prevention and health problems attended

Promotion and prevention activities in the health system

- In 20% of the patients receiving care in the SNS Primary Care services during the year, clinical notes indicate that promotion and prevention activities were performed.
- The coverage of the childhood vaccines recommended in Spain is over 96.7% and the percentage of children aged 1-2 who also receive the booster doses is over 95.7%. Vaccination against measles-mumps-rubella is over 96.2% in children aged 1-2, with more than 90% also receiving the recommended boosters.
- As for the seasonal flu vaccine, 56.1% of adults aged 65 and over receive it, with coverage showing a downward trend in recent years.

- With regard to population screening, an area in which the primary and specialised care levels work together, 8 out of 10 women have had early detection tests for breast cancer performed within the recommended period. In addition, 79.4% of women aged 25 to 64 have had a Pap smear done within the past 5 years, while 72.7% have had one in the past 3 years. Similarly, 12.4% of the population aged 50-69 have had a faecal occult blood test performed in the past two years.

Health problems attended

- At the primary care level, SNS professionals handle 373.3 million medical and nursing consultations. Frequentation in the case of medical consultations is 5.3 visits per person/per year and in the case of nursing consultations it is 2.9 visits per person/per year. By sex, frequentation, for both medical and nursing consultations, is higher in women than in men, with the difference being more patent in medical consultations.
- With 13.3 million house calls/per year, care delivered in the homes of patients represents 1.7% of all general practice activity, while in the case of nursing 7.5% of all activity takes place at patients' homes. Most recipients of this type of care are over the age of 65.
- Each person seen by a health professional at a primary care health centre during the year has an average of 5.7 active health problems. By sex, the average is 5.1 active problems in the case of men and 6.3 in the case of women.
- Among children under the age of 15, the main reasons for consultation are problems with the respiratory system (1,233.3 per 1,000 patients seen), followed by problems of a general and unspecific nature (872.2), problems with the digestive system (665.7), with skin and skin appendages (619.4), and with the auditory system (315.7). In terms of their characteristics, the predominant problems are of an acute and infectious nature. Regarding differences by sex, asthma, bronchitis, acute laryngitis and conjunctivitis are more frequent in boys than in girls.
- In the group aged 15 and over, the most frequent reasons for consultation are problems with the locomotor system (715.9 per 1,000 patients seen), especially in women, followed by problems of a general and unspecific nature (624.3) and problems with the respiratory system (494.8). The group aged 15 and over shows both chronic processes (arterial hypertension, lipid disorders) and acute processes (acute upper respiratory tract infection). In general terms health problems are more frequent in women and, among the most frequent problems, the greatest difference is found in cystitis, anxiety and osteoarthritis.
- In persons aged over 64 the main reasons for consultation are, in this order of frequency, problems with the circulatory system (1,156.0 per 1,000 patients seen) and with the locomotor system (1,094.0) followed by problems of a general and unspecific nature (988.4) and problems related to the endocrine system, metabolism and nutrition (801.2). In this last group chronic diseases predominate: arterial hypertension, lipid disorders, osteoarthritis and diabetes mellitus.
- Hospitals dependent on the SNS registered over 4 million admissions and handled 78.7 million medical consultations. The average hospital stay is 7.8 days, with a rotation index of 36.8.
- A total of 3.6 million surgical interventions are performed; over a million of them are done as major outpatient surgery. In addition, over 329 thousand births are attended, with 21.6% of them being Caesarean deliveries. The total percentage of Caesareans in the sector as a whole (both public and private) is 25.0%.
- Ambulatory procedures for the treatment of certain pathologies are progressively replacing the procedures that involve hospitalisation. Of all cataract operations, 98.1% are performed in ambulatory mode, as are 53.1% of the operations to repair inguinal hernia and 31.4% of the tonsillectomies. Similarly, the use of interventions involving less invasive surgical

procedures has increased; 79.6% of cholecystectomies and 37.0% of appendectomies are performed using laparoscopic techniques.

- The main causes of hospitalisation in Spain are circulatory system diseases (13.1%) followed by digestive system diseases (12.3%) and respiratory system diseases (11.4%). In men the most frequent causes of hospitalisation are circulatory system diseases, with 15.6% of the total, followed by digestive system diseases (14.5%), respiratory system diseases (13.8%) and tumours (10.9%). The most frequent causes of hospitalisation in women are childbirth, puerperium and complications during pregnancy (20.2% of the total number of admissions). These causes are followed, in order of frequency, by diseases of the circulatory system (10.9%), of the digestive system (10.4%), of the respiratory system (9.2%) and tumours (8.8%). Hospital admission due to mental health disorders is more frequent in men (2.2%) than in women (1.9%).

Urgent care

- Urgent care activity represents a total of 56.7 million consultations per year in the SNS. The SNS responds to the population's urgent care needs through three organizational spheres: the primary care level, the urgent care services at hospitals and the co-ordination activity performed by the Urgent Care and Emergency Services in response to demands received mainly through the telephone hotlines 112 and 061.
- The urgent care delivered at the primary care level takes place, on the one hand, in the 3,039 Primary Care Centres and 10,055 Local Primary Care Centres and it is delivered by the professionals of the primary care teams that normally provide their services there, during their usual working hours, in combination with their regular activity. These professionals also provide this kind of care, as a non-habitual activity, in 1,977 urgent care centres not located in hospitals.
- In the primary care sphere (at a health centre or at the patient's home) a volume of 28.1 million urgent care cases are handled, with an average frequentation of 0.6 per person/per year.
- The demand for health care made annually to the hotlines 112 and 061 amounts to 7.1 million calls, which equals 156 requests per 1,000 population.
- As for the urgent care services at SNS hospitals, every year 21.5 million urgent care cases are handled. Of them 11.3% require hospital admission.

Reference Centres, Services and Units

- In 2015 a total of 4,798 episodes of care were transferred to SNS Reference Centres, Services and Units. In the 2009-2015 period, the total number of episodes of care exceeded 14,000, with a total cost to the Cohesion Fund of 182.4 million Euros.

Organ donation and transplants

- The organ donor rate is 39.7 per million inhabitants, which means, in absolute values, 1,851 donors. The donor's average age is 60.0, continuing with the upward trend observed in recent years. By sex, of every 10 donors, 6 are men and 4 are women. The profile of donors in terms of the cause of death has changed: stroke as the cause of death has increased from 39.0% in 1992 to 65.1%; donors who died as a result of traumatic brain injury caused by a

traffic accident currently represent only 4.2% of the donors, whereas in 1992 these cases accounted for 43.0%.

- Kidney transplants are the most frequent (2,905), followed by liver transplants (1,162). Every year about 3,000 hematopoietic stem cell transplants are performed (3,068 in 2015). The Spanish Register of Bone Marrow Donors has a total of 200,678 donors.

Transfusion network

- In the blood transfusion network 1.7 million voluntary, non-remunerated blood donations took place, which represents a donation index of 36.9 per 1,000 population. Over the past three decades the blood donation rate per 1,000 population has increased by 16.9 points.

Quality of the Health Care Services

- Quite good (7.3) is the average score given by citizens to medical consultations in public primary care, based either on their personal experience or on the ideas they have about the services.
- Citizens give the highest score to the confidence and security conveyed by the doctor (7.7). The lowest score (5.7) goes to the waiting time for the diagnostic tests.
- Slightly less than 4 out of 10 users are given an appointment with the general practitioner for the same day they ask for it; of those not given an appointment for the same day, they must wait an average of 3.6 days to see the doctor. To make an appointment with the doctor 48.5% of users choose the on-line service. Users give this service a score of 8.4 points out of 10.
- Of all hospital discharges, 9.0% are caused by situations that, potentially, need not motivate admission to a hospital provided there is adequate outpatient monitoring.
- Regarding consultations with specialists in the public system, citizens give them an average score of 6.7. The interaction with health care personnel is the most highly valued aspect (7.3) of the system, while the lowest score (4.9) goes to the waiting time before the patient has the diagnostic tests.
- Citizens give hospitalisation and the care provided in public hospitals an average score of 6.6. Based either on personal experience or on the ideas they have, they consider the equipment and technological resources at the hospitals to be the best aspect (7.7) and the wait time for a non-urgent admission the worst aspect, with a failing score of 4.7.
- The average wait time for patients who are to have an initial consultation at the specialised care level is 58 days, 7 days less than the year before, while the wait for patients on the surgical waiting list is 89 days, 2 days more than the preceding year. For 10.6% of the patients the wait is over 6 months. The percentage of citizens who think that in the last year the waiting list problem has worsened or remained the same is 75.5%.
- Hip fracture in hospitalised patients and in-hospital mortality following acute myocardial infarction and stroke are indicators of care quality. In hospitalised patients, the incidence of hip fracture during their stay is 0.05 fractures per 100 discharges and the number is falling. In-hospital mortality following acute myocardial infarction is 7.1 deaths per 100 diagnoses of acute myocardial infarction, showing a downward trend. Looking at mortality following hemorrhagic stroke, the percentage of deaths is 26.5% and in the case of ischaemic stroke it is 10.3%; the trend is downward in both.
- In 2012 the Ministry of Health, Social Services and Equality initiated a systematised process for identifying, gathering, approving and disseminating best practices in the SNS. In 2016 the SNS catalogue of best practices comprises 225 best practices that have been identified and published in relation to ten SNS strategies: promotion and prevention, childbirth and

reproductive health, health care actions in response to gender violence, ischaemic cardiopathy, cancer, diabetes, rare diseases, rheumatic and muscular-skeletal diseases, palliative care and chronic obstructive pulmonary disease.

Professional Regulation and Ongoing Training

- In 2015 the National Council on Health Science Specialities (CNECS) was renewed and its 11-member Permanent Committee was elected. The CNECS is the Ministry of Health, Social Services and Equality's advisory and scientific body in the area of specialised training in the health sciences.
- A total of 7,501 slots were available in Specialised Health Care Training Programmes for the academic year 2015/16, which is 0.1% more than in the preceding year.
- In 2015, there were 28,749 specialists being trained in one of the 57 specialities taught in the 3,256 accredited teaching units within the SNS. The number of residents per 100,000 inhabitants is 61.7.
- Of the 24,988 doctors being trained in a speciality, 25% (6,255) are specialising in Family and Community Medicine. This is therefore the specialty with the highest number of residents in training, followed by Paediatrics and its Specific Areas (1,639) and Internal Medicine (1,539).
- In 2015 a total of 21 audits were conducted in accredited teaching centres that provide specialised training in the health sciences, with the support of audit teams linked to the autonomous communities.
- In 2015 the qualifications of 742 health care professionals (including basic degrees and specialised training) from other European Union countries were recognised, 27.1% more than the preceding year.
- A total of 172 credentials recognising specialist qualifications obtained in non-European countries were issued (a 44.5% increase).
- In 2015 a total of 940 training visits were authorised for foreign health care professionals, 94.0% of them doctors. These professionals come from 39 different countries.
- In 2015, 94.7% of the 48,653 activities presented to the Accreditation System for recognition as ongoing training were accredited. Over 4 out of 10 of the accredited activities are for persons with a University degree.

Pharmaceutical Benefits

Medicines and health products included in SNS benefits

- As of 31 December 2015 the number of presentations of medicines included in the public financing system, without regard to when their marketing began, was 19,177. Of them, 16,268 come in normal packaging and 13,837 are financed through the invoicing of SNS medical prescriptions dispensed at dispensing pharmacies. As of 31 December 2015, the total number of health products financed by the SNS was 4,784.
- Over the course of the year 2015, a total of 1,456 new presentations were included for the first time, without regard to when their marketing began. With these additions 51 new active ingredients corresponding to 102 presentations of medicines were incorporated into the system. Of all the new presentations included, 72.9% are generic medicines.
- The year 2015 saw the incorporation of the first presentations of biosimilar medicines of the monoclonal antibody Infliximab and the first biosimilar insulin, Glargina.

- Over 28% of the presentations included in public financing (5,420) correspond to medicines that act on the nervous system and belong to the therapeutic group N.

Pharmaceutical benefits provided through SNS prescriptions

- Almost 22,000 dispensing pharmacies collaborate in the provision of SNS pharmaceutical benefits, invoicing a monthly average of 77 million SNS medical prescriptions to the public funds of the autonomous communities, the National Institute of Health Management (INGESA) and the insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS), with the average monthly sales per dispensing pharmacy being 46,000 Euros. In Spain the average number of inhabitants per pharmacy is 2,119.
- In 2015 the pharmaceutical expenditure generated by the cost of SNS medical prescriptions is 9,962 million Euros. The amount invoiced has increased with respect to 2014 but remains below 2012 levels. From 2010 to 2015 pharmaceutical expenditure fell by 21.6%. Between the implementation of Royal Decree-Law 16/2012 and the end of 2015, there was a savings of 5,657.8 million Euros in the pharmaceutical expenditure generated by the invoicing of SNS medical prescriptions.
- The average expenditure per prescription in 2015 is 10.8 Euros, the same as in 2014. This figure is almost 2 Euros less than in 2010, when it was 12.7 Euros.
- In 2015 the pharmaceutical expenditure per inhabitant per year, through SNS medical prescriptions, is 214.5 Euros, 2.5% higher than in 2014. It fell by 20.6% between 2010 and 2015.
- The number of prescriptions per inhabitant is 19.8, which is 2.1% more than in 2014. Between 2010 and 2015 the number of prescriptions per inhabitant per year fell by 6.6% due to the drop in the number of prescriptions invoiced to public funds.
- Anti-ulcerants (proton pump inhibitors) are the subgroup with the highest consumption in terms of the number of packages dispensed through SNS medical prescriptions. Omeprazole, the preferred pharmaceutical in the group of anti-ulcerants, is the most-used active ingredient (54 million packages, 5.9% of all medicines), although its consumption has decreased by 2.5% compared to 2014; its daily dose per inhabitant is 97.4 and its daily cost of treatment is 0.1 Euros.
- Of the medicines with the highest consumption in terms of the amount invoiced through medical prescriptions dispensed at dispensing pharmacies, the subgroup hypolipidemic agents (HMG CoA reductase inhibitors) occupies first position at 535.9 million Euros and 4.9% of the total. Ranked second is the subgroup adrenergic agents in combination with corticosteroids or other agents, excluding anticholinergics, for treating asthma and COPD, with the amount invoiced being 531.6 million Euros, although this group has fallen by 1% with respect to 2014.
- The hypolipidemic agent Atorvastatin is the active ingredient with the highest amount invoiced, 277.5 million Euros, which represents 2.4% of the total amount invoiced to the SNS in medicines. In 2015 it increased by 7.4% with respect to 2014.
- In 2015 generic medicines account for 48.1% of the total number of medicine packages invoiced to the SNS and 22.7% of their retail value. Between 2010 and 2015 consumption of generics in terms of number of packages increased by 80.0%, with the amount invoiced increasing by 114%. The active ingredients with most packages invoiced coincide very closely with those of total consumption. Omeprazole is the active ingredient most consumed in packages of generic presentations (48.2 million packages), followed by Paracetamol (32.3 million packages) and Simvastatin (25.9 million packages).
- As for health products, urinary incontinence pads are the most consumed in terms of packages (7.5 million) and also in terms of retail value (288.9 million Euros). The group *high compression stockings* shows significant increases with respect to 2014, both in consumption in terms of packages (12.4%) and in retail value (11.3%).

Pharmaceutical benefits provided in hospitals

- In the public hospital network, the 15 pharmacological subgroups with highest consumption in terms of manufacturer's selling price (PVL) generated over 67% of the total expenditure in medicines in the year 2015. The subgroup *other anti-virals*, which includes the active ingredients for the treatment of Hepatitis C, occupies top position, with 18.3% of the total consumption and a sharp increase in 2015.
- Tumour necrosis factor-alpha inhibitors occupy second position, with 9.7% of hospital pharmaceutical expenditure.
- The active ingredients for treating hepatitis C, which were included in public financing in 2014 and 2015, occupy the highest positions in terms of consumption.

Orphan medicinal products

- The SNS pharmaceutical benefits basket includes, as of 31 December 2015, 59 authorised active ingredients - in 107 presentations - of orphan medicinal products, without regard to their marketing. Of them, 48 active ingredients (80 presentations) are for hospital use and 11 active ingredients (27 presentations) are dispensed by hospital pharmacy services. Of these 11 only 5 (10 presentations) can be obtained at dispensing pharmacies; for the rest a system of specific exceptions has been established for their financing by the SNS and they can only be dispensed in hospitals.
- The expenditure in orphan medicinal products at the hospital level in 2015 was 550.4 million Euros, which represents 7.4% of the total hospital expenditure. In 2015 the expenditure in these medicines was 17.5% greater than in 2014.
- Lenalidomide, for the treatment of patients with multiple myeloma and myelodysplastic syndrome, is the active ingredient with highest cost to the health system. In second place is Bosentan for pulmonary hypertension and third is the immunosuppressant Eculizumab, with an increase of 26.2% in the expenditure, due to it being the only medicine with specific approved studies for the indications of paroxysmal nocturnal hemoglobinuria and atypical haemolytic-uremic syndrome.

Health expenditure

- The total expenditure by the Spanish health system in 2014 was 95,722 million Euros (66,826 million by the public sector and 28,895 million by the private sector), which represents 9.2% of the GNP (of this share, 6.4% is public expenditure and 2.8% is private expenditure). The per capita expenditure is 2,058 Euros per inhabitant.
- The expenditure in curative and rehabilitative care services was 55,393 million Euros; these services thus absorbed over half of the total health expenditure.
- Looking at type of health care provider, it is the expenditure of hospitals, which totals 39,930 million Euros, that accounts for the highest percentage of the total health care expenditure.
- The governments of the autonomous communities bear the greatest burden in the public funding of health care, paying for 91.6% of the expenditure. With respect to private health care expenditure, it is households that make the greatest contribution to the funding, with a share of 80.7%.
- The total health expenditure of the autonomous communities increased by 0.7% in 2014.

e-Health

- The Individual Health Card and the SNS Protected Population Database (BDPP-SNS) comprise the system created to standardize the identification of SNS users and permit access to the clinical and administrative data of each person. Every person covered by the SNS has a personal identification code unique to him or her that lasts a lifetime and is valid in the entire system.
- The BDPP-SNS is one of the strategic tools used by the SNS, both for patient identification and for the implementation of projects related to interoperability and electronic traceability of clinical information, which is especially useful for people who receive health care in an autonomous community different from the one in which they usually reside.
- Patient health records are generally in electronic format (EHR) and can be used throughout the Health Service of the autonomous community. The EHR-SNS interoperability system intends to give citizens and authorised health personnel anywhere in the country access to relevant clinical information generated at any Health Service in the SNS. At this time (September 2016) the clinical information of 35,751,172 persons is available in the form of EHR-SNS, which represents coverage of 77.69% of the population with an Individual Health Card.
- The implantation of electronic prescribing in the autonomous communities is practically total in Primary Care Centres, while it is at 66% in Local Primary Care Centres and 72.5% in specialised care.
- The level of use of electronic prescribing relative to the total number of prescriptions dispensed in the SNS is 85.9%.
- The e-Prescribing interoperability project is intended to allow medicines to be dispensed anywhere in Spain, regardless of the autonomous community in which the prescription was made.

Citizen opinions and perception

- A total of 63.7% of citizens express a favourable opinion of Spain's health care system, believing either that it "works quite well" or that it "works well but *some changes* are needed".
- The score given by citizens to their degree of satisfaction with how the public health care system in Spain works is 6.4 points out of 10. Primary Care continues to be the most highly valued care level, with a score of 7.3 points out of 10.
- Regarding participation in health decisions, 77.1% of patients feel they have been able to participate sufficiently in decision-making about their health in their visits with the general practitioner; 70.4% have been able to participate sufficiently in their visits with specialists and 60.0% have been able to participate sufficiently during hospitalisation.
- The majority think that the public health care system provides the same care services to all people regardless of their sex (87.0%), their socioeconomic level (70.4%), their age (69.6%) or their nationality (58.0%). However, 42.5% believe that differences do exist when it comes to having or not having legal residence in Spain, and 40.7% think that there are differences depending on whether the patient lives in an urban or a rural area.
- As regards co-pay, 25.0% of citizens think that the co-pay system introduced in 2012 is good. The rest either believe that there should be more income brackets so that patient contributions to the cost of medicines better reflect the patient's income level (30.4%) or they believe that the previous system in which retirees did not make any contribution to the cost of their medicines and all other citizens did should be reinstated (36.3%). To this question 8.3% responded DK/NA.

1 Demographics and Health Status

1.1 Population figures and basic demographic indicators

1.1.1 Population figures

As of 1 January 2016 there are a total of 46.4 million people³ living in Spain. The Spanish population has decreased by 11,142 people with respect to the year before. In relative terms, the number of inhabitants has dropped by 0.02%.

Table 1-1 Resident population as of 1 January 2016, by autonomous community

	Both sexes	% of total
Andalucía	8,401,760	18.1
Aragón	1,317,921	2.9
Asturias	1,040,681	2.3
Baleares	1,134,657	2.4
Canarias	2,133,667	4.6
Cantabria	582,571	1.3
Castilla y León	2,454,870	5.3
Castilla-La Mancha	2,049,829	4.4
Cataluña	7,403,879	15.9
Comunidad Valenciana	4,932,906	10.6
Extremadura	1,085,189	2.4
Galicia	2,720,668	5.9
Madrid	6,433,221	13.7
Murcia	1,465,258	3.2
Navarra	637,002	1.4
País Vasco	2,162,626	4.7
La Rioja	312,622	0.7
Ceuta	84,632	0.2
Melilla	84,464	0.2
Spain	46,438,422	100.0

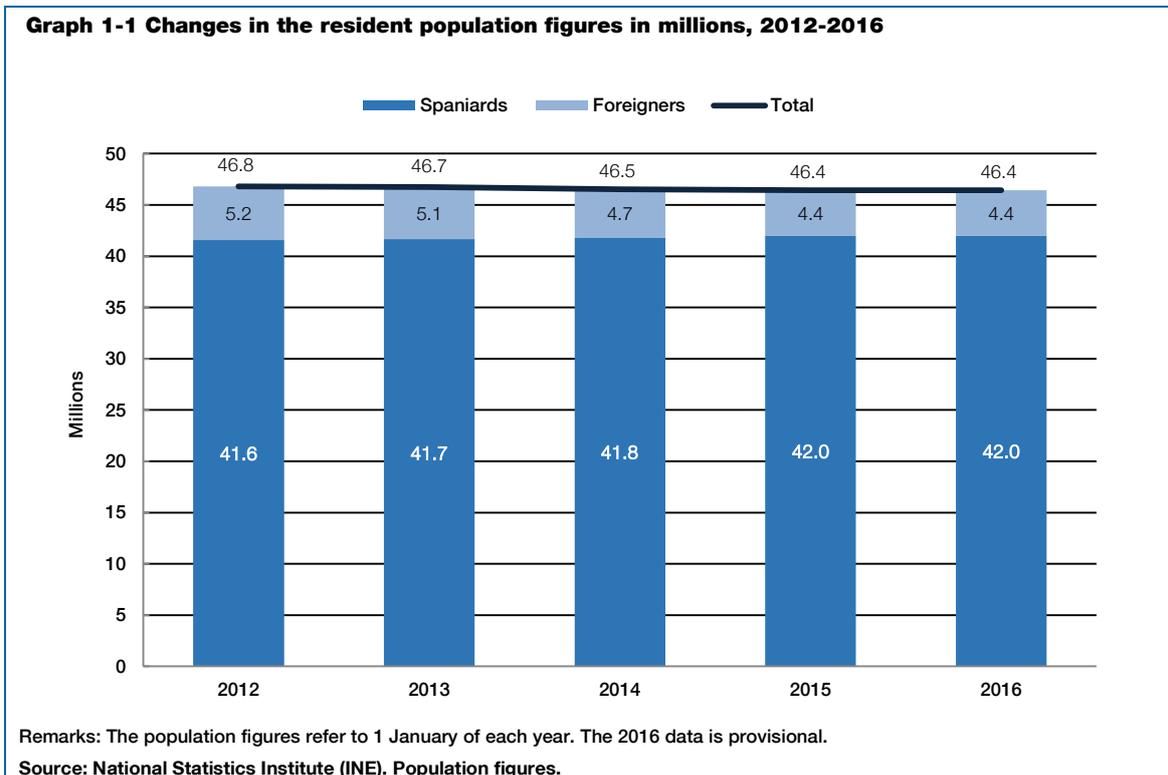
Remarks: Provisional data from 30 June 2016.

Source: National Statistics Institute (INE). Population figures.

³ National Statistics Institute, provisional data. Resident population figures are estimated using official population records, which are constantly updated to add or subtract the population movements taking place: births, deaths, migratory movements and nationality changes.

The population is concentrated in the autonomous communities located on the southern and eastern coasts and in the centre of the peninsula: Andalucía, Cataluña, Madrid and Comunidad Valenciana. They account for over 58% of the inhabitants.

Although Spain's population is decreasing, the number of Spaniards increased by 24,313 while the number of foreign-born residents fell by 35,457. One factor influencing these results is the acquisition of Spanish nationality by 114,207 residents in 2015.



1.1.2 Natality, mean maternal age

The crude birth rate has fallen from 9.2 births for every 1,000 inhabitants in 2014 to 9.0 in the year 2015.⁴ The highest rate is found in Melilla (17.9) and the lowest in Asturias (6.2). The mean maternal age continues to be about 32, increasing slightly from 31.8 years in 2014 to 31.9 years in 2015.

⁴ Provisional data from the Natural Population Movement 2015 statistics, published on 23 June 2016. In 2015 in Spain 419,109 children were born, that is, 8,486 fewer than in 2014, which places the crude birth rate at 9.0 per 1,000 inhabitants.

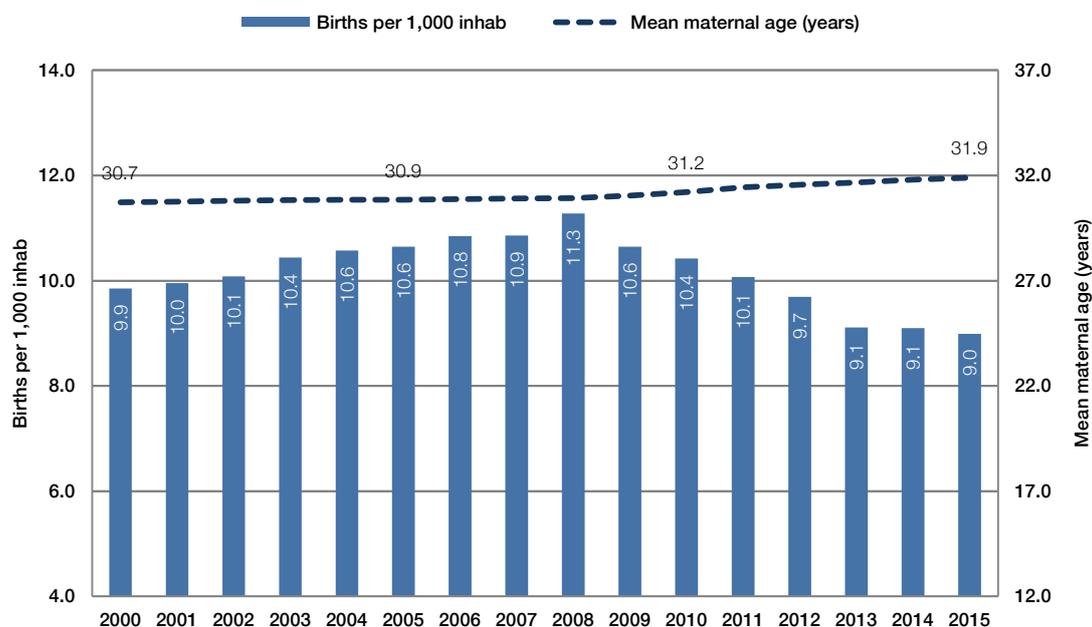
Table 1-2 Birth rate per 1,000 inhabitants and mean maternal age in years by autonomous community, 2015

	Birth rate per 1,000 inhabitants	Mean maternal age (years)
Andalucía	9.6	31.4
Aragón	8.6	32.1
Asturias	6.2	32.2
Baleares	9.4	31.6
Canarias	7.6	31.1
Cantabria	7.5	32.4
Castilla y León	7.0	32.5
Castilla-La Mancha	8.8	31.8
Cataluña	9.5	31.9
Comunidad Valenciana	8.8	31.9
Extremadura	8.1	31.8
Galicia	7.1	32.6
Madrid	10.1	32.5
Murcia	10.9	31.2
Navarra	9.5	32.4
País Vasco	8.7	32.8
La Rioja	8.7	32.2
Ceuta	12.9	30.3
Melilla	17.9	29.6
Spain	9.0	31.9

Remarks: Provisional data.

Source: National Statistics Institute (INE). Demographic indicators.

Graph 1-2 Changes in number of births per 1,000 inhabitants and mean maternal age in years, 2000-2015



Remarks: The 2015 data is provisional.

Source: National Statistics Institute (INE). Natural Population Movement. Demographic indicators.

1.1.3 Dependency

The dependency ratio⁵ is of great significance for budget forecasting in areas such as education, health, pensions and other social expenditures. As it increases so does the burden for the active part of the population that maintains the economically dependent part. The dependency ratio can be broken down into the youth dependency ratio (population under the age of 16) and the old-age dependency ratio (population over the age of 64).

The dependency ratio in Spain is 53.0%, disaggregated into an old-age dependency ratio of 28.3% and a youth dependency ratio of 24.7%.

By autonomous communities, the highest dependency ratios are observed in Castilla y León (58.7%), Galicia (58.0%) and País Vasco (57.3%) while the lowest are observed in Canarias (43.4%) and Baleares (46.2%).

Table 1-3 Changes in total dependency ratio by autonomous community, 2000, 2004, 2008 and 2015

	2000	2004	2008	2015	Difference 2015 - 2000
Andalucía	50.5	48.7	47.4	50.9	0.4
Aragón	53.7	52.8	51.0	56.4	2.7
Asturias	49.5	48.9	48.5	55.7	6.2
Baleares	46.6	43.9	42.2	46.2	-0.4
Canarias	43.2	41.5	40.8	43.4	0.2
Cantabria	48.3	47.2	46.6	53.3	5.0
Castilla y León	55.1	54.6	53.7	58.7	3.6
Castilla-La Mancha	59.0	56.5	51.7	53.5	-5.5
Cataluña	47.3	46.7	46.7	54.6	7.3
Comunidad Valenciana	48.3	46.8	46.6	53.3	5.0
Extremadura	58.1	56.4	53.2	53.7	-4.4
Galicia	51.2	51.0	51.3	58.0	6.8
Madrid	43.4	42.4	42.9	51.0	7.6
Murcia	50.0	48.7	49.1	51.3	1.3
Navarra	48.3	45.0	47.2	55.8	7.5
País Vasco	43.6	49.2	48.6	57.3	13.7
La Rioja	51.2	49.3	49.4	55.9	4.7
Ceuta	50.2	53.7	52.7	50.4	0.2
Melilla	54.1	48.5	46.9	54.1	0.0
Spain	48.9	47.8	47.2	53.0	4.1

Source: National Statistics Institute (INE). Demographic indicators.

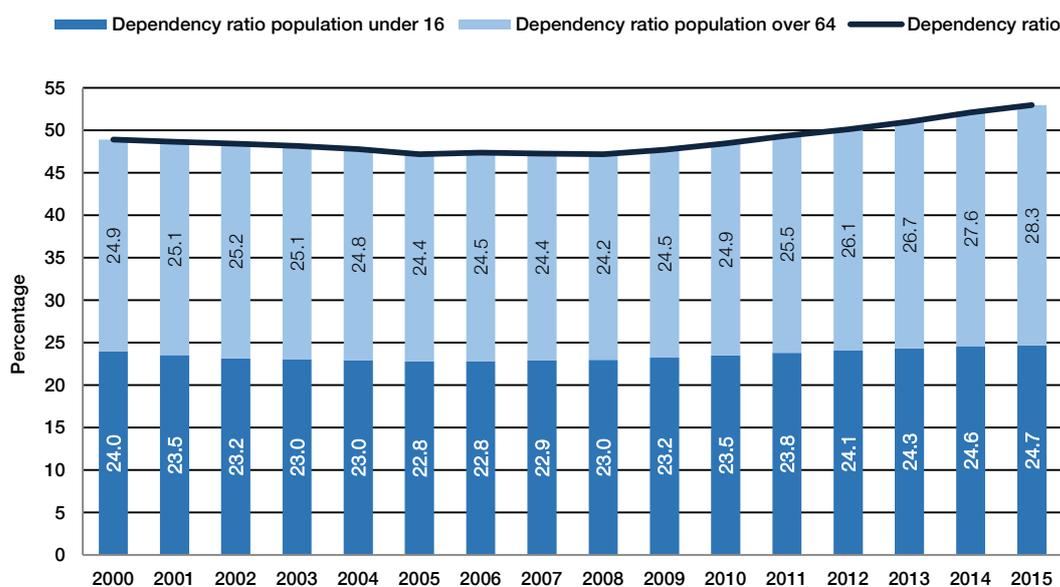
In the 2000-2015 period, the greatest variations in the dependency ratio occurred in País Vasco, with an increase in 2015 of 13.7 points with respect to 2000, followed by Madrid with an increase of 7.6 points, Navarra with 7.5 points, Cataluña with 7.3 points and Galicia, with an increase of 6.8 points over the period studied. In contrast, the most pronounced reductions are found in Castilla-La Mancha (5.3 points) and Extremadura (4.4 points). The difference observed in Spain as a whole is an increase of 4.1 points between 2000 and 2015.

⁵The dependency ratio is the demographic index that expresses in percentage form the relationship between the dependent population (under the age of 16 and over the age of 64) and the active population (from 16 to 64 years of age) on which the former depends. The most recent data available correspond to 2015.

The autonomous communities in the north-western part of the peninsula show the highest old-age dependency ratios: Castilla y León with 38.1%, followed by Galicia with 37.9% and Asturias with 37.4%. Overall Spain's ratio is 28.3%.

The autonomous communities that show the highest ratios of youth dependency are Melilla 38.9%, Ceuta 33.7% and Murcia 28.3%. In Spain as a whole the ratio is 24.7%.

Graph 1-3 Changes in dependency ratio: dependency ratio of children under age 16 and dependency ratio of persons over age 64, from 2000-2015



Source: National Statistics Institute (INE). Demographic indicators.

1.2 Life expectancy

1.2.1 Life expectancy at birth

Life expectancy at birth (LEB) in Spain is 83.2 years, 80.3 for men and 86.1 for women.

In the 2007-2014 period the LEB increased by 3.5 years (4.1 in men and 2.9 in women). At birth, Spanish women can expect to live 5.8 years longer than men.

Table 1-4 Life expectancy at birth by sex, 2001 and 2014

	LEB	
	2001	2014
Both sexes	79.7	83.2
Men	76.2	80.3
Women	83.2	86.1

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation. Life expectancies in Spain.

Table 1-5 Changes in life expectancy at birth by autonomous community, 2001 and 2014

	2001	2014	Difference 2014-2001
Andalucía	78.6	82.1	3.5
Aragón	80.4	83.2	2.8
Asturias	79.7	82.5	2.8
Baleares	79.3	83.0	3.7
Canarias	78.2	82.5	4.3
Cantabria	80.5	83.1	2.6
Castilla y León	80.3	84.1	3.8
Castilla-La Mancha	81.4	83.7	2.3
Cataluña	80.0	83.6	3.6
Comunidad Valenciana	79.0	82.9	3.9
Extremadura	79.4	82.7	3.3
Galicia	80.0	83.4	3.4
Madrid	80.8	85.0	4.2
Murcia	79.0	82.9	3.9
Navarra	81.3	83.9	2.6
País Vasco	80.4	83.9	3.5
La Rioja	80.8	84.1	3.3
Ceuta y Melilla	78.4	80.7	2.3
Spain	79.7	83.2	3.5

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation. Life expectancies in Spain.

By autonomous community, Madrid, with 85.0 years and Castilla y León and La Rioja, with 84.1 years, are the communities with the highest LEB. The lowest LEB are found in Ceuta and Melilla, with 80.7, Andalucía with 82.1 and Asturias with 82.5.

Between 2001 and 2014, the LEB increased by 3.5 years in Spain as a whole and it rose in all of the autonomous communities. Canarias, with an increase of 4.3 years, followed by Madrid with 4.2 years and the Comunidad Valenciana and Murcia, both with 3.9 years, are the communities showing the most growth. Ceuta and Melilla and Castilla-La Mancha, where the increase is of 2.3 years and also Cantabria and Navarra, with an increase of 2.6, are the communities with the smallest increase in life expectancy.

1.2.2 Life expectancy at age 65

In 2014 Life Expectancy at age 65 (LE₆₅) is 21.5 years: 19.3 years in men and 23.4 in women.

LE₆₅ increased during the 2001-2014 period by 2.4 years in both men and women. At age 65, Spanish women can expect to live almost 4.1 years longer than men.

Table 1-6 Changes in life expectancy at age 65 by sex, 2001 and 2014

	LE ₆₅	
	2001	2014
Both sexes	19.1	21.5
Men	16.9	19.3
Women	21.0	23.4

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation. Life expectancies in Spain.

The autonomous communities with the highest LE₆₅ are Madrid, with 22.9 years, Castilla y León, with 22.3 and La Rioja, with 22.1 years. The lowest LE₆₅ is found in Ceuta and Melilla, where it is less than 20 years, and in Andalucía with 20.4 and Extremadura with 21.0.

Between 2001 and 2014 the LE₆₅ has increased in all of the autonomous communities, the greatest growth being observed in Madrid and Castilla y León, with an increase of 3.1 years, and in Canarias, with an increase of 2.8 years. Castilla-La Mancha (1.2 years), Ceuta and Melilla (1.4 years) and Cantabria (1.8 years) are the autonomous communities in which the LE₆₅ has grown the least.

Table 1-7 Changes in life expectancy at age 65 by autonomous community, 2001 and 2014

	2001	2014	Difference 2014-2001
Andalucía	18.0	20.4	2.4
Aragón	19.6	21.5	1.9
Asturias	19.2	21.1	1.9
Baleares	18.6	21.1	2.5
Canarias	18.2	21.0	2.8
Cantabria	19.6	21.4	1.8
Castilla y León	19.2	22.3	3.1
Castilla-La Mancha	20.5	21.7	1.2
Cataluña	19.3	21.8	2.5
Comunidad Valenciana	18.4	21.1	2.7
Extremadura	18.7	21.0	2.3
Galicia	19.7	21.8	2.1
Madrid	19.8	22.9	3.1
Murcia	18.4	21.0	2.6
Navarra	20.1	22.0	1.9
País Vasco	19.6	22.0	2.4
La Rioja	20.2	22.1	1.9
Ceuta y Melilla	18.2	19.6	1.4
Spain	19.1	21.5	2.4

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation. Life expectancies in Spain.

1.2.3 Healthy Life Years

In 2014, the number of healthy life years at birth (HLYb) was estimated to be 66.9 years; 67.6 for men and 66.2 for women. Between 2006 and 2014 HLYb increased, overall, by 4 years, somewhat more in men (4.7 years) than in women (3.2 years).

In 2014, the HLYb varied substantially among the different autonomous communities. Aragón, with 72.6 years, followed by Cantabria, with 72.3 and Navarra, with 70.5, are the communities with the highest estimate of healthy life years. In the other extreme, Canarias, with 58.2 years, followed by Ceuta and Melilla, with 62.5 and Asturias, with 63.5 are the autonomous communities with the lowest estimate of healthy life years at birth.

Between 2006 and 2014, the healthy life years at birth estimates have increased in all autonomous communities except Canarias⁶, where it fell by 5.2 years. Besides Ceuta and Melilla,

⁶ With respect to the decrease in Canarias, just over 5 years, it is with all certainty the result of the significant increase in the prevalence of activity limitation in this community in 2011-12 compared to 2006-07, which was probably due to incidences in the process used to select households for the sample.

where the HLYb estimate has increased by 9.8 years, the greatest changes are found in La Rioja (8.7) and Navarra (7.8).

Table 1-8 Changes in healthy life years at birth (HLYb) by sex, 2006 and 2014

	HLYb	
	2006	2014
Both sexes	62.9	66.9
Men	62.9	67.6
Women	63.0	66.2

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation. Life expectancies in Spain.

Table 1-9 Changes in healthy life years at 65 (HLY65) by sex, 2006 and 2014

	HLY ₆₅	
	2006	2014
Both sexes	11.4	12.4
Men	11.5	12.7
Women	11.3	12.1

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation. Life expectancies in Spain.

As regards healthy life years at age 65 (HLY₆₅), Spaniards, in 2014, can expect to live another 12.4 healthy life years, 12.7 in the case of men and 12.1 in the case of women. Between 2006 and 2014, HLY₆₅ increased by 1 year in the population overall; 1.2 years in men and 0.8 in women. By autonomous community, País Vasco, with 15.8 years, Castilla-La Mancha, with 15.6 and Cantabria with 13.3 are those with the highest HLY₆₅, while Ceuta and Melilla, with 9.2, Canarias (9.3) and Andalucía (10.6) are those with the lowest HLY₆₅. As regards changes since 2006, the number of HLY₆₅ has fallen in Canarias (2.2 years) and in Andalucía, Madrid, Castilla y León and Extremadura, where the drop has been less than 1 year. La Rioja, with an increase of 5.5 years, Castilla-La Mancha (4.4) and País Vasco (3.9) are the communities that have registered the greatest increases in HLY₆₅ since 2006.

Table 1-10 Changes in healthy life years at birth (HLYb) and age 65 (HLY65) by autonomous community, 2006 and 2014

	HLYb		HLY ₆₅	
	2014	Difference 2006-2014	2014	Difference 2006-2014
Andalucía	65.5	2.5	10.6	-0.8
Aragón	72.6	5.4	13.2	0.4
Asturias	63.5	4.9	11.2	1.2
Baleares	66.0	5.0	11.9	2.2
Canarias	58.2	-5.2	9.3	-2.2
Cantabria	72.3	4.5	13.3	0.8
Castilla y León	69.8	1.1	12.3	-0.7
Castilla-La Mancha	70.1	2.8	15.6	4.4
Cataluña	66.7	6.0	12.7	1.5
Comunidad Valenciana	66.7	7.3	13.2	2.2
Extremadura	67.8	4.0	11.3	-0.6
Galicia	64.8	5.7	11.6	1.5
Madrid	68.5	1.2	12.9	-0.7
Murcia	65.7	5.8	10.9	2.8
Navarra	70.5	7.8	13.1	2.2
País Vasco	68.7	5.3	15.8	3.9
La Rioja	67.5	8.7	12.6	5.5
Ceuta y Melilla	62.5	9.8	9.2	3.3
Spain	66.9	4.0	12.4	1.0

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation. Life expectancies in Spain.

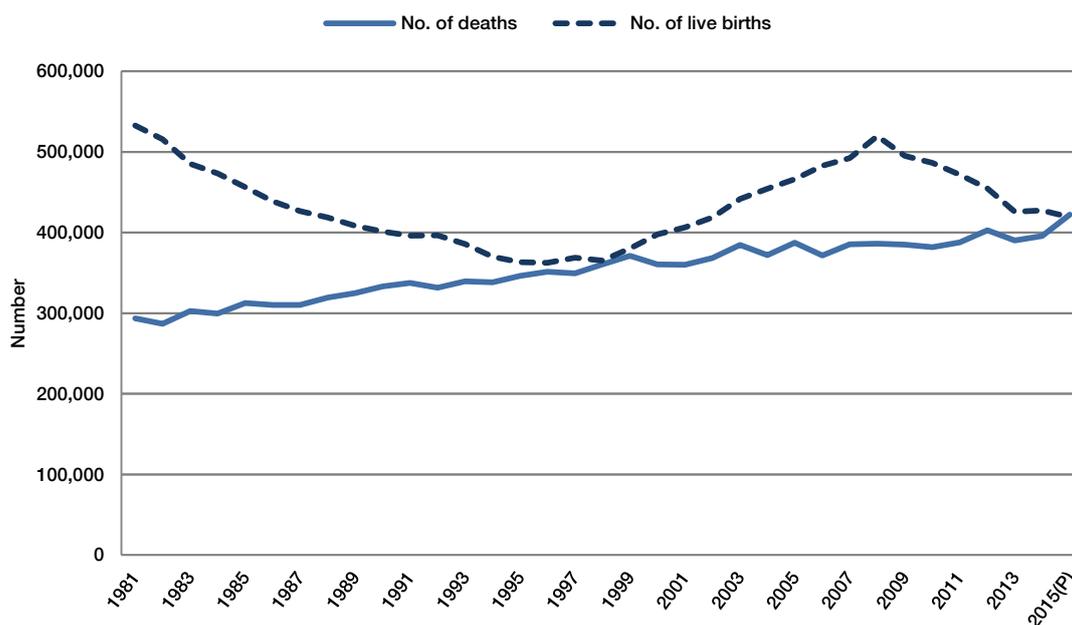
1.3 Mortality

1.3.1 General mortality

In 2014⁷ there were 395,830 deaths in Spain, 5,411 more than those occurring the preceding year. Of them 194,295 were women (1.9% more than the preceding year) and 207,571 were men (0.9% more).

⁷ National Statistics Institute (INE). Deaths by cause of death, 2014. Data published on 30 March 2016. The latest data available while preparing this report are the provisional data of the Natural Population Movement referring to 2015 and published on 23 June 2016, which put the deaths at 422,276 and births at 419,109.

Graph 1-4 Changes in number of deaths and births, 1981-2015



Remarks: (P) the 2015 data is provisional.

Source: National Statistics Institute (INE). Natural Population Movement.

As regards the number of births, based on provisional data, in 2015 the trend towards confluence in the number of deaths and births is confirmed, with a negative natural growth level registering 2,753 more deaths than births.

The gross death rate in 2014 is 852.1 deaths per 100,000 inhabitants, an increase of 1.7% with respect to the preceding year. By sex, the rate for women was 822.6 deaths per 100,000 women, while the rate for men was 882.5 per 100,000 men. The two largest groups of causes of death are diseases of the circulatory system (29.7%) and tumours (26.8%).

In relation to the risk of death, as expressed in the age-adjusted death rate, Madrid, followed by La Rioja and Castilla y León are the communities with the lowest risk of death, while Melilla, Ceuta, Andalucía and Canarias are the communities with the highest age-adjusted death rate.

Table 1-11 General mortality. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	495.6	-25.6
Aragón	446.2	-20.5
Asturias	480.5	-20.2
Baleares	454.3	-26.4
Canarias	480.6	-29.1
Cantabria	453.6	-19.4
Castilla y León	415.9	-19.8
Castilla-La Mancha	427.9	-25.3
Cataluña	431.1	-26.0
Comunidad Valenciana	463.0	-27.6
Extremadura	469.9	-24.5
Galicia	444.1	-23.1
Madrid	385.2	-29.4
Murcia	458.1	-28.2
Navarra	423.4	-19.3
País Vasco	424.8	-25.1
La Rioja	412.2	-23.6
Ceuta	552.9	-18.4
Melilla	558.0	-15.2
Spain	447.8	-25.3

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

In Spain, since 2001 the risk of death has fallen in relative terms by over 25%. The age-adjusted death rate fell between 2001 and 2014 in all autonomous communities. The decrease was greatest in Madrid, where it fell by 29.4%, and in Canarias, where it fell by 29.1%. The decrease was smaller in Melilla (15.2%), Ceuta (18.4%) and Navarra (19.3%).

1.3.2 Mortality by leading causes

1.3.2.1 Ischaemic heart disease

Ischaemic heart disease constitutes an important part of mortality from cardiovascular diseases. As many as 27.8% of the deaths from cardiovascular diseases (36.6% in men and 21.1% in women) are due to this disease, causing almost 8% of the total deaths occurring in Spain.

The risk of death from ischaemic heart disease is visibly different among the different autonomous communities. País Vasco, Navarra, Cantabria and Madrid are the autonomous communities with the lowest age-adjusted rate of death from this cause, while Asturias, Canarias, Ceuta and Andalucía are the communities with the greatest risk of death from ischaemic heart disease.

Changes in this risk of death between 2001 and 2014 have been downward, both in the country overall, where it has decreased by 45.3%, and in all of the autonomous communities.

Canarias, with a decrease of 55.4%, Ceuta (54.4%), Navarra (50.9%) and Madrid (45.1%) are the communities where the risk has fallen the most, while Cantabria (20.1%) and Asturias (27.8%) are where the smallest decreases are registered.

Table 1-12 Ischaemic heart disease. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	43.8	-43.9
Aragón	34.8	-33.8
Asturias	48.6	-27.8
Baleares	36.1	-38.9
Canarias	45.4	-55.4
Cantabria	28.4	-20.1
Castilla y León	33.3	-32.2
Castilla-La Mancha	32.7	-42.0
Cataluña	30.3	-44.5
Comunidad Valenciana	42.8	-44.6
Extremadura	43.3	-35.9
Galicia	32.7	-44.1
Madrid	28.5	-45.1
Murcia	36.7	-42.7
Navarra	27.8	-50.9
País Vasco	27.5	-42.3
La Rioja	34.9	-29.6
Ceuta	44.2	-54.4
Melilla	34.8	-44.7
Spain	34.4	-45.3

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

1.3.2.2 Cerebrovascular disease

Cerebrovascular disease causes 7.0% of the total number of deaths occurring in Spain and approximately 24% of all cardiovascular deaths (22% in men and 25% in women).

The risk of death from cerebrovascular disease in 2014 ranges from 18.8 per 100,000 inhabitants in Madrid, the autonomous community with the lowest risk, to 46.3 per 100,000 inhabitants in Melilla, where the risk of dying from this cause is the highest. Canarias, Castilla y León and Cataluña also have low risks, while Ceuta, Andalucía and Extremadura are where the highest age-adjusted death rates are observed.

Changes in this risk of death from 2001 to 2014 have been downward, both in the country overall, where it has decreased by 50.5%, and in each of the autonomous communities. Murcia, with a decrease of 57.6%, Castilla-La Mancha with a decrease of 55.5% and Canarias with a decrease of 55.5% are the communities with the biggest drop in the risk of death from this cause, while Melilla, with 25.4%, Cantabria with 32.4% and Navarra with 42.9% show the smallest decreases in the age-adjusted rate of mortality due to cerebrovascular disease.

Table 1-13 Cerebrovascular disease. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	37.7	-50.2
Aragón	26.8	-49.0
Asturias	29.0	-43.7
Baleares	24.3	-51.6
Canarias	22.1	-55.5
Cantabria	27.3	-32.4
Castilla y León	23.4	-46.4
Castilla-La Mancha	26.7	-55.6
Cataluña	23.5	-51.5
Comunidad Valenciana	28.5	-55.0
Extremadura	33.4	-46.9
Galicia	28.4	-51.0
Madrid	18.8	-50.2
Murcia	29.9	-57.6
Navarra	23.9	-42.9
País Vasco	24.0	-49.7
La Rioja	24.8	-44.4
Ceuta	39.1	-46.6
Melilla	46.3	-25.4
Spain	27.2	-50.5

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

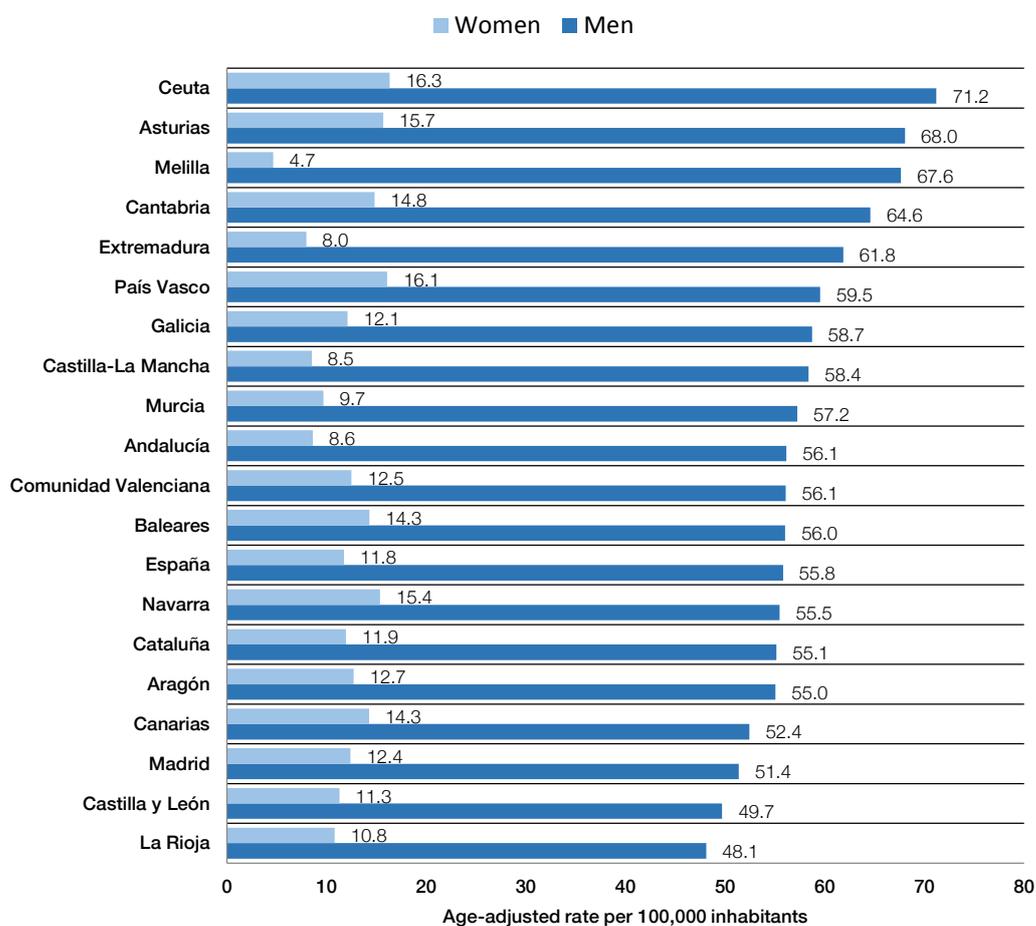
1.3.2.3 Lung and breast cancer

Lung cancer causes 20.0% of deaths due to malignant tumours in Spain. In men it is the neoplasia that causes the most deaths: about 26% of the total. The percentage is 10% in women.

Both the geographical pattern and, particularly, the changes observed in the risk of dying from this malignant tumour are different from one sex to the other, perhaps the consequence of the differences in smoking habits: a gradual reduction in the number of men who smoke has been observed for some time while women show a progressive incorporation, somewhat later in life, to the habit.

The lowest risk of death from lung cancer in men is observed in La Rioja, Castilla y León, Madrid and Canarias, while in women the communities with the lowest mortality rates are Melilla, Extremadura, Castilla-La Mancha and Andalucía. The highest risks of death for men are found in Ceuta, Asturias and Melilla, and for women in Ceuta, País Vasco and Asturias.

Graph 1-5 Lung cancer. Age-adjusted death rates per 100,000 inhabitants by sex and autonomous community, 2014



Remarks: Data appears in order from highest to lowest based on 2014 figures for men.

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

Over time the risk of dying from lung cancer has changed in different ways for men and women: while in men the age-adjusted rate of death from this cause fell by 20.1% during the 2001-2014 period, in women it increased by 70.9%.

The territories in which the risk for men fell the most were Extremadura (32.5%), Madrid (27.1%), Baleares (26.4%) and Andalucía (25.8%). For women, except in Melilla, where a 65.1% drop was observed, the risk of dying from lung cancer increased in all autonomous communities, with the increase being more than 100% in La Rioja (123.1%), País Vasco (120.3%) and Navarra (109.1%).

Table 1-14 Lung cancer. Percentage of change in age-adjusted death rate in men and women and autonomous community, 2014/2001

	% change 2014/2001	
	Men	Women
Andalucía	-25.8	43.5
Aragón	-16.1	90.6
Asturias	-9.2	62.4
Baleares	-26.4	74.0
Canarias	-17.0	70.8
Cantabria	-22.8	97.3
Castilla y León	-11.4	83.7
Castilla-La Mancha	1.4	63.8
Cataluña	-22.7	79.9
Comunidad Valenciana	-24.4	71.7
Extremadura	-32.5	78.9
Galicia	-10.7	87.3
Madrid	-27.1	57.3
Murcia	-10.4	40.6
Navarra	-16.6	109.1
País Vasco	-10.4	120.3
La Rioja	-16.3	123.1
Ceuta	22.8	98.1
Melilla	-25.1	-65.1
Spain	-20.1	70.9

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

Malignant breast tumours are the most frequent neoplasia in women. The 6,231 deaths by breast cancer in women occurring in 2014 represent about 15% of the deaths from malignant tumours and slightly more than 3% of women's total deaths. That year age-adjusted mortality rates ranged from the 10.5 per 100,000 inhabitants of Navarra, which –along with Melilla (12.7), Castilla-La Mancha (13.3) and La Rioja (14.2)– was the community with the lowest risk of death from this cause, and the 17.0 per 100,000 inhabitants of both Canarias and Comunidad Valenciana, the communities that, along with País Vasco (17.1) and Asturias (18.1), had the highest rates.

Looking at changes in the risk of breast cancer death in women from 2001 to 2014 we see a clear decline in all of the autonomous communities. In the country as a whole, the decline was 24.6%. The territories showing the greatest drop are Navarra with 50.0%, Murcia with 33.9%, Castilla-La Mancha con 31.7% and Cataluña with 31.5%.

Table 1-15 Breast cancer in women. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	16.9	-18.2
Aragón	16.9	-21.8
Asturias	18.1	-18.7
Baleares	14.8	-29.1
Canarias	17.0	-22.5
Cantabria	14.3	-20.1
Castilla y León	16.0	-13.9
Castilla-La Mancha	13.3	-31.7
Cataluña	15.6	-31.5
Comunidad Valenciana	17.0	-21.9
Extremadura	16.4	-18.7
Galicia	14.9	-22.6
Madrid	15.2	-26.7
Murcia	14.5	-33.9
Navarra	10.5	-50.0
País Vasco	17.1	-25.9
La Rioja	14.2	-27.1
Ceuta	14.8	-15.5
Melilla	12.7	-21.5
Spain	15.9	-24.6

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

1.3.2.4 Liver cirrhosis

Liver cirrhosis is the cause of 4,456 deaths, 3,267 men and 1,189 women, which represent 1.1% of the total number of deaths occurring in the course of the year (1.6% in men and 0.6% in women). The age-adjusted mortality rate varies somewhat among the different autonomous communities. Madrid and La Rioja, with just over 4 deaths per 100,000 inhabitants, are the communities with the lowest risk of death from this cause, while Ceuta with 12.2, Melilla with 9.5, Asturias with 9.3 and Canarias with 9.1 have the highest rates.

In Spain as a whole, since 2001 the risk of dying from liver cirrhosis has fallen by 34.2%. The decline is observed in most autonomous communities, with the largest decline in La Rioja, where cirrhosis mortality has fallen by 56.7%, and in País Vasco (44.9%), Comunidad Valenciana (41.8%) and Madrid (41.4%). Mortality from this cause increased from 2001 and 2014 only in Ceuta and Melilla, by 79.2% and 29.5% respectively.

Table 1-16 Liver cirrhosis. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	8.0	-37.3
Aragón	6.5	-20.6
Asturias	9.3	-39.2
Baleares	6.6	-27.5
Canarias	9.1	-32.2
Cantabria	6.7	-3.5
Castilla y León	5.9	-31.2
Castilla-La Mancha	6.7	-5.1
Cataluña	6.7	-35.4
Comunidad Valenciana	8.0	-41.8
Extremadura	6.1	-16.6
Galicia	6.7	-24.3
Madrid	4.2	-41.4
Murcia	8.6	-32.1
Navarra	5.4	-19.4
País Vasco	6.3	-44.9
La Rioja	4.3	-56.7
Ceuta	12.2	79.2
Melilla	9.5	29.5
Spain	6.9	-34.2

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

1.3.2.5 Traffic accidents

The relative importance of traffic accidents among the external causes of death has become considerably smaller in recent years. In 2014, traffic accidents in Spain represented 13% of the total number of deaths from external causes.

The risk of dying due to a traffic accident varies slightly among the autonomous communities. Ceuta and Melilla⁸ with not quite 1 death per 100,000 inhabitants, País Vasco with 2, Madrid with 2.2 and Canarias with 3, are the communities with the lowest age-adjusted death rate from traffic accidents in 2014. That same year the communities with the highest risk of traffic accident death are Navarra, with a rate of 5.5 per 100,000 inhabitants, Galicia with 5 and La Rioja and Baleares, both with 4.7.

The risk of dying due to a traffic accident in Spain dropped by 72.6% between 2001 and 2014. This significant decrease, which was observed in all of the autonomous communities, was largest in Ceuta and Melilla, where the decrease was about 85%, in País Vasco, with a decrease of 81.5% and Murcia, with a decrease of 78.6%.

⁸ The rates in Ceuta refer to 2001 to 2013 and in Melilla they refer to 2002 and 2014, due to there being no deaths from traffic accident in the other years.

Table 1-17 Traffic accidents. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	3.3	-71.6
Aragón	4.6	-69.9
Asturias	3.5	-65.1
Baleares	4.7	-70.6
Canarias	3.0	-65.0
Cantabria	3.3	-70.2
Castilla y León	4.5	-73.2
Castilla-La Mancha	4.2	-70.2
Cataluña	3.2	-74.7
Comunidad Valenciana	3.2	-74.9
Extremadura	4.5	-67.3
Galicia	5.0	-71.0
Madrid	2.2	-70.0
Murcia	4.2	-78.6
Navarra	5.5	-64.7
País Vasco	2.0	-81.5
La Rioja	4.7	-78.3
Ceuta	1.1	-90.7
Melilla	1.2	-85.1
Spain	3.6	-72.6

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

1.3.2.6 Suicide

In 2014, suicide caused 3,911 deaths (2,938 men and 973 women), which represents 26% of the deaths from external causes and 1% of the total number of deaths in Spain that year.

The risk of death from suicide varied moderately among the autonomous communities. Madrid, with an adjusted rate of 4.7 per 100,000 inhabitants, was the community with the lowest risk in 2014, followed by Extremadura, with a rate of 4.9 per 100,000 inhabitants, Cantabria, with 5.7 and Cataluña, with 6.0. The communities with the highest rates were Galicia and Asturias, both 10.3 per 100,000 inhabitants, La Rioja with 8.3 and Andalucía with 8.

Between 2001 and 2014, the risk of death from suicide in Spain rose by around 5%. A downward trend is observed in approximately half of the autonomous communities, with Extremadura (11.5%), Navarra (8.9%), Comunidad Valenciana (7.8%) and Murcia and La Rioja (both 6.9%) being the communities with the largest decrease. In the other direction, Ceuta and Melilla, with an increase of over 100%, and Baleares and Cantabria, with an increase of over 50%, were the communities with the greatest increase in the age-adjusted rate from 2001 to 2014.

Table 1-18 Suicide. Age-adjusted death rate per 100,000 inhabitants by autonomous community, 2014 and percentage of change 2014/2001

	2014	% change 2014/2001
Andalucía	8.0	-4.2
Aragón	7.0	22.4
Asturias	10.3	8.8
Baleares	7.4	52.5
Canarias	7.0	4.6
Cantabria	5.7	55.2
Castilla y León	7.6	15.2
Castilla-La Mancha	7.4	20.4
Cataluña	6.0	-6.7
Comunidad Valenciana	6.5	-7.8
Extremadura	4.9	-11.5
Galicia	10.3	30.3
Madrid	4.7	15.7
Murcia	6.7	-6.9
Navarra	6.2	-8.9
País Vasco	6.9	18.3
La Rioja	8.3	-6.9
Ceuta	6.9	114.6
Melilla	6.4	147.5
Spain	7.0	5.1

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

1.3.3 Infant mortality and perinatal mortality

Infant mortality is still an essential indicator for assessing the health status of a population, although in developed countries it has lost sensitivity as a gauge of a community's social-economic level.

The rate of infant mortality is 2.9 deaths in children under the age of one per 1,000 live births, which is a decline of almost 30% in the period between 2001 and 2014. As for perinatal mortality, a more sensitive indicator than infant mortality in evaluating the coverage and quality of health care services, especially mother-child care, the rate is 4.6 deaths per 1,000 live births. Between 2001 and 2014, perinatal mortality has fallen by 18% in Spain.

The 10 leading causes of infant mortality, by number of deaths, were:

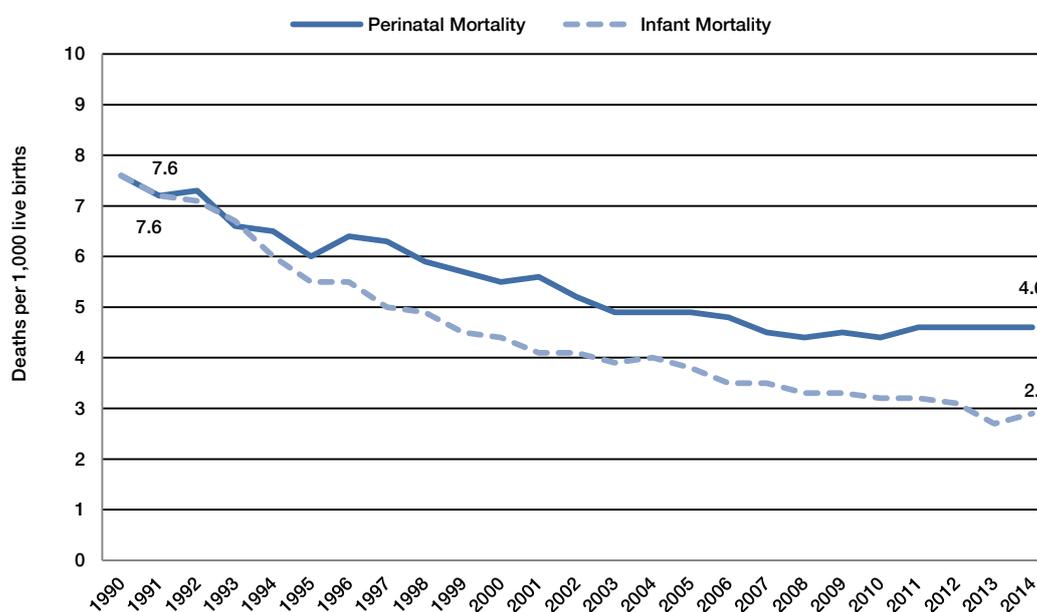
1. Congenital malformations, deformities and chromosomal anomalies
2. Neonatal bacterial sepsis
3. Disorders related to pre-term birth and low birth weight
4. Neonatal haemorrhage
5. Sudden infant death syndrome
6. Respiratory distress in the neonate
7. Foetus and neonate affected by maternal complications during pregnancy
8. Intrauterine hypoxia and birth asphyxia
9. Foetal and neonatal necrotising enterocolitis
10. Foetus and neonate affected by problems with the placenta or membranes

Table 1-19 Infant mortality and perinatal mortality per 1,000 live births by autonomous community, 2014

	Infant mortality	Perinatal mortality
Andalucía	3.4	5.1
Aragón	2.5	3.7
Asturias	2.1	7.1
Baleares	2.5	6.2
Canarias	2.7	4.1
Cantabria	2.2	3.7
Castilla y León	2.5	4.0
Castilla-La Mancha	2.1	4.1
Cataluña	2.7	4.7
Comunidad Valenciana	2.8	4.3
Extremadura	2.7	3.7
Galicia	2.0	3.4
Madrid	3.1	3.9
Murcia	2.9	4.1
Navarra	2.7	5.0
País Vasco	2.2	4.2
La Rioja	2.1	5.3
Ceuta	5.0	8.3
Melilla	5.5	8.6
Spain	2.9	4.6

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

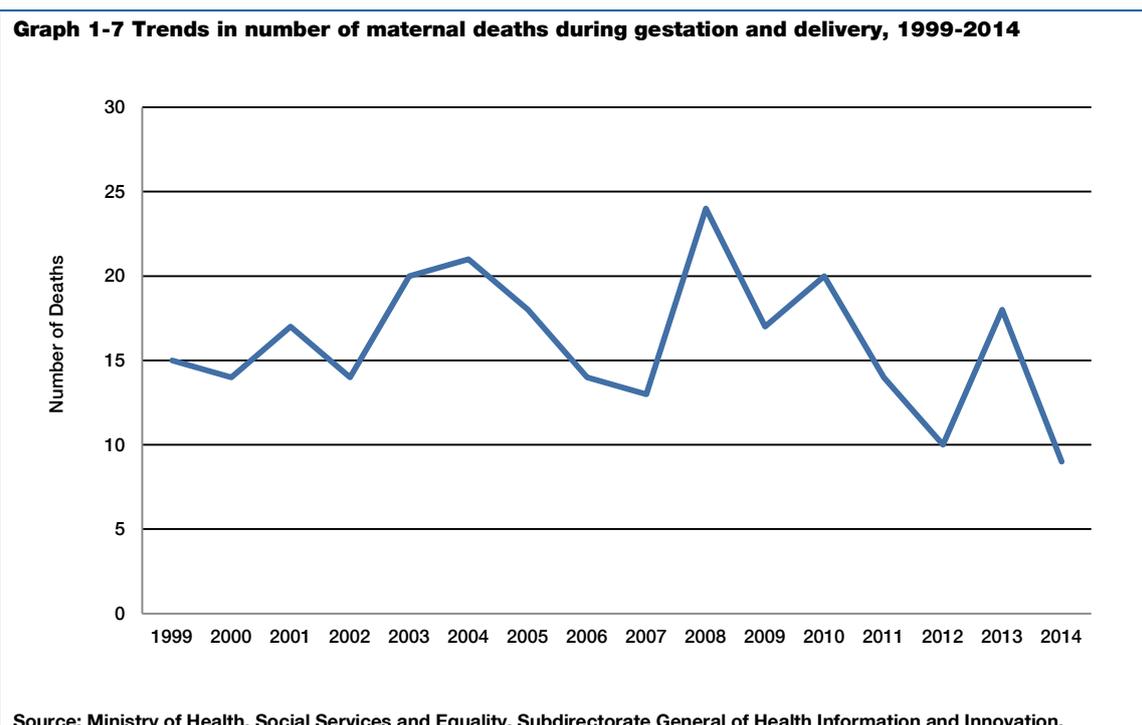
Graph 1-6 Trends in rates of infant mortality and perinatal mortality per 1,000 live births, 1990-2014



Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

1.3.4 Maternal death

The maternal death rate reflects the risk of mothers dying during gestation and delivery and is influenced by general socioeconomic conditions and also by the conditions of mother-child health care services. Currently, given the low maternal death rate, it is convenient to express it in absolute numbers. In 2014 in Spain 9 women died due to complications during pregnancy, delivery and puerperium, the lowest number registered in the 1999-2014 period, which began with 15 maternal deaths.



1.4 Morbidity in the Spanish population

1.4.1 Self-assessment of health

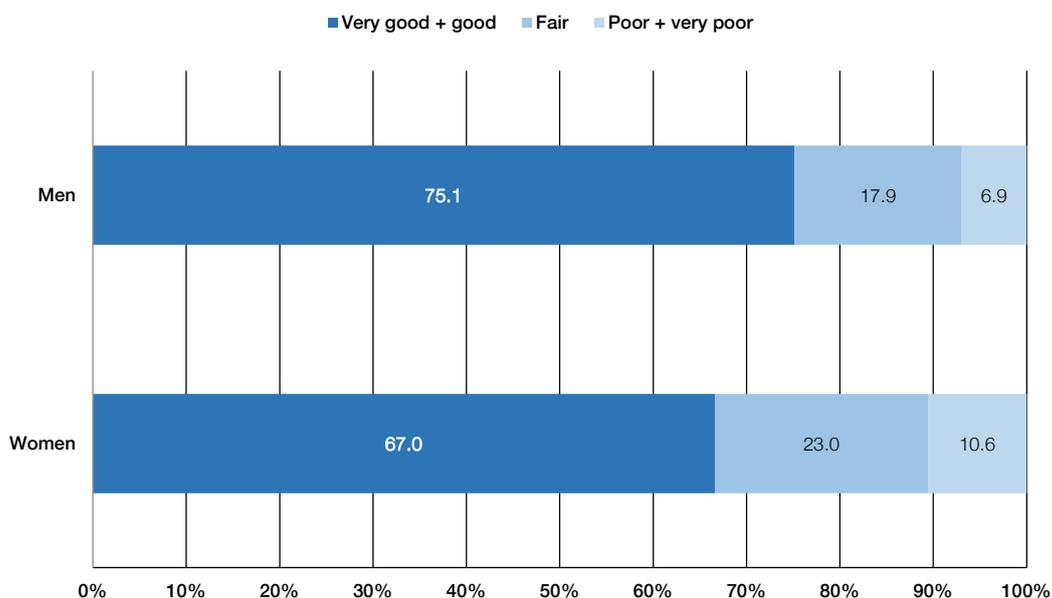
Self-perceived health complements other, more objective health indicators and has been shown to be a good predictor of mortality and the use of health care services.

In Spain 71% of the population aged 15 and over assess their own health as good or very good. Men report a better state of health than women do: 75.4% and 67.0% respectively.

Not surprisingly, the perception of a good or very good state of health decreases with age: in the age 65 and over group, 50.5% of men and 39.3% of women perceive their health positively, while in the population aged 85 and over, the assessment is positive in 36.8% of men and 26.8% of women. The greatest difference between the sexes is found in the group aged 65 to 74 years, where the variation is 13 points, and the smallest difference is in the 45-54 years group, which has a variation of only 4 points.

Socioeconomic level⁹ shows a clear relationship with self-perceived state of health; the lower the position on the social scale the fewer positive health assessments, which go from 83.2% in class I to 57.2% in class VI. The slope is steeper in women, with positive assessments falling from 82.1% in class I to 57.2% in class VI.

Graph 1-8 Perception of state of health in population aged 15 and over by sex, 2014

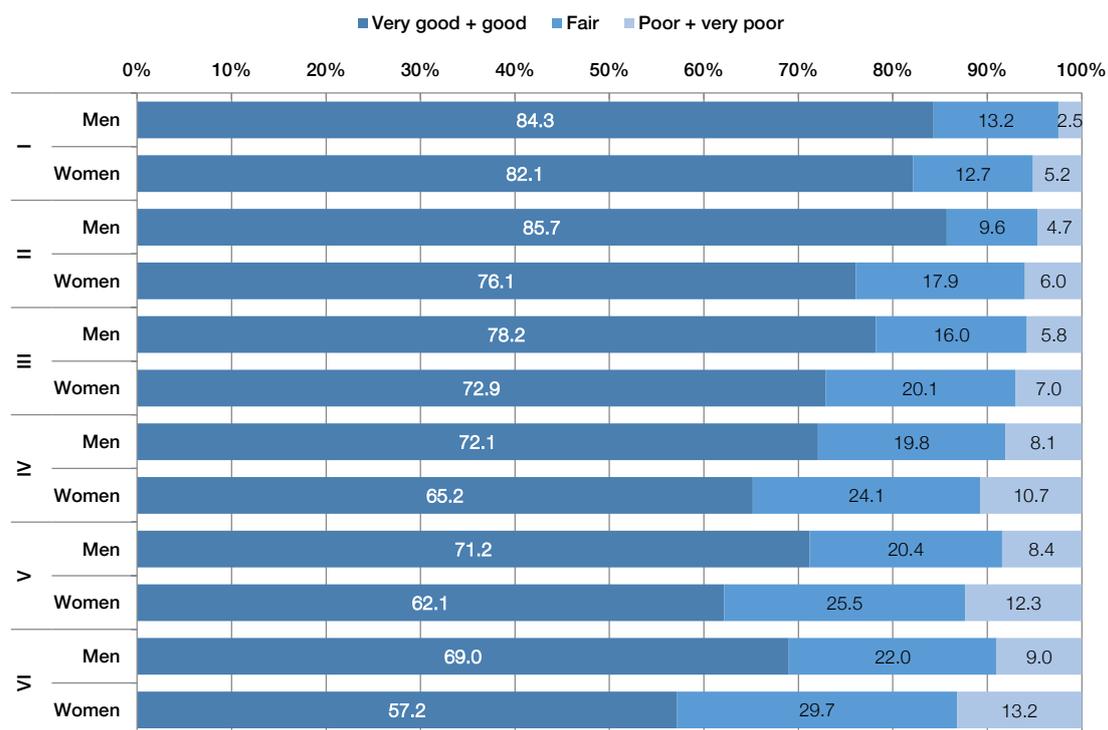


Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

⁹ Occupational social class: the social classes used in the European Survey of Health in Spain 2014 are the ones proposed in 2012 by the Spanish Epidemiology Society (SEE) Working Group on Determinants, as adapted for the Spanish National Health Survey. They consist of groups of occupations coded in accordance with the National Occupations Classification that went into effect in 2011 (CNO-11). The 6 groups used were the following:

- I. Directors and managers of establishments having 10 or more employees and professionals traditionally associated with longer University degree programmes.
- II. Directors and managers of establishments having less than 10 employees, professionals traditionally associated with shorter University degree programmes and other professionals that provide technical support. Athletes and artists.
- III. Intermediate occupations and the self-employed.
- IV. Supervisors and workers in skilled technical occupations.
- V. Skilled workers in the primary sector and semi-skilled workers.
- VI. Unskilled workers.

Graph 1-9 Perceived health in population aged 15 and over by sex and social class, 2014



Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

The autonomous community with the highest percentage of population aged 15 and over with a positive self-assessment of their health is Navarra (74.9%). The lowest is found in Galicia (60%). In Navarra is also where the difference between the sexes is the smallest (2.9 points).

By sex, men in Baleares (79.9%) and women in Navarra (73.5%) show the highest percentage of positive self-assessment of health; at the other end of the scale, the lowest percentages are found in Galicia, in both men (64.9%) and women (55.4%).

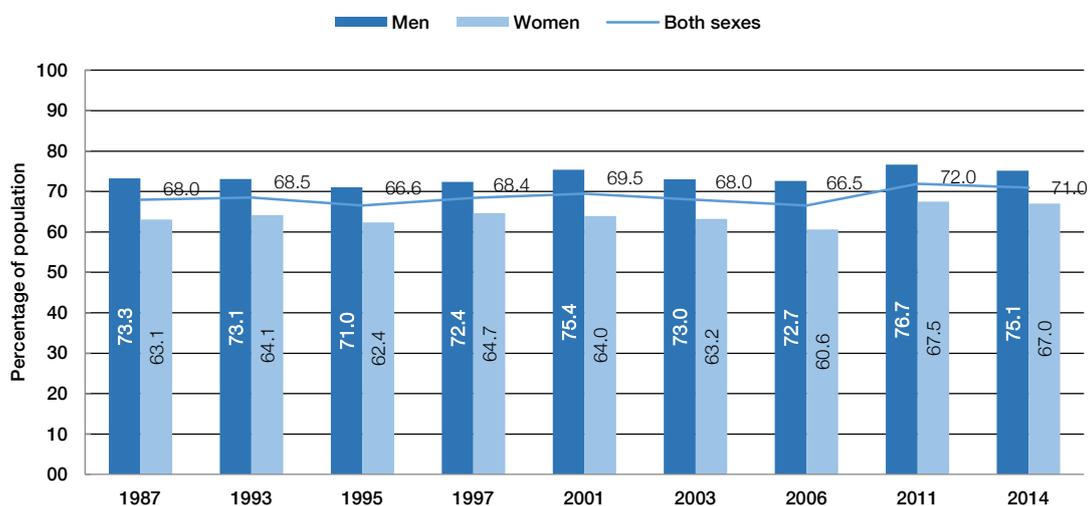
In the group aged 65 and over, it is men in Cantabria (59.4%) and women in Melilla (55.8%) who show the highest percentages of positive self-assessment of health; the lowest are found in the men and women of Galicia (32.7% and 25.3% respectively).

Table 1-20 Positive self-assessment of health in population aged 65 and over by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	43.6	54.5	35.1
Aragón	47.3	54.9	41.3
Asturias	45.5	56.3	37.8
Baleares	41.4	51.7	32.9
Canarias	31.3	32.8	30.0
Cantabria	52.6	59.4	47.5
Castilla y León	44.3	53.9	36.6
Castilla-La Mancha	35.7	40.5	31.9
Cataluña	47.9	53.1	43.8
Comunidad Valenciana	45.9	53.7	39.7
Extremadura	45.8	47.7	44.3
Galicia	28.5	32.7	25.3
Madrid	51.1	53.4	49.4
Murcia	34.7	44.4	27.0
Navarra	54.2	57.8	51.4
País Vasco	50.5	52.9	48.7
La Rioja	48.5	57.5	41.2
Ceuta	40.7	56.0	29.0
Melilla	49.2	40.9	55.8
Spain	43.6	50.5	39.3

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Graph 1-10 Trends in positive self-assessment of health in population aged 15 and over by sex, 1987-2014



Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey.

Looking at the data over time, rates are seen to remain stable with a slight upward trend in the percentage of the population aged 15 and over that assesses its health positively (good or very good), in both men and women, always more so in the former. Between 2006 and 2011 a

pronounced improvement is seen, especially in women. In 2014 this improvement in the subjective perception of health stays practically the same (71% compared to 72%).

1.4.2 Chronic diseases and health problems in adults

The main health problems and diseases have changed over time and chronic diseases have gradually replaced infectious diseases as the main causes of morbidity. The chronic health problems that most frequently affect the population aged 15 and over are arterial hypertension (18.4%), pain in lumbar spine (17.3%), high cholesterol (16.5%), degenerative joint disease (16.4%) and chronic cervical pain (14.7%).

Table 1-21 Chronic health problems in population aged 15 and over. Percentage distribution by sex, 2014

	Both sexes	Men	Women
High blood pressure	18.4	18.0	18.8
Chronic back pain (lumbar region)	17.3	13.8	20.8
High cholesterol	16.5	15.7	17.2
Degenerative joint disease (does not include arthritis)	16.4	10.3	22.1
Chronic back pain (cervical region)	14.7	9.3	19.9
Chronic allergy	13.4	11.3	15.4
Varicose veins in the legs	9.3	4.2	14.2
Migraine or frequent headache	8.3	4.4	12.0
Depression	6.9	3.9	9.7
Chronic anxiety	6.9	4.0	9.6
Diabetes	6.8	7.3	6.4
Cataracts	5.0	3.8	6.1

Remarks: Chronic diseases or health problems with prevalence of 5% or more.

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

By autonomous community, the prevalence of arterial hypertension is highest in Canarias (24.2%) and lowest in Baleares (14.1%). The men and women of Canarias (22.0% and 26.4%) have the highest prevalence while the men of Ceuta (8.7%) and the women of Baleares (14.6%) have the lowest.

The highest prevalence of high cholesterol is found in Galicia (25.0%) and the lowest in Asturias (12.1%). By sex, the men and women of Galicia (22.0% and 27.8%) present the highest prevalence of high cholesterol and the men of Ceuta (8%) and the women of Baleares (14.0%) have the lowest.

Table 1-22 Reported prevalence of arterial hypertension in population aged 15 and over by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	15.8	14.3	17.2
Aragón	21.3	21.7	20.9
Asturias	19.0	16.2	21.5
Baleares	14.1	13.6	14.6
Canarias	24.2	22.0	26.4
Cantabria	17.5	16.8	18.1
Castilla y León	20.3	20.4	20.1
Castilla-La Mancha	20.5	19.1	21.9
Cataluña	19.2	20.5	18.0
Comunidad Valenciana	18.9	19.5	18.3
Extremadura	20.5	21.4	19.5
Galicia	21.1	20.4	21.7
Madrid	16.3	15.4	17.2
Murcia	19.3	18.6	20.1
Navarra	15.3	14.9	15.7
País Vasco	17.4	17.6	17.2
La Rioja	17.2	18.2	16.3
Ceuta	16.9	8.7	26.1
Melilla	17.7	17.5	17.9
Spain	18.4	18.0	18.8

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Table 1-23 Reported prevalence of high cholesterol in population aged 15 and over by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	14.3	14.1	14.5
Aragón	17.4	17.6	17.2
Asturias	12.1	10.0	14.1
Baleares	13.6	13.3	14.0
Canarias	18.1	16.9	19.4
Cantabria	18.8	18.1	19.5
Castilla y León	17.6	17.1	18.0
Castilla-La Mancha	15.3	13.9	16.6
Cataluña	15.7	15.2	16.2
Comunidad Valenciana	15.9	15.8	15.9
Extremadura	17.8	17.7	18.0
Galicia	25.0	21.9	27.8
Madrid	16.5	14.3	18.5
Murcia	16.3	15.1	17.6
Navarra	14.9	14.9	15.0
País Vasco	18.5	20.4	16.7
La Rioja	15.8	14.1	17.4
Ceuta	12.8	8.0	18.3
Melilla	14.8	11.6	17.8
Spain	16.5	15.7	17.2

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

In the population over 14 years of age, 69.3% state that they have had their blood pressure taken in the last year; the proportion reaches 94.4% in the group aged 75 to 84. Over 90.0% of the population over the age of 64 state that they have had their blood pressure taken in the last two years. Cholesterol levels have been tested in the last year in 69.5% of the population over the age of 14 and it is also in the group aged 75 to 84 where the highest proportion is found, over 90%. Diabetes is the chronic metabolic disease most widespread among the population. It is one of the five leading causes of death in developed countries. The prevalence of diabetes in adults in Spain is 6.8%, with no significant differences between women (7.3%) and men (6.4%). Diagnosis and proper control of diabetes diminishes the risk of developing cardiovascular diseases such as myocardial infarction or stroke.

Table 1-24 Prevalence of diabetes in population aged 15 and over by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	7.1	6.8	7.4
Aragón	5.3	6.3	4.4
Asturias	7.4	7.5	7.3
Baleares	5.2	5.2	5.3
Canarias	8.1	8.0	8.1
Cantabria	5.3	5.7	5.0
Castilla y León	6.6	7.3	5.8
Castilla-La Mancha	6.4	7.4	5.3
Cataluña	7.1	8.7	5.5
Comunidad Valenciana	8.0	8.2	7.9
Extremadura	7.4	6.7	8.1
Galicia	7.5	6.5	8.3
Madrid	5.4	6.1	4.7
Murcia	8.6	8.3	9.0
Navarra	5.4	7.2	3.5
País Vasco	5.8	6.7	5.0
La Rioja	5.8	8.9	2.7
Ceuta	11.0	7.6	15.0
Melilla	10.7	10.8	10.6
Spain	6.8	7.3	6.4

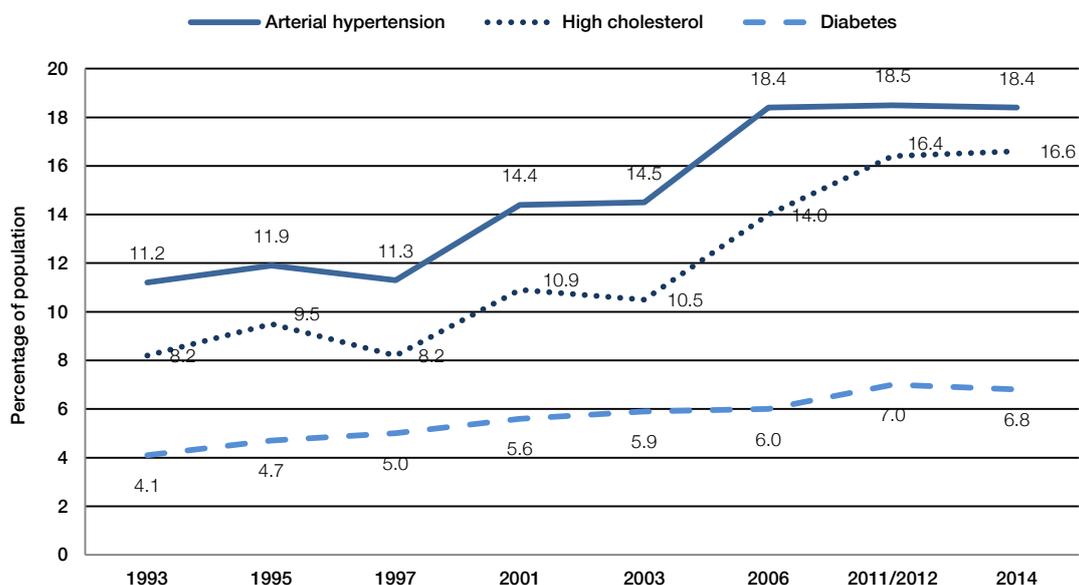
Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

The prevalence of diabetes, with a range of values between 11 and 8 per 100 inhabitants, is highest in Ceuta, Melilla, Murcia, Canarias and Comunidad Valenciana. The lowest levels are found in Baleares, Aragón and Cantabria, with values between 5.2 and 5.3 per 100 inhabitants.

In the population over 14 years of age, 68.2% state that they have measured their blood glucose level in the last 12 months. This percentage increases with age, reaching 89% in the group aged 75 to 84.

Arterial hypertension, high cholesterol and diabetes continue to show an upward trend in Spain. In fact, since 1993 hypertension has gone from affecting 11.2% to 18.4% of adults, diabetes from 4.1% to 6.8% and high cholesterol from 8.2% to 16.6%.

Graph 1-11 Trends in prevalence of chronic health problems in population aged 15 and over, 1993-2014



Remarks: The reference population for the years prior to 2011 is the group aged 16 and over.

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

1.4.3 Oral health problems

Of the population aged 15 and over, 26.1% still have all their own teeth, while 72.5% have had at least one tooth extracted and 64.1% have at least one filling. Cavities are present in 25.5% of people aged 15 and over and 17.6% say they experience bleeding gums, spontaneously or when they brush their teeth.

Table 1-25 Dental status in population aged 15 and over. Percentage distribution by sex, 2014

	Both sexes	Men	Women
Extracted teeth	72.5	70.6	78.3
Filled (obturated) teeth	64.1	60.6	67.4
Missing teeth	54.7	53.7	55.6
Having crowns, bridges, other prosthetic devices or false teeth	39.8	35.8	43.5
Cavities	25.5	26.8	24.3
Entire set of own teeth	26.1	27.5	24.9
Bleeding gums, spontaneously or while brushing	17.6	16.0	19.2
Loose teeth	6.4	6.3	6.6

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). European Survey of Health in Spain.

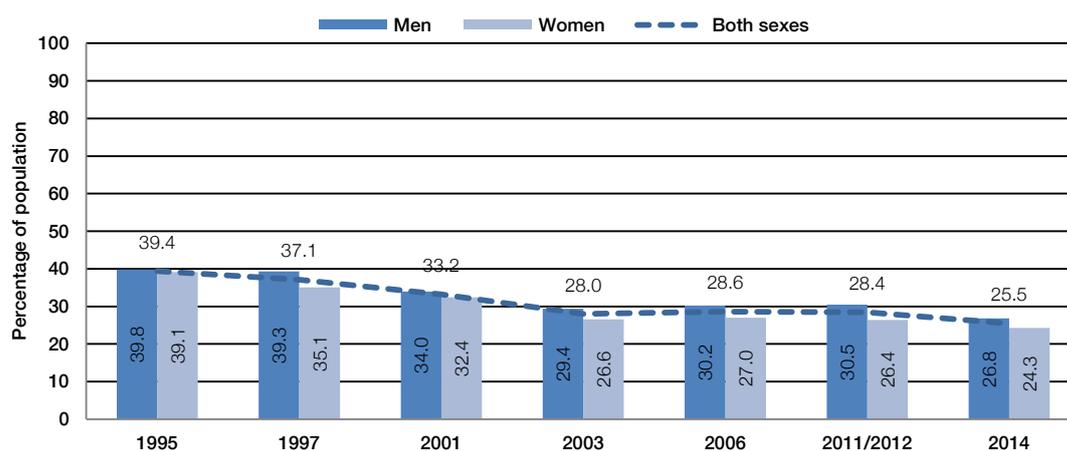
By autonomous community, the highest figures regarding prevalence of cavities in the population aged 15 and over are found in Melilla (37.2%), Canarias (35.0%) and Ceuta (34.3%). The lowest figures are in Cantabria (9.5%) and Asturias (16.4%).

Table 1-26 Reported prevalence of cavities in population aged 15 and over by sex and autonomous community, 2014

	Both sexes (%)	Men (%)	Women (%)
Andalucía	29.9	32.3	27.7
Aragón	27.0	31.3	22.8
Asturias	16.4	16.5	16.2
Baleares	19.1	20.1	18.1
Canarias	35.0	36.9	33.2
Cantabria	9.5	10.8	8.2
Castilla y León	21.8	20.1	23.5
Castilla-La Mancha	30.6	28.8	32.5
Cataluña	24.5	25.5	23.5
Comunidad Valenciana	25.1	27.3	22.9
Extremadura	26.2	26.1	26.2
Galicia	28.1	30.8	25.6
Madrid	21.7	22.1	21.4
Murcia	34.0	34.7	33.4
Navarra	17.5	18.2	16.9
País Vasco	18.6	20.7	16.6
La Rioja	21.7	25.3	18.3
Ceuta	34.3	31.2	37.9
Melilla	37.2	41.6	33.4
Spain	25.5	26.8	24.3

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). European Survey of Health in Spain.

Graph 1-12 Trends in prevalence of cavities in population aged 15 and over by sex, 1995-2014



Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

Looking at the data over time, in the period 1995-2014 a clear downward trend can be seen in the percentage of population aged 15 and over who report having cavities (13.9 points), with the reduction being more intense in women (14.8 points) than in men (13.0 points).

As for the prevalence of gums bleeding either spontaneously or while brushing, the highest values are found in the population aged 15 and over in Ceuta (27.6%), Murcia (26.1%) and Extremadura (24.3%) and the lowest are found in Cantabria (5.4%) and Asturias (13.3%).

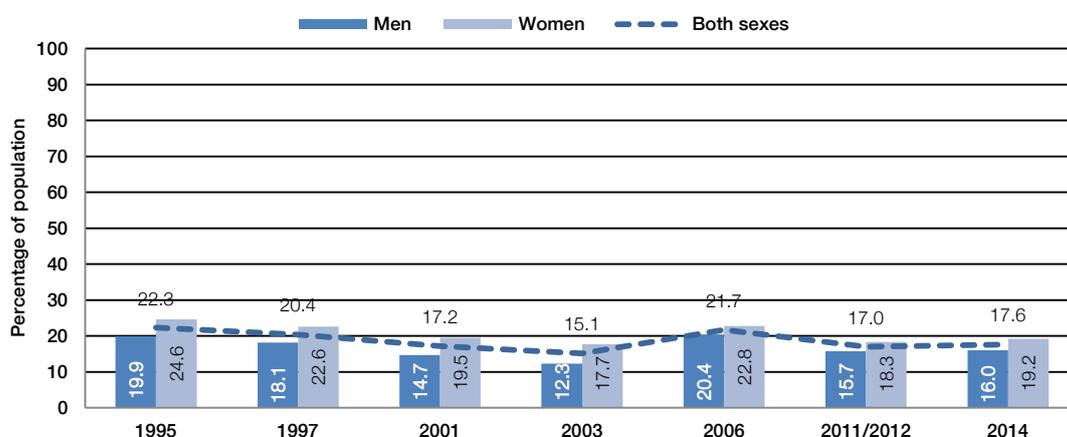
Table 1-27 Reported prevalence of bleeding gums in population aged 15 and over by sex and autonomous community, 2014

	Both sexes (%)	Men (%)	Women (%)
Andalucía	18.8	16.0	19.7
Aragón	21.5	16.6	26.4
Asturias	13.3	12.6	13.9
Baleares	16.5	14.7	18.3
Canarias	21.3	20.7	22.0
Cantabria	5.4	5.5	5.3
Castilla y León	17.3	16.3	18.3
Castilla-La Mancha	22.2	19.8	24.5
Cataluña	16.1	14.4	17.7
Comunidad Valenciana	14.0	11.9	16.8
Extremadura	24.3	22.4	26.2
Galicia	18.6	15.2	21.8
Madrid	15.8	14.7	16.8
Murcia	26.1	24.4	27.8
Navarra	16.5	15.7	17.4
País Vasco	17.1	16.7	17.4
La Rioja	19.2	15.9	22.9
Ceuta	27.6	17.1	39.9
Melilla	14.6	9.9	18.8
Spain	17.6	16.0	19.2

Remarks: gums bleeding either spontaneously or while brushing

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). European Survey of Health in Spain.

Graph 1-13 Trends in prevalence of bleeding gums in population aged 15 and over by sex, 1995-2011/2012, 1995-2011/2012



Remarks: gums bleeding either spontaneously or while brushing

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

Looking at the data over time, in the period 1995-2014 a clear downward trend is seen in the percentage of population aged 15 and over who say their gums bleed either spontaneously or while brushing (4.7 points), with the reduction being somewhat greater in women (5.4 points) than in men (3.9 points).

1.4.4 Limitations in the basic activities of daily living

In people aged 65 and over, 20.7% of the population (15.0% of men and 25.2% of women) have difficulty performing some of the basic activities of daily living.¹⁰ These difficulties increase with age. In the group aged 85 and over, such limitations affect 53.7%. In this age group, 38.8% of men and 61.8% of women have some degree of difficulty.

Table 1-28 Limitation in basic activities of daily living in population aged 65 and over. Percentage distribution by sex and age group, 2014

	Total	Aged 65-69	Aged 70-74	Aged 75-79	Aged 80-84	Age 85 years and over
Both sexes	20.7	8.4	11.1	18.9	30.6	53.7
Men	15.0	5.8	8.7	15.7	25.2	38.8
Women	25.2	10.4	13.4	21.4	34.1	61.8

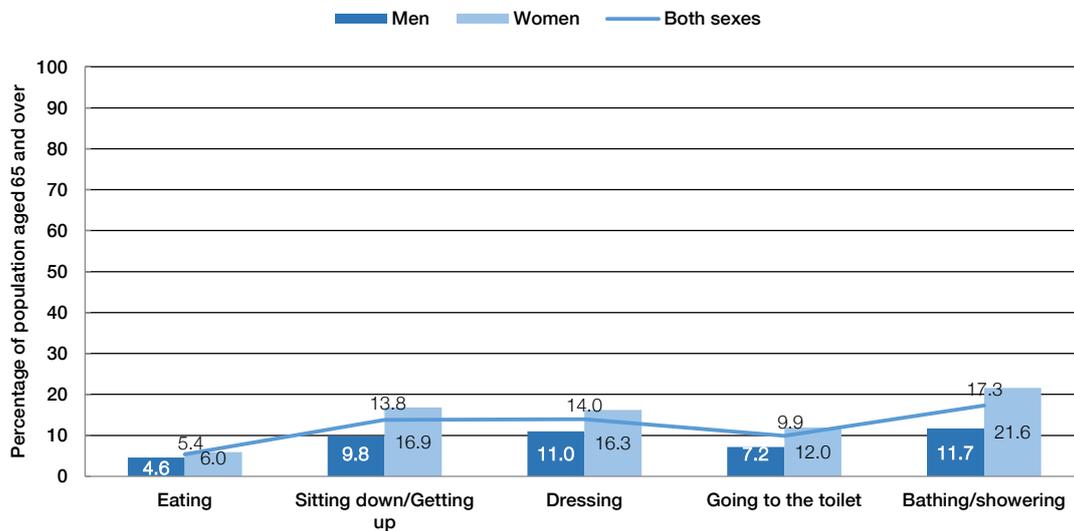
Remarks: The basic activities of daily living considered were: eating, sitting down, getting up from a chair or bed, going to bed, dressing and undressing, going to the toilet, showering or bathing.

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

¹⁰ The following were considered basic activities of daily living: eating, sitting down, getting up from a chair or bed, going to bed, dressing and undressing, going to the toilet, showering or bathing.

By type of limitation, bathing or showering, at 17.3%, is the limitation most frequently reported in the population aged 65 and over, both by men (11.7%) and by women (21.6%); it is followed by dressing, at 14.0%. At 5.4%, eating is the limitation least often reported by the population aged 65 and over, both in men (4.6%) and in women (6.0%).

Graph 1-14 Limitation in basic activities of daily living in population aged 65 and over. Percentage distribution by sex and type of limitation, 2014



Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey.

By autonomous community, the highest percentage of population aged 65 and over that reports experiencing limitations in the basic activities of daily living is found in Murcia (26.8%) and the lowest is in Castilla y León (13.4%). Navarra shows the least difference between the sexes (0.4 points) and Murcia the highest (22.0 points). The men of Aragón (19.8%) and the women of Murcia (32.7%) present the highest percentages; the lowest are found in the men of Castilla-La Mancha (9.2%) and the women of La Rioja (16.4%).

Measuring the prevalence of limitations in the basic activities of daily living, in terms of functional capacity and without regard to the reasons for these limitations (congenital, disease, accident, ageing...) constitutes a basic assessment of disability in the population.

Table 1-29 Limitation in basic activities of daily living in population aged 65 and over. Percentage distribution by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	26.2	15.0	31.1
Aragón	19.8	19.8	26.9
Asturias	16.2	11.0	19.2
Baleares	18.7	12.1	20.2
Canarias	20.7	16.8	21.9
Cantabria	20.8	19.3	29.2
Castilla y León	13.4	9.6	16.8
Castilla-La Mancha	22.5	9.2	27.1
Cataluña	21.1	16.8	25.6
Comunidad Valenciana	21.7	15.3	25.0
Extremadura	17.8	17.5	23.5
Galicia	23.0	10.6	28.9
Madrid	17.9	15.1	23.1
Murcia	26.8	10.7	32.7
Navarra	16.1	19.2	18.8
País Vasco	16.8	12.6	20.7
La Rioja	15.6	11.5	16.4
Ceuta	-	-	-
Melilla	16.9	-	23.1
Spain	20.7	14.9	25.2

Remarks: - no data due to insufficient population sample. The following were considered basic activities of daily living: eating, sitting down, getting up from a chair or bed, going to bed, dressing and undressing, going to the toilet, showering or bathing.

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

1.4.5 Limitations in the instrumental activities of daily living

With regard to the instrumental activities of daily living, 47.2% of the population aged 65 and over (34.1% of men and 57.3% of women) have difficulty performing one or more of them.¹¹ These difficulties increase with age. In the group aged 85 and over, 82.6% have some degree of difficulty with common household tasks, 68.5% in men and 90.3% in women.

Measuring the difficulty experienced when performing the instrumental activities of daily life constitutes a second basic assessment of the degree of the population disability. The prevalence of these limitations is measured in terms of functional capacity, without regard to the reasons for the limitations.

¹¹ The following were considered instrumental activities of daily living: preparing meals, using the telephone, doing the shopping, taking medicine, doing housework and managing money.

Table 1-30 Limitation in instrumental activities of daily living in population aged 65 and over. Percentage distribution by sex and age group, 2014

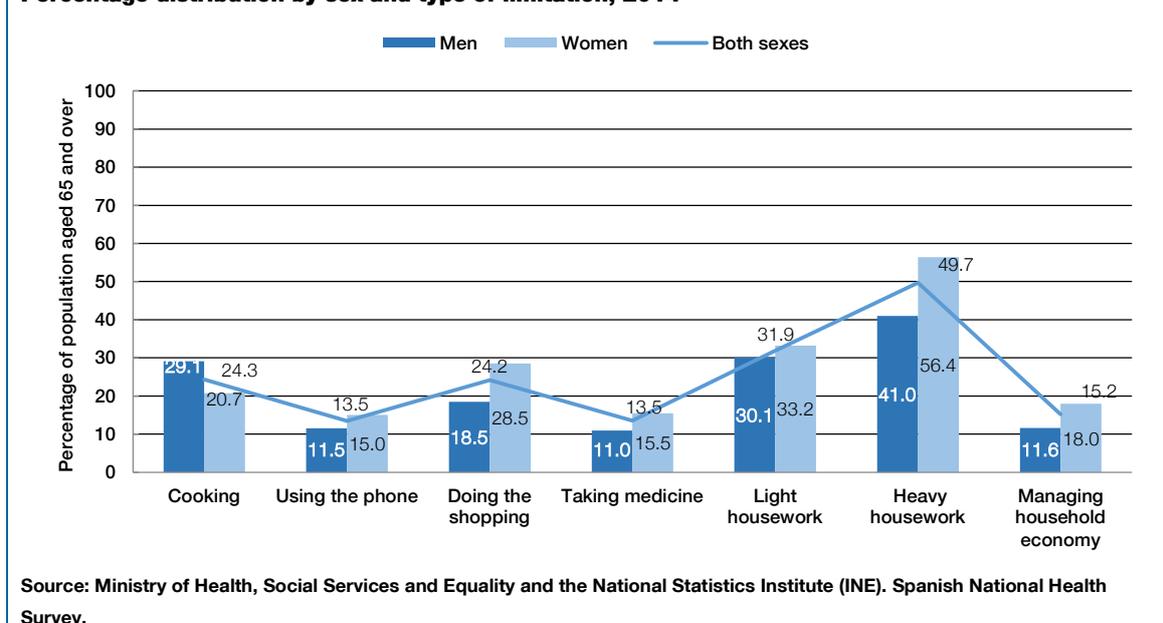
	Total	Aged 65-69 years	Aged 70-74 years	Aged 75-79 years	Aged 80-84 years	Aged 85 years and over
Both sexes	47.2	27.1	36.3	49.6	65.6	82.6
Men	34.1	16.5	25.2	36.2	55.9	68.5
Women	57.3	35.7	47.2	59.9	72.0	90.3

Remarks: The following were considered instrumental activities of daily living: preparing meals, using the telephone, shopping, taking medicine, doing housework and managing money.

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

By type of limitation, using the telephone and taking medication, both with 13.5%, are the limitations that the population aged 65 and over report as being the least frequent, both in men (11.5% and 11.0% respectively) and in women (15.0% and 15.5%). Housework, both heavy (49.7%) and light (31.9%), is the limitation most frequently reported, in both men and women.

Graph 1-15 Limitation in instrumental activities of daily living in population aged 65 and over. Percentage distribution by sex and type of limitation, 2014



By autonomous community, the highest percentage of population aged 65 and over that reports experiencing limitations in the instrumental activities of daily living is found in Canarias (64.0%) and the lowest is in Navarra (28.3%). Canarias shows the least difference between the sexes (4.9 points) and País Vasco the highest (36.9 points). The men of Canarias (61.3%) and the women of Castilla-La Mancha (73.8%) present the highest percentages; the lowest are found in the men of La Rioja (17.6%) and the women of Navarra (35.2%).

Table 1-31 Limitation in instrumental activities of daily living in population aged 65 and over. Percentage distribution by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	43.8	28.8	55.4
Aragón	35.7	24.0	44.9
Asturias	34.8	25.4	41.5
Baleares	47.7	37.6	55.9
Canarias	64.0	61.3	66.2
Cantabria	49.9	34.0	61.7
Castilla y León	30.0	20.3	37.9
Castilla-La Mancha	61.1	45.4	73.8
Cataluña	54.3	40.2	65.0
Comunidad Valenciana	44.6	33.1	53.7
Extremadura	53.0	35.3	66.6
Galicia	57.2	43.4	67.4
Madrid	45.0	33.6	53.3
Murcia	46.8	29.2	60.7
Navarra	28.3	19.7	35.2
País Vasco	48.3	27.2	64.1
La Rioja	32.0	17.6	43.5
Ceuta	-	-	-
Melilla	65.4	-	84.6
Spain	47.2	34.1	57.3

Remarks: - no data. The following were considered instrumental activities of daily living: preparing meals, using the telephone, shopping, taking medicine, doing housework and managing money.

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

1.4.6 Epidemiological surveillance of vaccine-preventable diseases: diphtheria, meningococcal disease, mumps, poliomyelitis, rubella, measles, pertussis, tetanus and varicella

The systematic vaccination of children has greatly reduced the morbidity and mortality of vaccine-preventable diseases.¹² Rubella, measles and mumps, all of which are included in the standard vaccination calendar, have shown a downward trend since the 1990s, although mumps exhibits epidemic waves, the last of which occurred between 2010-2014. In 2015 the incidence of mumps increased slightly, with a rate of 8.1 reported cases per 100,000 inhabitants.

¹² In this report, see Childhood Vaccination section of Chapter 4. Activity and accessibility of the SNS.

Table 1-32 Diphtheria, meningococcal disease, mumps, poliomyelitis, rubella, measles, tetanus, pertussis and varicella, notified cases and rates per 100,000 inhabitants, 2015

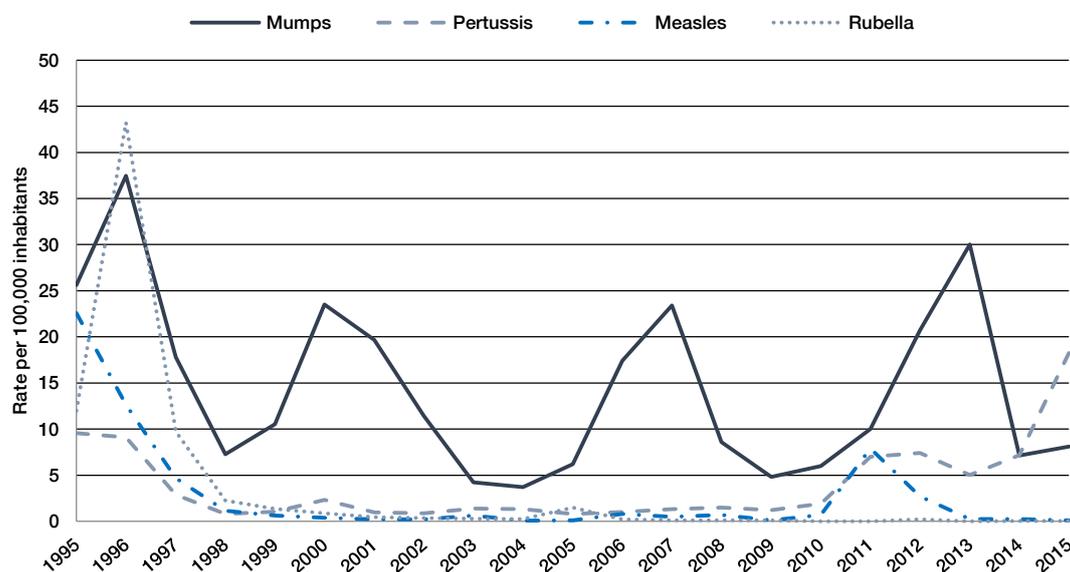
	Cases	Rate per 100,000 inhabitants
Diphtheria	1	0.0
Meningococcal disease	307	0.7
Mumps	3,763	8.1
Poliomyelitis	0	0.0
Rubella (does not include congenital rubella)	10	0.02
Congenital rubella	0	0.0
Measles	37	0.09
Tetanus (does not include neonatal tetanus)	7	0.02
Neonatal tetanus	0	0.0
Pertussis	8,471	18.3
Varicella	179,255	386.1

Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

In the same year in Spain 0.09 cases of measles and 0.02 cases of rubella were reported for every 100,000 inhabitants.

Pertussis continues to show a cyclical epidemic pattern and since 2010 a progressive increase has been observed in incidence, hospitalisation and mortality from this disease. In 2015 the number of reported cases per 100,000 inhabitants is 18.3.

Graph 1-16 Mumps, pertussis, measles and rubella. Rates of notified cases per 100,000 inhabitants, 1995-2015



Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre. Notifiable diseases.

1.4.7 Epidemiological surveillance of airborne diseases: flu, legionella, leprosy and tuberculosis

1.4.7.1 Flu, legionella and leprosy

In 2015 a total of 731,513 cases of flu were notified to the authorities, along with 1,333 cases of legionella and 6 of leprosy (the rates per 100,000 inhabitants were 1,575.8; 2.9 and 0.01 respectively).

In 2014 individualized information on 941 cases of legionella in residents of Spain was received; 930 were autochthonous cases (1.98 cases per 100,000 inhabitants) and 11 cases were imported.

Over the course of 2014, 11 incident cases of leprosy were notified to the State Register. In 10 of these 11 incident cases the country of origin was not Spain, which shows that leprosy in Spain is an imported disease, with incidence that is very low and falling. However, it is important to heighten health personnel's awareness that this disease might be present in persons from countries in which leprosy is endemic.

Table 1-33 Flu, legionella and leprosy, notified cases and rates per 100,000 inhabitants, 2015

	Cases	Rate per 100,000 inhabitants
Flu	731.513	1,575.8
Legionella	1,333	2.9
Leprosy	6	0.01

Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

1.4.7.2 Tuberculosis

In Spain in 2015 a total of 4,604 cases of tuberculosis were notified to the authorities, representing an incidence rate of 9.9 cases per 100,000 inhabitants, 8.2% less than the 2014 rate.

Table 1-34 Tuberculosis, notified cases and rates per 100,000 inhabitants by location category, 2015

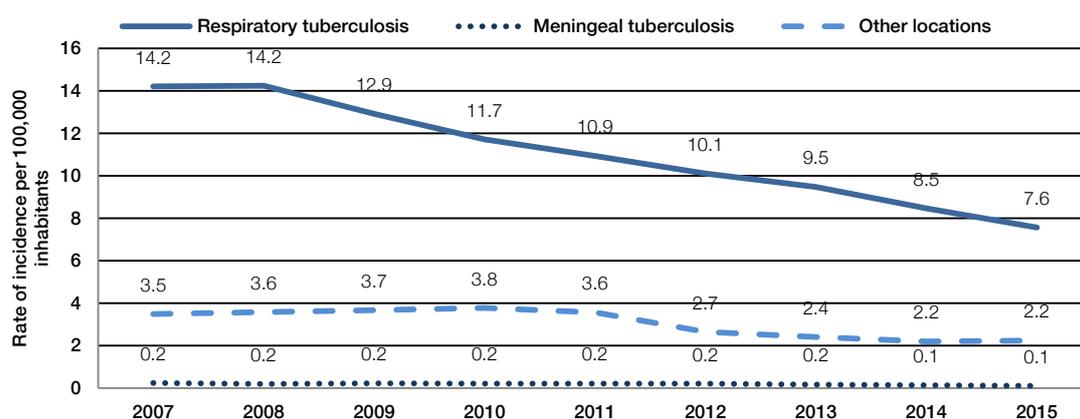
	Cases	Rate per 100,000 inhabitants
Respiratory tuberculosis	3,510	7.6
Meningeal tuberculosis	52	0.1
Other localizations	1,042	2.2
Total	4,604	9.9

Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

Of the notified cases, 3,510 were respiratory tuberculosis, 52 were meningeal tuberculosis, and 1,042 were tuberculosis with other locations (rates of 7.6; 0.1 and 2.2 cases per 100,000 inhabitants, respectively). In meningeal tuberculosis the rate has fallen from 0.14 in 2014 to 0.11 in 2015; in other locations there has been no decrease but rather a very slight increase, from 2.19 to 2.24 cases per 100,000 inhabitants.

The incidence of tuberculosis in Spain continues to fall, mainly due to the considerable reduction observed in the disease's respiratory forms.

Graph 1-17 Trends in notified cases of tuberculosis, by location, 2007-2015



Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

1.4.8 Epidemiological surveillance of sexually transmitted diseases: HIV/AIDS, gonococcal infection and syphilis

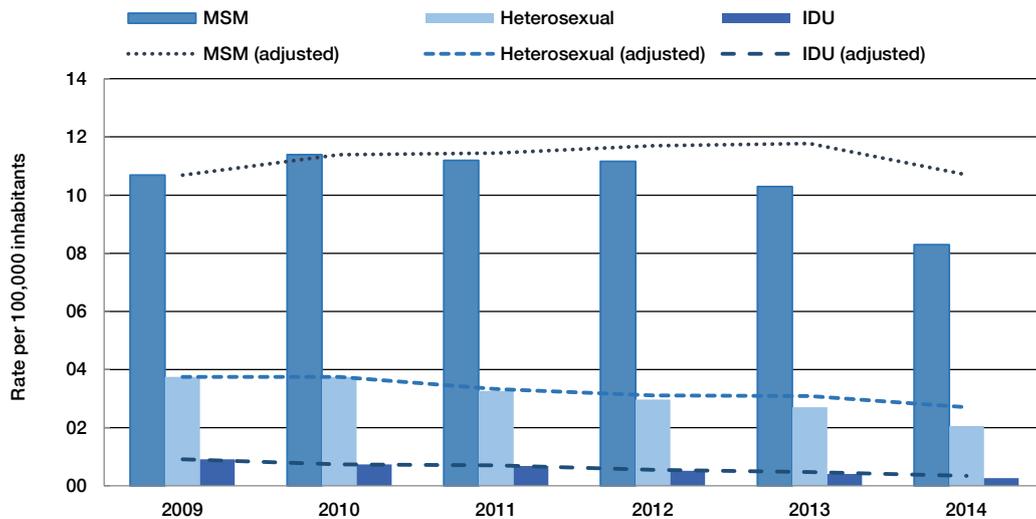
Spain has two population registries that are essential for monitoring changes in the HIV epidemic: the Information System on New HIV Diagnoses (SINIVIH)¹³ and the National Registry of AIDS Cases.

1.4.8.1 Information System on New HIV Diagnoses

In 2014, a total of 3,366 new HIV diagnoses were notified to the authorities, which is a rate of 7.3 per 100,000 inhabitants, without adjusting for notification delay. It is estimated that the rate will be 9.3 per 100,000 inhabitants when the notification of all the diagnoses made during the year is complete.

¹³ Some autonomous communities began gathering data in the 1980s and the order to create the SINIVIH at the state level was issued on 18 December 2000, although the information system was not actually put in place until later. As of 2003, data from 8 autonomous communities and the autonomous city of Ceuta was available. Other autonomous communities joined progressively after that, until coverage became complete in 2013. The data obtained through this system was the best way to understand the incidence of HIV, although, because infection is asymptomatic, new HIV diagnoses include not only recent infections but also infections occurring years ago.

Graph 1-18 New diagnoses of HIV by year and transmission category, rate per 100,000 inhabitants, 2009-2014



Remarks: Data adjusted for delay in notification (dotted line). Updated 30 June 2015.

MSM = Men who have sex with men; IDU= Injecting drug users; Heterosex. = Heterosexual men and women.

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Promotion and Epidemiology. Carlos III Health Institute. Epidemiological Surveillance of HIV/AIDS in Spain: Information System on New Diagnoses of HIV and National Registry of AIDS Cases.

Of the total number of notified cases, 84.7% are men and the median age is 35 years. Looking at transmission categories, 79.9% of the notified cases were sexually transmitted: 53.9% in *men who have sex with men* and 26.0% in heterosexual sex. The category *injecting drug users* represents 3.4%.

In the 2009-2014 period the incidence of new diagnoses shows different trends in terms of means of transmission. Among injecting drug users (IDU) the trend is downward, as it is in heterosexual transmission, although to a lesser degree and only in women; the rate is stable in men who have sex with men (MSM). As a result of the foregoing overall rates have stabilised.

1.4.8.2 National Registry of AIDS Cases

In 2014 the health authorities received notification of 444 diagnosed AIDS cases, which after adjusting for the reporting delay is expected to be 557. This is a rate of 1.3 per 100,000 inhabitants without adjusting for the delay and of 1.7 with adjustment. For technical reasons it has not been possible to introduce the data from Andalucía or Comunidad Valenciana to the database. These communities reported 77 and 47 cases respectively. Of all the persons newly diagnosed, 79.3% are men and the average age is 43.

Table 1-35 New AIDS cases, distribution by transmission category and sex, 2014

AIDS surveillance	Men	Women	Total
New cases	352	92	444
Distribution (%) by transmission category			
Men who have sex with men	44.0	0	34.9
Injecting drug users	22.2	14.1	20.5
Heterosexual sex	22.7	73.9	33.3
Recipients of blood products	0.0	0	0.0
Recipients of blood transfusions	0.0	0	0.0
Mother-to-child	0.0	0	0.0
Other types of exposure/Unknown/Not available	11.1	12.0	11.3
Total	100	100	100

Remarks: Data has not been adjusted for reporting delay so the numbers will rise in future updates. Updated 30 June 2015. For technical reasons it has not been possible to enter the data from Andalucía or Comunidad Valenciana, which reported 77 and 47 cases respectively.

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Promotion and Epidemiology. Carlos III Health Institute. Epidemiological Surveillance of HIV/AIDS in Spain: Information System on New Diagnoses of HIV and National Registry of AIDS Cases.

Cases notified in persons who have been infected through heterosexual sex represent 33.3% of the total, while cases in men who have sex with men represent 34.9% and injecting drug users 20.5%. In 11.3% of the cases the type of exposure is other, unknown or not available. No cases have been notified of transmission from mother-to-child or in recipients of blood products or transfusions.

In the case of women the means of transmission takes on special relevance because heterosexual sex represents 73.9% of the new cases. Since the beginning of the epidemic in Spain a total of 84,679 cases of AIDS have been notified.

Following almost two decades of effective antiretroviral treatment, the reduction in the incidence of the disease is enormous. However, this initially spectacular reduction (especially in the category of injecting drug users) has slowed in recent years.

1.4.8.3 Gonococcal infection and syphilis

Population data regarding gonococcal infection and syphilis comes from the National Network of Epidemiological Surveillance, through the Notifiable Disease System. Prior to the amendment made in 2015 to Royal Decree 2210/1995, of 28 December, which created the National Network of Epidemiological Surveillance, the notification of these diseases at the central level was numerical only; that is, the only individual variables reported were the year and the autonomous community of notification.

In 2015 a total of 4,802 cases of gonococcal infection and 3,697 cases of syphilis were reported, meaning the rates per 100,000 inhabitants are 10.4 and 8.0 respectively.

Table 1-36 Gonococcal infection and syphilis, notified cases and rates per 100,000 inhabitants, 2015

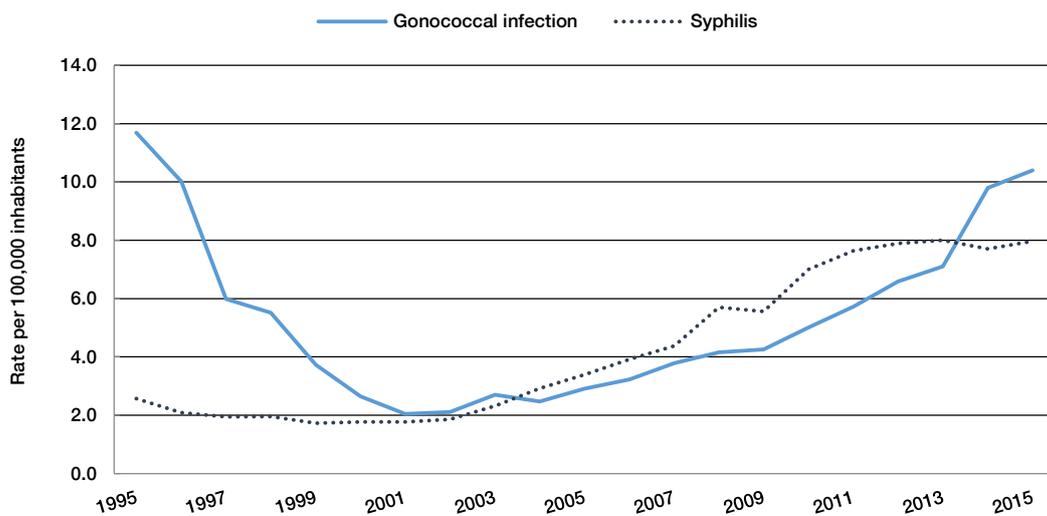
	Cases	Rate per 100,000 inhabitants
Gonococcal infection	4,802	10.4
Syphilis (does not include congenital syphilis)	3,693	8.0
Congenital syphilis (confirmed cases + probable cases)	4 (1+3)	0.01

Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

In the period 1995-2015 there was a marked decline in the incidence of gonococcal infection, with the rate falling from 11.7 per 100,000 inhabitants in 1995 to 10.4 in 2015. However, this trend is not homogeneous; after the initial decrease between 1995 and 2001 there has been a steady increase.

The syphilis data over these years also shows a decline in the rates of incidence in the 1995-2001 period, from 2.6 to 1.8 cases per 100,000 inhabitants, with growth starting that year and reaching 8.0 per 100,000 inhabitants in 2015. That year the incidence rate of gonococcal infection exceeds that of syphilis.

Graph 1-19 Trends in incidence of gonococcal infection and syphilis, rate per 100,000 inhabitant, 1995-2015



Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

1.4.9 Epidemiological surveillance of hepatitis: hepatitis A, hepatitis B, other types of hepatitis and hepatitis C

1.4.9.1 Hepatitis A, hepatitis B and other types of hepatitis

Notification of the different types of viral hepatitis to the National Network of Epidemiological Surveillance became mandatory in the second half of the 1990s. Until 2004 the notification of hepatitis cases showed a downward trend; then hepatitis A especially, and also B, increased until 2009 and, starting that year, began to drop again.

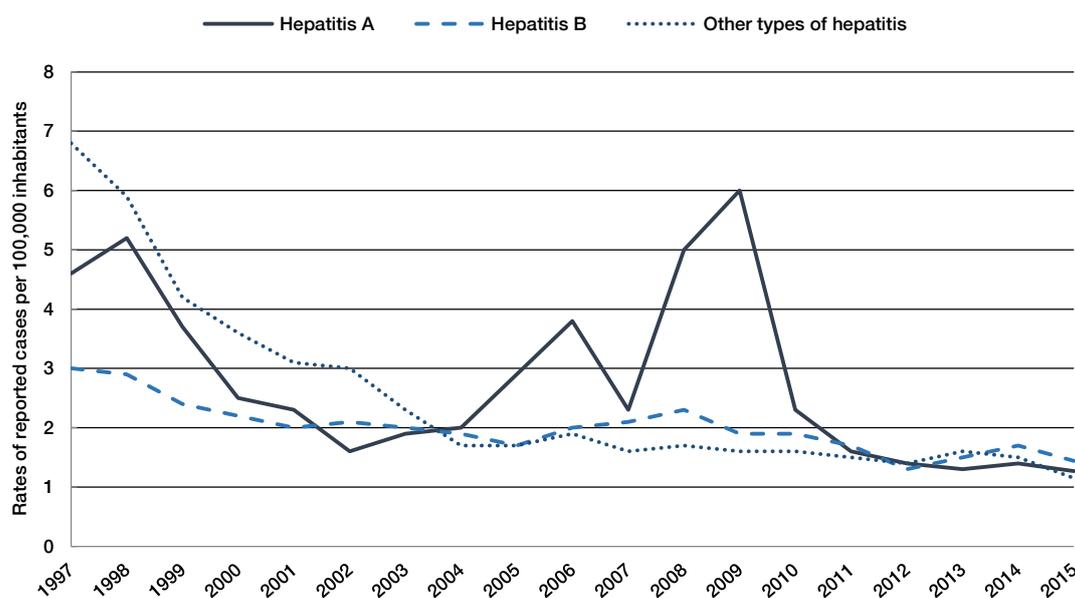
From 2009 to 2014 and 2015, the number of reported cases per 100,000 inhabitants fell from 6.0 to 1.4 and 1.3 in hepatitis A, from 1.9 to 1.7 and 1.4 in hepatitis B and from 1.6 to 1.5 and 1.2 in other types of viral hepatitis.

Table 1-37 Hepatitis A, hepatitis B, and other types of hepatitis, cases reported and rates per 100,000 inhabitants, 2015

	Cases	Rate per 100,000 inhabitants
Hepatitis A	591	1.3
Hepatitis B	670	1.4
Other types of hepatitis	500	1.2

Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness. Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre.

Graph 1-20 Hepatitis A, hepatitis B and other types of hepatitis. Rates of reported cases per 100,000 inhabitants, 1997-2014



Source: Ministry of Health, Social Services and Equality - Ministry of Economy, Industry and Competitiveness - Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre. Notifiable Disease Surveillance System.

1.4.9.2 Hepatitis C

Hepatitis C is a viral hepatic disease, either acute or chronic, the manifestations of which can vary from a light ailment to a serious, life-long disease. In general acute infection is asymptomatic. Approximately 15-45% of the persons infected eliminate the virus within a six month period, with no need for treatment. Around 55-85% develop the chronic infection. Between 15-30% of these patients will, within a 20 year period, develop liver cirrhosis.

Based on the hepatitis C cases reported by the autonomous communities to the Notifiable Disease Surveillance System, the prevalence of antibodies (seroprevalence) in adults is estimated to be 1.7% (0.4-2.6%).

Besides being a major cause of illness, chronic infection can also cause death; the estimated yearly rate of death from this disease is 10.7 deaths per 100,000 inhabitants, representing between 1-1.2% of mortality from all causes.

Since hepatitis C poses a significant health problem in Spain, the CISNS, in its plenary session of 14 January 2015, resolved unanimously to draw up a Strategic Plan for addressing hepatitis C in the SNS.

The Plan is structured into four lines of strategy, with aims and priority actions for the three-year period 2015-2017. The following bodies are involved in the plan's implementation: the Ministry of Health, Social Services and Equality, the Regional Health Services, Penitentiary Institutions and the Carlos III Health Institute.

Table 1-38 Strategic Plan for addressing hepatitis C in the SNS

GENERAL OBJECTIVE: To reduce morbi-mortality caused by hepatitis C virus in the Spanish population, efficiently addressing prevention, diagnosis, treatment and patient monitoring.			
Strategy 1	Strategy 2	Strategy 3	Strategy 4
Quantify magnitude of problem, describe patients' epidemiological characteristics and establish prevention measures	Define scientific-clinical criteria to be used in formulation of appropriate therapeutic strategy, considering the use of direct acting antivirals for the treatment of hepatitis C within the SNS	Establish coordination mechanisms that will ensure proper implementation of the Strategic Plan for addressing hepatitis C in the SNS	Promote progress in the understanding of the prevention, diagnosis and treatment of hepatitis C in the SNS through specific actions in the area of R+D+i

Source: Ministry of Health, Social Services and Equality. Secretariat General of Health and Consumer Affairs. Strategic plan for addressing hepatitis C in the SNS.

The Plan has an institutional committee that coordinates implementation in the SNS. The recent arrival of new antiviral pharmaceuticals effective against hepatitis C would suggest that there will soon be a radical change in how this disease is addressed.

1.4.10 Low birth weight

Low birth weight is an important indicator of children's health because of its close relationship with infant morbidity and mortality; it is also a reflection of various adverse circumstances that may accompany the pregnancy and it is linked to biological, demographic and socio-economic factors. However, the most important factors seem to be the mother's general state of health and nutrition, so it is also a good indicator of the community's nutritional status.

In recent decades Spain has seen a significant increase in the proportion of babies weighing less than 2,500 grams at birth, although it appears that in the last few years the upward trend has been slowing. In 1990 the percentage of newborns with low birth weight was slightly over 5%, while in 2000 it was 6.9%, and in 2014 it was 8.2%.

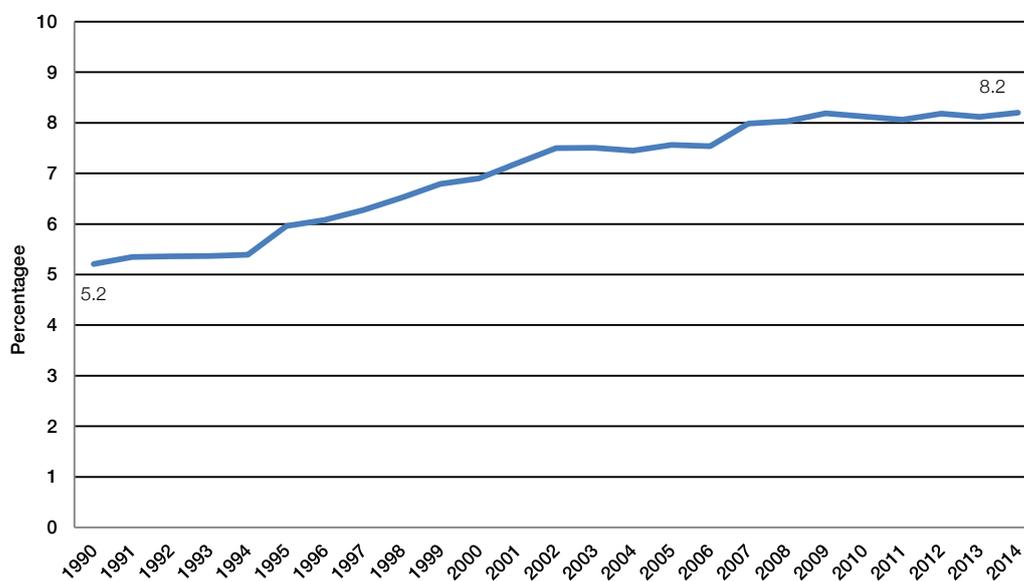
The main risk factors of low birth weight are the increase of maternal age, maternity among adolescents, in vitro fertility treatments and harmful habits such as smoking and drinking alcohol.

Table 1-39 Prevalence of low birth weight (under 2,500 grams) per 100 live births by autonomous community, 2014

Andalucía	8.1
Aragón	8.2
Asturias	8.1
Baleares	7.9
Canarias	9.3
Cantabria	8.5
Castilla y León	8.5
Castilla-La Mancha	8.4
Cataluña	8.0
Comunidad Valenciana	8.4
Extremadura	7.6
Galicia	8.2
Madrid	8.8
Murcia	7.9
Navarra	8.4
País Vasco	7.5
La Rioja	6.9
Ceuta	6.9
Melilla	6.8
Spain	8.2

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

Graph 1-21 Trends in the proportion of newborns weighing less than 2,500 grams at birth per 100 live births, 1990-2014



Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

1.4.11 Elective termination of pregnancy

There were 94,796 Elective Terminations of Pregnancy (ETOPs) in 2014.¹⁴ This figure represents an incidence of 10.5 per 1,000 women between the ages of 15 and 44 and confirms the downward trend of the last four years, with 2.0 points less than in 2011.¹⁵ In the under-20 age group the incidence is 9.9 elective terminations of pregnancy, 3.8 points less than in 2011.

The incidence of ETOPs is monitored by an epidemiological surveillance system that receives information from the entire country.¹⁶

Most of the interventions (82.1%) were notified from a privately-owned, non-hospital health care centre and were performed at the woman's request (88.9%) at 8 weeks or less of gestation (70.2%). Medical reasons are present in 11.1% of the motives for terminating the pregnancy, with a clear predominance (7.2%) of serious risk to the health or life of the pregnant woman, followed (3.9%) by risk of severe abnormality in the foetus and foetal abnormalities incompatible with life or severe and incurable disease.

Table 1-40 Incidence of Elective Termination of Pregnancy in women under age 20 and between 15 and 44 years of age, by autonomous community of residence, 2014

	Under age 20	Between 15-44 years
Andalucía	10.4	10.6
Aragón	7.0	8.6
Asturias	12.6	12.7
Baleares	10.2	12.3
Canarias	11.1	11.9
Cantabria	8.0	8.6
Castilla y León	5.5	6.1
Castilla-La Mancha	7.2	8.0
Cataluña	11.4	12.6
Comunidad Valenciana	9.1	8.7
Extremadura	6.6	6.2
Galicia	6.1	6.8
Madrid	11.4	12.6
Murcia	10.5	11.3
Navarra	8.5	7.5
País Vasco	8.8	8.9
La Rioja	6.7	6.2
Ceuta	0.0	0.7
Melilla	4.1	6.3
Spain	9.9	10.5

Source: Ministry of Health, Social Services and Equality. Statistics on elective termination of pregnancy.

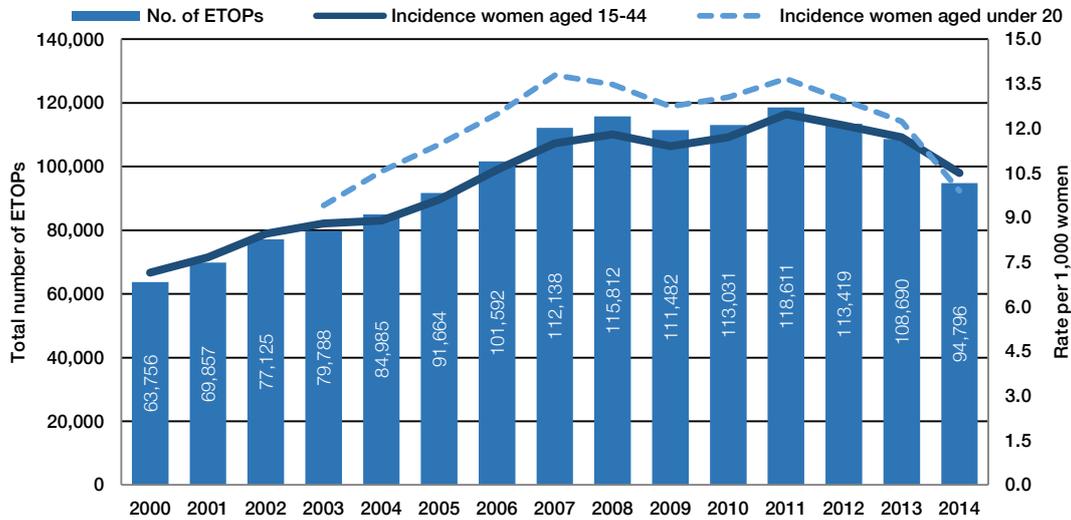
The highest incidences per 1,000 women between 15 and 44 years of age are found in Asturias (12.7), Cataluña and Madrid (both 12.6) and Baleares (12.3). In the under 20 group, Asturias (12.6), Cataluña and Madrid (both 11.4) occupy the highest positions.

¹⁴ Most recent data available during preparation of this report.

¹⁵ Since 2010 elective terminations of pregnancy have taken place under the conditions set forth in Spain's sexual health, reproduction and abortion law (*Ley Orgánica 2/2010, de 3 de marzo de salud sexual y reproductiva y de la interrupción voluntaria del embarazo*), starting the date the law took effect, 5 July 2010.

¹⁶ In 2015 corrections were made to the data published in 2011 and 2012 due to an improvement in the consolidated information of Navarra.

Graph 1-22 Trend in total number of notified ETOPs and in incidence in women aged between 15 - 44 and in women under 20, 2000-2014

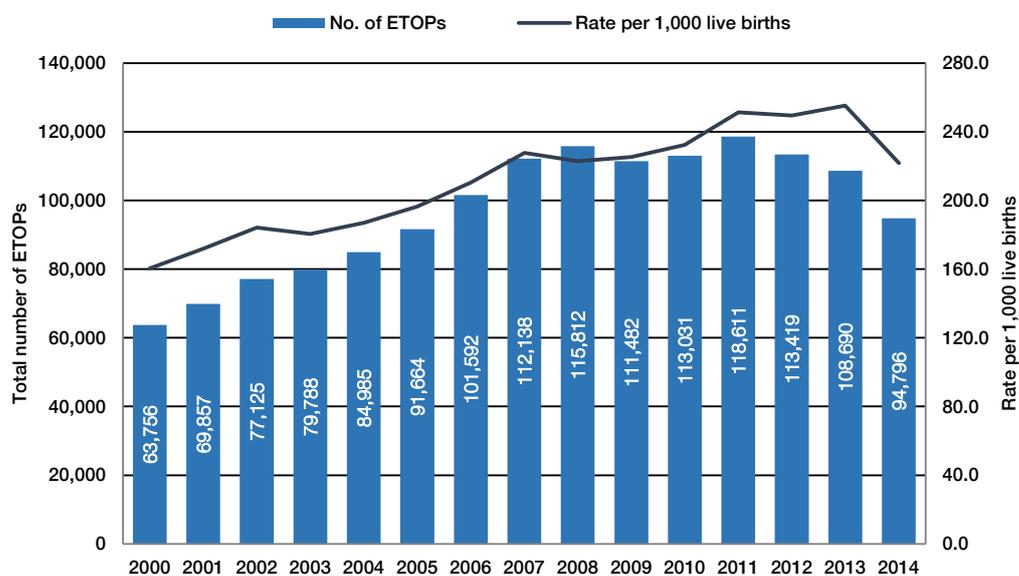


Remarks: Since 2010 elective terminations of pregnancy have been performed under the conditions set forth in Spain's sexual health, reproduction and abortion law (*Ley Orgánica 2/2010, de 3 de marzo de salud sexual y reproductiva y de la interrupción voluntaria del embarazo*), starting the date the law took effect, 5 July 2010.

Source: Ministry of Health, Social Services and Equality. Statistics on elective termination of pregnancy.

The number of ETOPs and the incidence rate in the group of women of fertile age (between 15 and 44 years) show clear signs of descent. If we look at the number of abortions relative to the number of births this tendency is confirmed, with 221.7 ETOPs for every 1,000 live births.

Graph 1-23 Trend in total number of ETOPs notified and rate per 1,000 live births, 2000-2014



Remarks: Since 2010 elective terminations of pregnancy have been performed under the conditions set forth in Spain's sexual health, reproduction and abortion law (*Ley Orgánica 2/2010, de 3 de marzo de salud sexual y reproductiva y de la interrupción voluntaria del embarazo*), starting the date the law took effect, 5 July 2010.

Source: Ministry of Health, Social Services and Equality. Statistics on elective termination of pregnancy.

1.4.12 Traffic, workplace, home and leisure accidents

1.4.12.1 Victims of traffic accidents

For the last twenty-five years the number of victims of traffic accidents has been showing a clear decrease, relative to both the number of accidents and the number of inhabitants. The number of victims per 1,000 accidents fell from 1,582 in 1991 to 1,393 in 2015. The rate per 100,000 inhabitants fell from 399 in 1991 to 293 in 2015, although a slight increase has been observed since 2012.

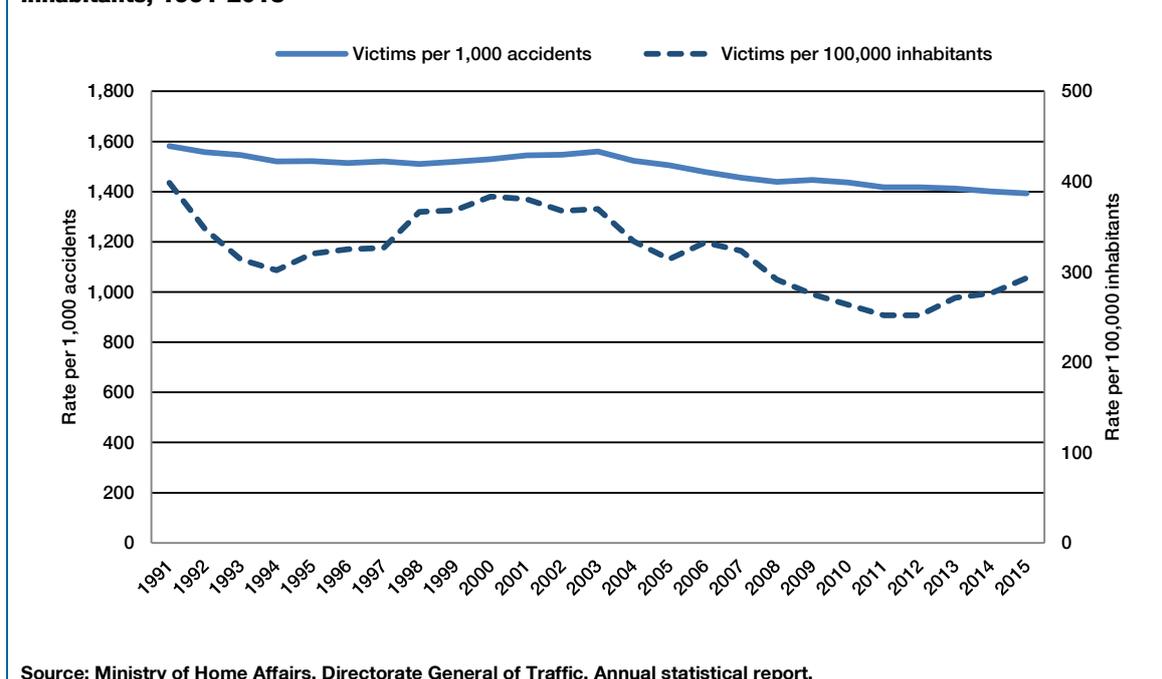
Table 1-41 Changes in number of traffic accidents with victims, number of victims, rate of victims per 1,000 accidents and rate of victims per 100,000 inhabitants, 1991- 2015

	1991	2000	2011	2012	2013	2014	2015
Accidents	98,128	101,729	83,027	83,115	89,519	91,570	97,756
Victims (total)	155,247	155,557	117,687	117,793	126,400	128,320	136,144
-Fatalities	6,797	5,776	2,060	1,903	1,680	1,688	1,689
-Victims with severe injuries	50,978	27,764	11,347	10,444	10,086	9,574	9,495
-Victims with minor injuries	97,472	122,017	104,280	105,446	114,634	117,058	124,960
Victims per 1,000 accidents	1,582	1,529	1,417	1,417	1,415	1,401	1,393
Victims per 100,000 inhabitants	399	384	252	252	271	276	293

Remarks: Victims include fatalities and victims with severe and minor injuries. The computation of fatalities takes place 30 days after the accident: until 1993 computation involved applying the adjustment factor recommended by the European Conference of Ministers of Transport (ECMT) to the fatalities figure. From 1993 to 2010, fatalities were computed at 30 days as a result of applying the adjustment factors subtracted from the real monitoring of a representative sample of victims with severe injuries. In 2011 the methodology used in its computation was revised.

Source: Ministry of Home Affairs. Directorate General of Traffic. National Statistics Institute (INE). Resident population figures as of 1 July of each year.

Graph 1-24 Changes in number of traffic accident victims per 1,000 accidents and per 100,000 inhabitants, 1991-2013



Source: Ministry of Home Affairs. Directorate General of Traffic. Annual statistical report.

1.4.12.2 Accidents at work

Work-related accidents represent an important health problem in developed countries, causing high morbi-mortality with serious individual and social consequences

Table 1-42 Changes in frequency index of accidents at work causing absence from work by economic sector, 2006-2015

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total	36.6	36.0	31.9	26.5	25.1	22.8	18.6	19.3	20.0	21.0
Sectors										
-Agriculture	20.2	21.0	22.0	21.8	25.2	24.8	23.2	24.1	25.1	27.4
-Industry	57.1	56.4	50.3	40.1	38.2	34.6	28.4	27.7	28.6	30.4
-Construction	73.0	71.1	61.6	52.3	49.9	45.4	37.5	35.2	36.7	39.3
-Services	24.7	24.4	22.6	20.1	19.3	17.8	14.9	16.1	16.7	17.3

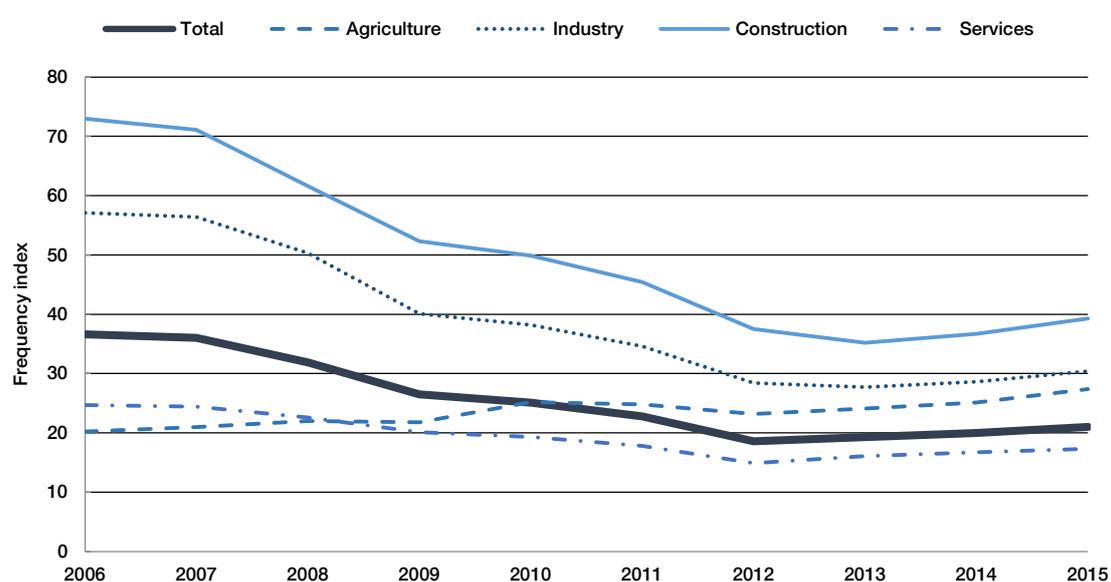
Remarks: The frequency index corresponds to the number of accidents occurring during the workday and causing absence from work, per million hours worked. The economic activity is that of the place of work in which the accident takes place and when there is none (accidents during transit) the economic activity of the usual place of work of the worker involved in the accident.

Homogeneous series that allows comparison of entire period shown.

Source: Ministry of Employment and Social Security. Statistics on work-related accidents.

Construction is the economic sector in which the most workplace accidents occur, followed by industry. In 2015, the number of workplace accidents causing absence from work per million hours worked is 39.3 in the construction sector and 30.4 in industry. Generally, over the last decade the frequency of accidents during the workday that cause absence from work shows a downward trend. Specifically, between 2006 and 2016, the frequency of workplace accidents resulting in absence from work fell in Spain by 15.1 points.

Graph 1-25 Changes in frequency index of accidents at work causing absence from work by economic sector, 2006-2015



Remarks: The frequency index is the number of accidents occurring during the workday and causing absence from work, per million hours worked. The economic activity is that of the place of work in which the accident takes place and if none (accidents during transit) the economic activity of the usual place of work of the worker involved in the accident. Homogeneous series that allows comparison of entire period shown.

Source: Ministry of Employment and Social Security. Statistics on work-related accidents.

1.4.12.3 Home and leisure accidents

Home and leisure accidents, in addition to being of the greatest magnitude, seem to be the most usual type of accident.¹⁷ Their importance lies in the different way they affect the population; they are more frequent in old age and among women. In Spain, 7.2% of the population reports having had an accident at home or during leisure time at some point during the past 12 months, 8.1% in women and 6.2% in men. Age is closely related to having had this type of accident, presenting a characteristic U-shaped distribution in which the extreme ages have the highest percentages, especially in those 65 years of age and older.

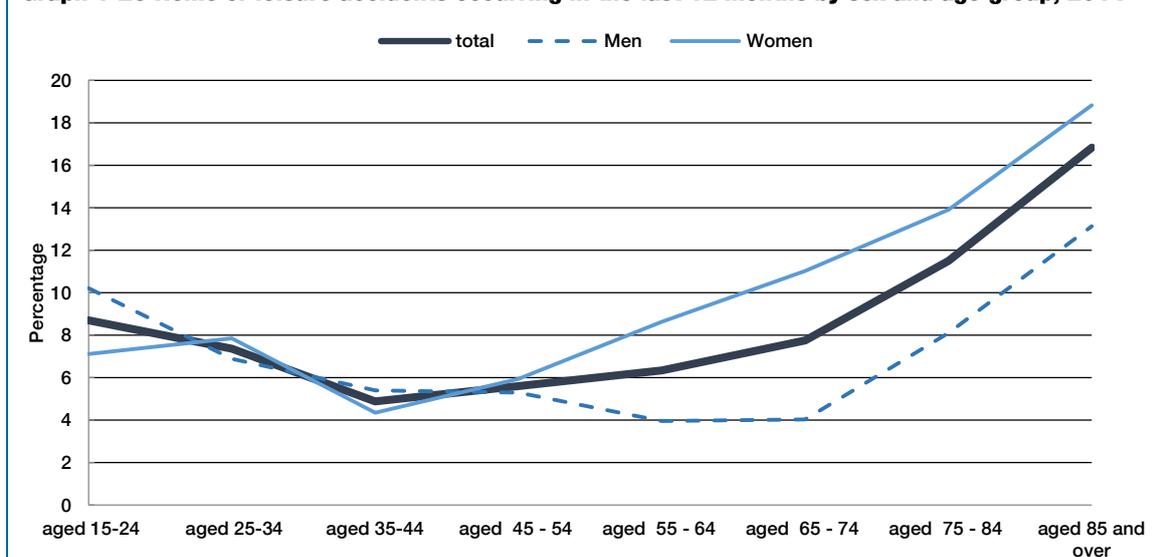
By level of education, women with a low or very low level of education present the highest figures, 9.3%, which is 3.6 points above men with the same level of education.

Table 1-43 Home or leisure accidents occurring in the last 12 months, percentage of population by sex and level of education, 2014

	Total	Low and very low level of education	Intermediate level of education	Higher education
Both sexes	7.2	7.5	6.1	7.3
Men	6.2	5.7	6.1	7.3
Women	8.1	9.3	6.1	7.4

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Graph 1-26 Home or leisure accidents occurring in the last 12 months by sex and age group, 2014



Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

¹⁷ National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain. A total of 9.1% of the individuals surveyed state that they have had an accident in the twelve months prior to the interview: 1.9% report a traffic accident, 3.4% an accident at home and 3.7% an accident during leisure activity.

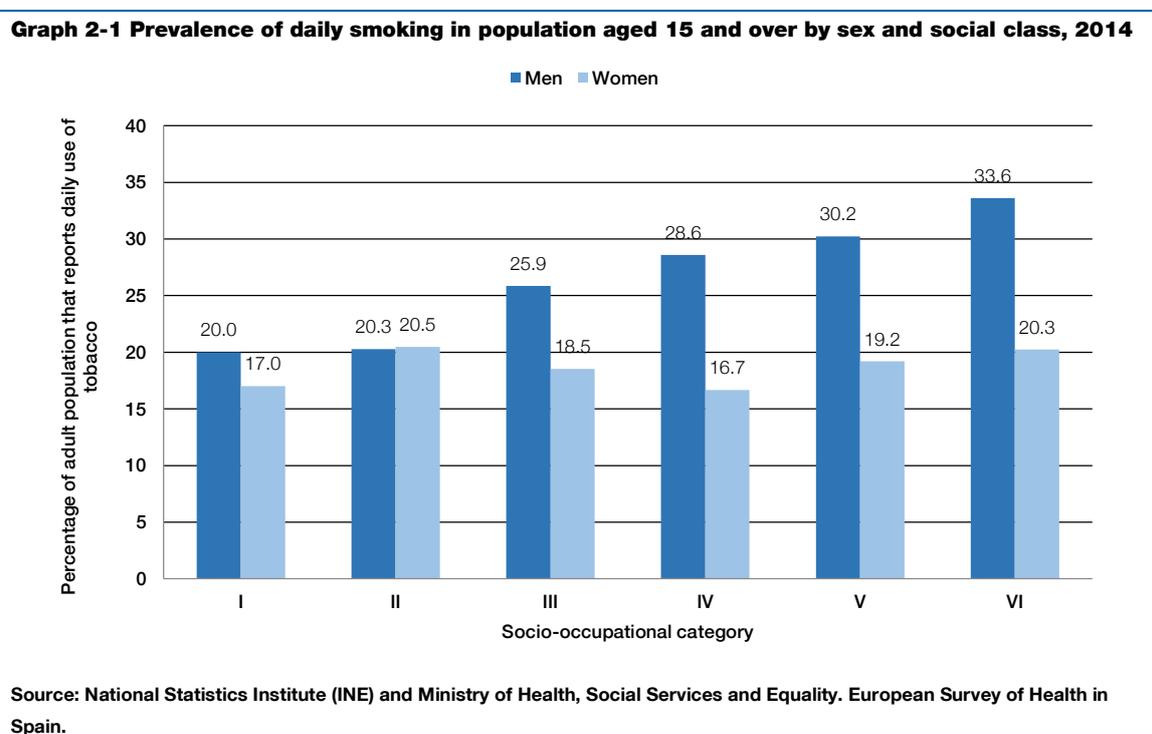
2 Lifestyle habits

2.1 Tobacco

2.1.1 Tobacco use in the adult population

In Spain, 23.0% of the population aged fifteen and over smoke on a daily basis, 2.4% are occasional smokers and 25.7% describe themselves as ex-smokers, while 49% state that they have never smoked. By sex, the percentage of daily smokers is 27.6% in men and 18.6% in women.

Tobacco use between the ages of 15 and 24 years affects 18.5%. This age group has the smallest difference between men (21.4%) and women (15.5%). The largest differences between the sexes appear in the group aged 25 to 34 and starting at age 55.



In the various socio-occupational categories¹⁸ different behaviours can be seen in the daily use of tobacco by sex. While in men a clear upward slope is visible from the lower rates of the most privileged class (20.0%) to the higher rates of the least privileged class (33.6%), in women no clear pattern can be seen.

Table 2-1 Prevalence of daily smoking in population aged 15 and over by sex and autonomous community, 2014

	Both sexes	Men	Women
Andalucía	24.4	29.0	19.9
Aragón	23.9	27.6	20.4
Asturias	19.1	21.9	16.6
Baleares	23.0	29.3	16.9
Canarias	22.7	29.5	16.0
Cantabria	21.4	25.5	17.5
Castilla y León	21.6	25.8	17.5
Castilla-La Mancha	23.4	28.2	18.6
Cataluña	23.7	29.8	17.8
Comunidad Valenciana	22.0	26.4	17.7
Extremadura	25.6	31.8	19.5
Galicia	19.1	23.7	14.9
Madrid	23.2	25.5	21.1
Murcia	25.6	27.7	23.5
Navarra	23.2	27.7	18.8
País Vasco	22.8	28.5	17.4
La Rioja	21.8	25.7	17.9
Ceuta	22.8	27.4	17.6
Melilla	15.3	19.7	11.4
Spain	23.0	27.6	18.2

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

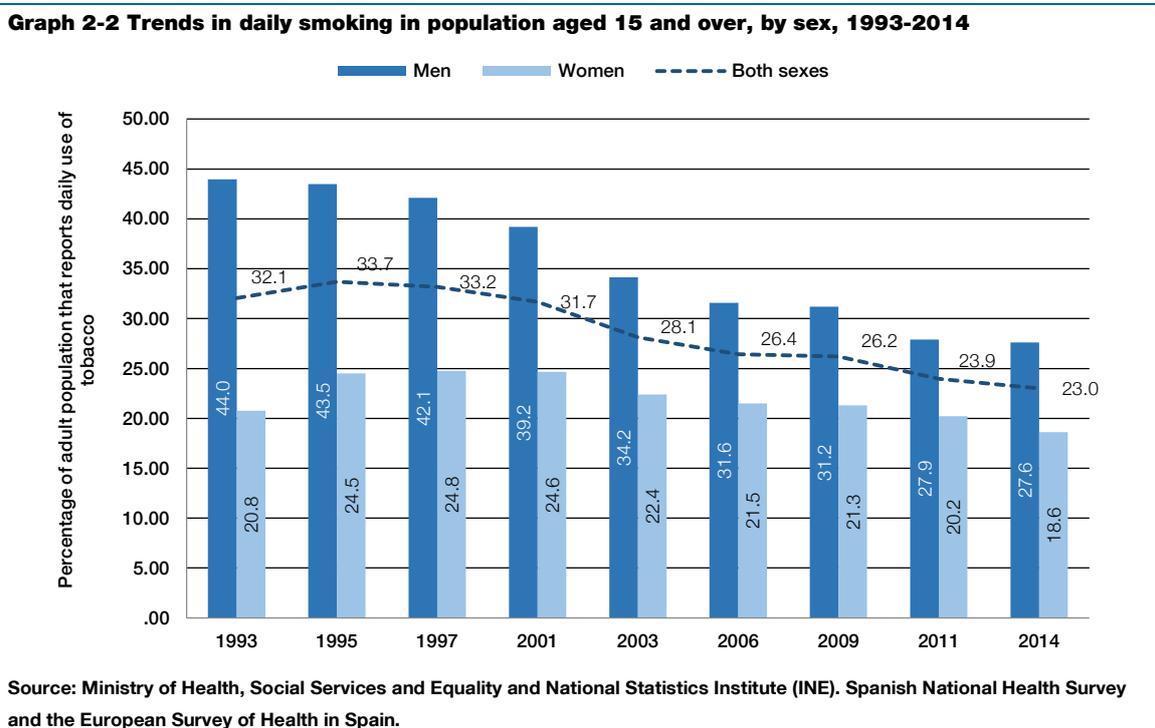
The autonomous communities with the highest prevalence of daily smoking in the adult population are Extremadura and Murcia, both with 25.6%. With prevalence under 21% are Melilla, Galicia and Asturias.

The percentage of population that smokes every day has fallen continuously since 1993, although the downward slope has become gentler in recent years. This recent attenuation has been at the expense of men: in the decade between 2001 and 2011 the prevalence of smoking fell

¹⁸ Socio-occupational categories: the categories used in the European Survey of Health in Spain 2014 are the ones proposed in 2012 by the Spanish Epidemiology Society (SEE) Working Group on Determinants, as adapted for the Spanish National Health Survey. They consist of groups of occupations coded in accordance with the National Occupations Classification that went into effect in 2011 (CNO-11). The 6 groups used were the following:

- I. Directors and managers of establishments having 10 or more employees and professionals traditionally associated with University degrees lasting 4 years or more.
- II. Directors and managers of establishments having less than 10 employees, professionals traditionally associated with 3-year University degree programmes and other professionals that provide technical support. Athletes and artists.
- III. Intermediate occupations and the self-employed.
- IV. Supervisors and workers in skilled technical occupations.
- V. Skilled workers in the primary sector and semi-skilled workers.
- VI. Unskilled workers.

by over 25% overall, but the reduction in 2014 with respect to 2011 was greater in women (in whom it fell from 20.2% to 18.6%) than in men (in whom it fell from 27.9% to 27.6%).



2.1.2 Tobacco use and the workplace

In relation to employment status¹⁹ the probability of smoking on a daily basis in the past 30 days is higher among the unemployed than among those with a job. Since 2007 the percentage of daily smokers (in the past 30 days) has decreased among the employed while it has increased among the jobless. By activity sector, construction, the hotel and restaurant industry, agriculture, fishing, livestock and mining, with percentages over 40%, show the highest values in tobacco use.

¹⁹ Survey on the use of psychoactive substances at the workplace in Spain, 2013-2014. The National Commission for the Prevention and Treatment of Drug Dependence at the workplace resolved to include a specific module in the Survey on Alcohol and Drugs in Spain (EDADES) to obtain information about the use of psychoactive substances at the workplace. It was conducted for the first time in 2007 and repeated in 2013.

Table 2-2 Changes in percentage of daily smokers (in the past 30 days) in the population aged 16 to 64, by employment status, 2007 and 2013

	2007	2013
Employed	32.7	31.0
Unemployed	35.2	39.0

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of psychoactive substances at the workplace in Spain.

The legislative measures²⁰ adopted in relation to smoking, particularly those that restrict smoking at the workplace, have contributed a great deal to reducing the number of passive smokers. However, 1 out of 10 continues to be exposed to environmental smoke at the workplace. The highest percentages are found in men (two for every woman), aged from 16 to 44 and in those with lower levels of education.

Table 2-3 Changes in the percentage of passive smokers at the workplace among the working population from 16 to 64 years of age, 2007 and 2013

	2007	2013
Passive smoker at the workplace	26.3	11.6

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of psychoactive substances at the workplace in Spain.

The percentage of passive smokers at the workplace has decreased in all activity sectors, especially the hotel and restaurant industry, which fell from 58.1% in 2007 to 15.1% in 2013.²¹

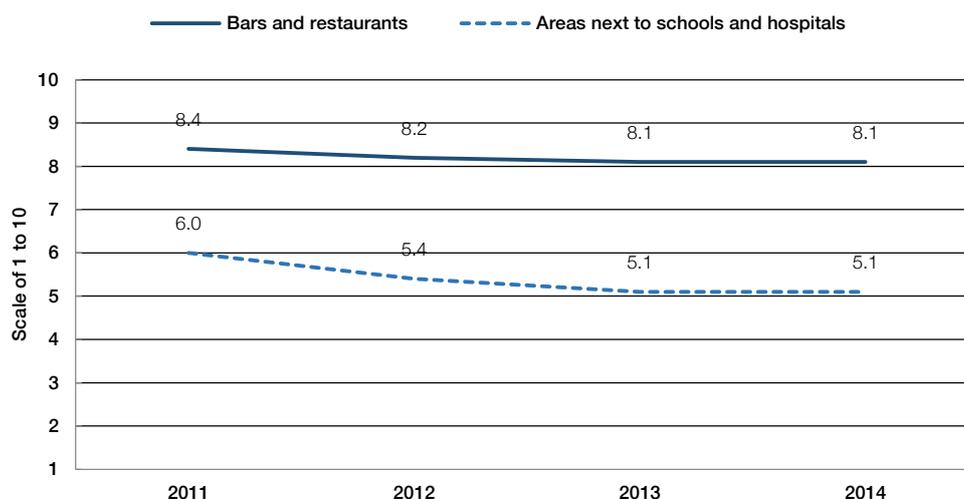
Citizens think there is a high level of compliance with the prohibition of smoking in bars and restaurants (8.1 out of 10).²²

²⁰ Spanish Law 42/2010, of 30 December 2010, better known as the “Tobacco Law”, went into effect on 2 January 2011; its most important measures are the expansion of smoke-free areas to all enclosed areas for public or collective use.

²¹ Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. 2013-2014 Survey on the use of psychoactive substances at the workplace in Spain.

²² Ministry of Health, Social Services and Equality. Health Care Barometer 2014. In the period 2011-2014 the Health Care Barometer has regularly studied the degree of compliance with the Tobacco Law's measures on the prohibition of smoking in public areas. A score of 1 means *there is no compliance at all* while 10 means *there is full compliance*.

Graph 2-3 Changes in compliance with the Tobacco Law, 2011-2014



Remarks: with respect to compliance with the measures set forth in the Tobacco Law, 1 means there is no compliance at all and 10 means there is full compliance.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

In persons aged 18 and older, 4.7% state²³ that they stopped smoking thanks to the influence of the Tobacco Law, 8.1% state that they smoke less as a result of it and 27.6% state that it has not affected their use of tobacco. In this survey, 58% of the respondents were non-smokers.

In 2015, 87.9% of citizens aged 18 and over are aware of the existence of the so-called e-cigarettes, 48.7% of them believe that they are a health risk, while 33.5% do not know and 0.3% do not answer. Of those aware of the existence of e-cigarettes, 52.7% do not think they can help a person to stop smoking. This is 8.6 points higher than in 2014.

Table 2-4 Opinion about electronic cigarettes, 2014-2015

	2014	2015
Have you heard of electronic cigarettes? YES	89.4	87.9
If you have heard of them do you think they may be a health risk? YES	47.5	48.7
If you have heard of them, do you think they can help a person to stop smoking? NO	44.1	52.7

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

2.2 Alcohol

2.2.1 Use of alcohol in the adult population

In the population aged 15 and over, 67.3% of the population have consumed alcohol at some time in the past year (77.5% of men and 57.7% of women). Differences between the sexes are observed at all ages, but they are smaller among the youngest age groups.

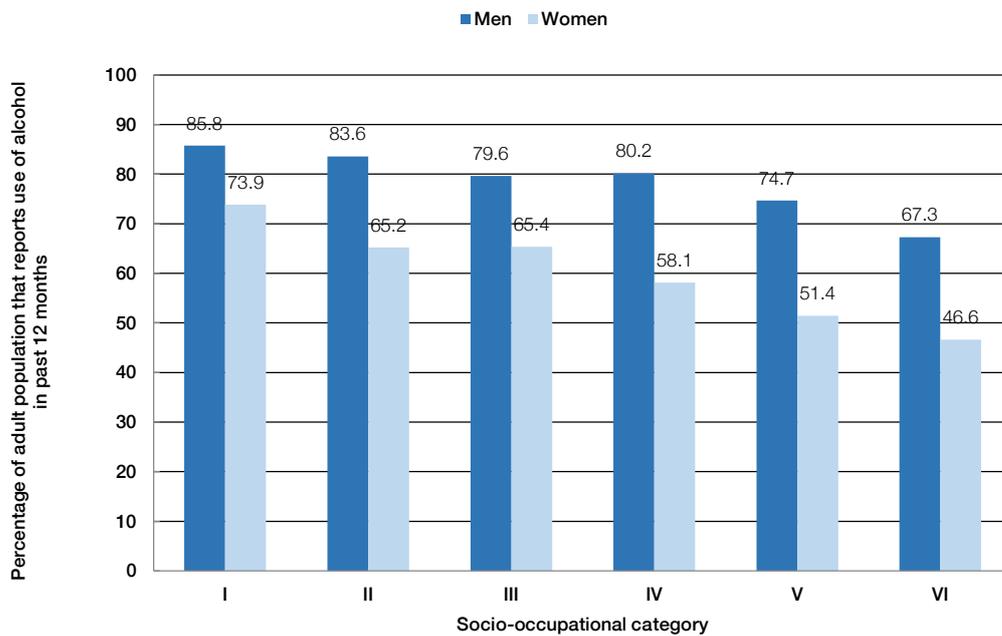
²³ Ministry of Health, Social Services and Equality. Health Care Barometer, 2014

The sex differences found in the prevalence of drinkers are related to educational and occupational gradients. The prevalence is higher in the more privileged social classes, especially in women.

A total of 74.9% of women with higher education had consumed alcohol in the last year, compared to 45.2% of the women with a low or very low level of education: the difference is found in all age groups.

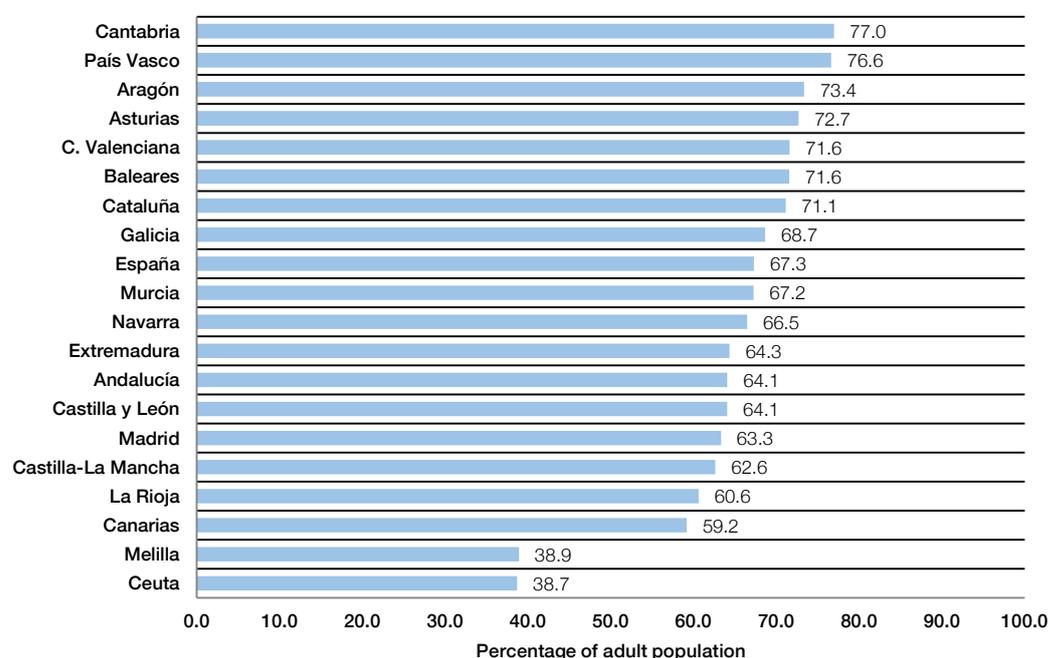
There are also clear territorial variations: the autonomous communities in the north and east of the peninsula show a greater prevalence of persons who have consumed alcohol in the past year.

Graph 2-4 Prevalence of use of alcoholic beverages in past twelve months in population aged 15 and over, by sex and socio-occupational category, 2014



Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Graph 2-5 Prevalence of use of alcoholic beverages in past twelve months in population aged 15 and over, by autonomous community, 2014



Remarks: data appears in order from highest to lowest.

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

The percentage of the population aged 15 and over that reports drinking above the risk threshold (>40g/day in men and >20g/day in women) is 1.6%, less than nine years ago (4.7%). The drop has occurred in both sexes but it is more pronounced in men, who show a reduction from 6.8% to 2.0% in this period. The percentage of men who consume alcohol in amounts that put their health at risk is greater than that of women in all age groups, except the youngest. By socio-occupational category, it is more frequent in men and in the least advantaged groups.

Table 2-5 Trends in the consumption of alcohol considered to be a health risk, in population aged 15 and over. Percentage distribution by sex, 2006-2014

	2006	2009	2011/2012	2014
Persons who admit to at-risk drinking	4.7	3.2	1.7	1.6
Men	6.8	4.0	2.1	2.0
Women	2.7	2.5	1.4	1.2

Remarks: The criterion for classifying alcohol consumption as 'at-risk drinking' is over 40 g/day (in men) and over 20 g/day (in women).

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

As for heavy episodic drinking, men do it more than twice as much as women do, with greater frequency, in greater amounts and for more years. In relation to frequency, 13.5% of men and 5% of women have engaged in heavy episodic drinking in the past month.

Table 2-6 Heavy episodic drinking in the past month in the population aged 15 and over. Percentage distribution by sex and age group, 2014

	Total	15-24	25-34	35-44	45-54	55-64	65-74	75 +
Both sexes	9.1	14.1	16.3	9.6	8.7	6.8	3.8	1.2
Men	13.5	18.2	23	13	13.8	11.1	5.9	2.4
Women	5	9.8	9.7	6.1	3.6	2.8	1.9	0.5

Remarks: Percentage of persons aged 15 and over who have had a session of heavy drinking (6 or more standard drink units – SDU– for men and 5 or more SDU for women. The pure alcohol content of one SDU has been defined as 10g (equivalent of 12.5 ml).
Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

The autonomous communities vary widely in their rates of heavy episodic drinking: Navarra and Extremadura stand out for their high reported frequency, over 17%, compared to the national average of 9.1%. At the other extreme is Cantabria, which is below 5%.

2.2.2 Alcohol use and the workplace

About 21% of the workforce state that they know a co-worker who consumes alcohol or other drugs in excess at work, although the percentage has diminished slightly compared to previous years (it was 24% in 2007).

Most of the workforce (86.6%) thinks that the use of alcohol or other psychoactive drugs at the workplace is a significant/very significant problem, because of the possibility of it causing workplace accidents (60.8%) and reducing productivity (51.3%). This is the opinion of a slightly higher percentage of women (87.2%) than of men (86.0%) and the figures are similar to other years.

Table 2-7 Percentage of the workforce, by view of significance of the problem of consumption of alcohol and other drugs at the workplace, 2007 and 2013

Do you think that the consumption of alcohol and other drugs at the workplace is a significant problem?		
	2007	2013
Very significant	48.3	52.8
Quite significant	37.7	33.8
Not very significant	7.9	5.8
Not at all significant	6.1	7.6

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of psychoactive substances at the workplace in Spain.

By sector, it is the public administration, education, health and social service sectors that show the highest percentage of workers who think the problem is quite significant or very significant.²⁴

²⁴ Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of psychoactive substances at the workplace, 2013/2014.

As for actions that members of the workforce believe should be performed at the workplace, the following are viewed as especially important: drug information and education, referral of workers with drug or alcohol problems to specialised centres where they can receive counselling, the necessity of making social health care services available to drug users.

2.3 Drug use by secondary school students (aged 14 to 18)

Alcohol (76.8%) and tobacco (31.4%) followed by cannabis (25.4%) are the drugs most used by students aged 14 to 18²⁵ in the past year. They are followed, in this order, by: hypnosedatives with or without prescription (10.8%), cocaine (2.8%), hallucinogens (1.2%), ecstasy (0.9%), amphetamines (0.9%), volatile inhalants (0.7%) and heroin (0.7%).

The consumption of legal psychoactive drugs (tobacco, alcohol, hypnosedatives) is more widespread among women than men, while the use of illegal drugs is more widespread in men than in women.

Table 2-8 Prevalence of use of legal drugs in the past 12 months in population aged 14 to 18, by sex, 2014

	Both sexes (%)	Men (%)	Women (%)
Alcohol	76.8	75.3	78.2
Tobacco	31.4	29.6	33.2
Hypnosedatives with or without prescription	10.8	7.7	13.8
Hypnosedatives without prescription	5.3	3.8	6.8

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

Table 2-9 Prevalence of use of illegal drugs in the past 12 months in population aged 14 to 18, by sex, 2014

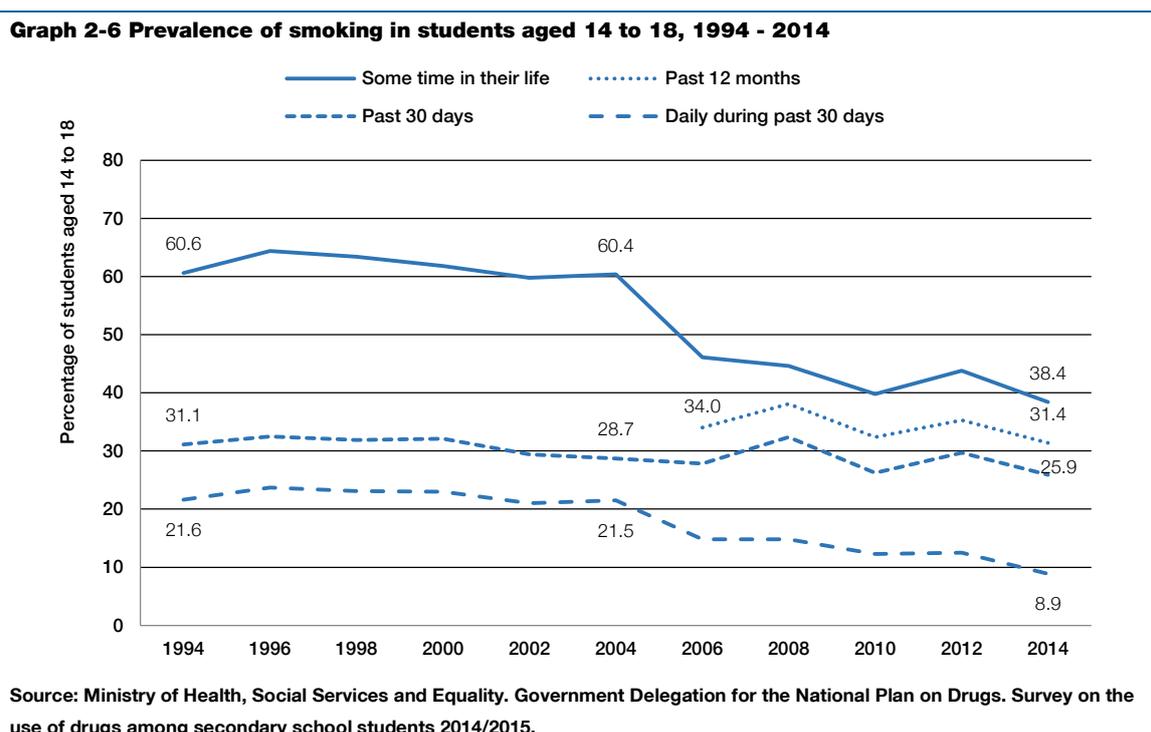
	Both sexes (%)	Men (%)	Women (%)
Cannabis	25.4	28.0	23.0
Cocaine (powder and/or base)	2.8	3.3	2.2
Hallucinogens	1.2	1.6	0.7
Ecstasy	0.9	1.2	0.6
Amphetamines	0.9	1.3	0.6
Volatile inhalants	0.7	0.9	0.4
Heroin	0.7	0.7	0.2

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

²⁵ Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students (ESTUDES), 2014/2015.

2.3.1 Tobacco use

With respect to tobacco use, the drop that began in 2004 continues, although in the past year 137,000 students started smoking. In 2014, 38.4% of students had smoked some time in their life, 31.4% in the past year and 8.9% smoke every day; in the past ten years the use of tobacco by students aged 14 to 18 has fallen; in 2004, 21.5% of this population sector smoked on a daily basis, compared to 8.9% in 2014. And if the 2014 figure is compared to that of 1994, the reduction is by 12.7 points.



2.3.2 Alcohol use

Although the prevalence of alcohol use in students aged 14 to 18 continues to be high, there is a clear downward trend. The reduction is most pronounced in the case of heavy consumption patterns (frequency of intoxication in the past 30 days and binge drinking²⁶). Still, 285,700 students between the age of 14 and 18 have started to consume alcohol (154,600 are women). 78.9% have drunk alcohol some time in their life, 76.8% have done so in the past year and 68.2% have done so in the past month.

The percentage of students that drink is higher on weekends. They drink mainly beer on weekdays and, on weekends, mixed drinks, beer and wine. They obtain the alcohol directly or through persons above the age of 18 who buy it for them.

As for heavy consumption, it is worth noting that 1.7% of young people aged 14 to 18 have consumed alcohol daily during the past 30 days (0.9% at age 14 and 2.4% at age 17).

²⁶ Binge drinking refers to the consumption of 5 or more alcoholic beverages in the space of approximately two hours.

1 out of 3 students has engaged in binge drinking in the past 30 days. This consumption pattern increases with age: at age 18 the percentage is 50%.

The prevalence of the phenomenon known as *botellón* – large groups of young people gathering in outdoor areas to drink and socialize – has fallen slightly, with 6 out of 10 (57.6%) having taken part in a *botellón* within the past 12 months (compared to 62% in 2012). The frequency of this practice increases with age, reaching 71.9% at age 18.

The episodes of intoxication are also falling: 2 out of 10 students have been intoxicated at some point in the past month. On weekends 3 out of 10 (31.9%) students display risk consumption.²⁷ A larger proportion of women drink than men and it is interesting to note that in the lowest age group (14-15 years) the percentage of young women who drink to intoxication is greater than that of young men.

The pattern of binge drinking is similar to that of episodes of intoxication. In 16-year-old students, 37.1% have binged on alcohol in the past month and in the case of 18-year-old students the proportion is just over half (50.6%).

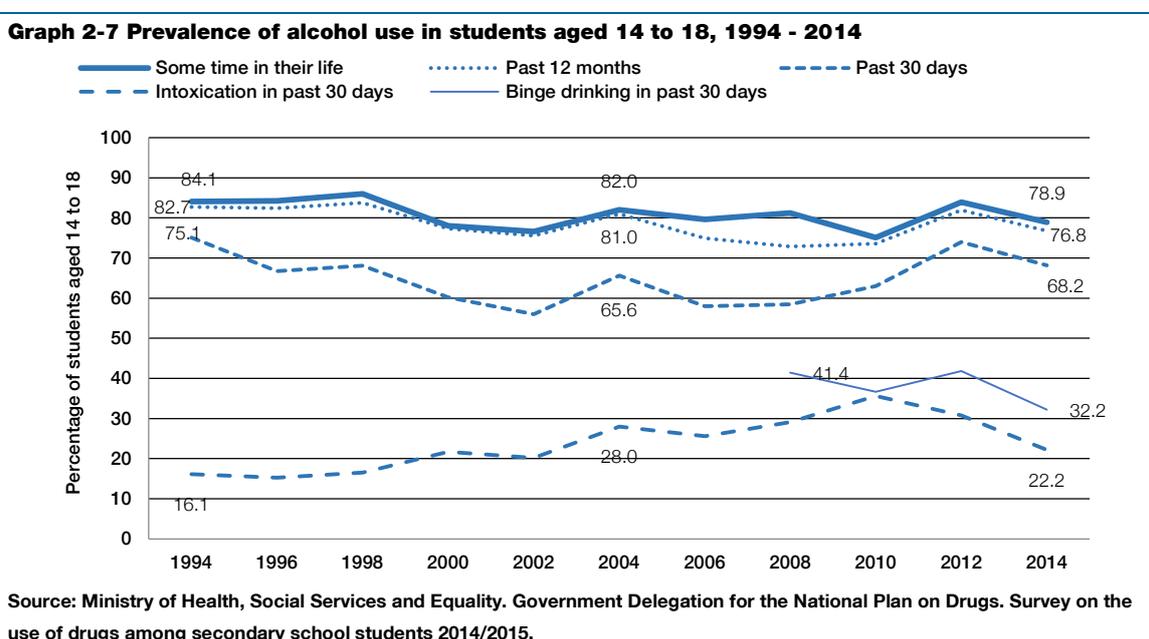


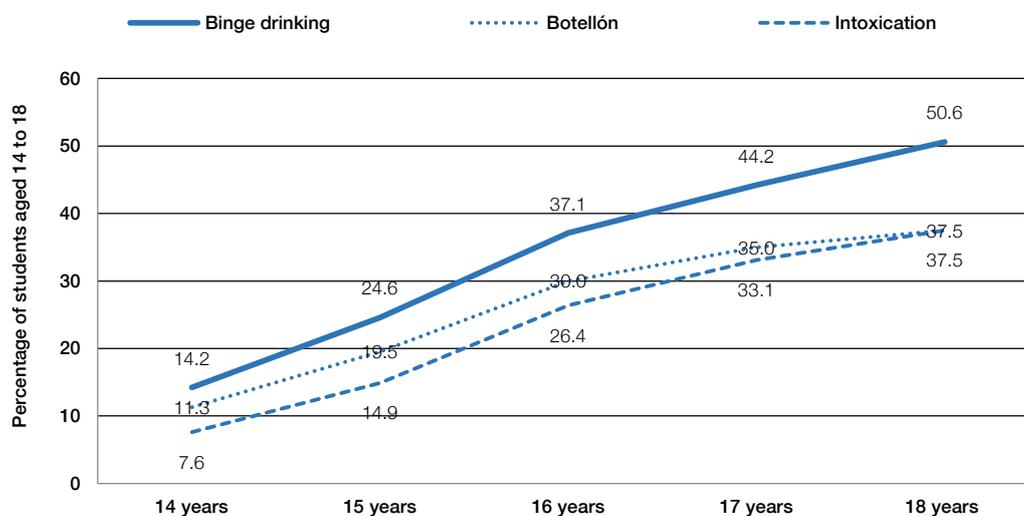
Table 2-10 Prevalence of alcohol use in the past 30 days in students aged 14 to 18, by sex, 2014

	Both sexes (%)	Men (%)	Women (%)
Binge drinking	32.2	33.4	31.0
Botellón	57.6	55.9	59.3
Episodes of intoxication	22.2	23.3	22.1

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

²⁷ Risk consumption refers to students aged 14 to 18 who drink more than 49 cc alcohol/day in men and more than 29 cc alcohol/day in women during the weekend (Friday, Saturday and Sunday).

Graph 2-8 Prevalence of alcohol use in the past 30 days in students aged 14 to 18, by drinking pattern and age, 2014



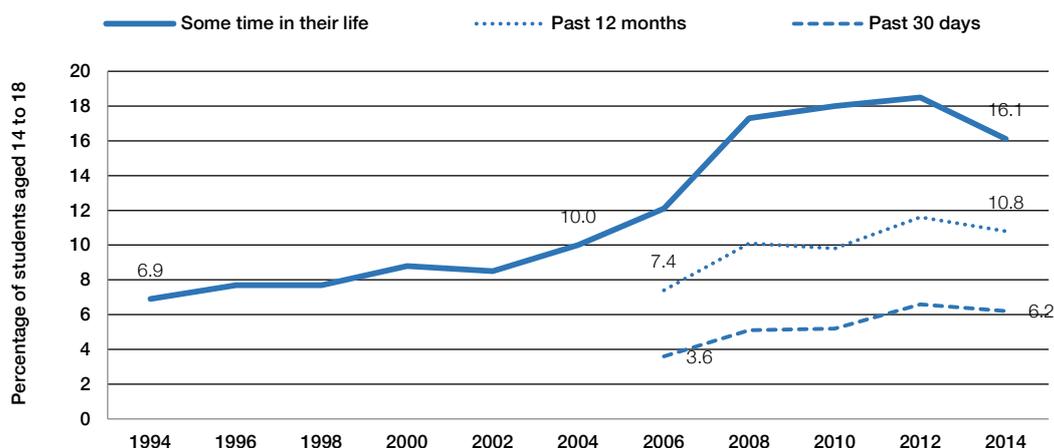
Remarks: Binge drinking refers to the consumption of 5 or more alcoholic beverages in the space of approximately 2 hours.

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

2.3.3 Use of hypnotosedatives

In the year 2014 the consumption of hypnotosedatives with and without prescription has dropped, a clear break being seen in the upward trend underway since 1994. Thus, 16.1% of secondary school students have taken them at some time in their life; 10.8% in the past 12 months and 6.2% in the past 30 days. Women continue to be the main users of hypnotosedatives. The percentage of women who have consumed this type of substance in the past year is twice that of men (13.8% compared to 7.7%).

Graph 2-9 Prevalence of hypnotosedative use in students aged 14 to 18, 1994 - 2014



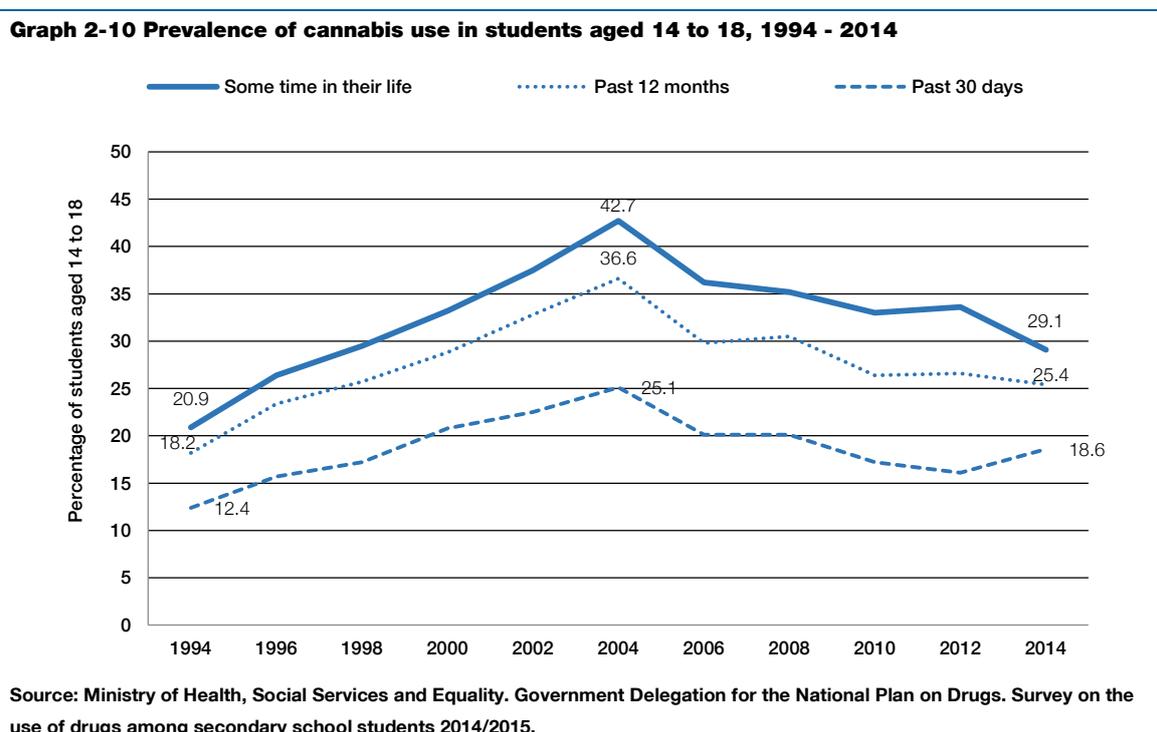
Remarks: use of hypnotosedatives with and without prescription

Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

2.3.4 Cannabis use

Cannabis is the illegal drug used by the largest percentage of young people. In the year 2014 use of this substance continues to drop: 29.1% have tried cannabis some time in their life, compared to 42.7% who had done so in 2004. Moreover, the proportion of students who have consumed in the past 30 days (18.6%) is half, considerably less than in 2004 (25.1%). In this group, 65.6% have consumed primarily marihuana, 9% consume hashish and 25.4% consume both types. About 86.5% mix cannabis with tobacco.

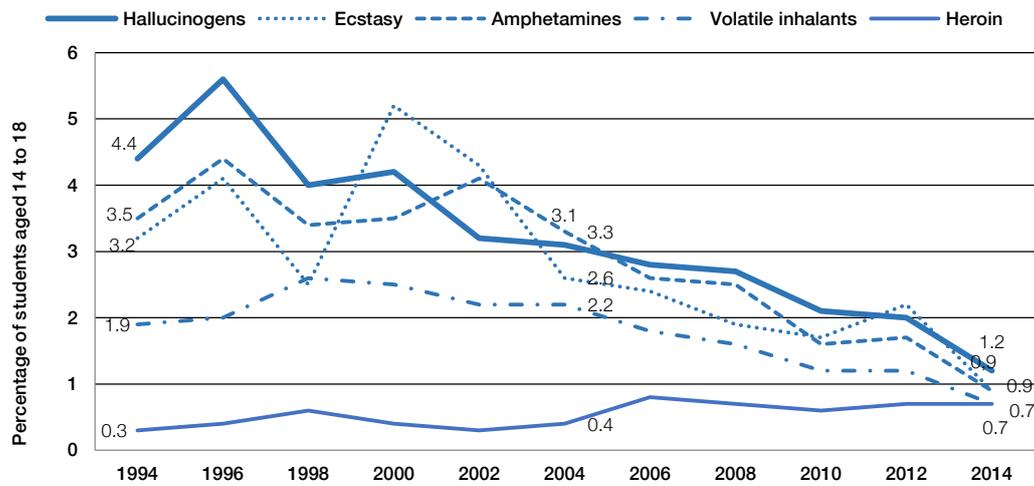
The daily average of joints consumed by users in the past 30 days is 3.2. Over the past year, about 146,200 students aged 14 to 18 have started consuming cannabis on a regular basis. More men than women consume in all age groups.



2.3.5 Use of other psychoactive substances

As for the consumption of hallucinogens (1.2%) amphetamines (0.9%), ecstasy (0.9%), volatile inhalants (0.7%) and heroin (0.7%), the continuous downward trend can be seen here also, with 2014 showing the lowest values since 1994.

Graph 2-11 Prevalence of use in the past 12 months of amphetamines, hallucinogens, ecstasy or heroin in students aged 14 to 18, 1994 - 2014



Source: Ministry of Health, Social Services and Equality. Government Delegation for the National Plan on Drugs. Survey on the use of drugs among secondary school students 2014/2015.

2.4 Obesity and overweight

2.4.1 Obesity and overweight in the adult population

Obesity is considered one of the main risk factors for a number of chronic conditions and health problems, including coronary and cerebrovascular disease, diabetes mellitus, arterial hypertension and some types of cancer.

According to the data obtained in the European Survey of Health in Spain 2014, obesity affects 16.9% of the population aged 18 and over (17.1% in men and 16.7% in women). If overweight is also considered, then 52.7% of the population aged 18 and over is obese or overweight.

Since 1987²⁸ obesity has been on the rise in both sexes, with the upward slope being more pronounced in men than in women. In 1987, 7.4% of the population aged 18 and over had a Body Mass Index of 30 kg/m² or higher (obesity is considered a BMI of 30 or higher), while in 2011 this percentage had reached 17%. This year, for the first time since 2014, no increase has been observed in the reported prevalence of obesity in Spain.

The frequency of obesity presents a gradient inverse to the level of education. In 2014, while 26.4% of the adult population with a primary education or less are obese, the percentage is 17.9% and 12.2% in subjects with a first-cycle and second-cycle secondary education, respectively, and 8.7% in subjects with a university education. This slope has existed for some time, with no reduction in the differences being observed.

²⁸Ministry of Health, Social Services and Equality. Spanish National Health Survey. The Spanish National Health Survey of 1987 was the first national health survey to be conducted in Spain.

Table 2-11 Trend in the percentage of people aged 18 and older with obesity by level of education, 2001-2014

Level of education	2001	2003	2006	2009	2011/2012	2014
Primary education or less	22.5	20.9	22.0	24.1	26.7	26.4
Secondary education, first cycle	10.1	11.0	13.7	14.6	19.0	17.9
Secondary education, second cycle	6.6	7.6	11.3	10.5	13.3	12.2
University	6.1	5.8	9.5	9.5	9.8	8.7
Total	13.2	13.6	15.4	16.0	17.0	16.9

Source: Ministry of Health, Social Services and Equality and National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

Table 2-12 Trend in the percentage of people aged 18 and older with obesity by autonomous community, 2001-2014

	2001	2003	2006	2009	2011/2012	2014
Andalucía	17.5	17.6	18.0	19.6	21.2	19.9
Aragón	13.0	12.4	15.4	15.7	15.7	16.6
Asturias	14.9	13.3	14.1	21.7	18.7	18.6
Baleares	12.8	12.6	12.1	14.3	15.1	13.2
Canarias	14.0	14.6	16.1	15.2	18.2	19.3
Cantabria	14.4	12.0	14.1	12.2	11.1	15.1
Castilla y León	11.6	12.0	13.7	12.7	13.8	15.5
Castilla-La Mancha	15.4	17.1	17.2	18.4	20.6	19.7
Cataluña	11.1	11.5	14.5	14.1	14.3	15.0
Comunidad Valenciana	13.9	14.6	15.8	15.5	17.3	17.3
Extremadura	15.4	19.0	17.7	21.5	21.6	16.8
Galicia	11.4	14.4	16.9	16.9	19.2	20.7
Madrid	12.1	9.7	12.0	13.5	14.3	14.6
Murcia	14.2	15.7	19.4	22.2	20.3	17.3
Navarra	7.3	13.7	14.7	11.2	11.2	11.7
Pais Vasco	8.6	10.4	15.6	14.1	15.3	13.0
La Rioja	7.5	10.5	11.0	14.7	14.9	14.4
Ceuta	14.1	12.8	17.4	11.4	24.9	18.2
Melilla				19.8	12.8	19.4
Spain	13.2	13.6	15.4	16.0	17.0	16.9

Source: Ministry of Health, Social Services and Equality and National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

2.4.2 Obesity and overweight in children and young people

As is the case with adults, in children and adolescents obesity is associated with a higher prevalence of different disease risk factors, such as pre-diabetes, type 2 diabetes, hypertension, metabolic syndrome, a negative antioxidant situation and even sleep disorders. In addition, young people with weight problems tend to have a lower self-esteem and quality of life, and it must not be forgotten that they run a greater risk of suffering from associated pathologies as adults.

Based on the growth charts of the World Health Organisation, the most recent data,²⁹ from 2015, indicates a prevalence of overweight in school children, aged 6 to 9, of 23.2% (22.4% in boys and 23.9% in girls) and a prevalence of obesity of 18.1% (20.4% in boys and 15.8% in girls).

Table 2-13 Body weight situation in school children aged 6 to 9, by sex, 2015

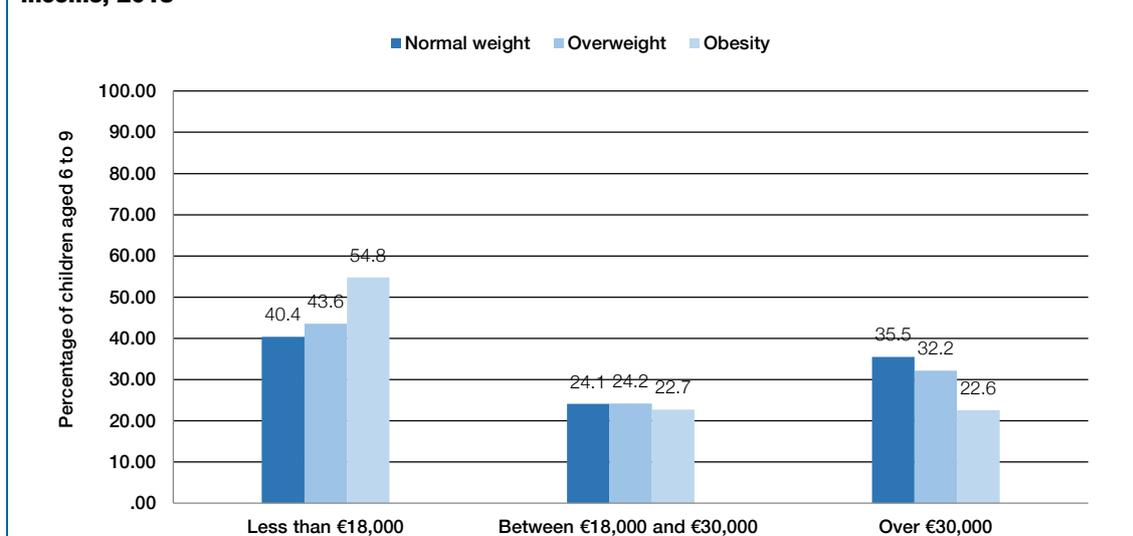
School children (6 to 9 years of age)	Both sexes (%)	Boys (%)	Girls (%)
Underweight	0.7	0.8	0.6
Normal weight	58.0	56.4	59.7
Overweight	23.2	22.4	23.9
Obesity	18.1	20.4	15.8

Remarks: based on World Health Organisation growth charts.

Source: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN). ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain.

Among the possible factors associated with obesity, significant correlations continue to be found between the factors related to dietary habits and the lack of physical activity, such as: not eating breakfast every day, having a television/computer/videogames in the bedroom, watching television for over 2 hours a day, not sleeping enough, and also low household income and low level of education of the parents.

Graph 2-12 Prevalence of overweight and obesity in school children aged 6 to 9, by household income, 2015



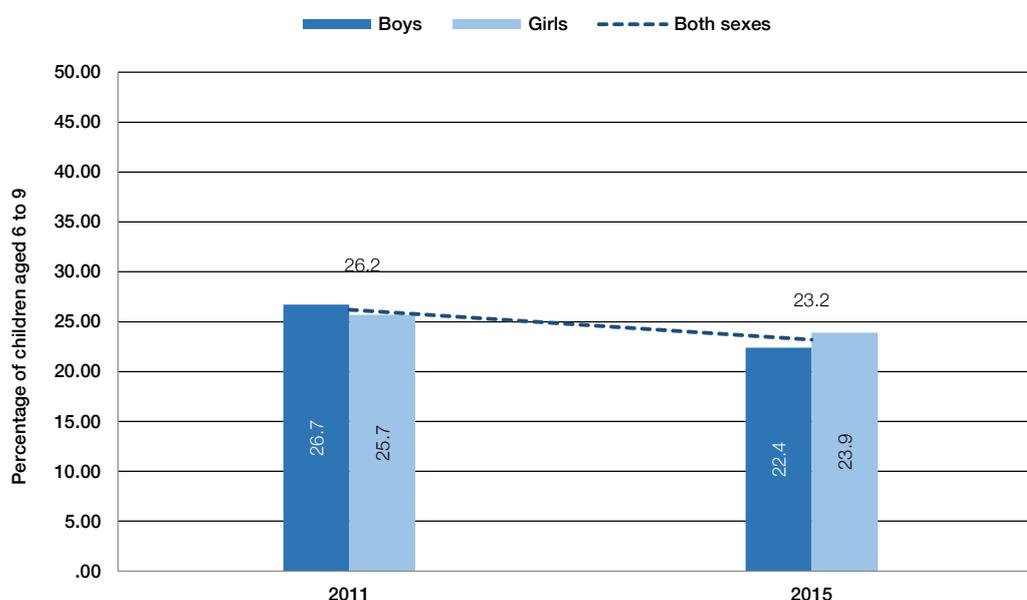
Remarks: According to WHO growth charts.

Source: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN). ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain.

Looking at the trends over time, since 2011 the prevalence of obesity in school children aged 6 to 9 has stabilised and that of overweight has diminished. The prevalence of overweight (not including obesity), calculated using the WHO growth charts, falls significantly, from 26.7% to 22.4% in boys and from 25.7% to 23.9% in girls.

²⁹ Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN). ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain, 2015

Graph 2-13 Changes in prevalence of overweight in school children aged 6 to 9, by sex, 2011-2015



Remarks: Figures calculated using WHO growth charts

Source: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN). ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain.

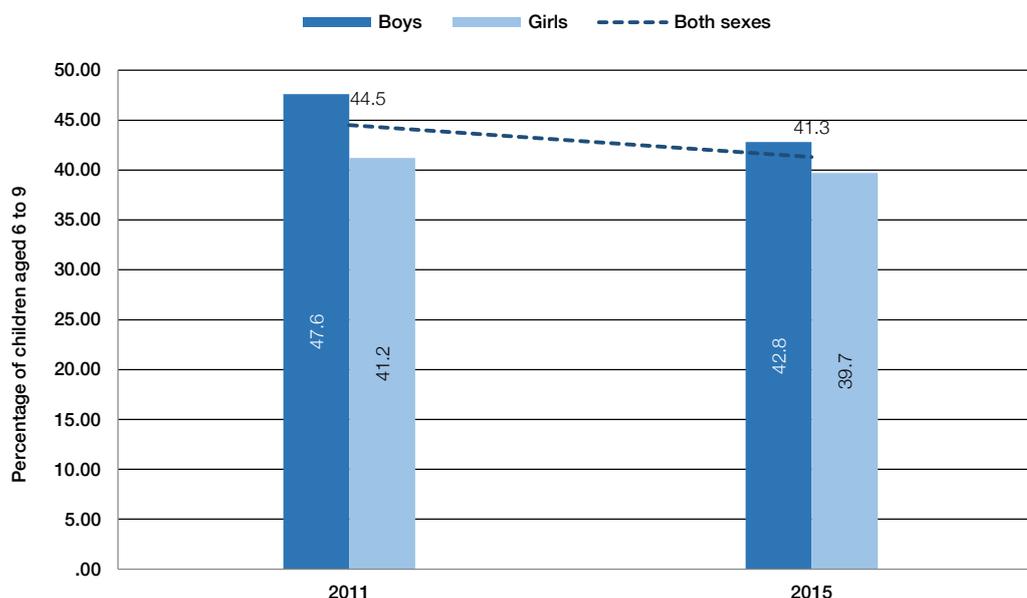
Most parents (80.0%) believe their children are of normal weight; only 12.0% think they are slightly overweight. No differences are found between boys and girls in this regard.

Table 2-14 Perception of parents about the weight of their children, 2015

School children (6 to 9 years of age)	Both sexes (%)	Boys (%)	Girls (%)
My child is underweight	6.1	6.2	6.0
My child is of normal weight	80.0	80.5	79.6
My child is slightly overweight	12.0	11.4	12.6
My child is very overweight	0.8	0.9	0.7

Source: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN) ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain.

Graph 2-14 Changes in prevalence of excess weight (overweight or obesity) in school children aged 6 to 9, by sex, 2011-2015



Remarks: Figures calculated using WHO growth charts

Source: Ministry of Health, Social Services and Equality. Spanish Agency for Consumer Protection, Food Safety and Nutrition (AECOSAN).ALADINO study on growth surveillance, diet, physical activity, child development and obesity in Spain.

As regards the prevalence of overweight and obesity (excess weight), here too a reduction is observed in both boys (from 47.6% to 42.8%) and girls (from 41.2% to 39.7%). Overall the reduction is from 44.5% to 41.3%.

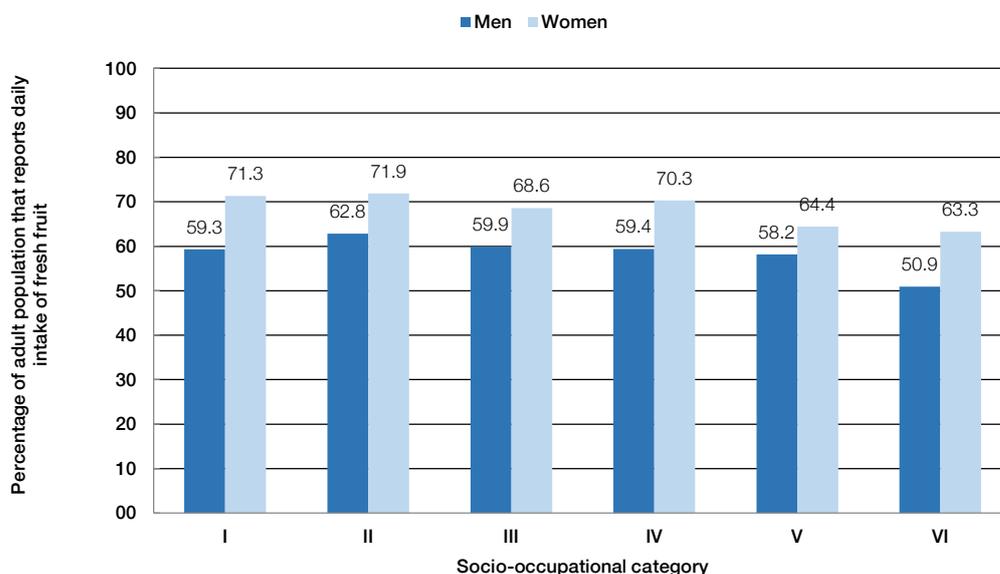
According to this data, it appears that the change in the trend of overweight and obesity in children has consolidated and, in the case of overweight, that a more pronounced reversal of the trend has begun.

2.5 Intake of fruit and vegetables

The percentage of the population aged 15 and over that eats fresh fruit on a daily basis (not including juice) is 62.7%. By sex, 58.2% of men and 67.1% of women eat fresh fruit every day.

This clear difference in favour of women in the prevalence in the intake of fresh fruit is present in all socio-occupational categories. The difference between the intake by women who belong to the most privileged group and women belonging to the least privileged group is 8 points and between men of the most privileged group and those of the least privileged group the difference is 8.4 points.

Graph 2-15 Prevalence of daily intake of fresh fruit in population aged 15 and over by sex and social class, 2014

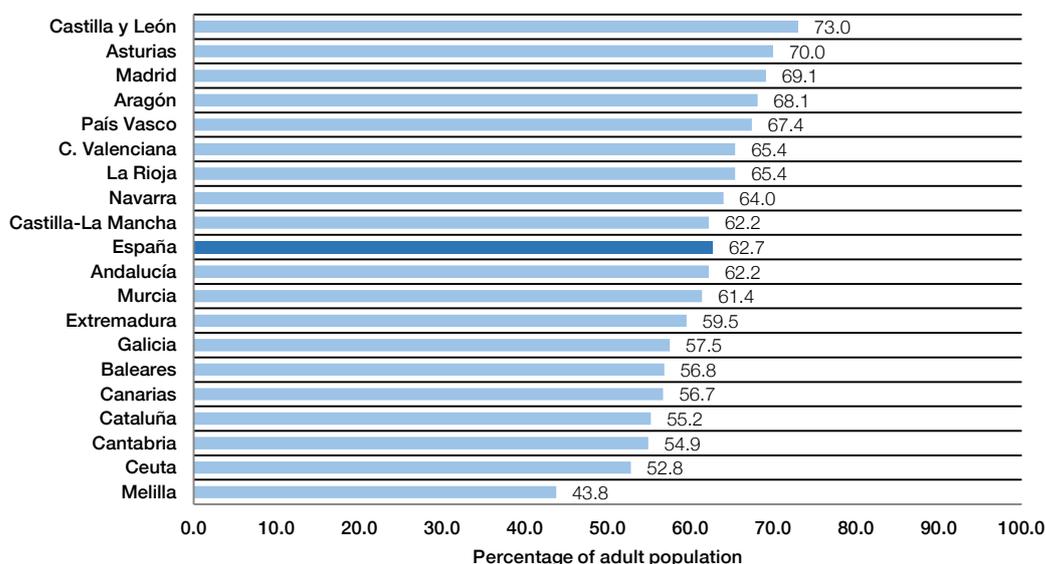


Remarks: juice is not included in the intake of fresh fruit.

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality European Survey of Health in Spain.

We also find variations between territories: Castilla y León, with the highest intake, exceeds Melilla by 24 percentage points.

Graph 2-16 Prevalence of daily intake of fresh fruit in population aged 15 and over, by autonomous community, 2014

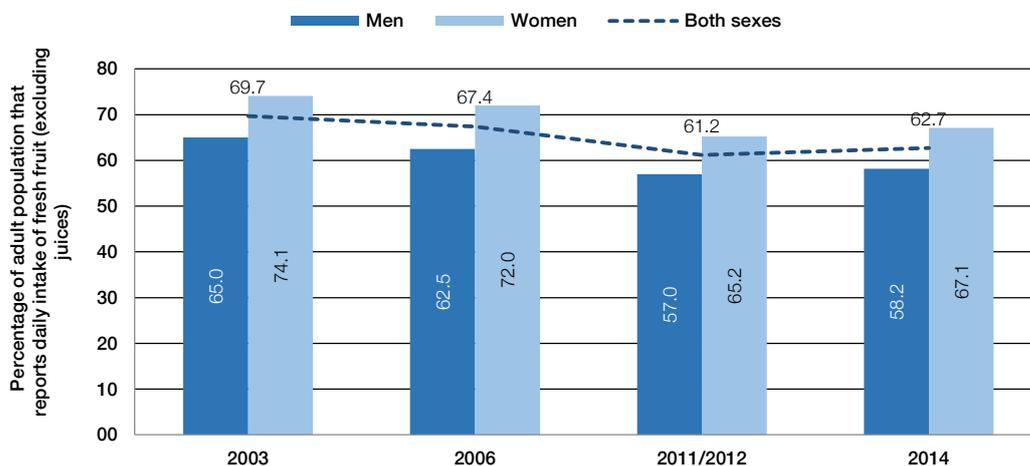


Remarks: data appears in order from highest to lowest. The intake of fresh fruit does not include juice.

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

From the year 2003 to 2011/2012 the intake of fresh fruit (excluding juices) fell in both men and women; however, the 2014 data seems to indicate a reversal in this trend, and in a more pronounced manner in women than in men.

Graph 2-17 Changes in daily intake of fresh fruit (excluding juices) in population aged 15 and over by sex, 2001-2014

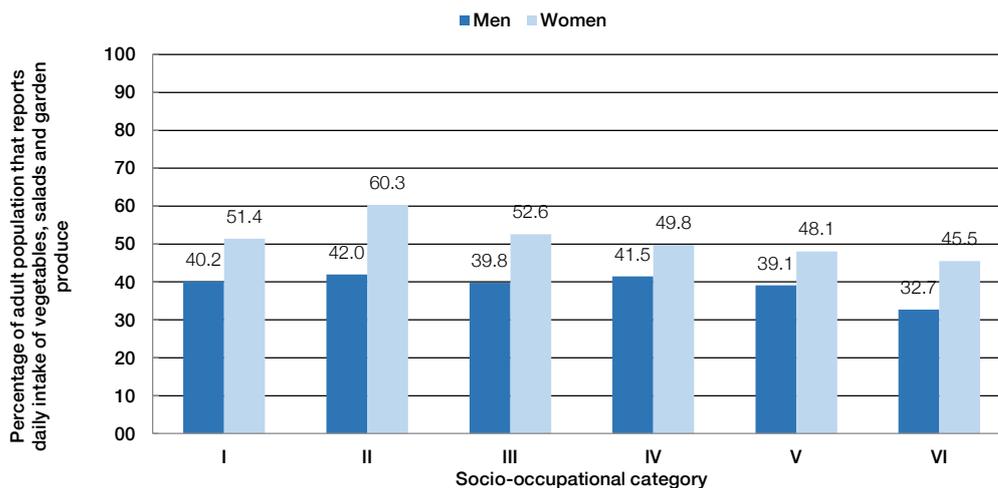


Remarks: the reference population for the years prior to 2011 is the group aged 16 and over.

Source: Ministry of Health, Social Services and Equality and National Statistics Institute (INE). Spanish National Health Survey and European Survey of Health in Spain.

The percentage of the population aged 15 and over that eats salads, vegetables and garden produce on a daily basis is 44.6%. By sex, 39.1% of men and 50.0% of women eat these foods every day.

Graph 2-18 Prevalence of daily intake of salads, vegetables and garden produce in population aged 15 and over by sex and social class, 2014

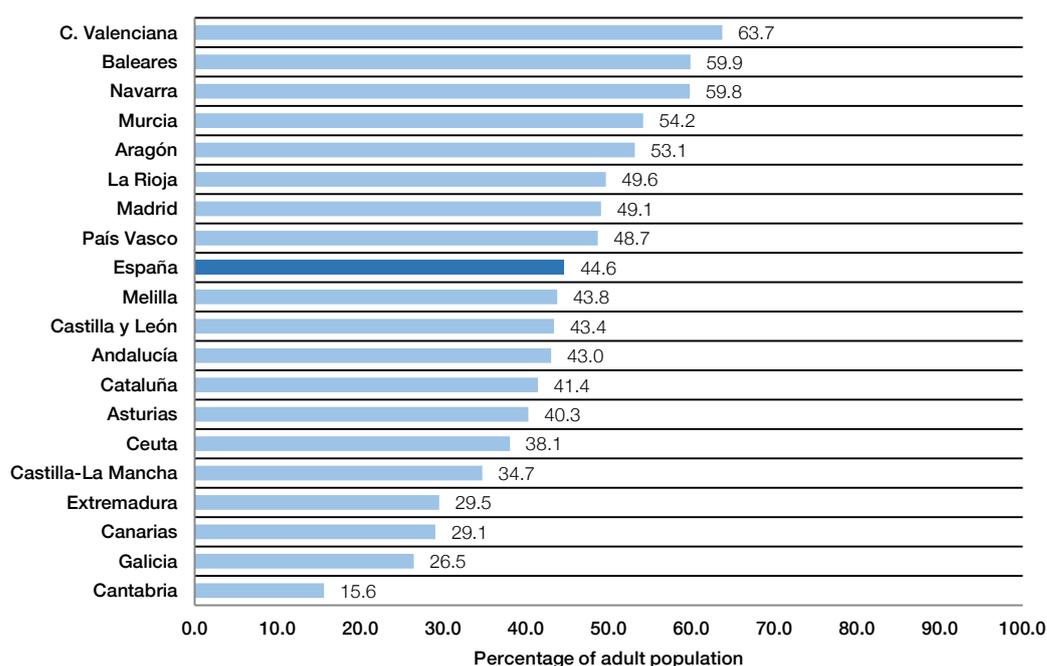


Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

This difference in favour of women in the prevalence of the daily intake of vegetables, salads and garden produce is present in all social classes. The difference between the intake by women who belong to the most privileged class and women belonging to the least privileged class is 5.9 points and between men of the most privileged class and those of the least privileged class the difference is 7.5 points.

We also find variations between territories: Comunidad Valenciana, which has the highest intake, exceeds Cantabria, which has the lowest intake, by 28.1 percent.

Graph 2-19 Prevalence of daily intake of vegetables, salads and garden produce in population aged 15 and over, by autonomous community, 2014

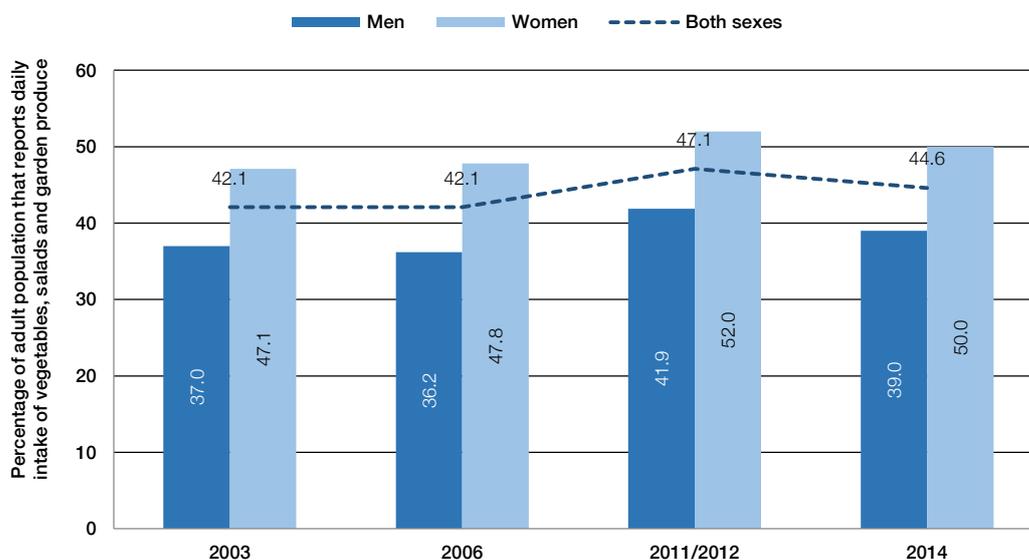


Remarks: data appears in order from highest to lowest.

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality European Survey of Health in Spain.

From the year 2003 to 2011/2012 the intake of these foods increased in both men and women; with the data from 2014, however, it seems that this trend has not been confirmed.

Graph 2-20 Prevalence of daily intake of vegetables, salads and garden produce in population aged 15 and over by sex, 2001-2014



Remarks: the reference population for the years prior to 2011 is the group aged 16 and over.

Source: Ministry of Health, Social Services and Equality and National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

Nutrition is an important health determinant and the intake of fruit and vegetables is one of the factors that can play a role in the prevention of chronic diseases such as hypertension, cardiovascular diseases, diabetes and certain types of cancer.

2.5.1 Promoting a healthy diet at the workplace

A majority of the employed population (64.0%) state that no activities promoting a healthy diet take place where they work.

Table 2-15 Are healthy eating habits encouraged at your place of work? 2014

Yes %	No %	DK/DA %	Total %	(N)
32.3	64.0	3.6	100	3,153

Remarks: DK/DA = Not sure what question means / Doesn't Know / Doesn't Answer. (N) = Number of interviews.

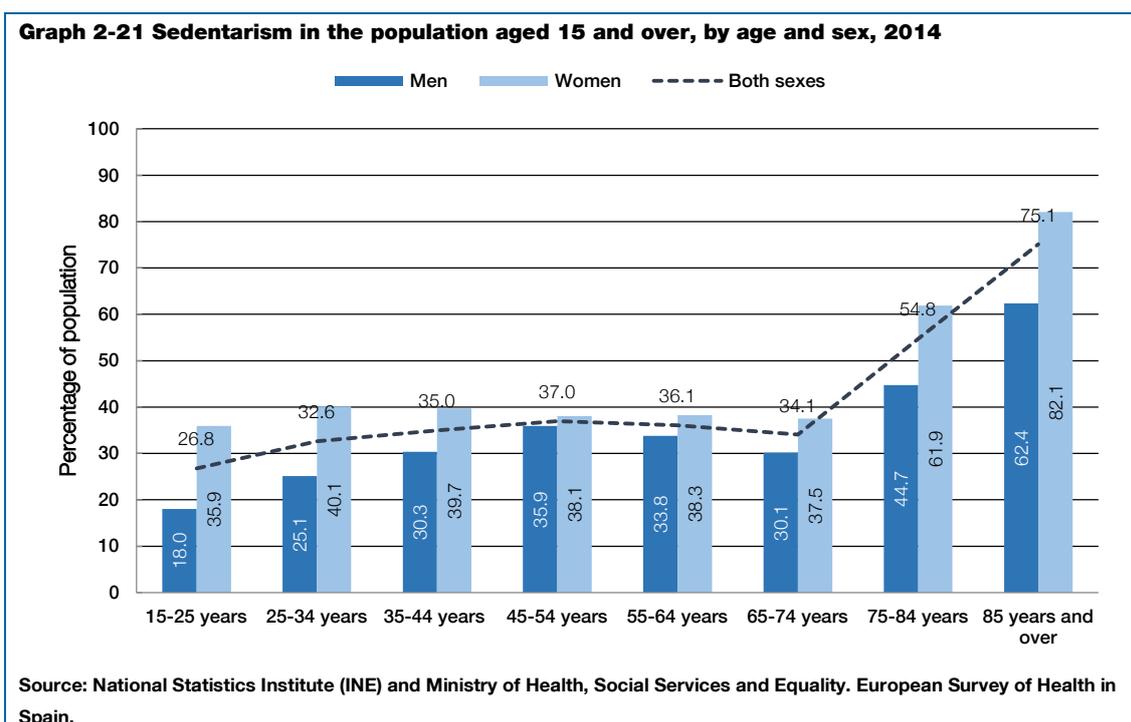
Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

When there are activities to promote a healthy diet, they focus on talks or informative material (41.2%) *recommendations about healthy snacks and meals* (39.9%) and *vending machines offering healthy foods* (22.0%).

2.6 Physical activity

2.6.1 Sedentarism and physical activity during free time

In Spain, four out of ten people aged 15 and over describe themselves as sedentary in their free time; 36.7% state that they do not do any form of exercise and that they occupy their free time almost completely with sedentary activities. Sedentarism during free time is more widespread among women (42.0%) than men (31.1%). The difference between the sexes is greater in young people and in the older age groups.



By autonomous community, Castilla-La Mancha and Murcia present the highest percentages of sedentarism, around 45%, while the lowest percentages are found in La Rioja, Navarra, Baleares and Canarias, all of which are below 30%. By sex, in all the autonomous communities sedentarism is more frequent in women than in men.

Table 2-16 Sedentarism in the population aged 15 and over. Percentage distribution by sex and autonomous community, 2014

	Both sexes (%)	Men (%)	Women (%)
Andalucía	37.1	29.8	44.1
Aragón	41.6	38.0	45.2
Asturias	34.1	30.0	37.8
Baleares	28.2	23.4	32.8
Canarias	29.3	23.7	34.8
Cantabria	41.5	33.3	49.2
Castilla y León	33.5	32.4	34.6
Castilla-La Mancha	45.1	41.3	48.8
Cataluña	37.8	32.0	43.2
Comunidad Valenciana	35.9	31.3	40.3
Extremadura	33.3	28.7	37.9
Galicia	40.3	34.4	45.9
Madrid	37.3	30.0	43.8
Murcia	44.5	38.6	50.3
Navarra	28.0	24.1	31.8
País Vasco	31.7	25.8	37.1
La Rioja	27.8	24.9	30.7
Ceuta	33.7	28.2	40.1
Melilla	41.5	35.0	47.4
Spain	36.7	31.1	42.0

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

An appropriate level of regular physical activity in adults lowers the risk of high blood pressure, coronary heart disease, stroke, diabetes, breast cancer and colon cancer, and it reduces musculo-skeletal problems. Physical activity is also a key determinant in avoiding overweight and obesity.

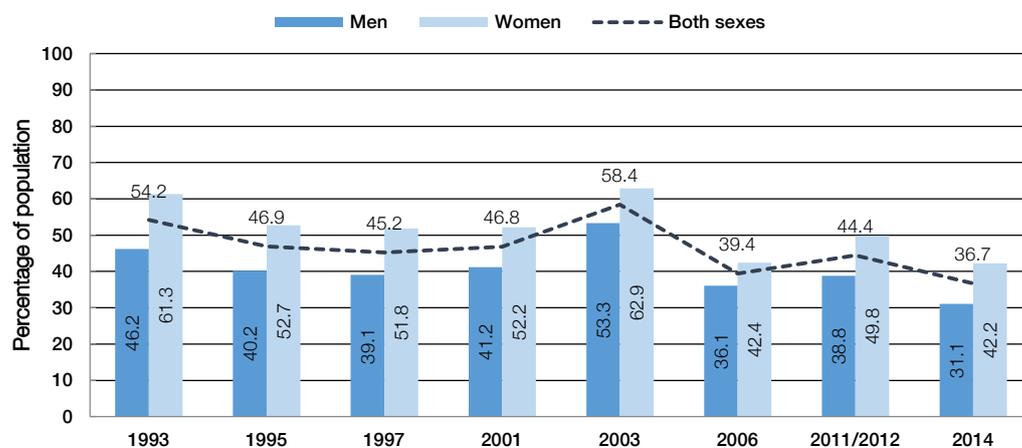
In recent decades sedentarism during free time has evolved in an irregular manner. In 2014, the percentage of people who state that they are sedentary during their free time is the lowest since 1993, in both men and women.

The most recent data regarding sedentarism and physical activity during free time in children is from the 2011/2012 Spanish National Health Survey. Sedentarism affects 12.1% of children aged 5 to 14; these children do no physical activity whatsoever during their free time. The percentage of sedentarism for girls is 16.3%, twice as high as the percentage for boys (8.2%), and both the frequency and the sex differential increase in the older age groups. So, in the group of 10 to 14 year olds, 7.6% of the boys have a sedentary life style, compared to 19.7% of the girls.

The autonomous communities also show significant differences in the practice of physical activity or the regular training in children. The figures of Aragón, Canarias, Cataluña, Extremadura, Navarra and La Rioja stand out because in the territories 60% of children engage in physical activity or train regularly.

Half of children spend more than the recommended time in front of a screen (television, computer, videogames or other electronic devices): 51.9% of the children aged 1 watch television every day, 61.2% aged 2 to 4 watch more than 1 hour a day, and 52.3% of children aged 5 to 14 watch more than 2 hours every day (these are the maximum times recommended for each age group).

Graph 2-22 Trends in percentage of sedentarism in population aged 15 and over by sex, 1993-2014



Remarks: in 2003 and 2006 a change was made in of the wording of the question, which must be taken into account when interpreting the results.

Source: Ministry of Health, Social Services and Equality and National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

Table 2-17 Regular physical activity during free time in children (aged 5 to 14) by sex and autonomous community, 2011/2012

	Both sexes (%)	Boys (%)	Girls (%)
Andalucía	53.9	64.5	43.6
Aragón	67.9	72.2	63.7
Asturias	48.7	53.4	43.5
Baleares	54.8	59.3	49.0
Canarias	61.8	65.7	57.7
Cantabria	23.7	38.5	10.5
Castilla-La Mancha	52.8	65.0	39.2
Castilla y León	24.7	32.3	16.2
Cataluña	68.1	71.6	64.1
Comunidad Valenciana	57.6	67.2	46.5
Extremadura	67.3	77.3	59.1
Galicia	50.7	58.5	41.5
Madrid	56.0	66.4	45.2
Murcia	32.6	45.1	19.5
Navarra	74.2	81.2	67.1
País Vasco	52.7	58.0	47.2
La Rioja	67.9	68.0	67.8
Ceuta	44.5	48.9	40.1
Melilla	39.9	47.4	33.7
Spain	55.5	63.7	46.9

Source: Ministry of Health, Social Services and Equality. Spanish National Health Survey. Physical activity, rest and leisure time. Series of monographic reports, no. 4.

2.6.2 Physical activity at the workplace

While doing their usual activity, 40.5% of the adult population spends most of the day standing, without moving about very much or making significant physical effort, and 36.1% spend almost the entire day seated. In 1993 these percentages were 51.0% and 34.0% respectively.

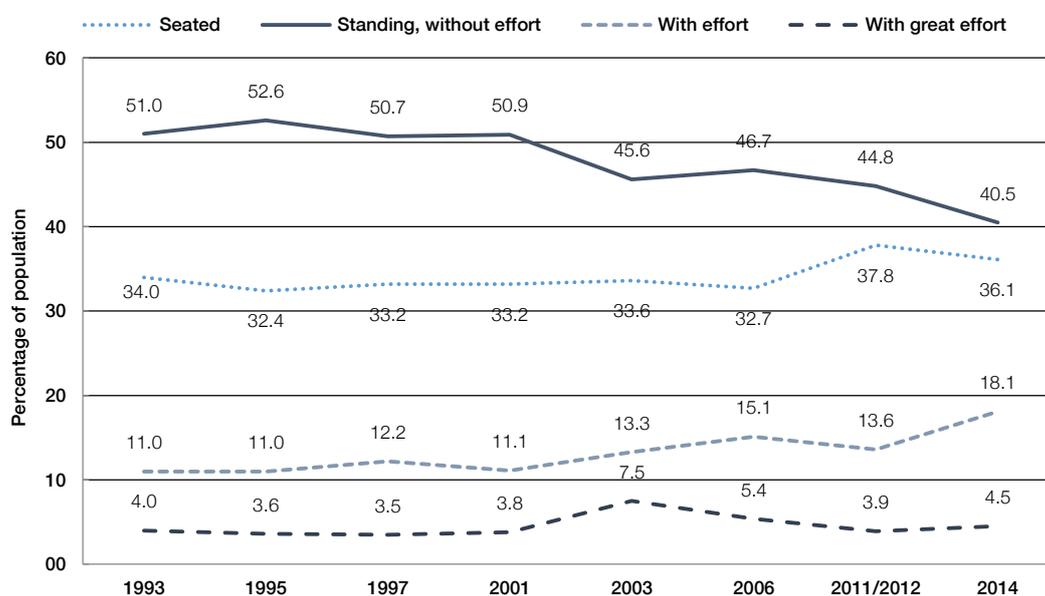
Men perform tasks that require significant physical effort (7.4%) more often than women do (1.9%) and tasks that require walking, carrying weight or moving about are also more frequent in men (21.6% compared to 15.0%). In women there is a predominance of work that requires standing most of the day but does not involve moving about much or making significant physical effort (46.4% compared to 33.8% in men).

Table 2-18 Degrees of physical activity at the workplace or while doing the main activity, in employed people, students and persons devoted to the home, aged 15 and over by sex, 2014

	Both sexes (%)	Men (%)	Women (%)
Seated most of the day	36.1	36.5	35.8
Standing most of the day, without moving about or making physical effort	40.5	33.8	46.4
Walking, carrying weight and moving about frequently, with effort	18.1	21.6	15.0
Performing tasks that require great physical effort	4.5	7.4	1.9

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Graph 2-23 Changes in the degrees of physical activity at the workplace or while doing the primary activity, in employed people, students and persons devoted to the home, aged 15 and over, 1993-2014



Remarks: In 2011/2012 and thereafter the population is aged 15 and older

Source: National Statistics Institute (INE) and Ministry of Health, Social Services and Equality. Spanish National Health Survey and European Survey of Health in Spain.

Looking at occupational physical activity over time, a reduction can be seen in the proportion of the population that spends most of the work day standing without moving about or making great physical effort.

The proportion of the population that spends most of the day seated remains stable, with figures similar to those of 2011.

Additionally, most employed people (76.3%) state that no activities promoting physical activity are carried out at their place of work.

Table 2-19 Are any activities to promote physical activity carried out at your place of work? 2014			
Yes %	No %	Total %	(N)
23.7	76.3	100	2,384
Remarks: percentage distribution based on valid responses. (N) = Number of interviews.			
Source: Ministry of Health, Social Services and Equality. Health Care Barometer.			

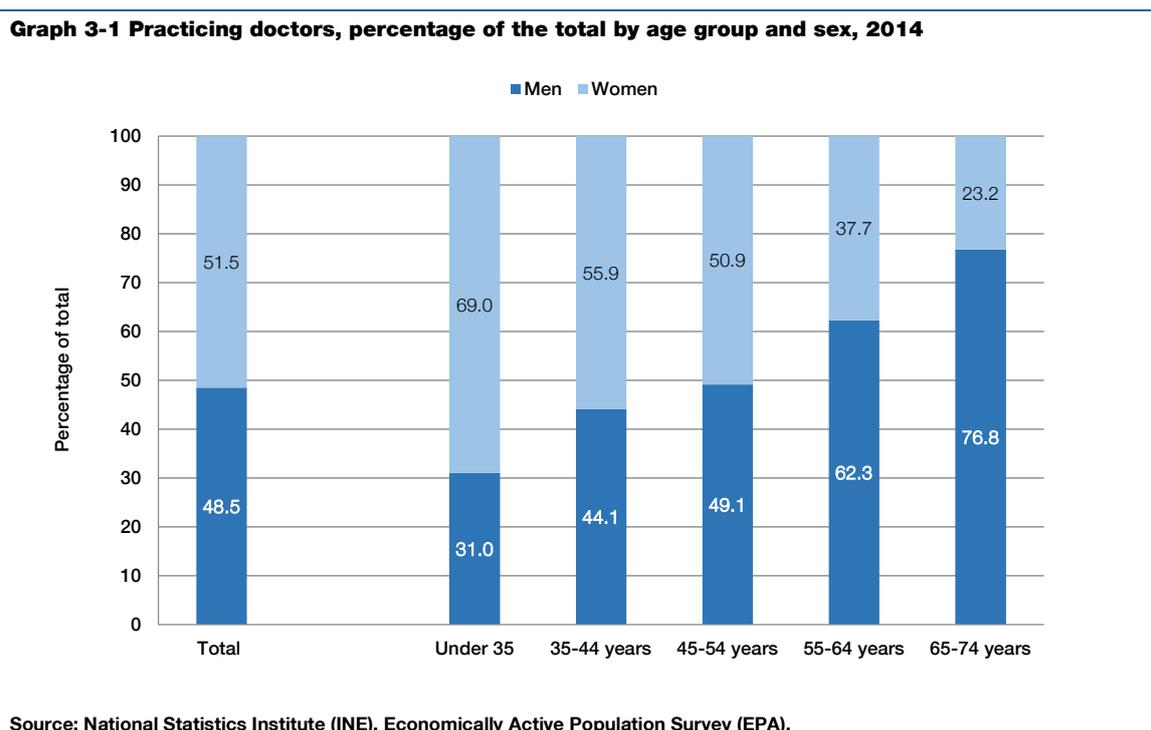
3 Health care resources

3.1 Human resources

3.1.1 Doctors

3.1.1.1 Practicing doctors

The most recent Economically Active Population Survey (EPA) data³⁰ indicates that the number of doctors working in patient care, in the private and public sectors, is 176,665, meaning that there are 3.8 doctors per 1,000 population. Over half of the practicing doctors (51.5%) are women. The most highly feminised age group is the under-35 group, while the group of doctors aged 65-74 is the least. The proportion of women increases as age decreases. Also, a certain degree of aging is observed; the group over 44 years of age represents 54.7% of the total number of doctors who are working and the group over 54 represents 27.9%.

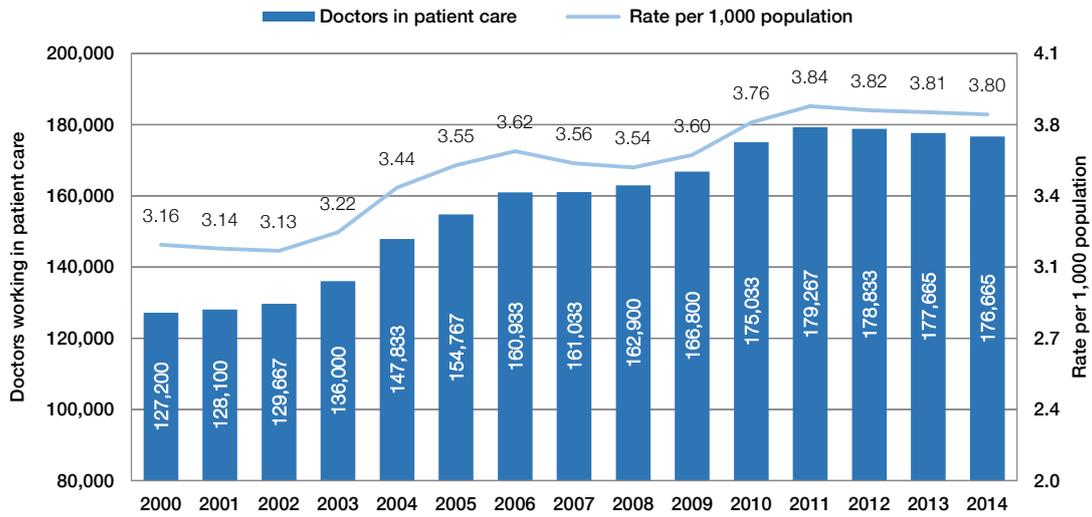


Over the last 15 years the rate of practicing doctors per 1,000 population has increased by 0.6 points, having remained stable, in the vicinity of 3.8, for the last five years. The proportion of

³⁰ National Statistics Institute (INE). Economically Active Population Survey (EPA) 2014.

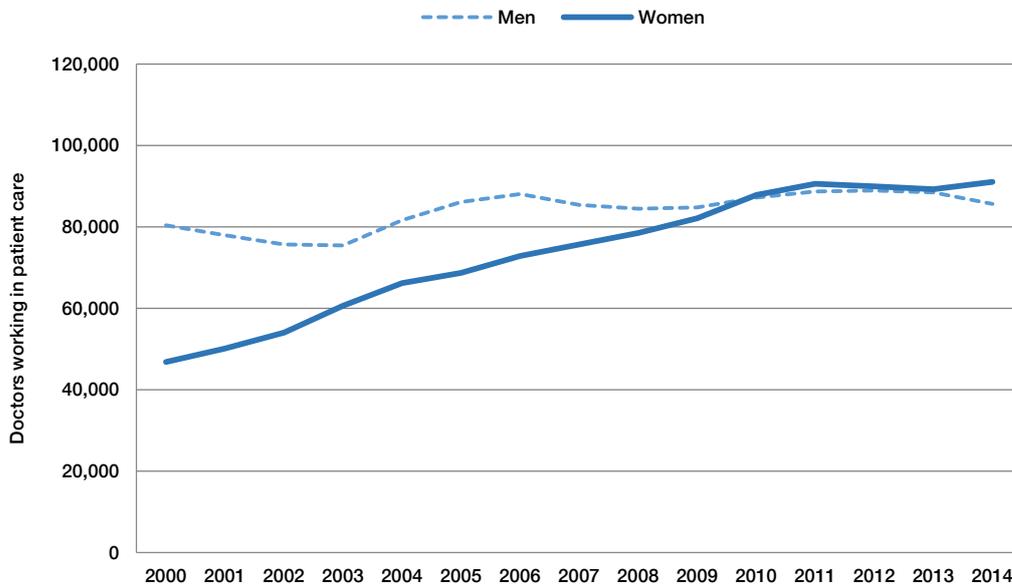
female doctors in the group has grown from 36.8% in 2000 to 51.5% in 2014, an increase of 14.7 points in this period. Since the year 2000 the proportion of doctors in the age group 35 to 44 years has decreased by 13.6 points, falling from 39.2% of the total number of doctors in 2000 to 25.6% in 2014 while the age group 55 to 64 years has increased by 15.6 points, growing in this period from 8.9 to 24.5%.

Graph 3-2 Changes in the number of doctors working in patient care and rate per 1,000 population, 2000-2014



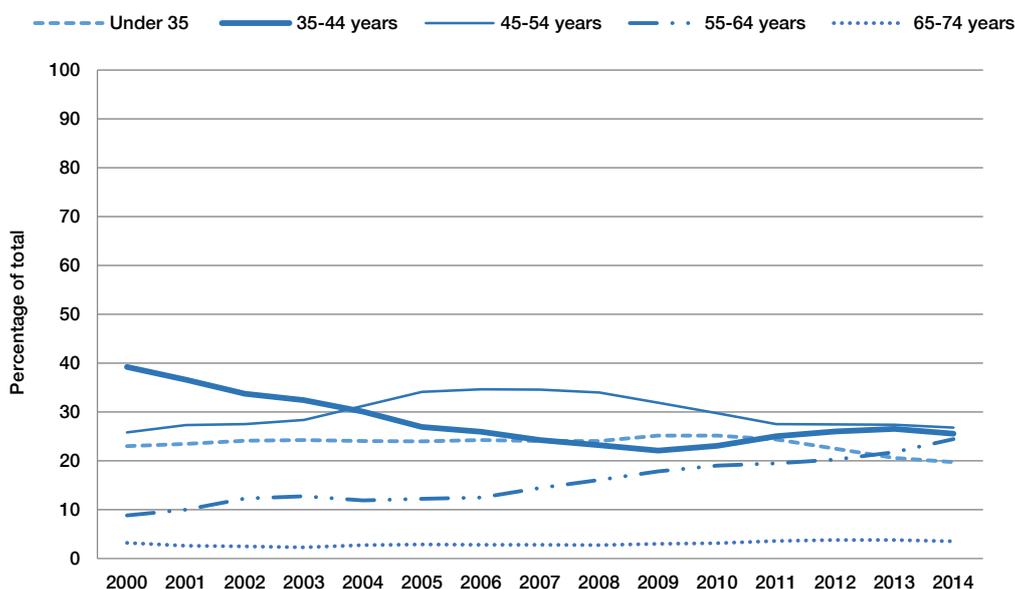
Source: National Statistics Institute (INE). Economically Active Population Survey (EPA).

Graph 3-3 Changes in the number of doctors working in patient care by sex, 2000-2014



Source: National Statistics Institute (INE). Economically Active Population Survey (EPA).

Graph 3-4 Changes in the percentage of doctors working in patient care by age group, 2000-2014



Source: National Statistics Institute (INE). Economically Active Population Survey (EPA).

3.1.1.2 Doctors in the SNS

The number of doctors engaged in patient care in the SNS is 116,711.³¹ Of them, 34,888 doctors (28,480 general practitioners and 6,408 paediatricians) work in primary care, meaning that the rate of doctors per 1,000 assigned persons (i.e., persons who have health cards and have been assigned to a primary care professional) is 0.8. It is estimated that there are 78,285 doctors working in patient care in SNS hospitals (not counting specialist doctors in post-graduate training). There are also 3,538 doctors in the Urgent Care and Emergency Services 112/061. All of this produces a rate of 1.7 doctors per 1,000 population.

In the SNS, for every doctor who works in primary care, there are 2.2 working in specialised care. In other words, 31.0% of SNS doctors provide their services in primary care while 69.0% do so in specialised care. By specialty group, out of every 10 doctors working in SNS hospitals, 4 work in Internal Medicine or medical specialties, 2 work in General Surgery or surgical specialties, 1 works in Gynaecology and Obstetrics, 1 in Trauma and Orthopaedics, 1 in Central Services (these are the specialised medical services that support clinical activities; radiology, laboratory, hospital pharmacy, anatomical pathology, etc.), and 1 in the Emergency Department.

An adequate supply of doctors – in both primary and specialised care – that takes into account service demand and the higher or lower dispersion of the population is one of the elements allowing patients to have access to quality medical care.

³¹ Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP) 2015 and Specialised Care Information System (SIAE) 2015 estimate based on data provided by 50% of the hospitals, with a coverage of 60% of the beds available in the SNS. Only attached professionals are included, i.e., professionals having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

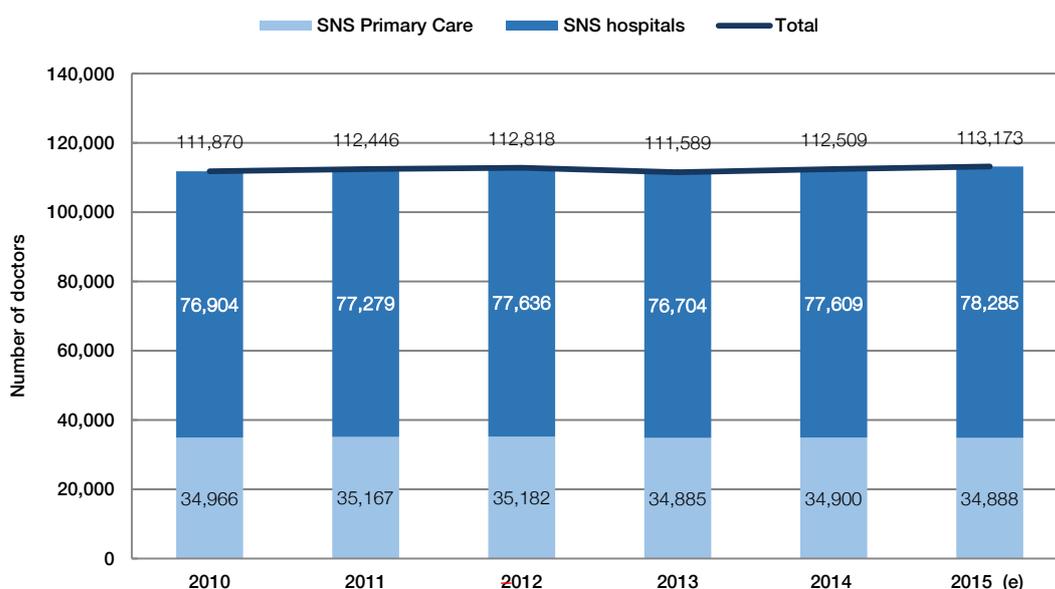
Table 3-1 Number and rate per 1,000 population of doctors working in patient care in the SNS, total and distribution by care level, 2014-2015

	SNS Primary Care		SNS hospitals		SNS total	
	Number	Rate per 1,000 pop.	Number	Rate per 1,000 pop.	Number	Rate per 1,000 pop.
2014	34,900	0.8	77,609	1.7	112,509	2.5
2015 (e)	34,888	0.8	78,285 (e)	1.7 (e)	116,711 (e) (*)	2.5 (e) (*)

Remarks: The rate of SNS primary care doctors is per 1,000 assigned persons (i.e. persons who have health cards and have been assigned to a primary care professional). (e) The number of doctors working in SNS hospitals in 2015 is an estimate. The figures are based on the data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. The number of doctors refers only to attached professionals, that is, those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time. (*) The SNS total for the year 2015 includes the 3,538 doctors who work in Urgent Care and Emergency Services 112/061.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Specialised Care Information System (SIAE). Statistics on Urgent Care and Emergency Services 112/061.

Graph 3-5 Changes in number of doctors working in patient care in the SNS, by care level 2010-2015



Remarks: (e) estimated figures. The figures for doctors working in SNS hospitals are based on the data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. The total does not include the 3,538 doctors who work in Urgent Care and Emergency Services 112/061.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Specialised Care Information System (SIAE).

Table 3-2 Number of general practitioners and primary care paediatricians in the SNS and rate per 1,000 assigned persons* by autonomous community, 2015

	General Practitioners	Paediatricians	Total	Rate per 1,000 assigned persons
Andalucía	4,826	1,132	5,958	0.7
Aragón	959	175	1,134	0.9
Asturias	655	120	775	0.7
Baleares	530	140	670	0.6
Canarias	1,174	314	1,488	0.8
Cantabria	365	78	443	0.8
Castilla y León	2,332	288	2,620	1.1
Castilla-La Mancha	1,344	250	1,594	0.8
Cataluña	4,397	1,012	5,409	0.7
Comunidad Valenciana	2,762	794	3,556	0.7
Extremadura	813	134	947	0.9
Galicia	1,857	326	2,183	0.8
Madrid	3,505	891	4,396	0.7
Murcia	830	242	1,072	0.8
Navarra	390	109	499	0.8
País Vasco	1,456	334	1,790	0.8
La Rioja	216	45	261	0.8
Ceuta y Melilla	69	24	93	0.6
SNS	28,480	6,408	34,888	0.8

Remarks: * Assigned persons refers to persons who have health cards and have been assigned to a primary care professional
Source: Ministry of Health, Social Services and Equality. SNS Key Indicators. Primary Care Information System (SIAP).

Table 3-3 Number and rate per 1,000 population of specialised care doctors working in patient care in SNS hospitals by autonomous community, 2014

	Doctors	Rate per 1,000 pop.
Andalucía	11,643	1.4
Aragón	2,718	2.1
Asturias	2,110	2.0
Baleares	1,769	1.6
Canarias	3,015	1.4
Cantabria	1,015	1.7
Castilla y León	4,317	1.7
Castilla-La Mancha	3,512	1.7
Cataluña	12,702	1.7
Comunidad Valenciana	7,814	1.6
Extremadura	1,871	1.7
Galicia	4,525	1.7
Madrid	11,759	1.8
Murcia	2,459	1.7
Navarra	1,212	1.9
País Vasco	4,424	2.0
La Rioja	514	1.6
Ceuta y Melilla	230	1.4
SNS	77,609	1.7

Remarks: estimated figures. Only attached professionals are included, i.e., those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.
Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

The skill and expertise of the doctors in the public health care system is one of the aspects most highly valued by citizens according to the results of the Health Care Barometer. Citizens place great importance on such skill and expertise when it comes to showing their preferences between public and private services.

Table 3-4 If you could choose, would you choose a public or a private health care service when considering...the skill and expertise of the doctors? 2015

Public %	Private %	Both%	NA%	(N)
63.8	15.9	19.5	0.8	7,746

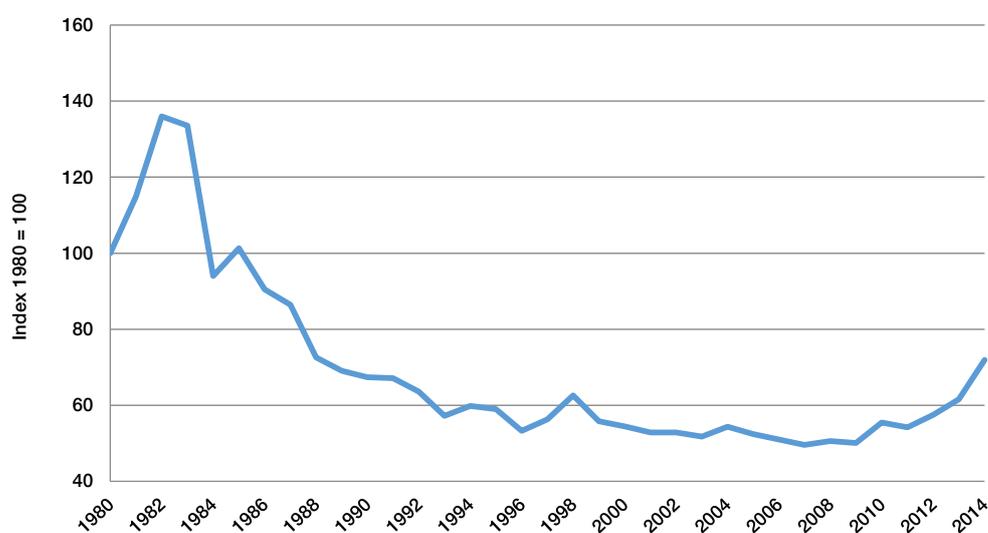
Remarks: NA = no answer. (N) = Number of interviews.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

3.1.1.3 Newly graduated doctors

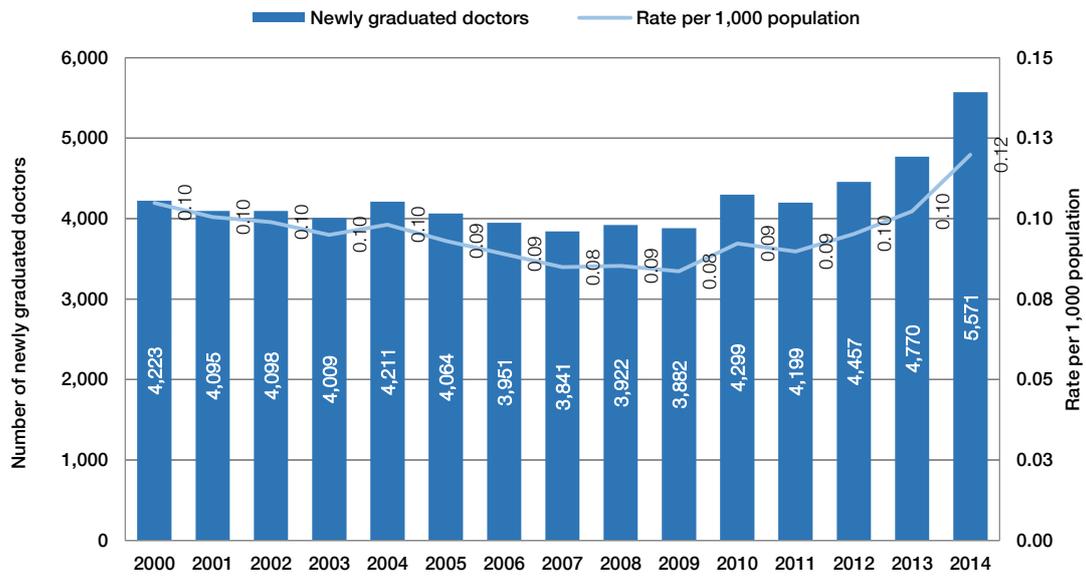
In 2014 over 5,500 students graduated with degrees in medicine, which is 1,348 more newly graduated doctors than in 2000, although significantly fewer (-72%) than in 1980. Relative to the population, in 2014 the number of new doctors is 0.1 per 1,000 population; if we compare it to practicing doctors, there are 31.4 newly graduated doctors for every 1,000 practicing doctors, 1.7 points less than in 2000.

Graph 3-6 Changes in number of newly graduated doctors, 1980-2014



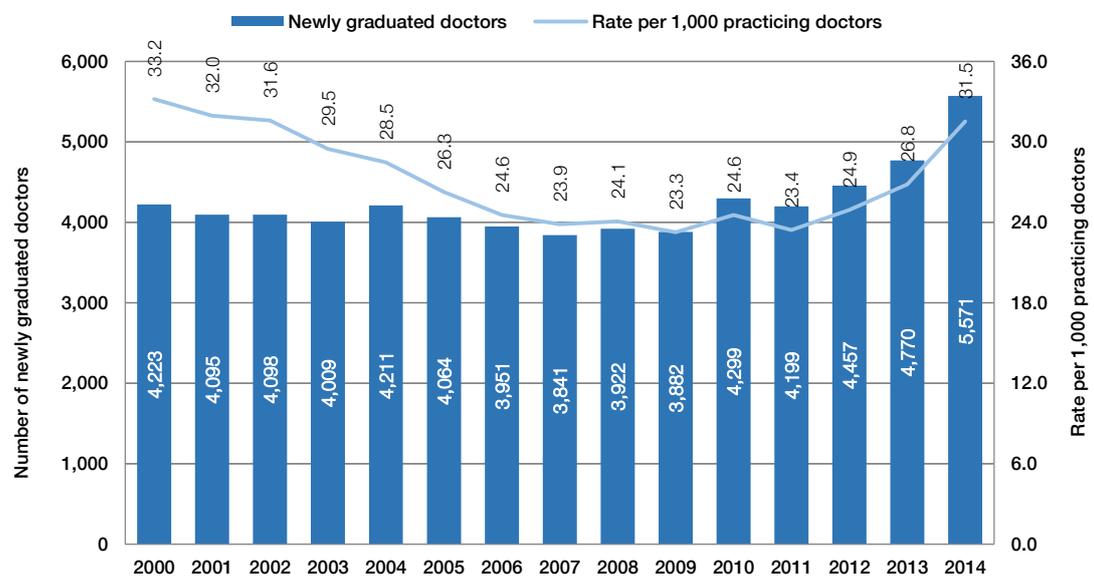
Source: Ministry of Education, Culture and Sport. Statistical report on university students.

Graph 3-7 Changes in number of newly graduated doctors and rate per 1,000 population, 2000-2014



Source: Ministry of Education, Culture and Sport. Statistical report on university students.

Graph 3-8 Changes in number of newly graduated doctors and rate per 1,000 practicing doctors, 2000-2014

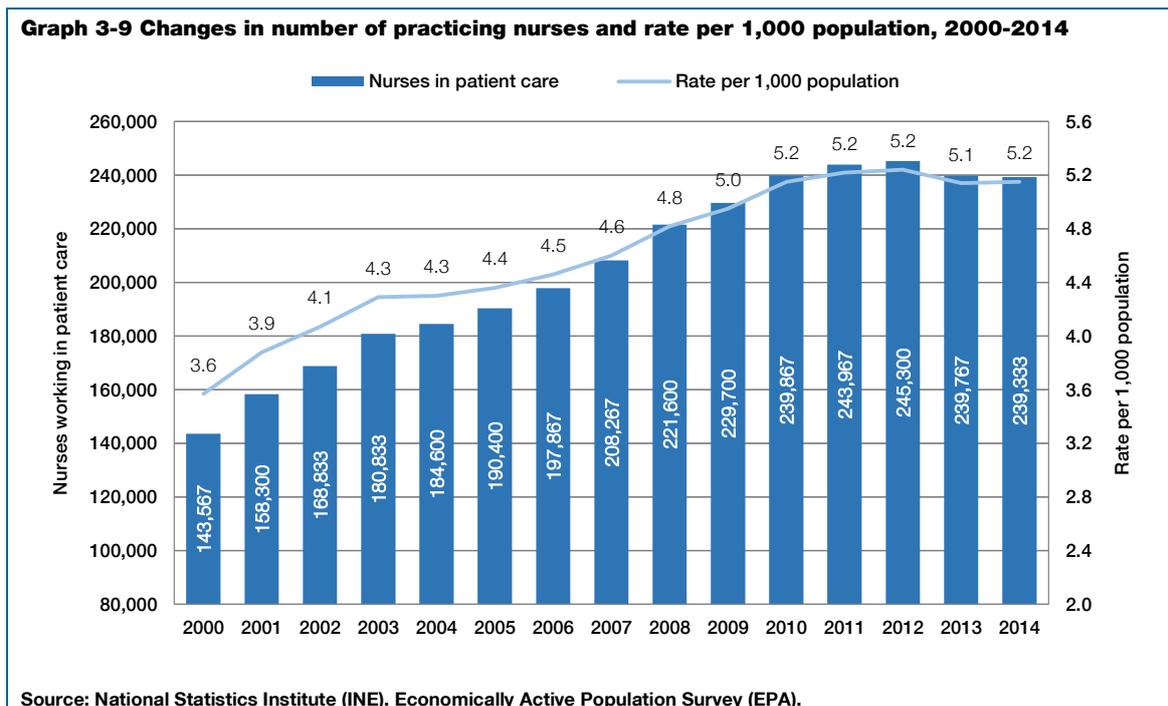


Source: Ministry of Education, Culture and Sport. Statistical report on university students.

3.1.2 Nurses

3.1.2.1 Practicing nurses

A total of 239,333 nurses work in the public and private sectors,³² which means the rate of nurses per 1,000 population is 5.2. Over the last 15 years the rate of practicing nurses per 1,000 population has increased by 1.6 points.



3.1.2.2 Nurses in the SNS

In 2015 a total of 169,233 nurses were working for the SNS, 3,632 more than 2014. The primary care centres and local primary care centres have a staff of 29,441 nurses, which equals a rate of 0.6 nurses per 1,000 assigned persons. According to preliminary 2015 data³³ a total of 136,699 nurses work in SNS hospitals (not including those in post-graduate training), which equals a rate of 2.9 per 1,000 population. A total of 3,093 nurses work for the Urgent Care and Emergency Services 112/061. The rate for the SNS in its entirety is 3.5 nurses per 1,000 population.

³² National Statistics Institute (INE). Economically Active Population Survey (EPA) 2014.

³³ Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). The figures are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. Only attached professionals are included, i.e., those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Table 3-5 Number and rate per 1,000 population of nurses working in patient care in SNS, total and distribution by care level, 2014-2015

	SNS Primary Care		SNS hospitals		SNS total	
	Number	Rate per 1,000 pop.	Number	Rate per 1,000 pop.	Number	Rate per 1,000 pop.
2014	29,642	0.6	135,959	2.9	165,601	3.5
2015 (e)	29,441	0.6	136,699 (e)	2.9 (e)	169,233 (e) (*)	3.5 (e) (*)

Remarks: The rate of nurses working in SNS primary care refers to 1,000 assigned persons (i.e. persons who have health cards and have been assigned to a primary care professional).

(e) The number of nurses working in SNS hospitals in 2015 is an estimate. The figures are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. The number of nurses in SNS hospitals includes midwives and specialised nurses and it refers only to attached professionals, that is, those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

(*) The SNS total includes the 3,093 nurses who work in Urgent Care and Emergency Services 112/061.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Specialised Care Information System (SIAE). Statistical report on Urgent Care and Emergency Services 112/061.

Table 3-6 Number and rate per 1,000 assigned persons* of SNS primary care nurses by autonomous community, 2015

	Nurses	Rate per 1,000 assigned persons
Andalucía	4,819	0.6
Aragón	952	0.7
Asturias	685	0.7
Baleares	545	0.5
Canarias	1,196	0.6
Cantabria	403	0.7
Castilla y León	2,114	0.9
Castilla-La Mancha	1,441	0.7
Cataluña	5,024	0.7
Comunidad Valenciana	3,158	0.6
Extremadura	904	0.8
Galicia	1,776	0.7
Madrid	3,263	0.5
Murcia	810	0.6
Navarra	466	0.8
País Vasco	1,562	0.7
La Rioja	242	0.8
Ceuta y Melilla	81	0.5
SNS	29,441	0.6

Remarks: *Assigned persons refers to persons who have health cards and have been assigned to a primary care professional.

Source: Ministry of Health, Social Services and Equality. SNS Key Indicators. Primary Care Information System (SIAP).

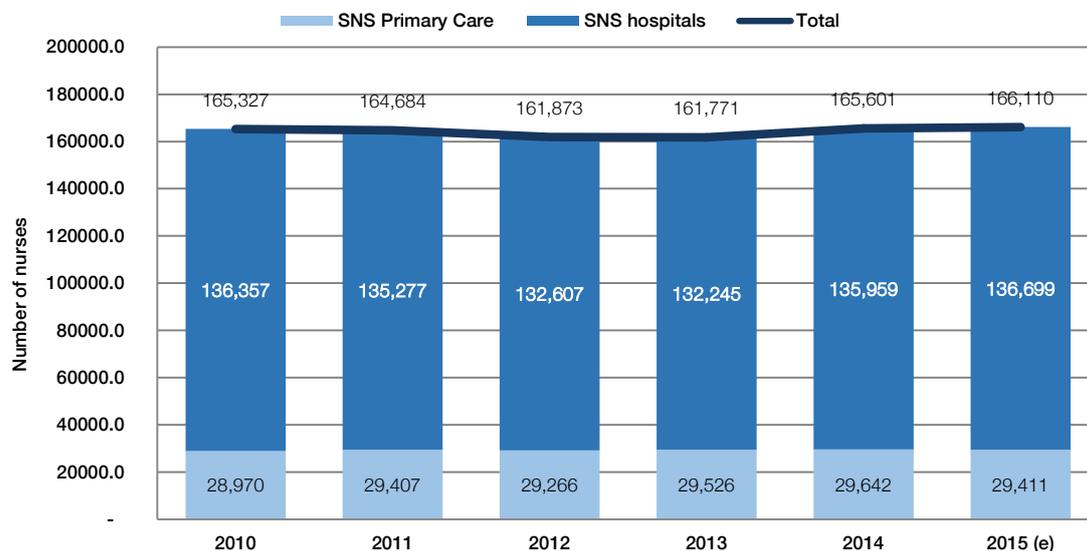
Table 3-7 Number and rate per 1,000 population of nurses working in patient care in SNS hospitals by autonomous community, 2014

	Nurses	Rate per 1,000 population
Andalucía	21,089	2.5
Aragón	5,576	4.2
Asturias	3,731	3.5
Baleares	3,409	3.0
Canarias	5,649	2.7
Cantabria	1,838	3.1
Castilla y León	7,450	3.0
Castilla-La Mancha	5,729	2.8
Cataluña	21,619	2.9
Comunidad Valenciana	12,843	2.6
Extremadura	3,163	2.9
Galicia	8,155	3.0
Madrid	19,096	3.0
Murcia	3,989	2.7
Navarra	2,059	3.2
País Vasco	9,156	4.2
La Rioja	971	3.1
Ceuta y Melilla	437	2.6
SNS	135,959	2.9

Remarks: The number of nurses working in SNS hospitals includes midwives and specialised nurses. Only attached professionals are included, i.e., those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Graph 3-10 Changes in number of nurses working in patient care in the SNS by care level, 2010-2015



Remarks: (e) estimated figures. The 3,538 nurses working in Urgent Care and Emergency Services 112/061 are not included in the total.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Specialised Care Information System (SIAE).

Since 2010 a reduction in the number of nurses has been detected, although neither the 2014 data nor the estimates for 2015 confirm this trend.

Table 3-8 Ratio of nurses per doctor in patient care in the SNS by care level, 2015

	SNS Primary Care			SNS hospitals			SNS total (e)(*)		
	D	N	N/D	D	N	N/D	D	N	N/D
2014	34,900	29,642	0.8	77,609	135,959	1.7	112,509	165,601	1.5
2015	34,888	29,441	0.8	78,285 (e) (*)	136,699 (e) (*)	1.7 (e) (*)	116,711 (e) (*)	169,233 (e)(*)	1.5(e)(*)

Remarks: "D" = Doctors. "N" = Nurses. "N/D" = ratio of nurses to doctors.

(e) estimated figures. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS.

(*) The 2015 total includes the 3,538 doctors and 3,093 nurses working in Urgent Care and Emergency Services 112/061.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Specialised Care Information System (SIAE). Statistical report on Urgent Care and Emergency Services 112/061.

As with doctors, the skill and expertise of the nurses in the public system is one of the aspects most highly valued by citizens.

Table 3-9 If you could choose, would you choose a public or a private health care service when considering...the skill and expertise of the nurses? 2015

Public %	Private %	Both%	NA%	(N)
63.5	16.2	19.4	0.9	7,746

Remarks: NA = no answer. (N) = Number of interviews.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

The ratio of nurses to doctors in the SNS is 0.8 in the Primary Care Centres (PCC) and Local Primary Care Centres (LPCC) and 1.7 in SNS hospitals, and therefore the total ratio of nurses to doctors is 1.5. This total includes the professionals working for the Urgent Care and Emergency Services 112/061.

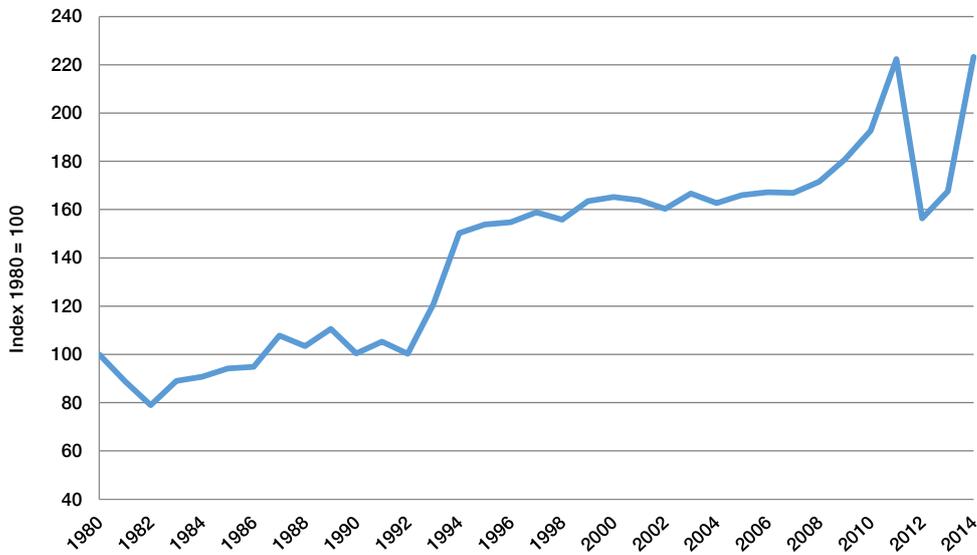
3.1.2.3 Newly graduated nurses

3.1.2.4 Newly graduated nurses

In 2014 a total of 11,700 students graduated with degrees in nursing, which means that Spain has 3,000 more new nursing graduates than in 2000. If we compare the figure with that of 1980 the number of graduates has more than doubled (223.3%).

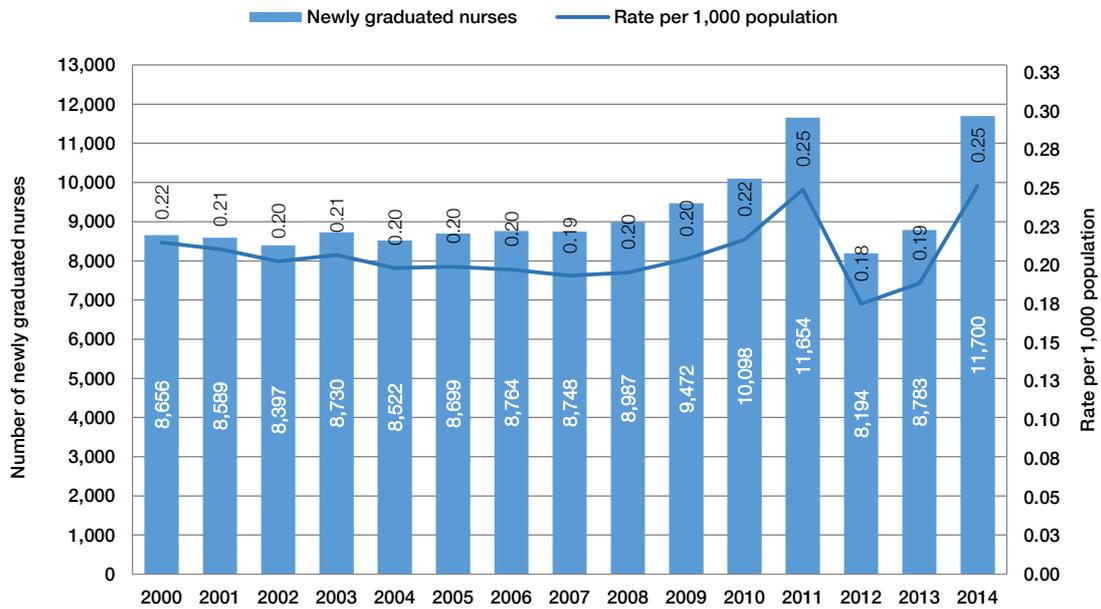
Relative to the population, the number of new nurses in 2014 is nearly 0.3 per 1,000 population; looking at the number in relation to practicing nurses, there are 48.9 newly graduated nurses for every 1,000 practicing nurses, which is 11.4 points fewer than in 2000.

Graph 3-11 Changes in number of newly graduated nurses, 1980-2014



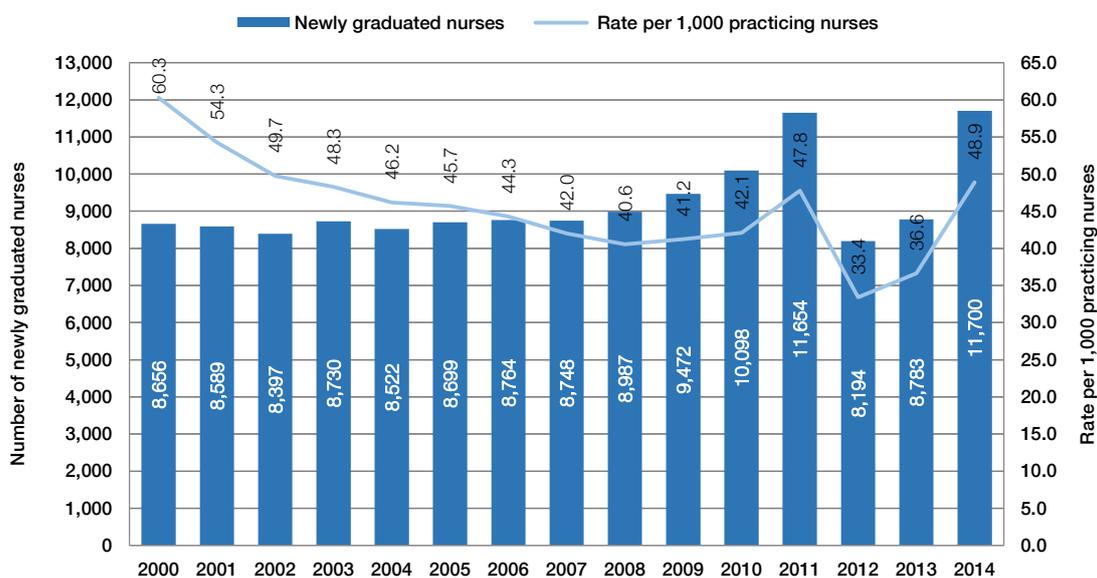
Source: Ministry of Education, Culture and Sport. Statistical report on university students.

Graph 3-12 Changes in number of newly graduated nurses and rate per 1,000 population, 2000-2014



Source: Ministry of Education, Culture and Sport. Statistical report on university students.

Graph 3-13 Changes in number of newly graduated nurses and rate per 1,000 practicing nurses, 2000-2014



Source: Ministry of Education, Culture and Sport. Statistical report on university students.

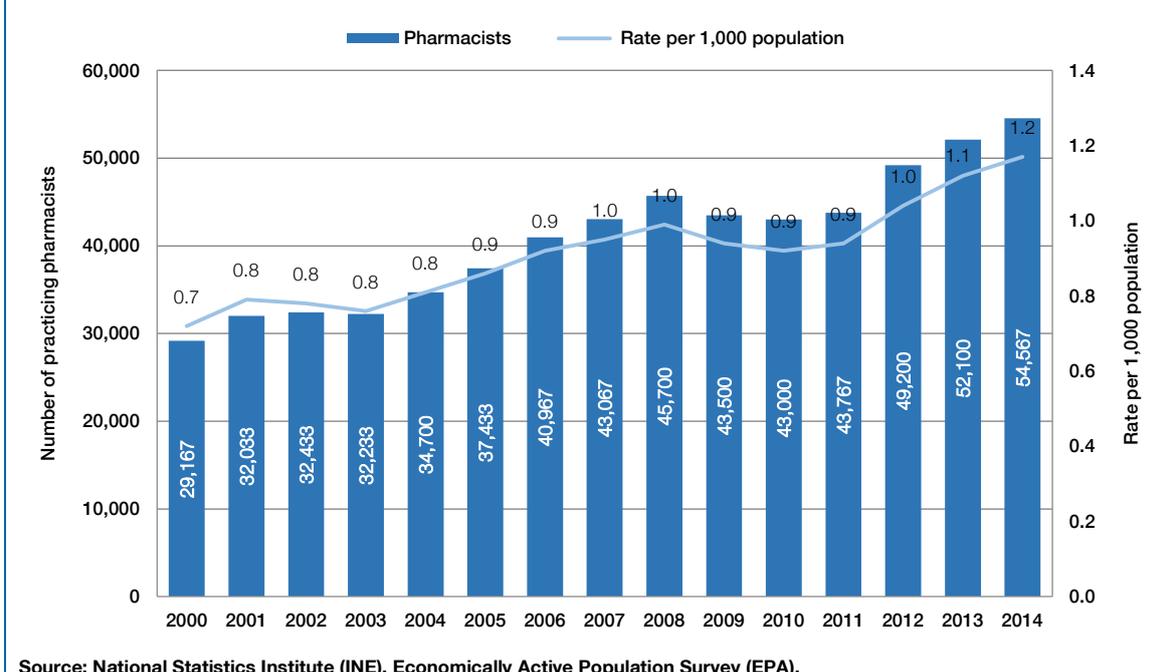
3.1.3 Pharmacists

3.1.3.1 Practicing pharmacists

In 2014 a total of 52,567 pharmacists were working in the public and the private sectors,³⁴ which equals a rate of 1.2 pharmacists per 1,000 population. Over the last 15 years there has been an increase in the rate of practicing pharmacists of 0.5 points.

³⁴ National Statistics Institute (INE). Economically Active Population Survey (EPA) 2014.

Graph 3-14 Changes in number of practicing pharmacists and rate per 1,000 population, 2000-2014



3.1.3.2 Pharmacists in SNS hospitals

In 2015, in SNS hospitals³⁵ the number of professionals of this type is 1,753³⁶ (not counting pharmacists in post-graduate training), which means the rate per 100,000 population is 3.7. The SNS also has pharmacists working at the primary care level. Their role is to support the rational use of medicines and their main functions include pharmacotherapy advising and research, although they also work in health care management and planning in relation to pharmaceutical policy. In the same year, 2015, over 48,000³⁷ pharmacists were working in pharmacies.

³⁵ Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). The figures are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. Only attached professionals are included, i.e., those working under a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

³⁶ Royal Decree-Law 16/2012 requires that a hospital pharmacy service be established in: a) All hospitals with 100 beds or more; b) Social care centres that have 100 beds or more for patients having a high degree of dependence; c) Psychiatric centres with 100 beds or more.

³⁷ According to the publication Statistics on Professional Pharmacists and Community Pharmacies of the General Board of Professional Associations of Pharmacists, in 2015 there were 48,424 registered pharmacists working in one of the country's 21,937 pharmacies.

Table 3-10 Number and rate per 100,000 population of pharmacists in SNS hospitals, 2015

	Pharmacists	Rate per 100,000 pop.
2014	1,730	3.8
2015 (e)	1,753 (e)	3.7 (e)

Remarks: (e) estimated figures. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS. Only attached professionals are included, i.e., those having a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

The highest rate of pharmacists working in SNS hospitals is in Galicia and Baleares (both with 5.1 pharmacists per 100,000 population) while the lowest is in Andalucía (2.4 pharmacists per 100,000 population).

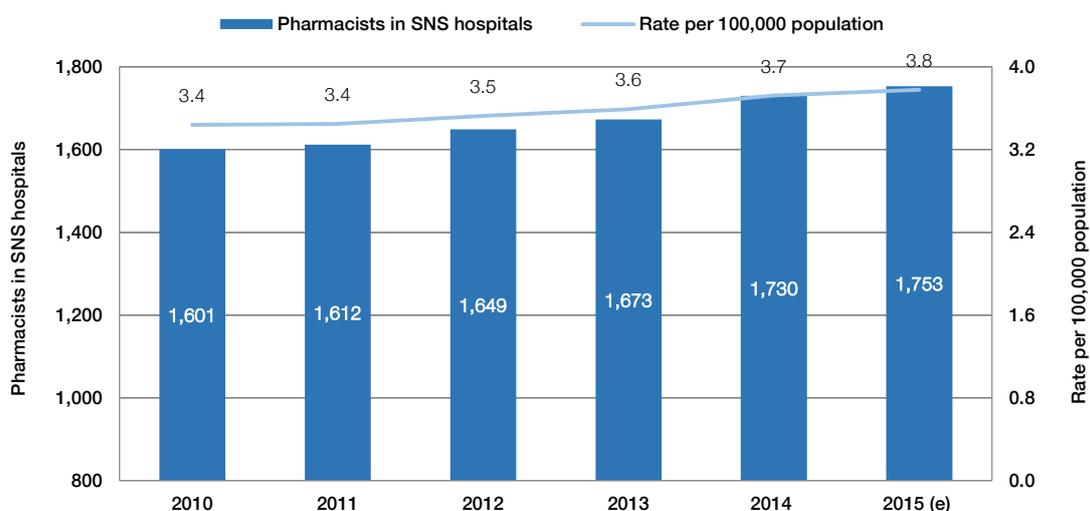
Table 3-11 Number and rate per 100,000 population of pharmacists in SNS hospitals by autonomous community, 2014

	Pharmacists in SNS hospitals	Rate per 100,000 pop.
Andalucía	199	2.4
Aragón	58	4.4
Asturias	44	4.2
Baleares	57	5.1
Canarias	68	3.2
Cantabria	19	3.2
Castilla y León	96	3.9
Castilla-La Mancha	84	4.1
Cataluña	358	4.8
Comunidad Valenciana	158	3.2
Extremadura	32	2.9
Galicia	141	5.1
Madrid	220	3.5
Murcia	50	3.4
Navarra	26	4.1
País Vasco	102	4.7
La Rioja	12	3.8
Ceuta y Melilla	6	3.6
SNS	1,730	3.8

Remarks: estimated figures. Only attached professionals are included, i.e., those working under a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Graph 3-15 Changes in number and rate per 100,000 population of pharmacists in SNS hospitals, 2010-2015



Remarks: (e) estimated figures. Only attached professionals are included, i.e., those working under a contract with the hospital, as government personnel, statutory personnel or with a regular employment contract, either full or part time.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

3.2 Physical resources

3.2.1 Primary Care Centres and Local Primary Care Centres of the SNS

The SNS has 3,039 Primary Care Centres (PCC) and 10,055 Local Primary Care Centres (LPCC), which provide a high degree of geographical accessibility of health care services to the population.

The average number of Local Primary Care Centres attached to each Primary Care Centre is 3.3, with a broad range of values depending on the geographical dispersion of the towns and villages. The ratio thus ranges from 14.8 LPCC to each PCC in Castilla y León to 0 LPCC in Ceuta and Melilla.

Although geographical variability is very great, there is an average of 28.2 primary care facilities per 100,000 assigned persons, taking into account both Primary Care Centres and Local Primary Care Centres.

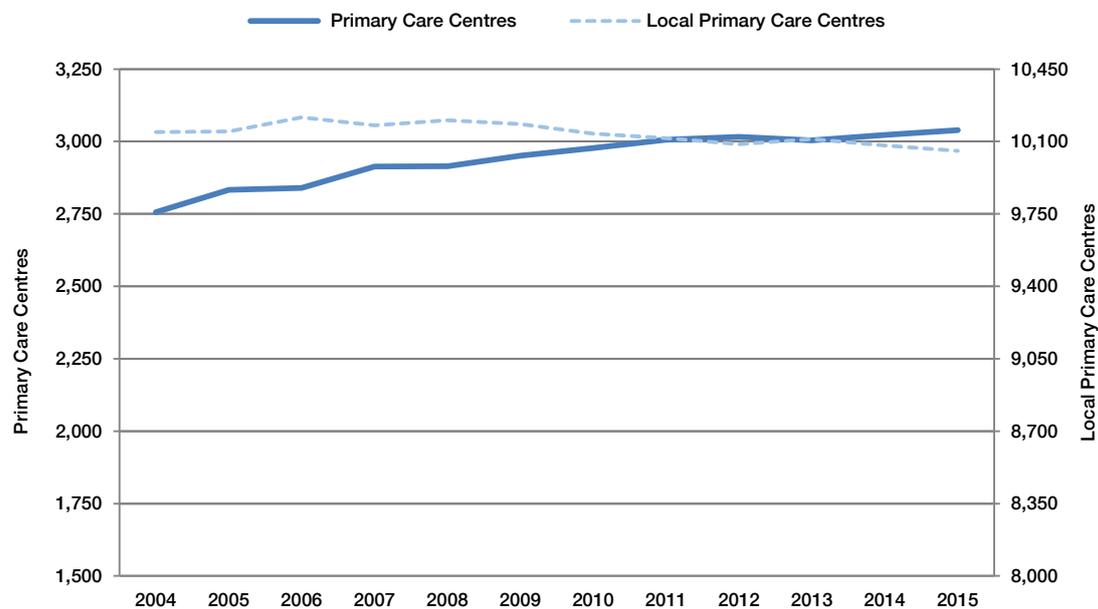
Since 2004 there has been an increase in the number of Primary Care Centres and a reduction in the Local Primary Care Centres, although in some cases it is more a matter of a name change than any change in structure, purpose or functions.

Table 3-12 Number of SNS Primary Care Centres and Local Primary Care Centres, ratio of LPCC/PCC and rate of PCC+LPCC per 100,000 population by autonomous community, 2015

	Primary Care Centre	Local Primary Care Centre	Total	Ratio PCC/LPCC	Rate PCC+LPCC per 100,000 pop.
Andalucía	404	1,109	1,513	2.7	18.0
Aragón	118	869	987	7.4	74.9
Asturias	69	150	219	2.2	21.0
Baleares	58	104	162	1.8	14.3
Canarias	108	154	262	1.4	12.3
Cantabria	42	103	145	2.5	24.9
Castilla y León	247	3,650	3,897	14.8	158.7
Castilla-La Mancha	201	1,110	1,311	5.5	64.0
Cataluña	421	829	1,250	2.0	16.9
Comunidad Valenciana	283	569	852	2.0	17.3
Extremadura	109	416	525	3.8	48.4
Galicia	394	72	466	0.2	17.1
Madrid	262	161	423	0.6	6.6
Murcia	85	182	267	2.1	18.2
Navarra	58	232	290	4.0	45.5
País Vasco	153	171	324	1.1	15.0
La Rioja	20	174	194	8.7	62.1
Ceuta y Melilla	7	0	7	0.0	4.1
SNS	3,039	10,055	13,094	3.3	28.2

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). National Statistics Institute (INE). Resident population data as of 1 January 2016.

Graph 3-16 Changes in number of Primary Care Centres and Local Primary Care Centres in the SNS, 2004-2014



Remarks: Data correspond to 31 December of each year.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

3.2.2 Hospitals

The hospital census in Spain indicates that the country has 791 hospitals,³⁸ and that the total number of beds is 158,566. As regards their size, 72% of the hospitals have fewer than 200 beds, 18% have between 200 and 500 beds and the remaining 10% have 501 or more beds. All the autonomous communities have at least one hospital with 501 or more beds, even though 47% of the large hospitals are located in the three most highly populated communities in the country: Andalucía (14), Madrid (12) and Cataluña (11).

Table 3-13 Hospitals according to size (total number of beds) by autonomous community, 2016

	Hospitals with fewer than 200 beds	Hospitals with 200 - 500 beds	Hospitals with 501 or more beds	Total number of hospitals	Hospitals per 100,000 pop.
Andalucía	78	16	14	108	1.3
Aragón	22	5	2	29	2.2
Asturias	15	4	1	20	1.9
Baleares	19	4	1	24	2.1
Canarias	30	4	4	38	1.8
Cantabria	4	2	1	7	1.2
Castilla y León	22	8	6	36	1.4
Castilla-La Mancha	20	5	3	28	1.4
Cataluña	166	37	11	214	2.9
Comunidad Valenciana	35	20	6	61	1.2
Extremadura	11	6	2	19	1.7
Galicia	29	2	7	38	1.4
Madrid	52	17	12	81	1.3
Murcia	21	4	2	27	1.8
Navarra	8	2	1	11	1.7
País Vasco	32	5	4	41	1.9
La Rioja	6	0	1	7	2.2
Ceuta	0	1	0	1	1.2
Melilla	1	0	0	1	1.2
Spain	571	142	78	791	1.7

Remarks: Hospital complexes count as a single hospital.

Source: Ministry of Health, Social Services and Equality. National Catalogue of Hospitals.

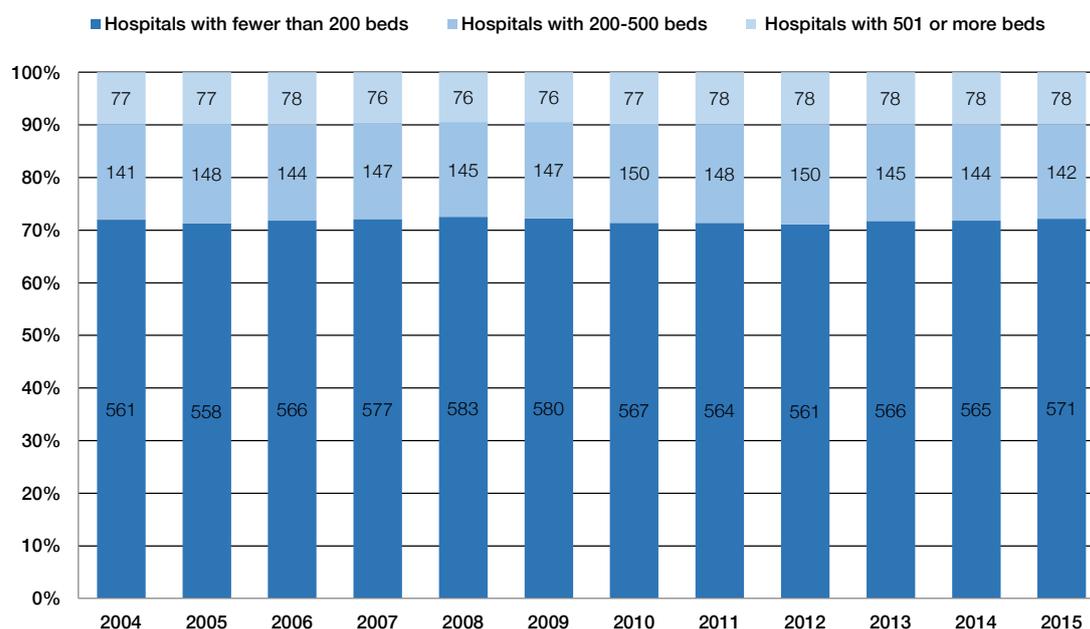
The rate of hospitals per 100,000 population is 1.7, with figures ranging from Cataluña's 2.9 to 1.2 in Cantabria, Comunidad Valenciana and the autonomous cities of Ceuta and Melilla.

With regard to the legal entity on which they depend,³⁹ most hospitals with under 200 beds are privately owned (68.6%); in contrast, 66.2% of the hospitals with 200 to 500 beds are public, as are 89.7% of the hospitals with 501 or more beds.

³⁸ Ministry of Health, Social Services and Equality. National Catalogue of Hospitals 2016 (updated 31 December 2015) Hospital complexes count as a single hospital.

³⁹ The entity upon which a hospital depends is the physical or legal person that owns or has hierarchical or functional jurisdiction over the health care facility. The classification of hospitals by entity upon which they depend – in hospitals having legal management forms among those contemplated in Law 15/1997, of 25 April, on new forms of management in the SNS, and in concordance with the region's legislative implementing provisions – has been assigned to the regional Health Services.

Graph 3-17 Changes in number of hospitals by size (total number of beds), 2004- 2015



Remarks: data correspond to 31 December of each year. Hospital complexes count as a single hospital.

Source: Ministry of Health, Social Services and Equality. National Catalogue of Hospitals.

3.2.2.1 Hospitals of the SNS

The SNS⁴⁰ has 451 hospitals, of which 324 are entirely public, 10 are private centres that have entered into substitution agreements,⁴¹ and 96 form part of the Public Use Network.⁴² This total also includes, for purely statistical purposes, the 21 Social Security Collaborating Mutuels (MCSS)⁴³ that deal with workplace accidents and occupational illness, because they are publicly financed with funds from the Social Security system.

As regards type of care provided, 281 of them are general hospitals, 32 are specialised hospitals, 93 are medium- and long-stay hospitals and 45 are mental health and rehabilitation hospitals.

⁴⁰ With statistical information from the National Catalogue of Hospitals, as of 31 December 2014, of the 787 hospitals counted, 763 have provided information to the Specialised Care Information System (SIAE) about their functioning, the activity they carry out and other characteristics; these informants include the 451 hospitals of the SNS. To interpret the figures correctly it must be taken into account that hospital complexes and consortia formed by two or more hospitals are counted as a single facility.

⁴¹ Privately owned hospitals that provide all of their care activity to an assigned population belonging to the SNS.

⁴² The Public Use Network comprises private hospitals belonging to the *Xarxa Hospitalaria d'Utilització Pública (XHUP)/Sistema sanitari integral d'utilització pública de Catalunya (SISCAT)* and hospitals that provide their health care services through agreements for the provision of specific services.

⁴³ The Insurance Mutuels for Workplace Accidents and Occupational Illness of the Social Security System (MATEPSS) are now called Social Security Collaborating Mutuels (Law 35/2014, of 26 December).

Table 3-14 Number of SNS hospitals by legal entity upon which they depend and type of care provided, 2014

	Total	General hospital	Specialised hospital	Medium- and long- stay hospital	Mental health and rehabilitation hospital
SNS total	451	281	32	93	45
Depends on public entity	324	248	11	41	24
Substitution agreement	10	4	2	3	1
Public Use Network	96	24	3	49	20
MATEPSS	21	5	16	0	0

Remarks: hospital complexes count as a single hospital.

Substitution agreement: privately owned hospitals that provide all of their care services to an assigned population belonging to the SNS.

The Public Use Network comprises private hospitals belonging to the Xarxa Hospitalaria d'Utilització Pública (XHUP)/Sistema sanitari integral d'utilització pública de Catalunya (SISCAT) and hospitals that provide their health care services through agreements for the provision of specific services.

MATEPSS: Social Security Collaborating Mutuals.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Table 3-15 Number and rate per 100,000 population of SNS hospitals by autonomous community, 2014

	SNS hospitals	Rate per 100,000 population
Andalucía	46	0.5
Aragón	20	1.5
Asturias	11	1.0
Baleares	12	1.1
Canarias	14	0.7
Cantabria	4	0.7
Castilla y León	16	0.6
Castilla-La Mancha	20	1.0
Cataluña	158	2.1
Comunidad Valenciana	38	0.8
Extremadura	10	0.9
Galicia	19	0.7
Madrid	36	0.6
Murcia	11	0.8
Navarra	6	0.9
País Vasco	22	1.0
La Rioja	6	1.9
Ceuta y Melilla	2	2.4
SNS	451	1.0

Remarks: hospital complexes count as a single hospital.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

3.2.3 Pharmacies

The health authorities of the autonomous communities and the Professional Associations of Pharmacists sign collaboration agreements for the provision of SNS pharmaceutical benefits through the country's legally established pharmacies.

In Spain 21,919⁴⁴ pharmacies collaborate in the provision of SNS pharmaceutical benefits. Andalucía (3,874), Cataluña (3,164), Madrid (2,833) and Comunidad Valenciana (2,344) are the autonomous communities with the most pharmacies collaborating in the provision of SNS pharmaceutical benefits.

The rate of pharmacies per 100,000 population varies greatly, ranging from the 95 pharmacies per 100,000 population of Navarra to the 26 of Melilla and 28 in Ceuta. For the national total the figure is 47 pharmacies per 100,000 population.

Table 3-16 Number of pharmacies and rate per 100,000 population by autonomous community, 2015

	Pharmacies	Rate per 100,000 pop.
Andalucía	3,874	46
Aragón	740	56
Asturias	456	43
Baleares	434	39
Canarias	705	33
Cantabria	254	43
Castilla y León	1,629	66
Castilla-La Mancha	1,270	62
Cataluña	3,164	43
Comunidad Valenciana	2,344	47
Extremadura	671	61
Galicia	1,344	49
Madrid	2,833	44
Murcia	567	39
Navarra	602	95
País Vasco	831	38
La Rioja	155	49
Ceuta	24	28
Melilla	22	26
Spain	21,919	47

Remarks: pharmacies that collaborate in the provision of SNS pharmaceutical benefits.

Source: Ministry of Health, Social Services and Equality. Subdirectorato General for the Quality of Medicines and Health Products. Statistics on Pharmaceutical Consumption through SNS prescriptions and insurance mutuals for civil servants. National Statistics Institute (INE). Resident population as of 1 January 2015.

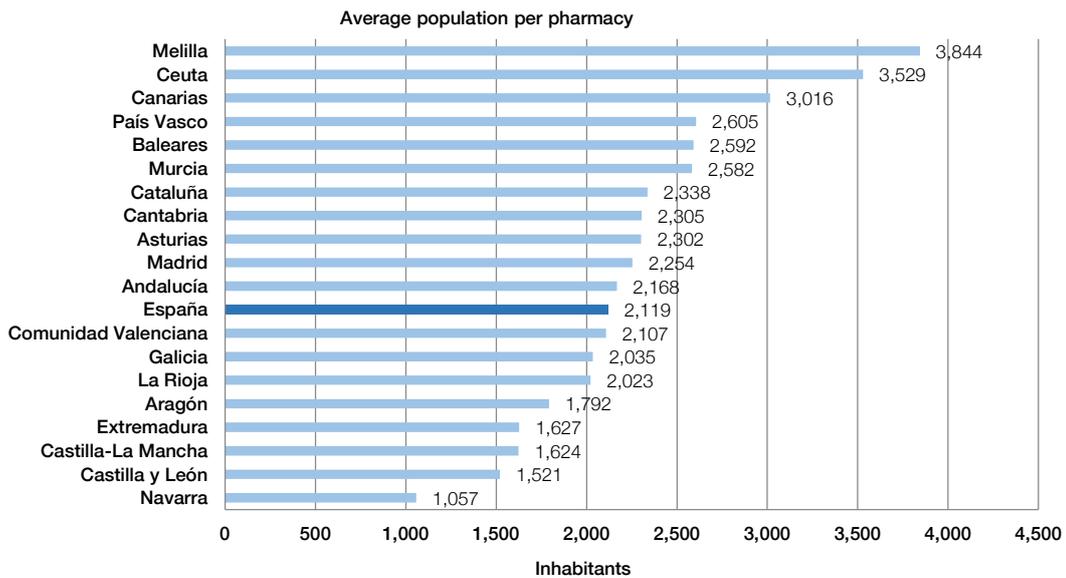
Expressed in number of inhabitants per pharmacy, Spain has, on average, one pharmacy for every 2,119 inhabitants, with Melilla and Ceuta, at over 3,500 inhabitants, and Canarias, at almost 3,000 inhabitants, being the regions with the most inhabitants per pharmacy, while Navarra, with just over 1,050 inhabitants per pharmacy, has the lowest ratio, followed by Castilla y León (1,521), Castilla-La Mancha (1,624) and Extremadura (1,627).

⁴⁴ According to the General Board of Professional Associations of Pharmacists, the number of pharmacies as of 31 December 2015 was 21,937. The discrepancy in the figures by the two information systems is due to the fact that the Alcántara Information System provides data only on the pharmacies that have invoiced SNS prescriptions during the month of December of 2015.

The wide variability may be due to different pharmaceutical planning criteria based on population modules and distances, determined by pharmaceutical legislation enacted by the autonomous communities.

Over the last 5 years, 517 new pharmacies have become part of this network, which is an overall growth of 2.4%. Andalucía leads this increase with 301 new establishments (8.4%), followed by Cataluña (77 new establishments and a 2.5% increase) and Comunidad Valenciana (with 60 new establishments and a 2.6% increase). In Extremadura, Castilla y León, Canarias and La Rioja there has been a slight drop in the number of pharmacies.

Graph 3-18 Number of inhabitants (average) per pharmacy, 2015



Remarks: pharmacies that collaborate in the provision of SNS pharmaceutical benefits. Data appears in order from highest to lowest.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System. National Statistics Institute (INE). Municipal population records as of 1 January 2015.

Table 3-17 Changes in number of pharmacies by autonomous community, 2011 and 2015

	2011	2015	Difference 2015-2011	% variation 2015/2011
Andalucía	3,573	3,874	301	8.4
Aragón	709	740	31	4.4
Asturias	456	456	0	0.0
Baleares	415	434	19	4.6
Canarias	707	705	-2	-0.3
Cantabria	254	254	0	0.0
Castilla y León	1,633	1,629	-4	-0.2
Castilla-La Mancha	1,264	1,270	6	0.5
Cataluña	3,087	3,164	77	2.5
Comunidad Valenciana	2,284	2,344	60	2.6
Extremadura	676	671	-5	-0.7
Galicia	1,342	1,344	2	0.1
Madrid	2,813	2,833	20	0.7
Murcia	562	567	5	0.9
Navarra	601	602	1	0.2
País Vasco	824	831	7	0.8
La Rioja	156	155	-1	-0.6
Ceuta	24	24	0	0.0
Melilla	22	22	0	0.0
Spain	21,402	21,919	517	2.4

Remarks: pharmacies that collaborate in the provision of SNS pharmaceutical benefits.

Source: Ministry of Health, Social Services and Equality. Subdirectorate General for the Quality of Medicines and Health Products. Alcántara Information System.

3.2.4 Available beds and day hospital beds in the SNS

Table 3-18 Changes in total number of available beds and in day hospital beds in the SNS, 2010-2015

	Total available beds	Rate per 1,000 pop.	Day hospital beds	Rate per 100,000 pop.
2010	115,418	2.5	14,045	30.5
2011	113,518	2.5	15,044	32.6
2012	111,430	2.4	16,170	35.0
2013	109,484	2.3	16,419	35.2
2014	109,435	2.4	16,820	36.2
2015 (e)	109,948	2.4	16,956	36.5

Remarks: (e) estimated figures. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

The SNS remains stable at a rate of 2.4 available beds per 1,000 population, while the rate of day hospital beds per 100,000 population is 36.5⁴⁵ and slowly rising.

⁴⁵ The figures are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS.

The 451 hospitals of the SNS have 109,435 available beds,⁴⁶ which is 79.4% of the 137,877 available beds in the country. The rate of available beds in Spain is thus 3.0 per 1,000 population and the rate of available beds in the SNS is 2.4 per 1,000 population.

Most of the public beds available are located in general hospitals which, along with public specialised hospitals, provide 2.0 beds per 1,000 population.

Table 3-19 Number and rate per 1,000 population of available beds in the SNS by care activity, 2014

	Total	General hospitals	Specialised hospitals	Medium- and long-stay hospitals	Mental health and rehabilitation hospitals
Available beds in the SNS	109,435	88,765	2,633	10,134	7,903
Rate per 1,000 population	2.4	1.9	0.01	0.2	0.2

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

While the number of beds is indicative of the resources available for care involving overnight stays, to better understand the capacity that hospitals have to carry out their activities it is important to also take into account the day hospital beds for patients receiving care that does not require them to stay overnight.

The SNS has 16,820 day hospital beds, which means a rate of 36.2 for every 100,000 population. The total rate in Spain is 41.1, because public and private day hospital beds together amount to 19,104.

Table 3-20 Number and rate per 100,000 population of day hospital beds in the SNS by care activity, 2014

	Total	General hospitals	Specialised hospitals	Medium- and long-stay hospitals	Mental health and rehabilitation hospitals
Day hospital beds in SNS	16,820	13,722	426	1,435	1,237
Rate per 100,000 population	36.2	29.5	0.9	3.1	2.7

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

⁴⁶ An available bed is one that can be immediately occupied. Each hospital informs the Specialised Care Information System (SIAE) - Statistics on Specialised Care Centres - of its annual average of available beds.

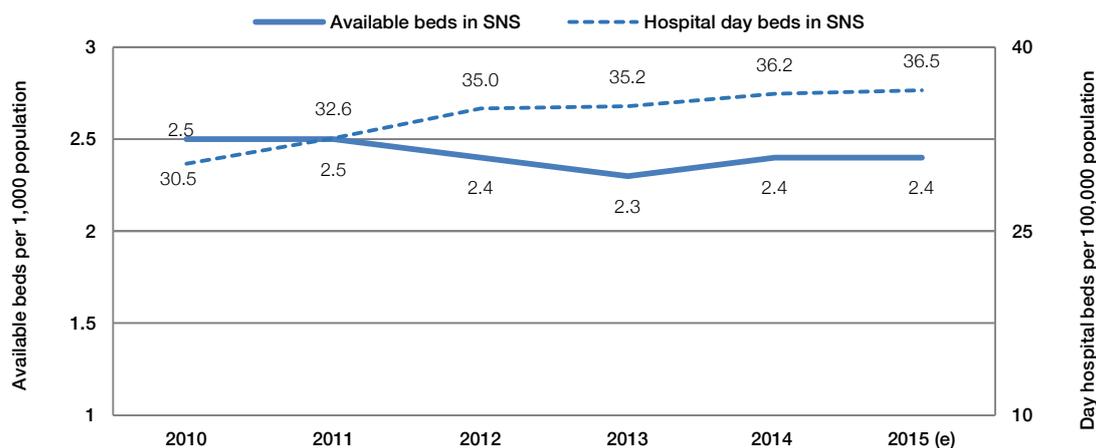
Table 3-21 Number of available hospital beds and day hospital beds in the SNS by autonomous community, 2014

	Available beds in SNS		Day hospital beds in SNS	
	Number	Rate per 1,000 population	Number	Rate per 100,000 population
Andalucía	13,783	1.7	2,527	30.1
Aragón	4,026	3.0	289	21.8
Asturias	2,870	2.7	449	42.6
Baleares	2,263	2.0	280	25.0
Canarias	4,248	2.0	431	20.3
Cantabria	1,292	2.2	280	47.8
Castilla y León	6,455	2.6	695	28.0
Castilla-La Mancha	4,217	2.0	583	28.2
Cataluña	25,019	3.4	4,913	66.4
Comunidad Valenciana	9,887	2.0	1,259	25.5
Extremadura	3,414	3.1	317	29.0
Galicia	7,627	2.8	828	30.2
Madrid	12,705	2.0	2,099	32.9
Murcia	2,935	2.0	402	27.5
Navarra	1,469	2.3	283	44.5
País Vasco	5,840	2.7	1,090	50.4
La Rioja	950	3.0	69	22.0
Ceuta y Melilla	345	2.1	26	15.4
SNS	109,435	2.4	16,820	36.2

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Day hospital beds offer an alternative to hospitalization for certain types of patients, such as oncological, geriatric or mental health patients, who are attended for several hours at the hospital but do not require an overnight stay.

Graph 3-19 Changes in SNS in rate of available beds per 1,000 population and of day hospital beds per 100,000 population, 2010-2015



Remarks: (e) estimated figures. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the beds available in the SNS.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

3.2.5 Medical technologies in the SNS

The expansion of advanced medical technologies, most of which are located in hospitals, is one of the main driving forces in improving the diagnosis and treatment processes of numerous diseases.

The medical technologies and resources existing in the SNS continue to be the aspect most highly valued by citizens when they are asked, if they would prefer, if they could choose, a public health care service (68.8%) or a private one (21.9%).⁴⁷

Among the most important diagnostic technologies are Computerized Axial Tomography (CAT) and Magnetic Resonance Imaging (MRI). The SNS has 538 CAT scanners (71.8% of the total number of units in use in Spain), which makes for a rate of 11.6 per million population. It has 308 units for performing MRI (53.4% of the total number of units in use), which is a rate of 6.6 per million population.

Table 3-22 Availability of medical technologies. Number of units, share of total in use and rate per million population. SNS, 2014

	Number of units in SNS	% of total number of units	Rate p.m.p
Computerized Axial Tomography	538	71.8	11.6
Nuclear Magnetic Resonance	308	53.4	6.6
Mammographs	418	65.8	9.0
Linear accelerator + cobalt therapy	184	79.0	4.0

Remarks: p.m.p. = per million population.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

⁴⁷ Ministry of Health, Social Services and Equality. Health Care Barometer, 2015

Table 3-23 Number of CAT and MRI units and share of total in use, by autonomous community. SNS, 2014

	CAT		MRI	
	Number of units in SNS	% of total units in the autonomous community	Number of units in SNS	% of total units in the autonomous community
Andalucía	91	70.5	35	47.9
Aragón	20	83.3	10	66.7
Asturias	13	81.3	9	60.0
Baleares	11	52.4	8	40.0
Canarias	15	45.5	6	24.0
Cantabria	8	88.9	4	80.0
Castilla y León	27	64.3	17	53.1
Castilla-La Mancha	29	82.9	11	52.4
Cataluña	87	78.4	60	66.7
Comunidad Valenciana	61	76.3	34	59.6
Extremadura	19	90.5	8	72.7
Galicia	36	72.0	20	54.1
Madrid	64	65.3	57	48.3
Murcia	17	70.8	9	45.0
Navarra	8	66.7	2	33.3
País Vasco	27	71.1	14	51.9
La Rioja	3	75.0	3	75.0
Ceuta y Melilla	2	100.0	1	100.0
SNS	538	71.8	308	53.4

Remarks: CAT = Computerized Axial Tomography. MRI = Magnetic Resonance Imaging.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Mammography facilitates the diagnosis of breast cancer, the most common type of cancer in women. Early diagnosis and intervention significantly increase the rates of survival of women with this type of tumour. The number of mammogram machines in the SNS is 418 (64.9% of the total number of registered machines) and the rate is 9.0 machines per million population.

Table 3-24 Number of mammography units and share of total in use, by autonomous community. SNS, 2014

	Number of units in SNS	% of total units in the autonomous community
Andalucía	70	60.9
Aragón	25	83.3
Asturias	14	73.7
Baleares	8	47.1
Canarias	14	45.2
Cantabria	4	100.0
Castilla y León	26	68.4
Castilla-La Mancha	19	67.9
Cataluña	76	73.1
Comunidad Valenciana	34	65.4
Extremadura	14	70.0
Galicia	23	63.9
Madrid	51	58.6
Murcia	11	57.9
Navarra	5	71.4
País Vasco	18	60.0
La Rioja	4	80.0
Ceuta y Melilla	2	100.0
SNS	418	64.9

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Table 3-25 Number of radiotherapy units (cobalt bombs and linear accelerators) and share of total units in use, by autonomous community. SNS, 2014

	Number of units in SNS	% of total units in use in the autonomous community
Andalucía	29	87.9
Aragón	4	80.0
Asturias	5	83.3
Baleares	3	75.0
Canarias	10	83.3
Cantabria	3	75.0
Castilla y León	10	83.3
Castilla-La Mancha	4	100.0
Cataluña	32	84.2
Comunidad Valenciana	18	78.3
Extremadura	4	100.0
Galicia	13	100.0
Madrid	28	62.2
Murcia	5	100.0
Navarra	3	50.0
País Vasco	11	64.7
La Rioja	2	100.0
Ceuta y Melilla	0	0.0
SNS	184	79.0

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

As for radiotherapy devices (cobalt bombs and linear accelerators) the network of SNS hospitals has 184 units (79.0% of the total in existence), which is a rate of 4.0 units per million population.

3.2.6 Spanish Network of Health Technology and SNS Benefits Assessment Agencies

The CISNS, meeting in plenary session on 29 February 2012, resolved to create the Spanish Network of Health Technology Assessment Agencies, the purpose of which is to evaluate medical techniques and procedures, for inclusion, exclusion and/or modification of conditions in the SNS basket of services.

Articles 20 and 21 of the Law 16/2003, of 28 May, on Cohesion and Quality in the SNS, amended by Articles 2.6 and 2.7 of the Royal Decree-Law 16/2012, of 20 April, on urgent measures to guarantee the sustainability of the SNS and improve the quality and safety of its benefits, provide that the Spanish Network of Health Technology and SNS Benefits Assessment Agencies will take part in the evaluation of the contents of the SNS service basket. In addition, whenever the service basket is updated, the new techniques, technologies or procedures will be subject to a mandatory assessment, prior to use in the SNS, by the Spanish Network of Health Technology and SNS Benefits Assessment Agencies.

Ministerial Order SSI/1833/2013, of 2 October, created and regulates the Board of the Spanish Network of Health Technology and SNS Benefits Assessment Agencies. The network's mission is to generate, disseminate and facilitate the implementation of information intended to support decision-making in the SNS, thus contributing to improved quality, equity, efficiency and cohesion in the SNS. The Network thus takes part in developing the SNS service basket by assessing new techniques, technologies and procedures, in a mandatory evaluation that must take place before they are used in the SNS.

To create the Network's Annual Work Plans, the General Subdirectorate of Quality and Cohesion, as the Network's Technical Secretary, asked the Commission of Benefits, Entitlement and Financing (CPAF) to provide a list of topics proposed by the autonomous communities for evaluation.

Taking into account the topics listed by the CPAF as well as others proposed by the General Directorate of Public Health, Quality and Innovation, the Annual Work Plan for 2014 called for the preparation of 46 health technology assessment reports and 12 clinical practice guides or other evidence-based products, and it also foresaw the possibility of requesting 13 additional reports, depending on the needs identified by the Directorate General of the Basic Basket of Services. The Annual Work Plan for 2015 commissioned the preparation of 45 health technology assessment reports and 6 clinical practice guides or other evidence-based products, plus 4 monitoring studies. It also foresaw the possibility of commissioning 5 additional reports, depending on the needs identified by the Directorate General of the Basic Basket of Services.

The Annual Work Plans for 2014 and 2015 were first approved in plenary sessions of the Board of the Spanish Network of Health Technology and SNS Benefits Assessment and then they were adopted at the CISNS plenary sessions held on 11 June 2014 and 26 March 2015, respectively.

In addition, over the course of the years 2014 and 2015, activities took place in relation to the participation of assessment agencies and units in the Service Basket working groups and collaborative efforts in methodological developments continued.

At the international level, the Spanish Network of Assessment Agencies took part in activities organized by the European Network for Health Technology Assessment, particularly in the preparation of the Strategy for EU Cooperation in Health Technology Assessment, approved in October of 2014. The Ministry of Health, Social Services and Equality acts in representation of Spain, as a Member State, of the said European Network.

3.2.7 Reference Centres, Services and Units of the SNS

The number of Reference Centres, Services and Units of the SNS (CSUR-SNS) continues to grow. These facilities are so designated in order to improve the access in equitable conditions of all citizens to highly-specialised services that require a concentration of experience so as to ensure the delivery of high-quality, safe and efficient health care.

The CSUR-SNS attend all patients in equality of conditions, regardless of their place of residence, to meet the following objectives:

- To provide care through multidisciplinary teams: health care services, diagnostic confirmation, definition of therapeutic and monitoring strategies and advisory services for the clinical units that usually provide care to these patients.
- To ensure care continuity between life stages (child-adult) and between care levels.
- To assess the results obtained.

The SNS has 227 CSUR, covering 52 complex pathologies or procedures; 41 of these CSUR were designated in 2015 and in the first half of 2016.

	Reference Centres, Services and Units	Hospitals
Andalucía	28	6
Aragón	2	1
Asturias	4	1
Baleares	-	-
Canarias	1	1
Cantabria	6	1
Castilla y León	4	3
Castilla-La Mancha	1	1
Cataluña	67	14
Comunidad Valenciana	20	3
Extremadura	-	-
Galicia	14	2
Madrid	68	9
Murcia	6	2
Navarra	-	-
País Vasco	6	2
La Rioja	-	-
Ceuta y Melilla	-	-
SNS	227	46

Remarks: data refer to September 2016.

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of the SNS Basic Basket of Services and the Cohesion Fund.

Table 3-27 List of new CSUR-SNS designated in 2015 and first half of 2016

Unit	Hospital	Autonomous community
Lung transplant, adults	Hospital Universitario 12 de Octubre	Madrid
Pancreas transplant	Hospital Universitario Marqués de Valdecilla	Cantabria
Replants, including catastrophic hand injury	Hospital Universitario La Paz	Madrid
Paediatric arrhythmology and electrophysiology	Hospital de Sant Joan de Deu	Cataluña
Refractory epilepsy	Hospital Universitario de Cruces	País Vasco
Hereditary ataxias and paraplegias	Hospital Universitario Vall D' Hebrón	Cataluña
	Hospital Universitario Ramón y Cajal	Madrid
Paired kidney exchange	Hospital Universitario Marqués de Valdecilla	Cantabria
	Hospital Universitario Ramón y Cajal	Madrid
Imported tropical diseases, adults and children	Hospital Clinic y Provincial de Barcelona y Hospital de Sant Joan de Deu	Cataluña
	Hospital Universitario La Paz	Madrid
Imported tropical diseases, adults	Hospital Universitario Ramón y Cajal	Madrid
Congenital metabolic diseases, adults and children	Complejo Hospitalario Universitario de Santiago	Galicia
	Hospital Universitario de Cruces	País Vasco
	Hospital Universitario y Politécnico La Fe	C. Valenciana
	Hospital Universitario Vall D' Hebrón	Cataluña
	Hospital Universitario Ramón y Cajal	Madrid
Congenital metabolic diseases, children	Hospital Universitario 12 de Octubre	Madrid
	Hospital de Sant Joan de Déu	Cataluña
Rare neuromuscular diseases, adults and children	Hospital U. Vall D'Hebrón	Cataluña
	Hospital Universitario y Politécnico La Fe	C. Valenciana
Rare neuromuscular diseases, adults	Hospital de la Santa Creu i Sant Pau	Cataluña
	Complejo Hospitalario Regional Virgen del Rocío	Andalucía
Rare neuromuscular diseases, children	Hospital de Sant Joan de Deu	Cataluña
Genetic neurocutaneous syndromes, adults	Hospital Universitario Germans Triás i Pujol de Badalona and Institut Catalá D' Oncología Badalona	Cataluña
Genetic neurocutaneous syndromes, children	Hospital de Sant Joan de Deu	Cataluña
Rare diseases with movement disorders, adults and children	Complejo Hospitalario Regional Virgen del Rocío	Andalucía
	Hospital Clinic y Provincial de Barcelona and Hospital de Sant Joan de Deu	Cataluña
	Hospital General Universitario Gregorio Marañón	Madrid
Rare diseases with movement disorders, adults	Hospital Universitario y Politécnico La Fe	C. Valenciana
	Hospital Universitario Ramón y Cajal	Madrid
	Hospital Clínico San Carlos	Madrid
Complex disorders of the autonomic nervous system	Hospital Universitario La Paz	Madrid
Neuroblastoma	Hospital Universitario Vall D'Hebrón	Cataluña
	Complejo Hospitalario Regional Virgen del Rocío	Andalucía
Sarcomas in childhood	Hospital Universitario Vall D'Hebrón	Cataluña
	Hospital Universitario y Politécnico La Fe	C. Valenciana
	Complejo Hospitalario Regional Virgen del Rocío	Andalucía
Complex pulmonary hypertension, adults and children	Hospital Universitario 12 de Octubre	Madrid
Complex pulmonary hypertension, adults	Hospital Clínico y Provincial de Barcelona	Cataluña
Complex pulmonary hypertension, children	Hospital Universitario La Paz	Madrid

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of the SNS Basic Basket of Services and the Cohesion Fund.

3.2.7.1 European Reference Networks

In March of 2016 the European Commission issued the first call for proposals regarding the designation of European Reference Networks (ERN). These networks are meant to be tools for improving the care provided in EU countries, within the framework of the European directive on cross-border health care. Participation in the networks is voluntary.

To facilitate the process for health care providers wishing to become members of an ERN, the CSUR Designation Committee drew up an agreement that was ratified by the CISNS on 13 April 2016.

In Spain a health care provider that wishes to become a member of an ERN must already be a CSUR-SNS in the target area of the future network. It must also have approval from its autonomous community, from the CSUR Designation Committee and a written statement issued by the Ministry of Health, Social Services and Equality certifying that its participation complies with national legislation.

Meeting the requirements of the aforementioned agreement, 42 units were admitted to the selection process. Spanish units participate in 17 of the 24 ERN that have been accepted for consideration in the selection process.

The ERN designation process will end on 15 December 2016 with a meeting of the Board of Member States. At this meeting it will be decided which ERN have successfully completed the process.

3.2.8 Network of solid organ transplant teams

In Spain a total of 44 hospitals are authorised to perform organ transplants and transplant programmes exist for kidney, liver, heart, lung, pancreas, small intestine and others, for both adults and children. There are 186 coordination teams comprised of 267 doctors and 173 nurses. On these teams, 93% of the doctors and 72% of the nurses have part-time dedication to coordination activities, which allows them to continue their normal job as well. Intensive medicine is the specialty of 87.0% of the coordinating doctors and of 40.0% of the nurses.

There are 46 kidney transplant teams in Spain, distributed in 40 hospitals (7 teams perform paediatric transplants and 39 perform adult transplants); for each team there is a population of practically 1 million inhabitants.

In the case of liver transplants there are 29 teams in 25 hospitals; the population attended by each team is thus 1.6 million.

There are 21 teams performing heart transplants in 17 hospitals (population of 2.2 million per team) while 8 facilities have an active lung transplant programme (meaning that each one attends a population of 4.25 million).

Table 3-28 Network of transplant teams, 2015

	Kidney	Liver	Heart	Lung	Cardio-pulmonary	Pancreas-kidney and combinations	Intestine
Andalucía	6 (1)	5 (1)	3 (1)	2 (1)	1	2	--
Aragón	1	1	1	--	--	--	--
Asturias	1	1	1	--	--	--	--
Baleares	1	--	--	--	--	--	--
Canarias	2	--	--	--	--	1	--
Cantabria	1	1	1	1	--	1	--
Castilla y León	2	1	1	--	--	1	--
Castilla- La Mancha	2	--	--	--	--	--	--
Cataluña	8 (2)	4 (1)	4 (1)	2 (1)	(1)	2	1
C. Valenciana	5 (1)	3 (1)	1	2 (1)	1	1	--
Extremadura	1	1	--	--	--	--	--
Galicia	2	2	2 (1)	1	--	2	--
Madrid	9 (2)	6 (2)	5 (2)	3 (1)	1	2 (1)	3 (2)
Murcia	1	1	1	--	--	1	--
Navarra	1	1	1	--	--	--	--
País Vasco	2 (1)	1	--	--	--	--	--
La Rioja	1	--	--	--	--	--	--
Total teams	46 (7)	29 (5)	21 (5)	11 (4)	4 (1)	13 (1)	4 (2)
No. of hospitals	40	25	17	8	4	13	3

Remarks: () Number of paediatric transplant teams.

Sources: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT).

3.2.9 Blood transfusion centres and services

Activities related to the extraction and processing of human blood and its components, due to their nature and the public interest of these activities at both the health care and social levels, are performed exclusively by Blood Transfusion Centres (CTS). In Spain there are 20 authorised CTS, all public, and 400 Transfusion Services (ST), which facilitate transfusional therapy and are located in public and private hospitals. These two structures (Blood Transfusion Centres and Transfusion Services) make up the country's transfusion network.

Graph 3-20 Geographic distribution of the transfusion network in Spain, 2015



Source: Ministry of Health, Social Services and Equality. Information System of the National System for Transfusion Safety (SI-SNST). National Haemotherapy Plan

4 Promotion, prevention and health problems attended

4.1 Health promotion and disease prevention

4.1.1 Promotion

Health promotion activities involve multiple agents, both in the sphere of health care and elsewhere, such as schools and the food industry, to cite just two examples. A variety of institutions and bodies take part, one way or another, in promoting healthy habits in the population.

Within the health care sector, all of the care levels and professionals take part in fomenting such lifestyles, mostly through the health advice they provide, but the Primary Care services have a special role as the main sources and agents entrusted with this broad array of activities. The SNS Strategy for Health Promotion and Disease Prevention and the service baskets of the autonomous communities provide for an organized deployment of actions – focused on promoting healthy habits in terms of diet, physical exercise, the consumption of tobacco and alcohol and on avoiding accidents – that are prioritized according to the age and the health situation of the persons to whom they are directed.

Some of these activities are recorded using coding systems based on commonly used international classifications. According to the International Classification of Primary Care (ICPC), which serves as the basis for the general analysis of the data appearing in the SNS Clinical Primary Care Database (BDCAP), clinical notes indicate that promotion and prevention activities have taken place⁴⁸ in 20% of the persons attended over the course of a year.

4.1.2 Vaccination

4.1.2.1 Coverage and opinions on efficacy of childhood vaccination

In recent years in Spain, rates of vaccination coverage in the target population of children under 24 months of age are 95% or higher, although they fall as the target population gets older. These levels of coverage have made it possible to eliminate poliomyelitis, to see only rare occurrences of diseases such as tetanus and diphtheria and to control or reduce the incidence of the other diseases for which vaccination is included in the vaccination schedule.⁴⁹

Every year the plenary body of the Interterritorial Council of the SNS (CISNS) approves the common schedule of childhood vaccination, following the recommendation of the Public Health Commission. The recommendation in effect for the year 2016 and reflected in the schedule adopted by the CISNS includes systematic vaccination of children against 13 diseases: diphtheria,

⁴⁸ Code ICPC2: A98 – Preventive medicine/health promotion. BDCAP 2013.

⁴⁹ See section on epidemiological surveillance of vaccine-preventable diseases in the chapter Health Status.

tetanus, pertussis, poliomyelitis, measles, rubella, parotitis, *Haemophilus influenzae* type b, hepatitis B, invasive meningococcal disease serogroup C, pneumococcal disease, human papiloma virus infection and chicken pox in children⁵⁰ and the susceptible adolescent population.

Table 4-1 Common schedule of childhood vaccination approved by the CISNS, 2016

First year of life	Vaccination against hepatitis B (HB) at 0, 2 and 6 months. In children whose mothers have HB, the recommendation is 0, 1 and 6 months.
	Vaccination against diphtheria, tetanus, pertussis, poliomyelitis, <i>Haemophilus Influenzae</i> b (DTPa, VPI, Hib), at 2, 4 and 6 months.
	Vaccination against meningococcal disease C (MenC) at 4 months. Depending on the vaccine used, primary vaccination may require one dose (4 months) or two doses (2 and 4 months).
	Vaccination against pneumococcal disease (VCN) at 2 and 4 months.
Second year of life	Combined measles, mumps and rubella (MMR), 1st dose at 12 months.
	Vaccination against meningococcal disease C (MenC) at 12 months.
	Vaccination against pneumococcal disease (VCN) at 12 months.
	Vaccination against chicken pox (VZV). 1st dose at 15 months. Booster vaccination against diphtheria, tetanus, pertussis, poliomyelitis and <i>Haemophilus Influenzae</i> b (DTPa, IPV, Hib), at 18 months.
3 to 6 years of age	Combined measles-mumps-rubella (MMR), 2nd dose between 3 and 4 years of age.
	Chicken pox (VZV), 2nd dose between 3 and 4 years of age.
	Booster vaccination against diphtheria-tetanus-pertussis (DTPa) at age 6.
12 to 14 years of age	Vaccination against meningococcal C disease (MenC) at age 12.
	Vaccination against chickenpox (VZV) at age 12 in persons who have not had the disease and have not been vaccinated previously. Recommendation is for two doses.
	Vaccination against human papiloma virus (HPV). Only girls. Administration at age 12.
	Booster vaccination against tetanus and diphtheria (TD) at age 14.

Source: Ministry of Health, Social Services and Equality. Interterritorial Council of the SNS.

In 2015, the percentage of children who received the basic series of recommended vaccines is 96.7%. The percentage of children aged 1 to 2 who received the recommended boosters is close to 95%.

⁵⁰ In July of 2015 the Interterritorial Council of the SNS resolved to include the vaccine against chicken pox in children with a recommendation of two doses, starting in 2016.

Table 4-2 Primary vaccination coverage (basic series), 2011-2015

	2011	2012	2013	2014	2015
Poliomyelitis	97.1	96.3	95.6	96.6	96.6
Diphtheria-tetanus-pertussis (DTPa)	97.1	96.3	95.6	96.6	96.6
Haemophilus influenzae type b (Hib)	97.1	96.3	95.6	96.5	96.6
Hepatitis B	96.6	95.8	95.2	96.2	96.6
Meningococcal disease, serogroup C	98.0	96.6	95.8	96.9	97.0

Remarks: primary vaccination coverage refers to the percentage of children aged 0 to 1 who have received three doses of vaccine against DTPa, Hib, hepatitis B and two doses of vaccine against serogroup C meningococcal disease. Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Table 4-3 Coverage of primary vaccination (basic series) by autonomous community, 2015

	Poliomyelitis	Diphtheria-tetanus-pertussis (DTPa)	Haemophilus influenzae type b (Hib)	Hepatitis B	Meningitis C
Andalucía	97.4	97.4	97.4	97.4	97.4
Aragón	98.4	98.4	98.4	98.2	96.7
Asturias	99.1	99.2	99.2	98.3	98.9
Baleares	94.8	94.8	94.8	94.8	95.7
Canarias	97.4	97.4	97.4	97.4	97.7
Cantabria	98.2	98.2	98.2	98.2	97.4
Castilla y León	95.0	95.0	95.0	95.0	97.2
Castilla-La Mancha	97.2	97.2	97.2	97.2	99.4
Cataluña	92.8	92.7	92.7	92.7	93.2
Comunidad Valenciana	99.4	99.5	99.4	100.0	100.0
Extremadura	93.6	93.6	93.6	93.6	95.0
Galicia	96.5	96.5	96.5	95.6	98.6
Madrid	98.5	98.5	98.5	98.5	98.3
Murcia	98.2	98.2	98.2	98.2	99.0
Navarra	95.9	95.9	95.9	95.9	96.7
País Vasco	93.4	93.4	93.4	93.2	93.4
La Rioja	99.0	99.0	99.0	99.0	99.6
Ceuta	100.0	100.0	100.0	100.0	100.0
Melilla	96.1	96.1	96.1	96.1	93.9
Spain	96.6	96.6	96.6	96.6	97.0

Remarks: the data for Aragón and Baleares refers to coverage in 2014. Primary vaccination coverage refers to the percentage of children aged 0 to 1 who have received three doses of vaccine against DTPa, Hib, hepatitis B and two doses of vaccine against serogroup C meningococcal disease. Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Table 4-4 Booster vaccination coverage: vaccinated children aged 1 to 2, 2011-2015

	2011	2012	2013	2014	2015
Poliomyelitis	94.3	92.9	92.3	94.8	94.5
Diphtheria-tetanus-pertussis (DTPa)	94.1	93.1	92.3	94.6	94.5
Haemophilus influenzae type b (Hib)	94.1	92.9	92.3	94.6	94.5
Meningococcal disease, serogroup C	98.8	94.8	96.1	95.2	95.7

Remarks: booster vaccination coverage is the percentage of children aged 1 to 2 who have received the booster dose. Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Table 4-5 Booster vaccination coverage: vaccinated children aged 1 to 2 by autonomous community, 2015

	Poliomyelitis	Diphtheria-tetanus-pertussis (DTPa)	Haemophilus influenzae type b (Hib)	Meningitis C
Andalucía	96.7	96.7	96.7	96.7
Aragón	95.3	95.3	95.3	94.1
Asturias	95.7	95.8	95.6	97.5
Baleares	96.7	96.7	96.7	93.5
Canarias	95.7	95.7	95.7	97.4
Cantabria	96.4	96.4	96.4	94.2
Castilla y León	92.6	92.6	92.6	94.2
Castilla-La Mancha	96.5	96.5	96.5	96.7
Cataluña	90.6	90.4	90.5	93.5
Comunidad Valenciana	95.7	95.8	95.7	92.7
Extremadura	86.1	86.1	86.1	97.1
Galicia	97.8	97.8	97.8	97.5
Madrid	97.1	97.1	97.1	99.2
Murcia	94.6	94.6	94.6	94.6
Navarra	97.5	97.5	97.5	95.5
Pais Vasco	83.3	83.3	83.3	93.0
La Rioja	97.7	97.7	97.7	99.1
Ceuta	100.0	100.0	100.0	99.3
Melilla	91.9	91.9	91.9	95.0
Spain	94.5	94.5	94.5	95.7

Remarks: booster vaccination coverage is the percentage of children aged 1 to 2 who have received the booster dose. The data for Aragón and Baleares refers to coverage in 2014. Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Vaccination against measles-mumps-rubella (MMR) in children aged 1 to 2 was over 95%, with over 90% also receiving the recommended booster dose.

Table 4-6 Coverage of vaccination against measles-mumps-rubella, 2011-2015

	2011	2012	2013	2014	2015
First dose: children aged 1 to 2	96.8	97.1	95.3	96.1	96.2
Second dose: children aged 3 to 6	91.3	90.3	90.7	93.0	94.2

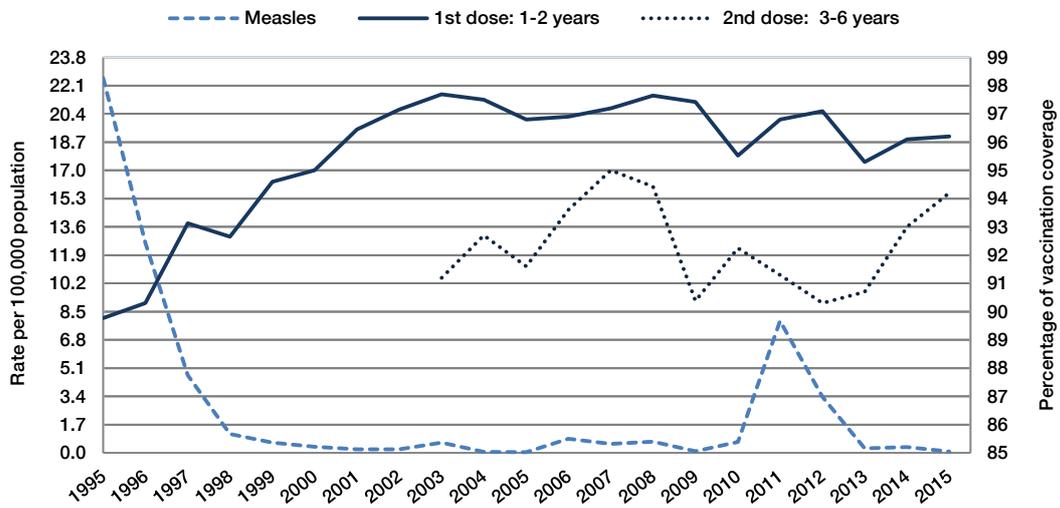
Remarks: only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage.

Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

The coverage of MMR vaccination in children aged 1 to 2 varies among the different autonomous communities, ranging from 91% (Comunidad Valenciana) to 100% (Ceuta), while booster dose coverage ranges from 86% (Comunidad Valenciana) to 100% (Ceuta).

Graph 4-1 Changes in incidence of measles and coverage of vaccination against measles-mumps-rubella, 1995-2015



Remarks: only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage.

Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality- Ministry of Economy, Industry and Competitiveness - Carlos III Health Institute. National Network of Epidemiological Surveillance. Spanish National Epidemiology Centre. Notifiable diseases. Vaccination statistics.

Table 4-7 Coverage of vaccination against measles-mumps-rubella by autonomous community, 2015

	Coverage (%) 1st dose	Coverage (%) 2nd dose
Andalucía	98.5	96.9
Aragón	98.8	97.7
Asturias	97.6	94.2
Baleares	97.4	95.8
Canarias	97.5	95.3
Cantabria	96.3	97.5
Castilla y León	95.2	93.9
Castilla-La Mancha	96.7	91.9
Cataluña	92.6	95.5
Comunidad Valenciana	90.9	85.8
Extremadura	97.7	89.3
Galicia	97.8	92.3
Madrid	99.4	97.8
Murcia	98.0	88.0
Navarra	98.3	97.7
País Vasco	93.9	92.4
La Rioja	99.1	95.8
Ceuta	100.0	100.0
Melilla	96.1	98.0
Spain	96.2	94.2

Remarks: only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Forty-eight per cent of citizens think⁵¹ that the health care professionals give patients (or their parents in the case of children) sufficient information about the advantages and risks of vaccines prior to administering them. In relation to childhood vaccines, there is a high degree of agreement (*very much agree* or *agree quite a lot*) that the vaccines are effective (88.1%). There is also widespread agreement about the importance of receiving all the doses of each vaccine in order to be protected (87.1%).

Table 4-8 Degree of agreement about childhood vaccines, 2015

	They are effective in preventing diseases	They have more risks than benefits	It is important to receive all the doses in order to be protected	It is better to have the disease naturally
Very much agree	53.7	2.8	55.3	5.9
Agree quite a lot	34.4	7.4	31.8	9.5
Agree only a little	4.6	29.6	3.0	25.2
Do not agree at all	1.3	43.1	1.3	45.3
DK/NA	5.9	17.2	8.3	14.0

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

⁵¹ Ministry of Health, Social Services and Equality. Health Care Barometer, 2015

4.1.2.2 Coverage and opinions regarding flu vaccination

The flu is a common infectious disease that affects people of all ages and can have a high impact on the health of the population and on a country's health care system. At certain times of the year the flu puts the health system's care activity under enormous strain. Its repercussion in terms of morbidity and mortality is greater among persons over age 64 and among those with chronic health problems.

In the 2015/2016 campaign, coverage of vaccination against seasonal flu in older persons is 56.1%, with an interval that goes from 65.5% in La Rioja to 29.7% in Ceuta.

Table 4-9 Coverage of vaccination against the flu in persons aged over 64 by autonomous community, campaigns 2014/2015 and 2015/2016

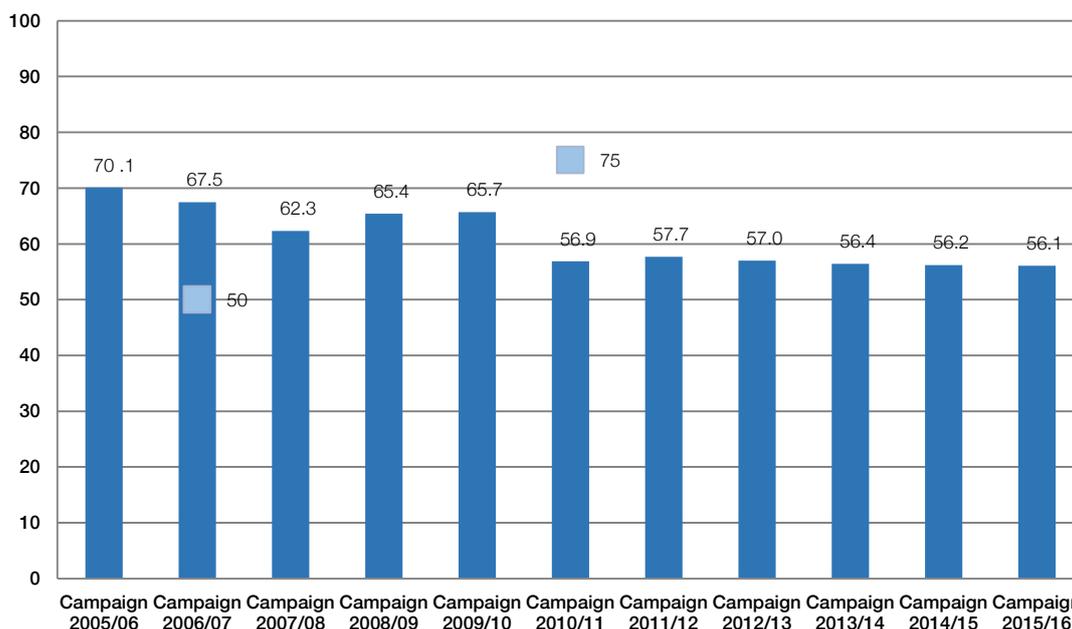
	Campaign 2014/2015	Campaign 2015/2016
Andalucía	60.0	56.2
Aragón	57.5	57.5
Asturias	56.2	55.5
Baleares	45.9	47.3
Canarias	57.5	57.4
Cantabria	57.3	56.9
Castilla y León	66.1	64.4
Castilla-La Mancha	54.0	59.2
Cataluña	54.0	54.3
Comunidad Valenciana	50.6	50.7
Extremadura	50.8	58.8
Galicia	52.4	54.1
Madrid	58.2	58.1
Murcia	49.3	43.9
Navarra	60.0	60.1
País Vasco	60.3	60.5
La Rioja	66.5	65.5
Ceuta	28.9	29.7
Melilla	38.1	37.5
Spain	56.2	56.1

Remarks: the data for Aragón in the 2015/2016 campaign is the figure for the 2014/2015 campaign. The Cataluña population is the group aged 60 and over. Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Seasonal flu vaccination in persons aged 65 and over has been falling in recent years, although it continues to be higher than 55%.

Graph 4-2 Trends in the coverage of vaccination against the flu in persons aged over 64, campaigns 2005-2006 to 2015-2016



Remarks: in 2003 the countries participating in the World Health Assembly, including all the European Union member states, set the objective of attaining vaccination coverage in older persons of at least 50% in 2006 and at least 75% in 2010.

Only doses administered as part of the Official Vaccination Services are used to calculate vaccination coverage. Vaccines acquired at pharmacies or administered in the private health care sector are not included.

Source: Ministry of Health, Social Services and Equality. Vaccination statistics.

Vaccination against the flu aims to reduce the mortality and morbidity associated with the flu and the impact the disease has on the community. For this reason it is aimed mainly at protecting people who are at higher risk of complications if they catch the flu, those who might spread the disease to others who have a high risk of complications and those who, because of their occupation, provide essential community services.

Following the proposal of the Vaccination Program and Register Committee, every season the Public Health Commission issues recommendations regarding flu vaccination. The recommendations in effect for the 2016-2017 season place special emphasis on the group of persons aged 65 and over and on health care professionals.

Table 4-10 Target population groups for antifu vaccination, season 2016-2017

The general population	Not recommended
Persons aged 65 and over	Recommended, especially in persons living in closed institutions
The chronically ill	Recommended Children over the age of 6 months and adults with: Chronic cardiovascular diseases (excluding isolated arterial hypertension) Neurological diseases Pulmonary diseases, including bronchopulmonary dysplasia, cystic fibrosis and asthma Children over the age of 6 months and adults who require periodic medical monitoring or who have been hospitalised in the past year for: Metabolic disease, including diabetes mellitus Morbid obesity Renal insufficiency Hemoglobinopathies and anaemias Asplenia Chronic liver disease Severe neuromuscular diseases Immunosuppression (including that derived from HIV infection, from pharmaceuticals or in transplant recipients) Cancer Persons having or waiting for cochlear implant Disorders and diseases involving cognitive dysfunction: Down syndrome, dementias and others Children and adolescents aged between 6 months and 18 years who receive prolonged treatment with acetylsalicylic acid, due to the possibility of developing Reye syndrome following the flu
Pregnant women	Recommended in any trimester of gestation
Health care centre staff	Recommended for staff at both primary and specialised and hospital care facilities, public and private, especially those professionals who attend patients in certain risk groups
Persons who work in geriatric institutions or in centres that provide care to patients with chronic illnesses	Recommended, especially for those having ongoing contact with vulnerable patients
Students doing practicum at health care centres	Recommended
Persons who provide home care to high risk patients	Recommended
Persons who work in essential services	Recommended Law enforcement agencies, whether national, regional or local Fire-fighters Civil protection services Persons who work in emergency health care services Workers at penitentiaries and other confinement facilities

Source: Ministry of Health, Social Services and Equality. Ministry of Health, Social Services and Equality. Vaccination Programme and Register Committee. Recommendations approved by the Public Health Commission on 13 October 2016.

When citizens above the age of 18 are asked⁵² if they received the antifu vaccination last season, 21.0% say *yes, they did get vaccinated* while 78.8% say *no, they did not*. Only 0.2% says they *don't know* or they give *no answer*.

⁵² Ministry of Health, Social Services and Equality. Health Care Barometer, 2015

Table 4-11 If you were vaccinated against the flu last season, what was the reason?, 2015

	%
I am in the age group for which it is recommended	55.0
I have a chronic illness	19.9
I am a health care worker	3.2
I work with groups of people (large groups, persons at risk, etc.)	5.0
The flu can be dangerous and everyone should be vaccinated	11.8
Doctor's orders	2.0
Another reason	0.5
Don't know/No answer	1.0

Remarks: last season refers to the period between October of last year and January of this year.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

Of the 21.0% who report they were vaccinated, 55.0% indicate that the reason was *they are in the age group for which it is recommended*. Of the 78.8% of citizens who say they were not vaccinated, in 70.9% of the cases the reason is *it was not recommended* or because *the flu was not a risk to their health*; 18.3% state that the reason for not being vaccinated is that they do not trust vaccines (6.7% vaccines in general and 11.6% the flu vaccine in particular). In the unvaccinated group, 5.8% state that *they did not hear about the vaccination campaign*.

Table 4-12 If you were not vaccinated against the flu last season, what was the reason?, 2015

	%
It is not recommended in my case	35.2
I do not trust vaccines in general	6.7
I do not trust the flu vaccine	11.6
The flu does not pose a risk to my health	35.7
I did not hear about the vaccination campaign	5.8
Another reason	2.8
Don't know/No answer	2.3

Remarks: last season refers to the period between October of last year and January of this year.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

When citizens aged 18 and older are asked, 69.0% say that they *very much agree* or *agree quite a lot* that the flu vaccine prevents the disease and its complications in older persons and those at high risk.

4.1.3 Early cancer detection

In relation to population screening, in which both primary care and specialised care work together, the SNS Cancer Strategy (adopted in 2006 and updated in 2009⁵³) recommends early detection tests in certain population groups, establishes coverage objectives and designates the

⁵³ In 2015 the SNS Cancer Strategy is in the process of being updated.

Spanish National Health Survey (ENSE)⁵⁴ as the source of data to be used for monitoring these indicators.

Screening tests for breast cancer, colorectal cancer and cervical cancer form part of the basic service basket of the SNS.⁵⁵ Both primary care and specialised care play a role in these screenings.

Table 4-13 SNS policy regarding early cancer detection, 2016

Early detection	Target population	Test	Interval between explorations	Coverage objectives
Breast cancer	Women aged 50 to 69	Mammogram	2 years	Population-wide programme. Minimum recommended participation is 70% of women aged 50-69
Cervical cancer	Asymptomatic women who are or have been sexually active between the ages of 25 and 65	Pap smear	3-5 years	Pap smear performed in past 5 years in 70% of women aged 30 to 60
Colorectal cancer	Population aged 50 to 69 (in the initial phase)	Faecal occult blood test	2 years	Population-wide programme. Full coverage in 2025

Source: Ministry of Health, Social Services and Equality. Order SSI/2065/2014.

4.1.3.1 Breast cancer

Almost 8 out of 10 women are screened for the early detection of breast cancer within the recommended period. In the age group for which the test is recommended (50 to 69 years), 79.8% of the women state that they have had a mammogram performed in the past two years and in another 8.6% it was performed over two but less than three years ago. The autonomous communities with the highest rates of coverage are Castilla-La Mancha, Galicia and Navarra.

⁵⁴ The Spanish National Health Survey is a periodic study that has been conducted since 1987 by the Ministry of Health, Social Services and Equality, and which since 2003 has been conducted through an agreement signed with the National Statistics Institute (INE).

⁵⁵ Ministerial Order SSI/2065/2014 contains updates regarding breast, colorectal and cervical cancer screening in the SNS basic service basket.

Table 4-14 Mammogram according to recommended frequency in women aged 50 to 69 by autonomous community, 2011/2012 - 2014

	% women aged 50 to 69	
	2011-2012	2014
Andalucía	66.3	73.6
Aragón	77.2	80.1
Asturias	75.9	83.8
Baleares	65.1	72.8
Canarias	76.6	70.7
Cantabria	76.9	85.2
Castilla y León	74.5	77.6
Castilla-La Mancha	80.9	89.0
Cataluña	83.7	80.5
Comunidad Valenciana	71.2	77.7
Extremadura	77.9	77.8
Galicia	83.3	89.0
Madrid	80.2	83.8
Murcia	86.9	80.5
Navarra	88.8	86.9
País Vasco	86.5	83.1
La Rioja	69.7	85.2
Ceuta	-	-
Melilla	-	56.9
Spain	77.1	79.8

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

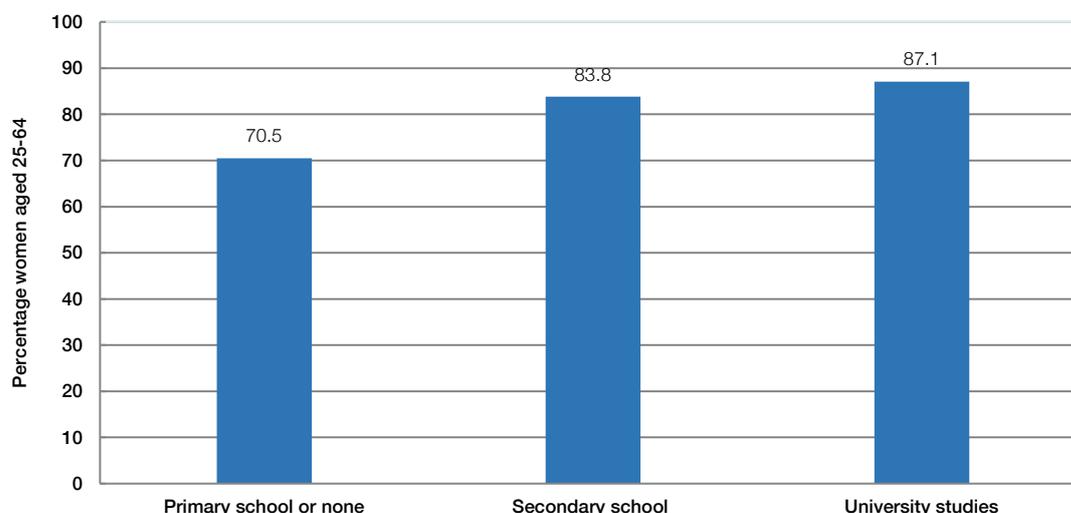
Mammogram rates are lower in the less-privileged groups. Gradients according to socio-economic category and household income are visible. However, the difference observed between women in category I and category VI has fallen from a 16.2 point difference in 2011/2012 to one of 8.5 points in 2014. In category I, 81.4% of the women in the age group for which it is recommended state that they have had it done, compared to 72.9% in category VI.

4.1.3.2 Cervical cancer

In addition, 79.4% of women aged 25 to 64 have had a Pap smear performed within the past 5 years, while 72.7% have had one in the past 3 years. In the autonomous communities of Madrid, País Vasco and Baleares coverage rates higher than 86% have been attained.

Having had a Pap smear in the past 5 years is related to socio-economic category (89.1% of women in category I compared to 63.4% in category VI), education level (87.1% of women with university studies, compared to 70.5% of women with primary school studies or none at all).

Graph 4-3 Pap smear performed within the recommended period in women aged 25 to 64 by education level, 2014



Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

Table 4-15 Pap smear performed within the recommended period in women aged 25 to 64 by autonomous community, 2014

	% women aged 25 to 64
	2014
Andalucía	72.2
Aragón	78.9
Asturias	77.6
Baleares	86.0
Canarias	84.2
Cantabria	79.0
Castilla y León	74.7
Castilla-La Mancha	74.4
Cataluña	84.3
Comunidad Valenciana	74.4
Extremadura	67.5
Galicia	80.1
Madrid	87.3
Murcia	74.5
Navarra	81.9
País Vasco	87.8
La Rioja	85.5
Ceuta	74.6
Melilla	48.0
Spain	79.4

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

4.1.3.3 Colon cancer

As for the faecal occult blood (FOB) test, 12.4% of the population aged 50 to 69 say they have had the test in the past two years, with no differences in terms of sex or socio-economic level. In 2009⁵⁶ coverage for this test was 3.4% and in 2011/2012 it was 6.8%. By autonomous community, País Vasco, with 59.5%, has the highest coverage, followed by La Rioja (32.6%), Murcia (24.3%) and Cantabria (29.4%). The lowest coverage (under 5%) is found in Asturias (3.5%), Melilla (4.1%), Castilla-La Mancha (4.4%), Aragón (4.8%) and Extremadura (4.9%).

Population-wide programmes for early detection of colorectal cancer are currently being introduced. At this time coverage is still low because 2015 was the first year that colorectal cancer screening formed part of the basic service basket of the SNS. The objective is to attain full coverage – coverage meaning that the target group has been invited to have the test performed – within 10 years of this screening test being incorporated into the SNS service basket.

Table 4-16 Faecal occult blood test performed in recommended period in population aged 50 to 69 by autonomous community, 2014

	% population aged 50 to 69
Andalucía	5.7
Aragón	4.8
Asturias	3.5
Baleares	8.0
Canarias	13.8
Cantabria	29.4
Castilla y León	7.6
Castilla-La Mancha	4.4
Cataluña	11.4
Comunidad Valenciana	17.2
Extremadura	4.9
Galicia	10.1
Madrid	5.8
Murcia	24.3
Navarra	12.3
País Vasco	59.5
La Rioja	32.6
Ceuta	9.0
Melilla	4.1
Spain	12.4

Source: Ministry of Health, Social Services and Equality and the National Statistics Institute (INE). Spanish National Health Survey and the European Survey of Health in Spain.

The most frequent reason (37.2%) for having had the latest FOB test performed is having had some kind of problem, symptom or illness, in both men (32.1%) and women (41.6%). Screening at the recommendation of a doctor, with no previous problem, is the reason for having had the latest test in 20.1% of the population aged 50 to 69 (23.5% in men and 17.2% in women) while an action by the person's Primary Care Centre is the reason in 38.5% in both sexes, with no significant differences being observed between men and women in the reasons for having the test. At least half of the FOB tests were performed for the purpose of early detection.

⁵⁶ The European Survey on Health in Spain (ESHS) conducted in 2009 was the first to ask about the faecal occult blood test.

Table 4-17 Reason for the latest faecal occult blood test in population aged 50 to 69 years by sex, 2014

	Both sexes %	Men %	Women %
Some kind of problem, symptom or illness	37.2	32.1	41.6
Doctor's recommendation, with no previous problem	20.1	23.5	17.2
Letter, call or suggestion by Primary Care Centre	38.5	39.4	37.8
Other reasons	4.2	5.0	3.5
Total	100.0	100.0	100.0

Source: National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain.

In addition, for the past 5 years the percentage of adult population (aged 15 and over) that has had a colonoscopy at some time in their life⁵⁷ is 12.3% in men and 8.5% in women.

4.1.4 Spanish Network of Health Schools for Citizens

In 2013 the Spanish Network of Health Schools for Citizens was created for the purpose of developing, promoting and sharing tools that empower citizens by improving health education and self-management of illness. This will make it possible to enhance knowledge and skill acquisition in care-giving and also in self-care, improve health promotion and disease prevention, and also help in the building of tools necessary for the caring for patients with chronic illness.

The Network of Health Schools for Citizens was approved by the CISNS in December of 2012, with the objective of giving patients, care-givers and other interested persons a set of tools containing care-related information that is current, high-quality and easily understood by the target groups, through the creation of a web platform.

The Network of Health Schools has been taking shape since then, with the participation of different schools, programmes and projects, such as: *Escuela de Pacientes de Andalucía*, *Escuela Gallega de Salud para Ciudadanos*, *Programa Paciente Experto of Cataluña*, *Universidad de los Pacientes de la Fundación Josep Laporte*, *Fundación para la formación y la investigación sanitaria de la Región de Murcia*, *Programa Paciente Activo- Paziente Bizia (Osakidetza)* and the citizen network of health educators of the Ministry of Health, Social Services and Equality. Over the course of 2013, all of them were involved in and committed to the further development of the Network of Health Schools, with special emphasis on integration, service and transparency.

The network's activity revolves around five work areas: health care literacy; tools to assist in decision-making; self-care; patient safety; social and emotional support. The Network of Health Schools web page was officially inaugurated⁵⁸ in 2015.

⁵⁷ National Statistics Institute (INE) and the Ministry of Health, Social Services and Equality. European Survey of Health in Spain 2014.

⁵⁸ Network of Health Schools for Citizens <http://www.escuelas.mssi.gob.es/>

4.2 Health problems attended

4.2.1 Primary Care

4.2.1.1 Ordinary activity in primary care centres and homes

At the primary care level of the SNS, 373 million medical and nursing consultations are attended; 96% of them take place in health care centres and the remaining 4% at the home of the patient.

The average number of visits in the case of medical consultations is 5.3 visits per assigned person (i.e. person with a health card and who has been assigned to a primary care professional) and year (5.3 to the general practitioner and 5.1 to the paediatrician). In the case of consultations with the nurse, there is an average of 2.9 visits per person and year.

	Average number of visits per assigned person						Number of visits
	2010	2011	2012	2013	2014	2015	2015
Medicine	5.4	5.5	5.3	5.3	5.2	5.3	241,335,483
General practice	5.5	5.6	5.5	5.4	5.3	5.3	207,903,896
Paediatrics	5.2	5.4	4.9	5.0	5.0	5.1	33,431,587
Nursing	2.8	2.8	2.8	2.9	2.9	2.9	131,989,350
Total	-	-	-	-	-	-	373,324,833

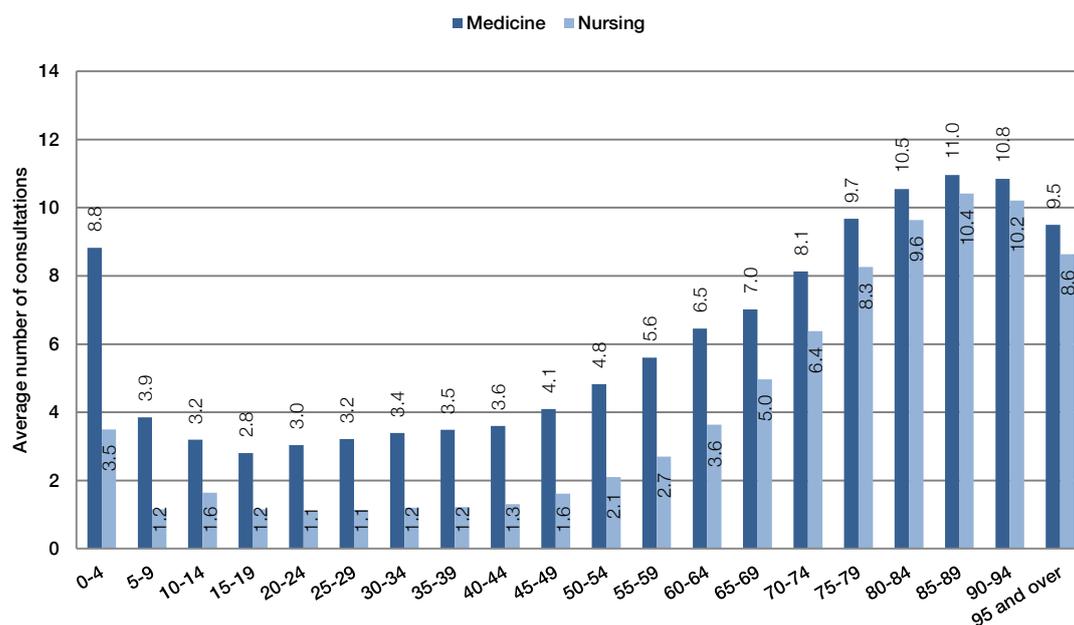
Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

By sex, in the case of medical consultations the average per person and year is higher in women (6.0) than in men (4.5); in the case of nursing consultations this difference is somewhat smaller (3.1 and 2.6, respectively).

Looking at age groups, for the first five years of life, ages 0 to 4, the average is 8.8 visits per child and year; it then decreases until reaching a low of 2.8 during adolescence (ages 15 to 19), the age group with the lowest average number of visits per person and year. The subsequent rise, which is very gradual until age 45, becomes more pronounced at this time, reaching the highest number of visits in persons aged 85-89, in whom the average number of visits per year is 11.0.

In the case of nursing consultations, the average is 3.5 visits/year in the group aged 0 to 4, dropping to 1.1 visits/person and year in the age groups 20 to 24 years and 25 to 29 years and showing a gradual ascent starting at age 45, until reaching the groups with the highest average (85 to 89 years), with 10.4 visits/person and year.

Graph 4-4 Average number of SNS primary care consultations by age group, 2015



Remarks: the figures for medicine include general practitioner and paediatrician.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

Table 4-19 Average number of primary care consultations by autonomous community, 2015

	Medicine	Nursing
Andalucía	6.0	3.2
Aragón	5.3	2.5
Asturias	5.2	3.2
Baleares	3.8	2.3
Canarias	5.2	2.3
Cantabria	5.5	2.5
Castilla y León	8.0	4.2
Castilla-La Mancha	6.2	3.9
Cataluña	4.0	2.0
Comunidad Valenciana	4.6	2.7
Extremadura	7.0	3.6
Galicia	5.7	3.2
Madrid	4.9	2.3
Murcia	5.7	2.9
Navarra	4.8	4.0
País Vasco	5.0	3.9
La Rioja	5.8	3.9
Ceuta and Melilla	4.9	2.7
SNS	5.3	2.9

Remarks: the figures for medicine include general practitioner and paediatrician.

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

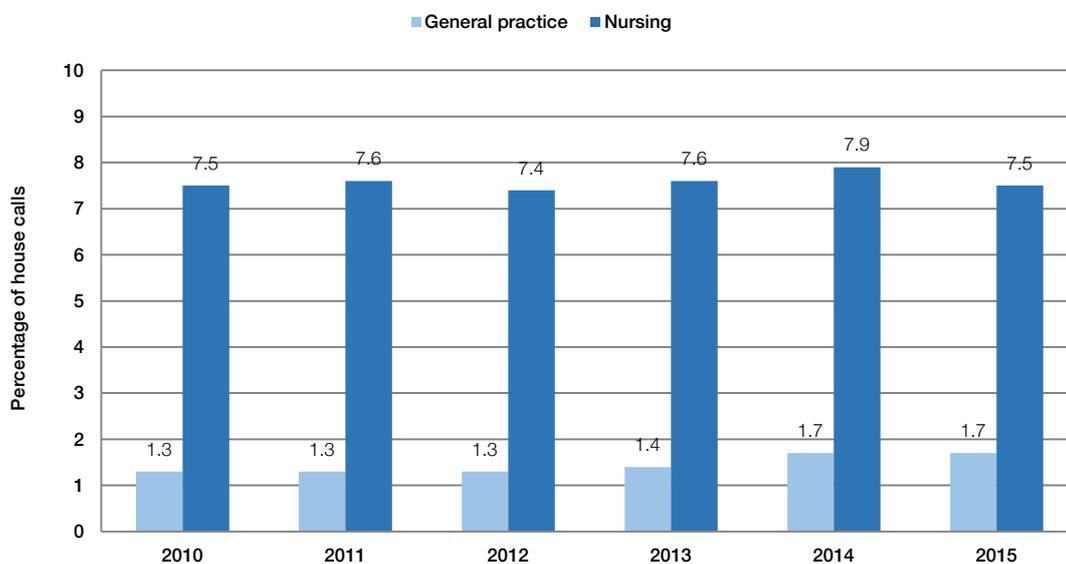
By autonomous communities, the highest average for medical consultations is found in Castilla y León (8.0 consultations per assigned person and year) and the lowest in Baleares (3.8

consultations per assigned person and year). In the case of nursing, the highest average is also found in Castilla y León (4.2 consultations with the nurse per assigned person and year) and the lowest is found in Cataluña (2.0 consultations with the nurse per assigned person and year).

Care delivered in the patient's home (4% of primary care activity and 13.3 million house calls) varies considerably depending on the type of professional. In the case of paediatrics this type of care represents a low share (32,484 house calls), just 0.1%. In general practice medicine it represents 1.7% of all activity (3.4 million house calls) while in nursing it reaches 7.5% (9.9 million house calls).

The majority of the recipients of care provided at the patient's home are persons aged over 65 and these patients receive a similar share of the house calls made by general practitioners and nurses (85% and 87%, respectively).

Graph 4-5 House calls as percentage of all primary care activity, by type of care professional, 2010-2015



Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

4.2.1.2 Morbidity attended

Each person attended in primary care centres⁵⁹ presents an average of 5.7 health problems. By sex, the average is 5.1 active problems in the case of men and 6.3 in the case of women.

⁵⁹ The most recent figure available at the time of this report is from 2012. The Clinical Primary Care Database (BDCAP) contains codified and standardized clinical information extracted from a random sample of 2.7 million electronic health records. The almost total coverage of primary care in combination with the random nature of the sample means that the results can be considered an estimate of the type of health problems affecting the Spanish population.

More information at: <http://www.mssi.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/home.htm>

Table 4-20 Average number of active health problems per user attended in primary care centres, by age group and sex, 2012

	Both sexes	Men	Women
Active problems (average)	5.7	5.1	6.3

Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database (BDCAP).

Table 4-21 Prevalence of health problems, rate per 1,000 persons assigned to an SNS primary care centre, location by anatomical system or apparatus, by age in both sexes, 2012

Code	Health problems by apparatus or system	Both sexes					
		age 0-14		age 15 and over		age 65 and over	
		Rate	Order	Rate	Order	Rate	Order
A	Problems of a general and unspecific nature	872.2	2	624.3	2	988.4	3
B	Blood, hematopoietic organs and immune system	43.2	14	64.3	14	107.7	14
D	Digestive System	665.7	3	464.0	4	629.9	5
F	Eyes and adnexa	224.6	7	202.4	9	390.6	9
H	Auditory apparatus	315.7	5	137.9	13	197.5	12
K	Circulatory system	51.2	13	451.2	6	1,156.0	1
L	Locomotive system	267.0	6	715.9	1	1,094.0	2
N	Nervous system	75.2	11	143.0	12	179.1	13
P	Psychological problems	87.0	10	332.0	8	405.9	8
R	Respiratory system	1,223.3	1	494.8	3	613.9	6
S	Skin and skin appendages	619.4	4	452.0	5	544.4	7
T	Endocrine system, metabolism and nutrition	114.6	8	408.6	7	801.2	4
U	Urinary system	60.3	12	154.6	11	312.7	10
W	Family planning, pregnancy, childbirth and puerperium	0.2	15	51.5	15	0.0	15
XY	Genital apparatus	94.5	9	188.7	10	206.3	11

Remarks: the health problems are grouped by apparatus or system according to the Primary Care Classification System (CIAP-2). The Order column refers to prevalence by apparatus or system. The Clinical Primary Care Database contains coded and standardized clinical information extracted from a random sample of 2.7 million electronic health records. The almost total coverage of primary care in combination with the random nature of the sample means that the results can be considered an estimate of the type of health problems affecting the Spanish population.

Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database of the SNS (BDCAP-SNS).

The most frequent health problems, grouped by apparatus or system, vary depending on age and sex. In the group aged under 15, the respiratory system (rate of 1,223.3 per 1,000 assigned persons) is the primary reason for consultation, followed, at a distance, by problems of a general and unspecific nature (872.2), digestive system (665.7), skin and skin appendages (619.4) and the auditory apparatus (315.7).

In the group aged 15 and over the most frequent problems per 1,000 assigned persons are related to the locomotive system (715.9), followed by problems of a general and unspecific nature (624.3) and problems of the respiratory system (494.8).

In persons aged over 64 the main reasons for consultation are problems with the circulatory system (1,156.0 per 1,000 assigned persons) and the locomotive system (1,094.0) followed by problems of a general and unspecific nature (988.4) and problems related to the endocrine system, metabolism and nutrition (801.2).

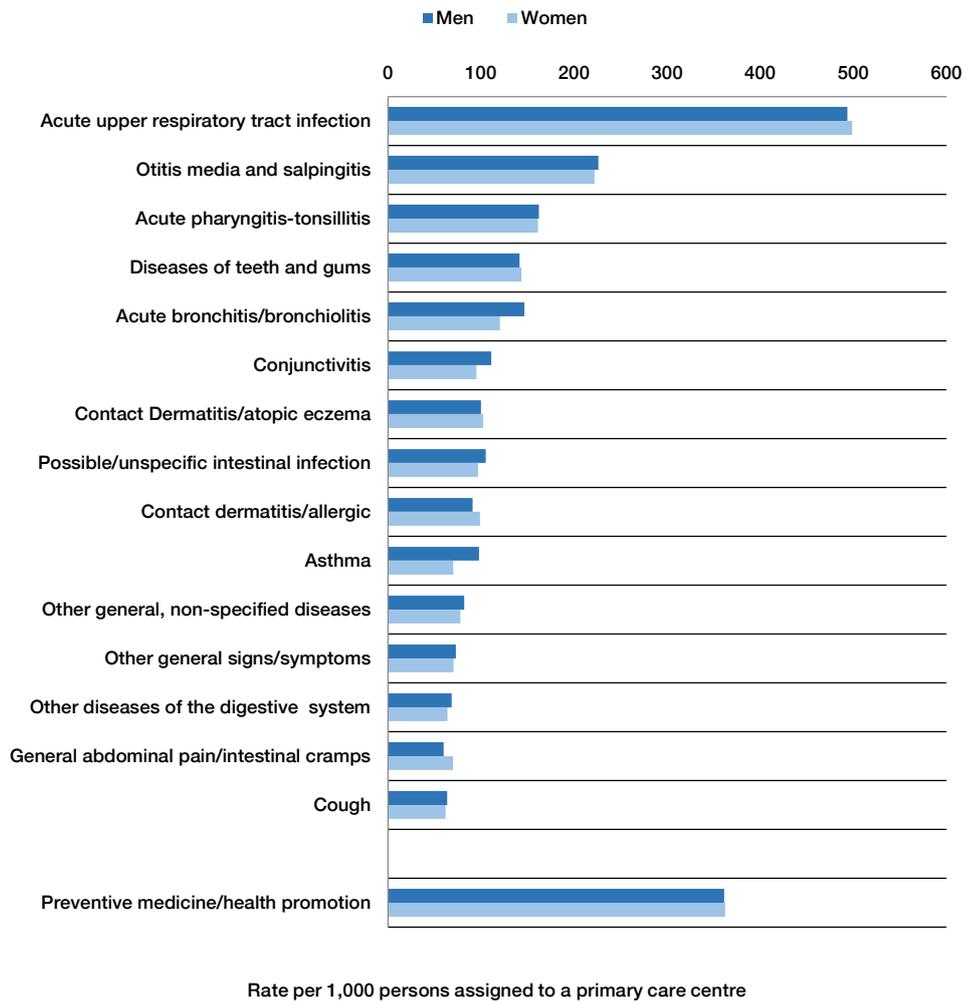
Table 4-22 Prevalence of health problems, rate per 1,000 persons assigned to an SNS primary care centre, location by system or apparatus, by age in men and women, 2012

Code	Health problems by apparatus or system	Men					
		age 0-14		age 15 and over		age 65 and over	
		Rate	Order	Rate	Order	Rate	Order
A	Problems of a general and unspecific nature	888.1	2	537.5	2	946.6	2
B	Blood, hematopoietic organs and immune system	48.9	13	45.9	14	102.6	14
D	Digestive System	660.1	3	426.8	4	621.9	6
F	Eyes and adnexa	227.0	7	173.7	9	346.1	8
H	Auditory apparatus	311.6	5	124.1	10	187.6	12
K	Circulatory system	52.9	12	413.4	5	1,140.5	1
L	Locomotive system	267.2	6	552.0	1	775.4	3
N	Nervous system	73.7	11	101.2	13	149.9	13
P	Psychological problems	107.3	10	281.9	8	332.2	9
R	Respiratory system	1,269.8	1	451.3	3	650.8	5
S	Skin and skin appendages	615.2	4	400.8	6	508.3	7
T	Endocrine system, metabolism and nutrition	108.1	9	361.8	7	749.3	4
U	Urinary system	47.1	14	109.6	11	276.8	11
W	Family planning, pregnancy, childbirth and puerperium	0.03	15	5.9	15	0.1	15
XY	Genital apparatus	121.7	8	103.9	12	283.3	10
Code	Health problems by apparatus or system	Women					
		age 0-14		age 15 and over		age 65 and over	
		Rate	Order	Rate	Order	Rate	Order
A	Problems of a general and unspecific nature	855.4	2	707.0	2	1,020.0	3
B	Blood, hematopoietic organs and immune system	37.1	14	81.9	15	111.5	14
D	Digestive System	671.8	3	499.5	5	635.9	5
F	Eyes and adnexa	222.0	7	229.7	10	424.2	9
H	Auditory apparatus	320.0	5	150.9	13	205.1	11
K	Circulatory system	49.5	13	487.2	6	1,167.7	2
L	Locomotive system	266.7	6	872.0	1	1,335.1	1
N	Nervous system	76.7	9	182.7	12	201.2	12
P	Psychological problems	65.5	12	379.7	8	461.6	8
R	Respiratory system	1,174.1	1	536.3	3	585.9	6
S	Skin and skin appendages	623.9	4	500.9	4	571.6	7
T	Endocrine system, metabolism and nutrition	121.5	8	453.2	7	840.4	4
U	Urinary system	74.3	10	197.6	11	339.8	10
W	Family planning, pregnancy, childbirth and puerperium	0.5	15	95.0	14	0.0	15
XY	Genital apparatus	65.6	11	269.4	9	148.1	13

Remarks: the health problems are grouped by apparatus and system according to the Primary Care Classification System (CIAP-2). The Order column refers to the prevalence of problems with that apparatus or system. The Clinical Primary Care Database contains coded and standardized clinical information extracted from a random sample of 2.7 million electronic health records. The almost total coverage of primary care in combination with the random nature of the sample means that the results can be considered an estimate of the type of health problems affecting the Spanish population.

Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database of the SNS (BDCAP-SNS).

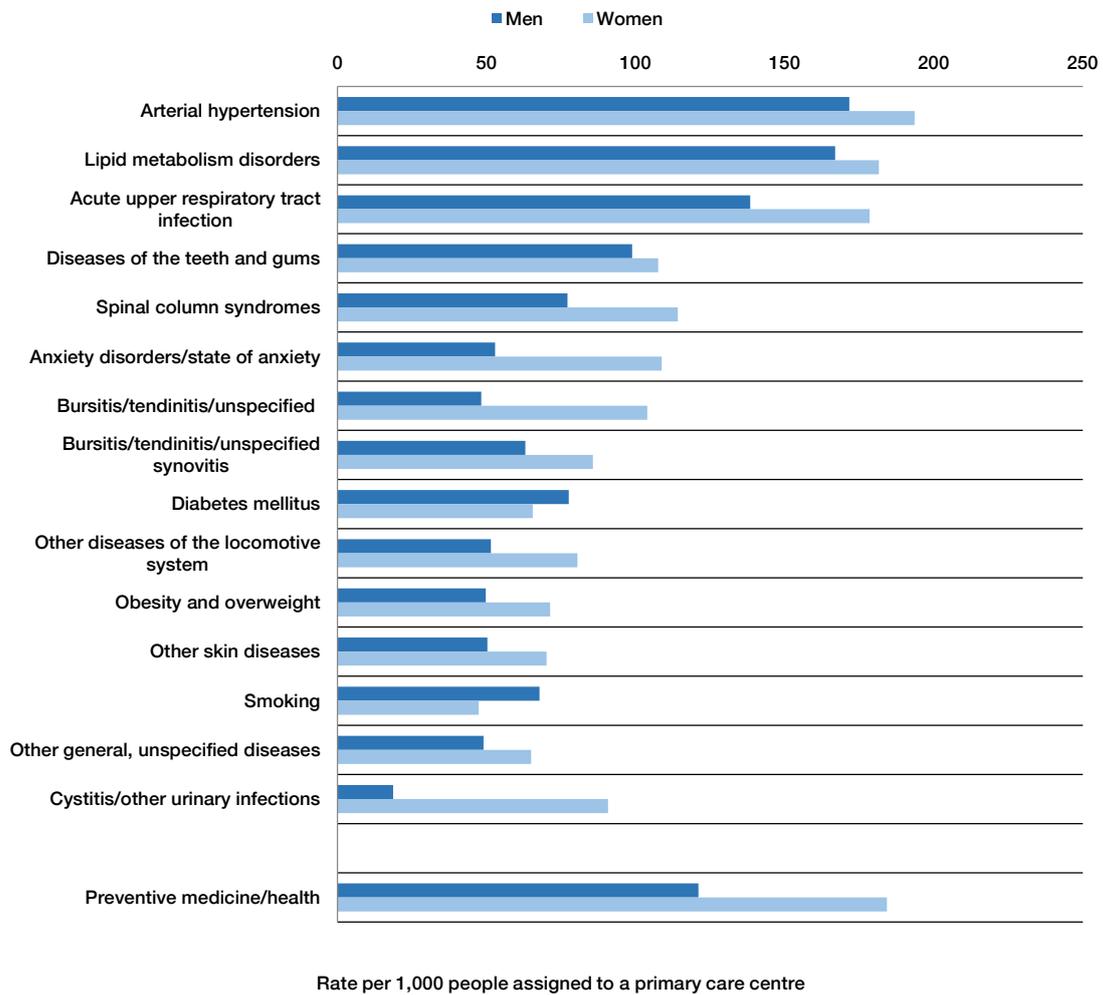
Graph 4-6 Most frequent health problem in population aged 0 to 14. Rate per 1,000 persons assigned to the primary care centres, 2012



Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database (BDCAP).

In terms of the characteristics of the problems, in the group aged 0 to 14, the problems that predominate are the acute and infectious ones. The following are more frequent in boys than in girls: asthma, acute bronchitis/bronchiolitis and conjunctivitis.

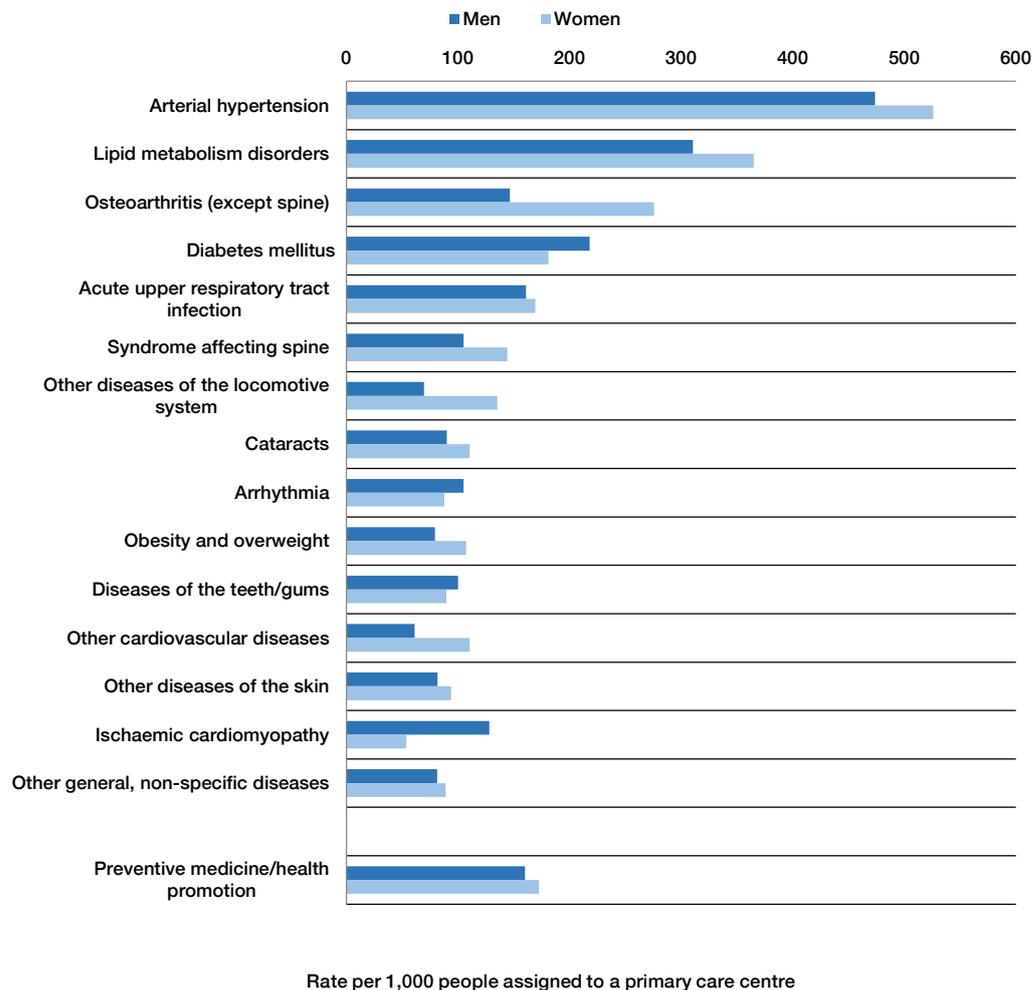
Graph 4-7 Most frequent health problem in population aged 15 and over. Rate per 1,000 persons assigned to the primary care centres, 2012



Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database (BDCAP).

The group aged 15 and over tends to be affected by both chronic processes (arterial hypertension, lipid disorders) and acute processes (acute upper respiratory tract infection). In general terms health problems are more frequent in women and, considering the most frequent problems, the greatest differences are found in cystitis, anxiety and osteoarthritis.

Graph 4-8 Most frequent health problem in population aged 65 and over. Rate per 1,000 persons assigned to a primary care centre, 2012



Source: Ministry of Health, Social Services and Equality. Clinical Primary Care Database (BDCAP).

In the group aged over 65 chronic illnesses predominate, such as: arterial hypertension, lipid disorders, osteoarthritis and diabetes mellitus.

4.2.2 Specialised Care

4.2.2.1 Utilization of hospitals and specialised ambulatory care⁶⁰

Each year approximately 4.0 million discharges occur in SNS hospitals, 76.5% of the 5.2 million occurring in the Spanish hospital sector as a whole.

⁶⁰ The data appearing in this report regarding specialised care in 2015 are estimates made at the time the report was being prepared. The figures are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of available beds.

In addition, in the SNS 78.7 million ambulatory visits with specialists take place (82.9% of the total number of this type of visit in Spain), 21.5 million urgent care visits are attended (77.6% of the sector total) and 3.6 million surgical interventions are performed, of which more than 1.1 million are Major Outpatient Surgery (MOS).

For every 10 surgical interventions performed in Spain 7 take place in one of the hospitals of the SNS. SNS hospitals also attend 8 out of 10 births, which means 329,216 deliveries (79.1% of the total), 21.6% of which are Caesarean deliveries. In the sector as a whole (public and private) 25.0% of deliveries are Caesarean.

Table 4-23 Medical, surgical and obstetrical activity in hospitals and specialty centres, by type of entity, 2014-2015

	2014		2015 (e)	
	SNS	Total	SNS	Total
Discharges (thousands)	4,026.9	5,264.9	4,043.9	5,284.0
Discharges / 1,000 pop.	86.7	113.3	87.1	113.8
Visits (thousands)	78,639.6	94,343.5	78,703.7	94,880.8
Visits / 1,000 pop.	1,692.9	2,031.0	1,695.4	2,043.8
Urgent care visits (thousands)	20,851.6	26,974.0	21,542.8	27,628.1
Urgent care visits / 1,000 pop.	448.9	580.7	464.1	595.1
Surgical acts (thousands)	3,561.2	4,997.3	3,557.5	5,010.7
Surgical acts / 1,000 pop.	76.7	107.6	76.6	107.9
Major Outpatient Surgery (MOS) (thousands)	1,167.6	1,574.1	1,177.2	1,583.8
Vaginal deliveries (number)	258,773	313,948	257,895	312,279
Caesarean deliveries (number)	72,750	106,703	71,210	104,114
Total births (number)	331,523	420,651	329,216	416,391
% Caesarean deliveries	21.9	25.4	21.6	25.0

Remarks: (e) these figures are estimates. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the available beds in the SNS. The total includes data from the public and private sector.

Source Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Table 4-24 Discharges for all hospitalisation causes per 1,000 population by autonomous community, 2014

	SNS hospitals	All hospitals
Andalucía	67.2	92.0
Aragón	105.0	126.5
Asturias	105.1	118.7
Baleares	76.9	147.5
Canarias	55.8	94.9
Cantabria	89.8	103.1
Castilla y León	99.6	117.7
Castilla-La Mancha	82.8	89.9
Cataluña	96.1	125.6
Comunidad Valenciana	89.4	111.2
Extremadura	99.2	112.9
Galicia	93.1	116.5
Madrid	81.3	118.9
Murcia	83.7	105.3
Navarra	99.9	123.3
País Vasco	125.5	153.8
La Rioja	95.6	110.6
Ceuta and Melilla	83.6	83.6
Spain	86.7	113.3

Remarks: the total includes the public and private sector.

SNS hospitals = public hospitals + hospitals with substitution agreement + hospitals in the public use network + Social Security collaborating mutuals.

Ceuta and Melilla have only SNS hospitals.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

In SNS hospitals, the highest hospital attendance is found in País Vasco, where there are 125.5 discharges per 1,000 population per year, doubling that found in Canarias (55.8 discharges per 1,000 population), which has the lowest figure. For the hospital sector as a whole (public and private hospitals), País Vasco also occupies first position, with 153.8 discharges per 1,000 population. Castilla-La Mancha shows the lowest figure, at 89.9 per 1,000 population. Ceuta and Melilla have 83.6 discharges per 1,000 population and have public hospitals only.

SNS hospitals perform 3.6 million surgical interventions, of which over 40% require hospitalisation.

Table 4-25 Average annual number of surgical procedures per 1,000 population by autonomous community, 2014

	SNS hospitals	All hospitals
Andalucía	60.7	96.4
Aragón	81.8	105.1
Asturias	66.7	86.8
Baleares	60.5	112.8
Canarias	39.9	77.9
Cantabria	56.9	68.8
Castilla y León	82.0	95.1
Castilla-La Mancha	62.8	74.4
Cataluña	99.2	132.4
Comunidad Valenciana	82.0	104.2
Extremadura	83.0	95.4
Galicia	74.9	101.8
Madrid	80.8	127.9
Murcia	61.4	97.1
Navarra	76.9	100.1
País Vasco	106.8	137.7
La Rioja	77.5	94.4
Ceuta and Melilla	53.0	53.0
Spain	76.7	107.6

Remarks: the total includes the public and private sector.

SNS hospitals = public hospitals + hospitals with substitution agreement + hospitals in the public use network + Social Security collaborating mutuals.

Ceuta and Melilla have SNS hospitals only.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

In SNS hospitals, the highest average number of surgical interventions is found in País Vasco, where there are 106.8 interventions per 1,000 population, almost triple the average in Canarias (39.9 interventions per 1,000 population), which has the lowest figure. For the hospital sector as a whole (public and private hospitals), País Vasco also occupies first position, with 137.7 interventions per 1,000 population, and Cantabria shows the lowest annual average, with 68.8 interventions per 1,000 population. Ceuta and Melilla present 53.0 interventions per 1,000 population and have only public hospitals.

4.2.2.2 Activity indicators

The average length of stay of patients admitted to SNS hospitals is 7.8 days and falling (it was 8.3 days in 2010).

Table 4-26 Care activity indicators by type of entity, 2014 and 2015

	2014		2015 (e)	
	SNS hospitals	All hospitals	SNS hospitals	All hospitals
Average stay (days)	7.8	7.4	7.8	7.3
Occupancy Index (%)	78.9	77.0	78.8	76.9
Rotation Index	36.8	38.2	36.8	38.2
Initial consultations, % of totals	32.3	34.9	32.2	34.8
Urgent care visits resulting in admission (%)	11.5	10.3	11.3	10.3
Emergency department pressure (%)	63.2	55.9	63.8	56.3

Remarks: (e) these figures are estimates. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the available beds in the SNS. The total includes data from public and private sector. SNS hospitals = public hospitals + hospitals with substitution agreement + hospitals in the public use network + Social Security collaborating mutuals.

Average stay (days) = Hospitalisations generated / discharge. Occupancy index = Hospitalisations generated x 100 / available beds x 365 (days). Rotation index = Patients discharged/available beds. Emergency Department pressure = admissions through Emergency Department / total admissions X100

Source Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

The rotation index⁶¹ has risen in recent years and is now 36.8; in 2010 it was 35.1.

The average length of stay has come to be considered an efficiency indicator linked to resolute clinical practice. A reduction in the average length of stay, along with an increase in the rotation index, suggests greater productivity in that hospital section, which may be related to the decrease observed recently in the number of available beds.

In SNS hospitals the average length of stay ranges from the 10.9 days of Cataluña to the 5.6 days of Ceuta and Melilla. If all hospitals are considered, both public and private, the autonomous community with the longest average stay is Canarias (9.9 days) while the shortest is in Comunidad Valenciana (5.6 days).

⁶¹ Number of patients who have occupied a bed during the year.

Table 4-27 Average stay (days) for all causes of hospitalisation, by autonomous community, 2014

	SNS hospitals	All hospitals
Andalucía	6.6	6.1
Aragón	8.0	8.1
Asturias	7.5	7.6
Baleares	7.9	5.9
Canarias	10.6	9.9
Cantabria	7.0	9.3
Castilla y León	7.1	7.6
Castilla-La Mancha	7.4	7.1
Cataluña	10.9	9.2
Comunidad Valenciana	6.2	5.6
Extremadura	8.2	7.9
Galicia	8.5	7.7
Madrid	7.2	7.0
Murcia	6.5	8.4
Navarra	6.2	7.7
País Vasco	6.3	6.3
La Rioja	9.3	8.4
Ceuta and Melilla	5.6	5.6
Spain	7.8	7.4

Remarks: The total includes data from the public and private sector. SNS hospitals = public hospitals + hospitals with substitution agreement + hospitals in the public use network + Social Security collaborating mutuals. Ceuta and Melilla have only SNS hospitals.

Source: Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

4.2.2.3 Surgery without overnight stay and less invasive procedures

Over one million surgical procedures are performed in ambulatory mode, without overnight stay, every year, which means the percentage of substitution is slightly more than 46.0%.

The expansion of less invasive surgical practices, which pose less risk of immediate post-surgical complications, and advances in anaesthetic techniques associated with faster recovery, have allowed surgery not requiring an overnight stay to increase over the last decade.

Cataract operations are an illustrative example of the types of surgery now performed predominantly in ambulatory mode. The progressive aging of the population has brought with it an increase in this surgical procedure but the safety and cost-effectiveness of this surgery as an ambulatory procedure have been even more important in this evolution, contributing a great deal to its growth.

In fact, 98.1% of all interventions of this type are performed in ambulatory mode, with no need to hospitalise the patients.

Table 4-28 Changes in cataract operations, total number and proportion of procedures performed with and without hospitalisation in the SNS, 2005-2014

	Total no. interventions	Interventions with hospitalisation	% interventions with hospitalisation	Interventions without hospitalisation	% interventions without hospitalisation
2005	226,199	21,534	9.5	204,665	90.5
2006	247,534	19,259	7.8	228,275	92.2
2007	252,059	16,285	6.5	235,774	93.5
2008	258,265	13,546	5.2	244,719	94.8
2009	272,810	11,716	4.3	261,094	95.7
2010	275,880	10,517	3.8	265,363	96.2
2011	280,184	8,582	3.1	271,602	96.9
2012	283,484	7,344	2.6	276,140	97.4
2013	306,968	6,753	2.2	300,215	97.8
2014	324,447	6,150	1.9	318,297	98.1

Source: Ministry of Health, Social Services and Equality. Discharge Register - Minimum Data Set (MDS) of acute care hospitals of the SNS.

Other frequent ambulatory surgery procedures, albeit with ambulatorization rates lower than that of cataract surgery, include inguinal hernia interventions and tonsillectomies: 53.1% of the operations to repair inguinal hernia (59% more than in 2005) and 31.4% of tonsillectomies (37% more than in 2005), respectively, were performed in ambulatory mode.

Table 4-29 Changes in inguinal hernia interventions and tonsillectomies, total number and proportion of procedures performed without hospitalisation in the SNS, 2005 and 2014

	2005		2014	
	Total no. interventions	Interventions without hospitalisation %	Total no. interventions	Interventions without hospitalisation %
Inguinal hernia	70,321	35.1	74,473	53.1
Tonsillectomy	18,950	22.8	25,306	31.4

Source: Ministry of Health, Social Services and Equality. Discharge Register - Minimum Data Set (MDS) of acute care hospitals of the SNS.

Surgical interventions involving less invasive procedures have also been increasing; this is the case of cholecystectomies and appendectomies. In 2014 four out of five gallbladder removals were performed by laparoscopy (50% more than in 2005) and, in lower proportion but still having quadrupled in frequency compared to 2005, 4 out of 10 appendectomies were performed using this technique in 2014.

Table 4-30 Trends in less invasive procedures. Frequency of cholecystectomies and appendectomies by laparoscopy. SNS, 2005 and 2014

	2005		2014	
	Total no. of interventions	% of all interventions	Total no. of interventions	% of all interventions
Cholecystectomy	50,213	65.8	62,385	79.6
Appendectomy	45,003	10.9	44,840	37.0

Source: Ministry of Health, Social Services and Equality. Discharge Register - Minimum Data Set (MDS) of acute care hospitals of the SNS.

4.2.2.4 Morbidity attended

Diseases of the circulatory system are the main cause of hospitalisation in Spain's acute care hospitals (13.1%). They are followed by diseases of the digestive system (12.3%) and those of the respiratory system (11.4%). In men, diseases of the circulatory system cause 15.6% of the hospitalisations; these diseases are followed by those of the digestive system, 14.5%, and those of the respiratory system, 13.8%. Tumours represent 10.9%. In women, the most frequent reason for hospitalisation is childbirth, puerperium and complications during pregnancy, with 20.2% of all hospital discharges in women. After these causes come diseases of the circulatory system, with 10.9%, of the digestive system and of the respiratory system, with 10.4% and 9.2% respectively; tumours represent 8.8% of the discharges in women.

Hospital admissions due to mental health disorders are more frequent in men (2.2%) than in women (1.9%).

The Register of Specialised Care Activity⁶² (RAE-CMBD), which contains the Minimum Data Set (MDS) information on discharges from acute care hospitals, is the main database for learning about the morbidity attended in acute care hospitals. In 2014 it includes over 92% of the discharges registered in Spain's acute care hospitals, which in absolute numbers means it contains information on a total of 4.4 million discharges (specifically, 4,375,732) of which 84.1% are SNS hospitals⁶³ and the remaining 15.9% are private centres.

Over the past fifteen years the main causes of hospitalisation in men have varied only slightly, with diseases of the circulatory system giving rise to the highest number of hospitalisations. These are followed by diseases of the digestive system and of the respiratory system. All of them have experienced a decline, with the drop being the most significant in diseases of the circulatory system (5.2% less), followed by diseases of the respiratory system (2.9% less) and diseases of the digestive system (1.5% less). On the other hand, neoplasias have seen an increase of 9.3% during this period. The proportion of discharges due to mental disorders has fallen by 7.2% in the 2000-2014 period.

The main causes of hospitalisation in women have not changed over the past fifteen years. The most frequent reason for stays at the hospital are episodes related to pregnancy, childbirth and puerperium, followed by diseases of the circulatory system and diseases of the digestive system. Episodes related to pregnancy, childbirth and puerperium are the only group of causes of admission that shows a clear drop in the past fifteen years (17.9%), in coherence with the drop in the number of births during this period. Diseases of the respiratory system show a 19.0% increase, while neoplasias have increased by 8.6% and diseases of the digestive system by 8.0%. The figure for mental health disorders has increased by 11.8%.

⁶²The Register of Specialised Care Activity (Royal Decree 69/2015) is an improved version of the Minimum Data Set on Hospital Discharges (CMBD) that was created in 1987. It will progressively be extended to other care modes and to the private sector and it replaces ICD-9-CM, the clinical modification of the International Classification of Diseases, by ICD-10-ES, which is of greater scope and specificity.

⁶³ These include public hospitals, hospitals in the public use network and hospitals with substitution agreements.

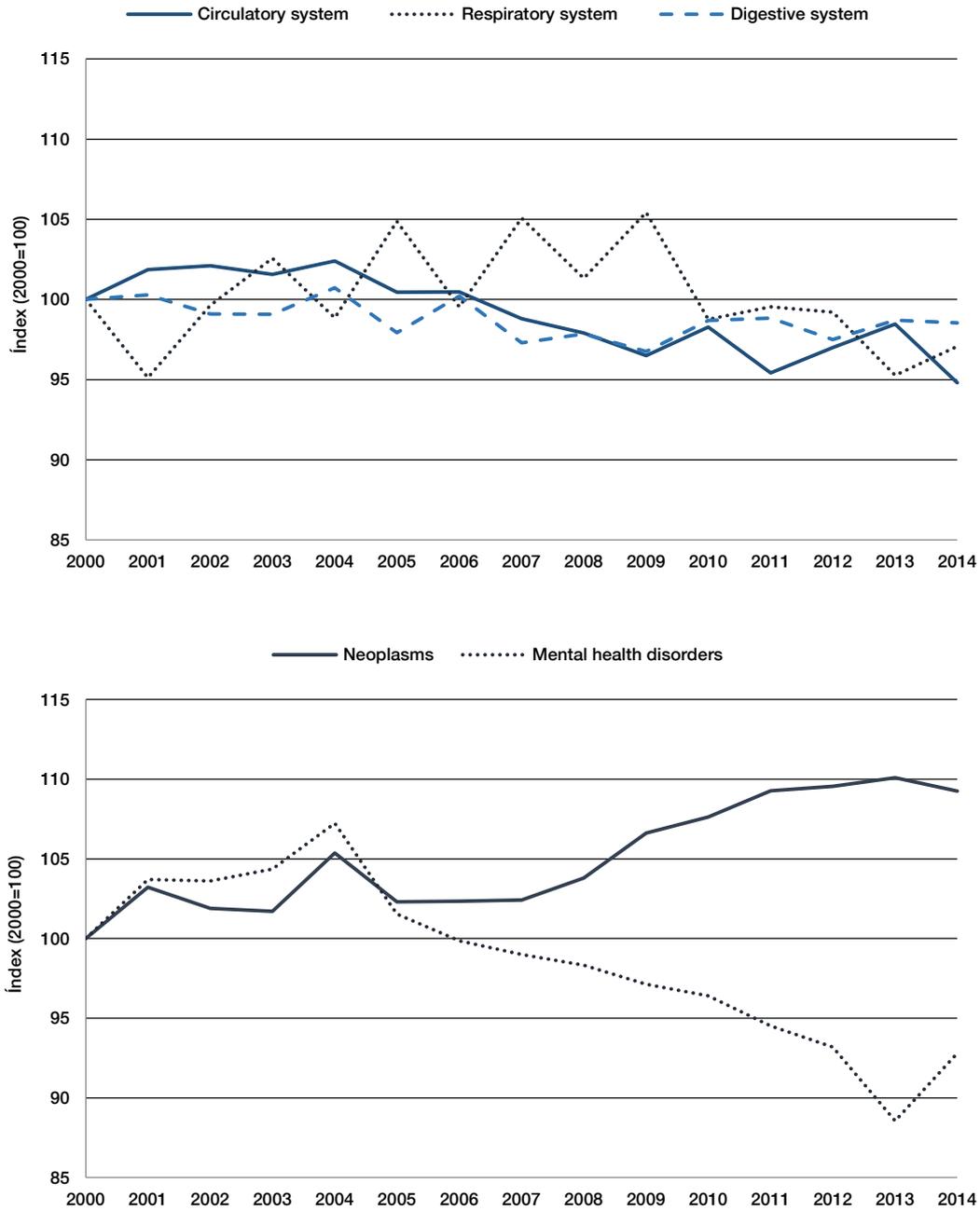
Table 4-31 Acute care hospitals. Number of discharges, distribution and rate per 1,000 inhabitants, by diagnostic groups and by sex. Spain, 2014

	Both sexes			Men			Women		
	Number	%	Rate	Number	%	Rate	Number	%	Rate
Total	4,375,732	100.0	94.2	2,067,891	100.0	90.5	2,307,343	100.0	97.7
Certain infectious and parasitic diseases	95,577	2.2	2.1	53,188	2.6	2.3	42,379	1.8	1.8
Neoplasias	428,923	9.8	9.2	226,399	10.9	9.9	202,472	8.8	8.6
Diseases of the blood and hematopoietic organs and certain disorders affecting the immunity mechanism	40,727	0.9	0.9	20,033	1.0	0.9	20,690	0.9	0.9
Endocrine, nutritional and metabolic diseases	79,718	1.8	1.7	31,906	1.5	1.4	47,808	2.1	2.0
Mental health disorders	88,336	2.0	1.9	45,348	2.2	2.0	42,972	1.9	1.8
Inflammatory nervous system disorders	95,736	2.2	2.1	48,453	2.3	2.1	47,274	2.0	2.0
Diseases of the eye and its adnexa	28,080	0.6	0.6	14,584	0.7	0.6	13,491	0.6	0.6
Diseases of the ear and the mastoid process	21,692	0.5	0.5	10,524	0.5	0.5	11,164	0.5	0.5
Diseases of the circulatory system	575,147	13.1	12.4	323,080	15.6	14.1	252,017	10.9	10.7
Diseases of the respiratory system	497,767	11.4	10.7	284,835	13.8	12.5	212,910	9.2	9.0
Diseases of the digestive system	539,167	12.3	11.6	299,860	14.5	13.1	239,259	10.4	10.1
Diseases of the skin and subcutaneous tissue	43,263	1.0	0.9	23,555	1.1	1.0	19,706	0.9	0.8
Diseases of the osteomuscular system and conjunctive tissue	311,980	7.1	6.7	148,599	7.2	6.5	163,327	7.1	6.9
Diseases of the genitourinary system	284,488	6.5	6.1	131,985	6.4	5.8	152,431	6.6	6.5
Complications during pregnancy, childbirth and puerperium	465,099	10.6	10.0	0	0.0	0.0	465,065	20.2	19.7
Certain conditions originating in the perinatal period	62,689	1.4	1.3	34,561	1.7	1.5	28,118	1.2	1.2
Congenital anomalies	36,250	0.8	0.8	20,549	1.0	0.9	15,694	0.7	0.7
Abnormal symptoms, signs and findings, either clinical or detected in the laboratory, not classified elsewhere	192,115	4.4	4.1	103,665	5.0	4.5	88,422	3.8	3.7
Injuries and poisonings	379,812	8.7	8.2	194,869	9.4	8.5	184,917	8.0	7.8
Factors that influence state of health and contact with health services	109,166	2.5	2.4	51,898	2.5	2.3	57,227	2.5	2.4

Remarks: the total number of discharges for both sexes is higher than the disaggregated figures for men and women because it includes discharges in which the sex variable is unknown. Diagnoses grouped according to the ICD-10-ISHMT, the correspondence of ICD-9-CM coded cases to a list of selected diagnoses adopted by the OECD/Eurostat/WHO for tabulation of hospital morbidity (ISHMT: International Shortlist for Hospital Morbidity Tabulation).

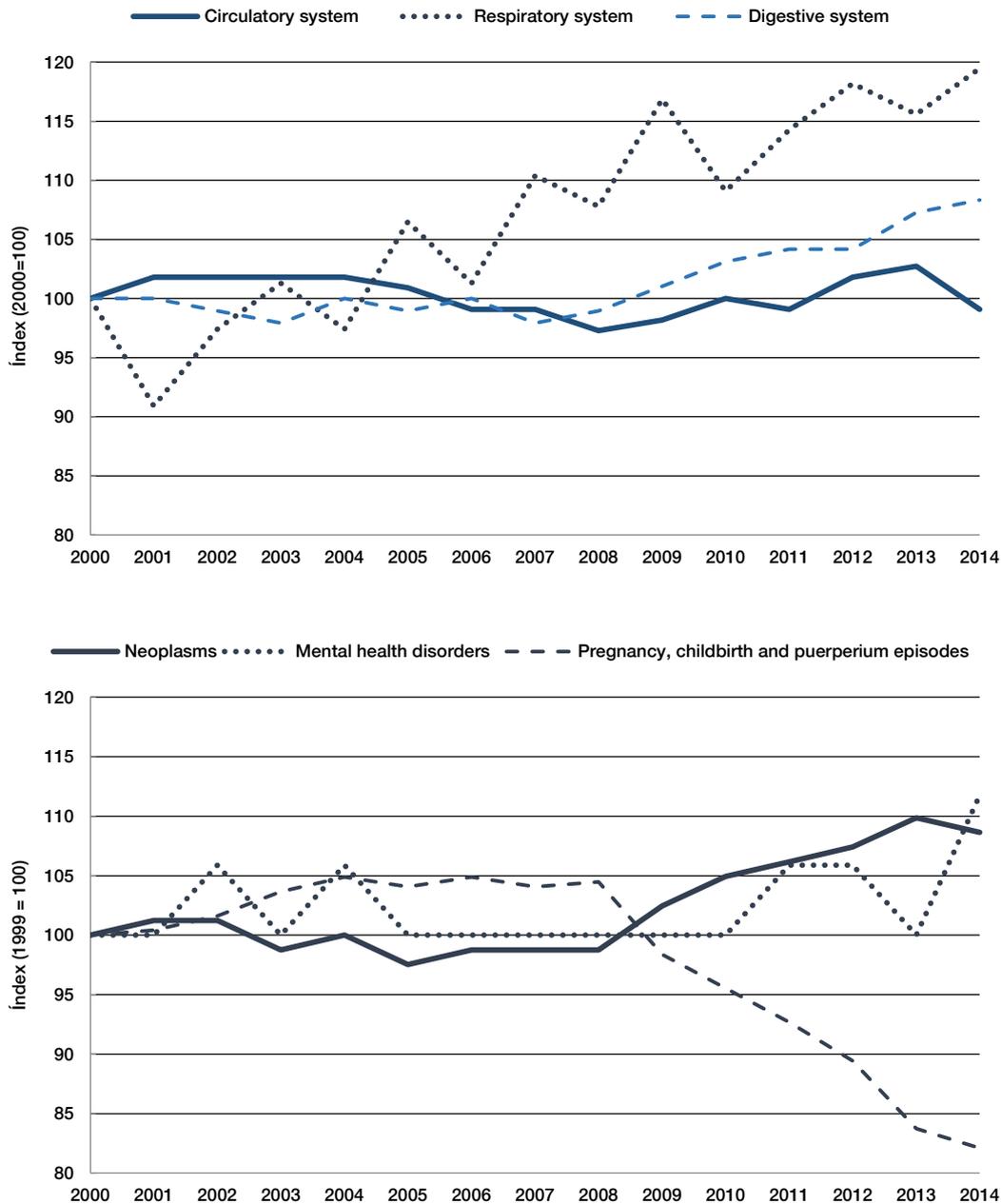
Source: Ministry of Health, Social Services and Equality. Register of Specialised Care Activity.

Graph 4-9 Changes in the morbidity attended in acute care hospitals by most frequent diagnosis groups in men, 2000-2014



Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation. Register of Specialised Care Activity. RAE-CMBD.

Graph 4-10 Changes in morbidity attended in acute care hospitals by most frequent diagnosis groups in women, 2000-2014



Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation. Register of Specialised Care Activity. RAE-CMBD.

The groups of diseases responsible for the most admissions vary according to whether the entity is public or private. In public acute care hospitals the main causes of hospitalisation are diseases of the circulatory system (13.9%), digestive system (12.2%) and respiratory system (11.9%). The section related to care during pregnancy and childbirth has lost significance and now occupies fourth position (10.7%), although as an individual process, *vaginal delivery without complications* continues to be the most frequent.

Table 4-32 Acute care hospitals. Number of discharges and distribution by diagnosis groups, by type of entity, 2014

	All hospitals		SNS hospitals		Private hospitals	
	number	%	number	%	number	%
Total	4,375,732	100.0	3,681,787	100.0	693,945	100.0
Diseases of the circulatory system	575,147	13.1	511,222	13.9	63,925	9.2
Diseases of the digestive system	539,167	12.3	447,645	12.2	91,522	13.2
Diseases of the respiratory system	497,767	11.4	437,679	11.9	60,088	8.7
Childbirth, puerperium and complications during pregnancy	465,099	10.6	392,676	10.7	72,423	10.4
Neoplasias	428,923	9.8	376,253	10.2	52,670	7.6
Injuries and poisonings	379,812	8.7	328,338	8.9	51,474	7.4
Diseases of the genitourinary system	311,980	7.1	226,820	6.2	57,668	8.3
Diseases of the osteomuscular system and conjunctive tissue	284,488	6.5	210,208	5.7	101,772	14.7
Abnormal symptoms, signs and findings, either clinical or detected in the laboratory, not classified elsewhere	192,115	4.4	156,790	4.3	35,325	5.1
Certain infectious and parasitic diseases	109,166	2.5	87,389	2.4	8,188	1.2
Factors that influence state of health and contact with the health services	95,736	2.2	82,320	2.2	26,846	3.9
Inflammatory nervous system disorders	95,577	2.2	81,366	2.2	14,370	2.1
Mental health disorders	88,336	2.0	80,829	2.2	7,507	1.1
Endocrine, nutritional and metabolic diseases	79,718	1.8	66,387	1.8	13,331	1.9
Certain diseases originating in the perinatal period	62,689	1.4	54,958	1.5	7,731	1.1
Diseases of the blood and hematopoietic organs and certain disorders affecting the immunity mechanism	43,263	1.0	36,082	1.0	4,645	0.7
Diseases of the skin and subcutaneous tissue	40,727	0.9	34,380	0.9	8,883	1.3
Congenital anomalies	36,250	0.8	30,169	0.8	6,081	0.9
Diseases of the eye and its adnexa	28,080	0.6	22,918	0.6	5,162	0.7
Diseases of the ear and the mastoid process	21,692	0.5	17,358	0.5	4,334	0.6

Remarks: data ordered by most weight to least weight among all discharges in all hospitals

Source: Ministry of Health, Social Services and Equality. Register of Specialised Care Activity.

In private hospitals the most frequent admissions are those caused by diseases of the osteomuscular system and connective tissue (14.7%) followed by the digestive system (13.2%) and, in third place, pregnancy and childbirth (10.4%). By individual processes, *vaginal delivery without complications* is, like in public hospitals, the most frequently attended process.

4.3 Urgent care

4.3.1 Urgent care activity at primary care health centres and at the patient's home

Outside of hospitals, the SNS has two organisational spheres for responding to the population's urgent care demands: the care coordinated through the telephone hotlines 112/061 by the Urgent Care and Emergency Services and the care provided directly at the primary care level.

Urgent care at the primary care level is provided, on the one hand, at the 3,039 Primary Care Centres and 10,055 Local Primary Care Centres by the professionals comprising the Primary Care Teams during their usual hours, combining this activity with their regular work, and on the other hand, as a non-habitual activity at the 1,977 existing extra-hospital urgent care sites, which can be organised in two ways:

- Expanded opening hours at the Primary Care Centres. This mode is more common in rural settings. This care is provided by members of the usual Primary Care Teams who rotate to cover the shifts and are at times complemented by professionals hired specifically for this purpose.
- Specific urgent care services, independent of the Primary Care Teams, with teams of professionals dedicated exclusively to this care. This mode is more common in urban settings.

Besides providing care at these centres, the professionals also make house calls.

At the primary care level (in a health care centre or at the patient's home) the SNS attends a total of 28.1 million urgent care demands, which is an average of 0.6 urgent care visits per person and year.

Table 4-33 Urgent care activity in SNS primary care, 2013-2015

	Number of visits	Urgent primary care visits per person and year
2013	25,531,865	0.56
2014	26,576,946	0.58
2015	28,142,613	0.61

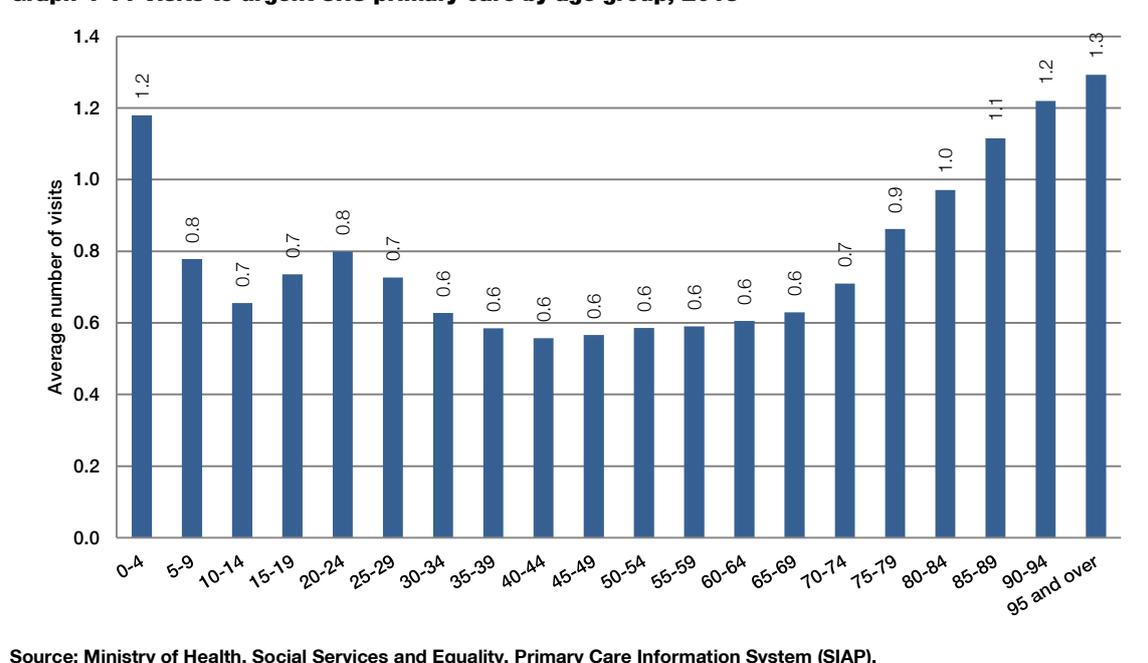
Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

Table 4-34 Urgent care activity in SNS primary care by autonomous community, 2015

	Number of visits	Urgent primary care visits per person and year
Andalucía	6,512,799	0.8
Aragón	917,200	0.7
Asturias	794,258	0.8
Baleares	685,707	0.6
Canarias	1,500,139	0.8
Cantabria	494,033	0.9
Castilla y León	1,978,071	0.8
Castilla-La Mancha	2,835,582	1.5
Cataluña	3,054,322	0.4
Comunidad Valenciana	2,826,244	0.6
Extremadura	1,505,324	1.4
Galicia	1,443,867	0.5
Madrid	1,184,385	0.2
Murcia	779,991	0.6
Navarra	408,081	0.7
País Vasco	939,895	0.4
La Rioja	216,816	0.7
Ceuta and Melilla	65,899	0.4
SNS	28,142,613	0.6

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

With regard to sex, the average number of visits is somewhat higher in women than in men. By age group, the group aged 0 to 4 and the very old (95 years and over) are the ones receiving the most extra-hospital urgent care; an average of about 1 visit per person and year.

Graph 4-11 Visits to urgent SNS primary care by age group, 2015

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP).

Regarding where the care is provided, 95% takes place in health centres.

As for house calls, persons aged over 65 are the main recipients, with 74% of this type of care being provided to them.

4.3.2 Urgent Care and Emergency Services 112/061

Every year the urgent care and emergency coordination centres receive 7.1 million health care demands (health-related requests made by the population through the telephone hotlines 112/061). This equals 156 requests per 1,000 population per year.

Of them, 86.9% (6.2 million) are health incidents, that is, they required the assessment, advice and/or direct intervention of health professionals.

The 6.2 million health care incidents led to 4.2 million ambulance mobilizations, with an average of 67 ambulances for every 100 incidents (it is important to keep in mind that a single incident may give rise to the mobilization of more than one ambulance, depending on the type of emergency it is).

Table 4-35 Rates of health care demand, incidents and mobilized ambulances by autonomous community, 2015

	Demands per 1,000 pop.	Incidents per 1,000 pop.	Ambulances / 100 health care incidents
Andalucía	151	126	94
Aragón	137	108	61
Asturias	301	248	31
Baleares	136	115	71
Canarias	151	143	83
Cantabria	144	129	64
Castilla y León	121	115	82
Castilla-La Mancha	80	80	94
Cataluña	213	184	62
Comunidad Valenciana	104	97	65
Extremadura	57	50	79
Galicia	218	161	66
Madrid	132	126	45
Murcia	194	183	76
Navarra	137	137	50
País Vasco	169	143	59
La Rioja	195	169	51
Ceuta and Melilla	218	141	76
SNS	156	136	67

Source: Ministry of Health, Social Services and Equality. Primary Care Information System (SIAP). Statistical report on Urgent Care and Emergency Services 112/061.

4.3.3 Urgent care services at hospitals

The number of urgent care episodes attended at the hospital level is 27.6 million and public hospitals attend nearly 8 out of 10 of them (21.5 million). The pressure of emergency departments in SNS hospitals is around 64%, as 11.3% of the urgent care case result in hospitalisation. For the health care system as a whole (public sector + private sector) the figures regarding the pressure of emergency departments and the percentage of admissions are 56.3% and 10.3% respectively.

Table 4-36 Activity indicators in urgent care services at hospitals by type of entity, 2013 - 2015

	2013		2014		2015 (e)	
	SNS hospitals	All hospitals	SNS hospitals	All hospitals	SNS hospitals	All hospitals
Urgent care visits (thousands)	20,516.0	26,297.7	20,851.7	26,974.0	21,542.8	27,628.2
Urgent care visits /1,000 pop.	440.4	564.4	448.9	580.7	464.1	595.1
Urgent care patients hospitalised %	11.6	10.5	11.5	10.3	11.3	10.3
Emergency Department pressure (%)	63.3	56.3	63.2	55.9	63.8	56.3

Remarks: (e) these figures are estimates. They are based on data provided to the Specialised Care Information System (SIAE) by 50% of the hospitals, with coverage of 60% of the available beds in the SNS. The total includes data from public and private sector. SNS hospitals = public hospitals + hospitals with substitution agreement + hospitals in the public use network + Social Security collaborating mutuals. Emergency Department pressure = admissions through Emergency Department / total admissions X100.
Source Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

Table 4-37 Care activity in urgent care services at hospitals by autonomous community, 2014

	Urgent care visits attended	Visits per 1,000 pop.	% urgent care visits attended at SNS hospitals
Andalucía	5,627,794	670.6	74.4
Aragón	729,291	549.0	81.2
Asturias	494,114	468.8	87.8
Baleares	787,664	703.0	57.0
Canarias	1,026,365	484.3	58.2
Cantabria	348,914	595.1	90.4
Castilla y León	1,160,203	466.8	83.4
Castilla-La Mancha	975,892	472.0	87.6
Cataluña	4,542,461	614.1	80.2
Comunidad Valenciana	2,746,752	555.2	79.2
Extremadura	530,855	485.4	87.8
Galicia	1,311,597	478.8	79.4
Madrid	4,094,812	642.4	72.0
Murcia	942,918	644.6	83.0
Navarra	269,899	424.3	89.6
País Vasco	1,123,437	518.9	82.1
La Rioja	138,752	441.7	81.7
Ceuta and Melilla	122,274	725.2	100.0
Total	26,973,944	580.7	77.3

Source Ministry of Health, Social Services and Equality. Specialised Care Information System (SIAE).

4.4 Activity at reference centres, services and units

The designation of certain health care facilities as SNS Reference Centres, Services and Units (CSUR) began in 2009 with the aim of ensuring equitable access to high-quality, safe and efficient health care by patients with pathologies requiring a high level of specialisation. The annual monitoring of the CSUR is based on two sources of information:

- The Health Cohesion Fund Information System (SIFCO), which makes it possible to analyse the monitoring of patient flows and of motives for transfers to a CSUR, while also contributing to the identification of pathologies or procedures for which the designation of a CSUR in the SNS is necessary. The Health Cohesion Fund uses, as a criterion for compensation, the activity of the preceding year; the care activity referred to a CSUR in 2016 will be the basis for calculating compensation by this fund in 2017.
- The CSUR Monitoring Information System (SISCSUR), which is based on the Patient Register that each CSUR must keep updated and that allows for the yearly monitoring of the activity-related designation criteria as well as procedure and outcome indicators, with a view to improving standards and detecting deviations in the functioning of the CSURs. The standard used for this is the activity-related designation criteria agreed upon by the CISNS.

Table 4-38 Activity referred to CSURs from other autonomous communities, by year in which the activity took place, 2009-2015

	2009	2010	2011	2012	2013	2014	2015	Total 2009- 2015
No. of designated CSUR	68	90	132	132	177	186	219	219
No. of care episodes transferred to CSURs	86	330	136	2,403	2,817	3,805	4,798	14,375

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of the Basic Basket of Services and Cohesion Fund.

Table 4-39 Annual cost (millions of Euros) of compensation by the Health Cohesion Fund by year of compensation, 2009-2016

	2009	2010	2011	2012	2013	2014	2015	2016	Total 2009- 2016
Cost in Euros (millions)	-	2.6	5.6	3.8	33.4	40.2	45.2	51.6	182.4

Remarks: the Health Cohesion Fund uses the activity of the preceding year as the criterion for compensation. The activity that is transferred to a CSUR in 2015 will be used for compensation by this fund in 2016.

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of the Basic Basket of Services and Cohesion Fund.

Table 4-40 Activity of the reference centres, services and units

Pathologies	Period with designated CSUR	CSUR	Procedures	Total activity in this period	Annual average per CSUR	Annual standard
Critical burns	2009-2015	7	Hospitalisations	9,336	191	100
			Surgical interventions due to acute burns	12,786	261	70
Reconstruction of outer ear	2009-2015	2	Complete reconstruction	117	12	10
			Partial reconstruction	631	63	50
Congenital glaucoma and childhood glaucoma	2009-2015	2	Interventions in patients up to age 14	779	56	10
			Interventions in other types of complex secondary glaucomas in patients up to age 14	311	22	10
Congenital alterations in ocular development	2009-2015	1	Eyelid surgery in patients up to age 14	171	24	50
			Enucleations and reconstructions in orbital cavity, patients up to age 14	70	10	30
Extraocular tumours in childhood	2009-2015	3	New patients up to age 14 with orbital rhabdomyosarcoma	24	1	1
Interocular tumours in childhood	2009-2015	4	New patients up to age 14	336	12	6
Intraocular tumours in adults	2009-2015	3	New patients aged over 14	2,195	105	25
			Ophthalmic brachytherapy, patients aged over 14	485	23	10
Orbital decompression in thyroid-associated ophthalmopathy	2009-2015	2	Orbital decompressions	364	36	20
Orbital tumours	2009-2015	4	Surgery on orbital tumours	522	19	15
Advanced retinopathy of prematurity	2009-2015	1	Vitrectomies in patients up to age 14	175	25	40
Ocular surface reconstruction, complex. Keratoprosthesis	2009-2015	10	Eye reconstructions through transplant of cornea, limbus, amniotic membrane and keratoprosthesis	5,480	81	50
Total skin electron irradiation in mycosis fungoides	2011-2015	1	Total skin electron irradiation	51	10	3
Treatment of germinal tumours with intensive chemotherapy	2009-2015	1	New patients evaluated by multidisciplinary team for therapeutic decision	61	9	5
Kidney transplant in children	2009-2015	6	Kidney transplant in patients up to age 14	290	8	5
Liver transplant in children	2009-2015	4	Liver transplant in patients up to age 14	337	12	8
Live donor liver transplant, adults	2009-2015	2	Live donor liver transplants	42	3	6
Lung transplant, adults and children	2009-2015	7	Lung transplants	1,626	38	15
Cardiopulmonary transplant, adults	2009-2015	2	Cardiopulmonary transplant in patients aged over 14	16	1	-
Heart transplant, children	2009-2015	4	Heart transplants in patients up to age 14	80	4	-

Pancreas transplant	2009-2015	8	Pancreas transplants	461	10	6
Bowel transplants, children and adults	2009-2015	2	Bowel transplants per year	59	4	-
Penetrating keratoplasty, children	2009-2015	2	Penetrating keratoplasty in patients up to age 14	102	7	5
Allogeneic hematopoietic stem cell transplants, children	2010-2015	9	Allogeneic hematopoietic stem cell transplants in patients up to age 14	682	13	3
			Hematopoietic stem cell transplants in adults and children	1,464	34	10
Paired kidney exchange	2011-2015	11	Live donor kidney transplants per year	989	21	5
Pelvic osteotomy in hip dysplasia, adults	2010-2015	2	Pelvic osteotomy in hip dysplasia in patients aged over 14	187	16	15
Treatment of resistant osteoarticular infections	2010-2015	5	Complex surgeries in patients with resistant osteoarticular infections	4,849	162	72
Paediatric orthopaedics	2010-2015	7	Complex orthopaedic procedures in patients up to age 14	7,409	190	30
			Simple orthopaedic procedures in patients up to age 14	11,101	285	100
Replants, including catastrophic hand injury	2010-2015	4	Alerts	792	47	40
			Replants and/or revascularization	450	26	15
			Microsurgery procedures	1,650	97	30
Comprehensive care for neonates with congenital heart disease and children with complex congenital heart disease	2001-2015	6	Procedures in patients up to age 18	11,425	457	150
			Procedures in neonates (≤ 30 days)	2,054	82	30
Comprehensive care for adults with congenital heart disease	2001-2015	6	Procedures in patients aged over 14	2,359	98	40
			Cardiac surgery interventions	13,671	570	450
Complex repair surgery of the mitral valve	2001-2015	5	Repair of the mitral valve	1,149	50	45
			Complex repair of the mitral valve	565	25	20
			Cardiac surgery interventions	14,943	650	450
Left ventricle repair surgery	2013-2015	2	Left ventricular remodelling procedures	36	6	10
			Cardiac surgery interventions	3,525	588	450
			Repair of the mitral valve	251	42	20
			Coronary surgery interventions	1,249	208	150
Familial cardiomyopathies (including hypertrophic cardiomyopathy)	2011-2015	8	New patients diagnosed with familial cardiomyopathies	4,505	129	75
			Evaluation of family members	10,617	303	150
Brachial plexus surgery	2013-2015	5	Brachial plexus surgeries	584	39	10
			Peripheral nerve surgery	1,716	114	40
Refractory epilepsy	2011-2015	8	Surgical treatment of refractory epilepsy	1,132	37	15
Surgery for movement disorders	2013-2015	6	Surgical interventions aimed at deep brain stimulation and/or ablation in	1,050	58	25

			patients with movement disorders			
Brain neuromodulation for refractory neuropathic pain	2011-2015	2	Surgical brain neuromodulation procedure in patients with refractory neuropathic pain	86	9	5
Hereditary ataxias and paraplegias	2011-2015	7	New patients with hereditary ataxias and paraplegias	1,130	42	30
			Patients with hereditary ataxias and paraplegias being monitored	5,630	209	100
Multiple sclerosis	2013-2015	12	Patients with multiple sclerosis	60,586	1,782	500
Care for patients with complex spinal cord injuries	2013-2015	2	Hospitalised patients	1,249	208	100
			Hospitalised patients up to age 18	86	14	5
			Hospitalised tetraplegic patients	505	84	30
			Hospitalised tetraplegic patients requiring prolonged mechanical ventilatory support	131	22	10
			Patients in everyday life re-education programme	1,020	170	40
			Patients in home adaptation programme	956	159	40
			Patients who use a wheelchair equipped with portable respirator	46	8	5
			Patients with prolonged mechanical ventilatory support who no longer have a respirator	68	11	5
			Urodynamic studies	6,536	1,089	100
			Surgical interventions in patients with neurogenic bladder complications	300	50	30
			Patients in robotized assisted-walking systems	273	46	40
			Kinematic and/or kinetic studies of walking	202	34	15
			Analytical studies of pressure distribution at user-cushion interface	649	108	35
			Patients in pain treatment programme	451	75	20
			Devices for continuous intrathecal drug delivery	59	10	4
			Surgical intervention for the treatment of pressure ulcers	490	82	20
			Patients seen for assessment or treatment of voice and swallowing alterations	246	41	20
			Orthopaedic surgery interventions	331	55	20
			Patients receiving psychological and/or psychiatric care	1,616	269	100
			Patients in psycho-sexual rehabilitation programme	305	51	20
			Patients seen for erectile dysfunction, ejaculatory dysfunction or semen evaluation	635	106	20
Complex paediatric neurosurgery	2013-2015	5	Complex paediatric neurosurgical procedures in patients up to age 14	987	66	15
			Complex paediatric neurosurgical	2,391	159	150

			procedures in patients up to age 14			
			Surgeries for craniosynostosis, except when due to syndrome	319	21	15
			Surgeries for brain tumours, not complex	175	12	15
			Surgeries for cerebrospinal fluid pathologies	1,081	72	20
			Spinal procedures	160	11	15
Care for patients with spinal vascular pathology	2013-2015	4	Selective spinal catheterizations	111	11	5
			Intramedullary surgical procedures for patients with spinal vascular pathology	23	2	5

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of the Basic Basket of Services and the Cohesion Fund.

4.5 Organ donation and transplants

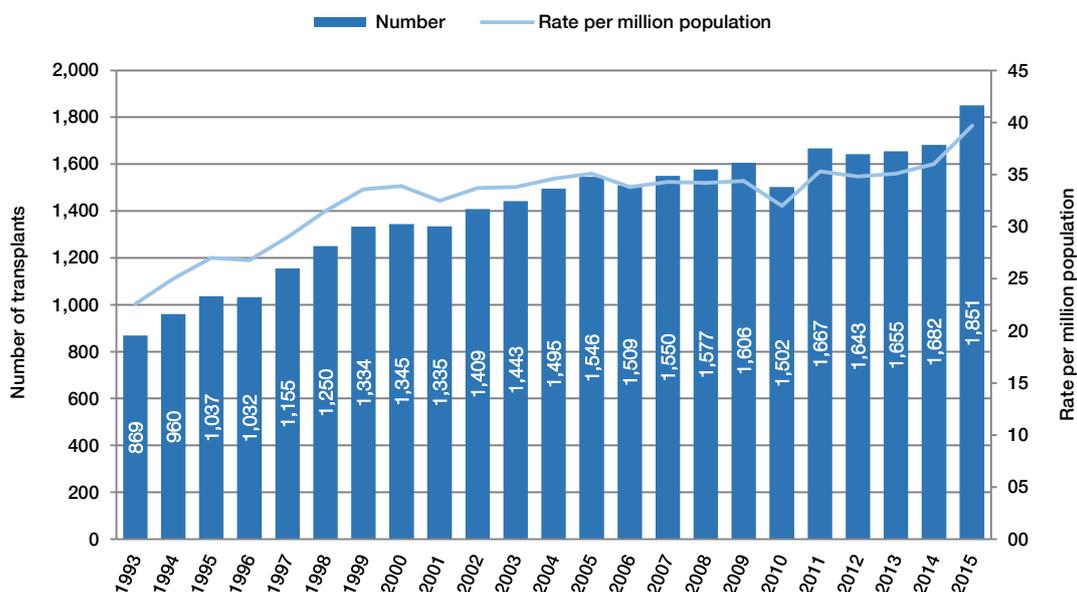
4.5.1 Transplantation of solid organs

The donor rate is 39.7⁶⁴ donors per million population, which means, in absolute values, a total of 1,851 donors. The average age of the donors is 60. A reflection of the upward trend observed in recent years, the group of donors over the age of 45 has risen from 59.5% in the year 2000 to 84.2% in 2015. Distribution by sex remains the same as in previous years, approximately 59% are men and 41% are women.

The donor description has also changed in terms of the most common cause of death: in 1992 cerebrovascular accidents accounted for 39.0% of the deaths but are now 65.1%; donors who died as a result of traumatic brain injury caused by a traffic accident now represent just 4.2% of the donors, whereas in 1992 these cases accounted for 43.0%.

⁶⁴ The population rates are calculated based on population figures appearing in the municipal population records as of 1 January 2015 (Royal Decree 1079/2015, of 27 November 2015).

Graph 4-12 Changes in the number and annual rate per million population of organ donors, 1993-2015



Source: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT).

Among the alternative for increasing the number of donors is non-heart-beating donation, or donation after cardiac death. In recent years this category of donors has shown progressive growth and now 17% of all donors belong to this category (314 out of 1,851).

Table 4-41 Distribution by autonomous community of transplants performed, 2015

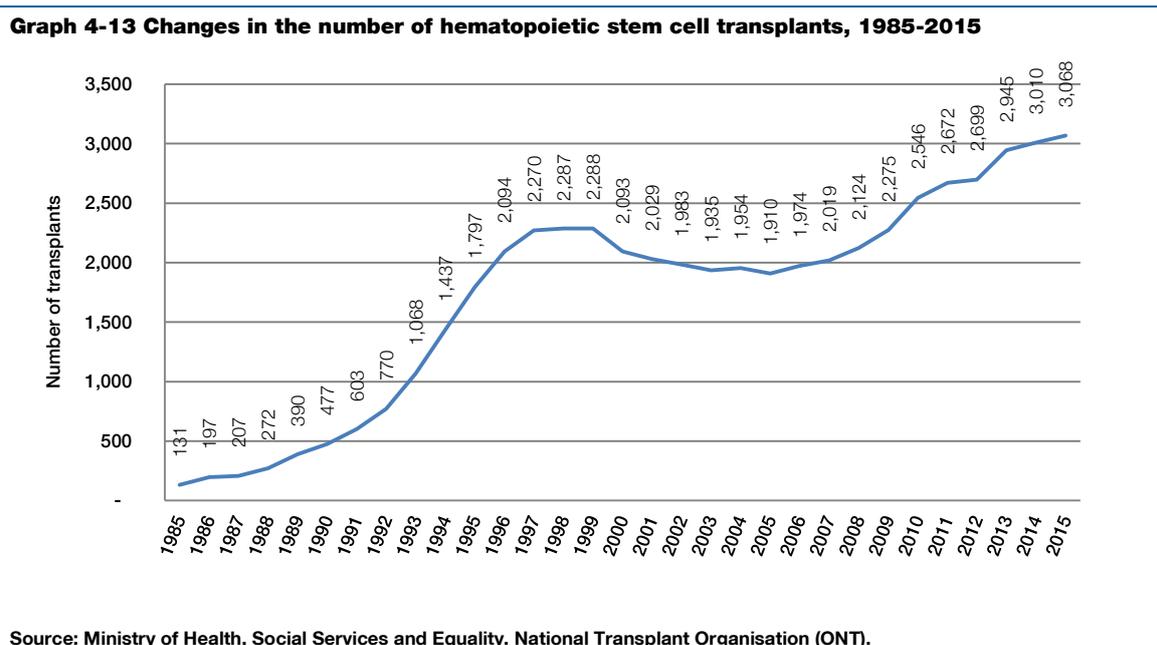
	Kidney	Liver	Heart	Lung	Pancreas	Bowel
Andalucía	453	208	41	35	24	-
Aragón	78	33	7	-	-	-
Asturias	52	22	12	-	-	-
Baleares	52	-	-	-	-	-
Canarias	123	33	-	-	7	-
Cantabria	55	27	21	48	6	-
Castilla y León	111	45	10	-	7	-
Castilla-La Mancha	90	-	-	-	-	-
Cataluña	647	161	66	58	22	-
C. Valenciana	281	143	27	35	5	-
Extremadura	53	30	-	-	-	-
Galicia	168	94	25	47	4	-
Madrid	450	201	73	71	20	12
Murcia	68	60	11	-	2	-
Navarra	49	24	6	-	-	-
País Vasco	159	81	-	-	-	-
La Rioja	16	-	-	-	-	-
Total	2,905	1,162	299	294	97	12

Source: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT).

4.5.2 Hematopoietic stem cell transplantation

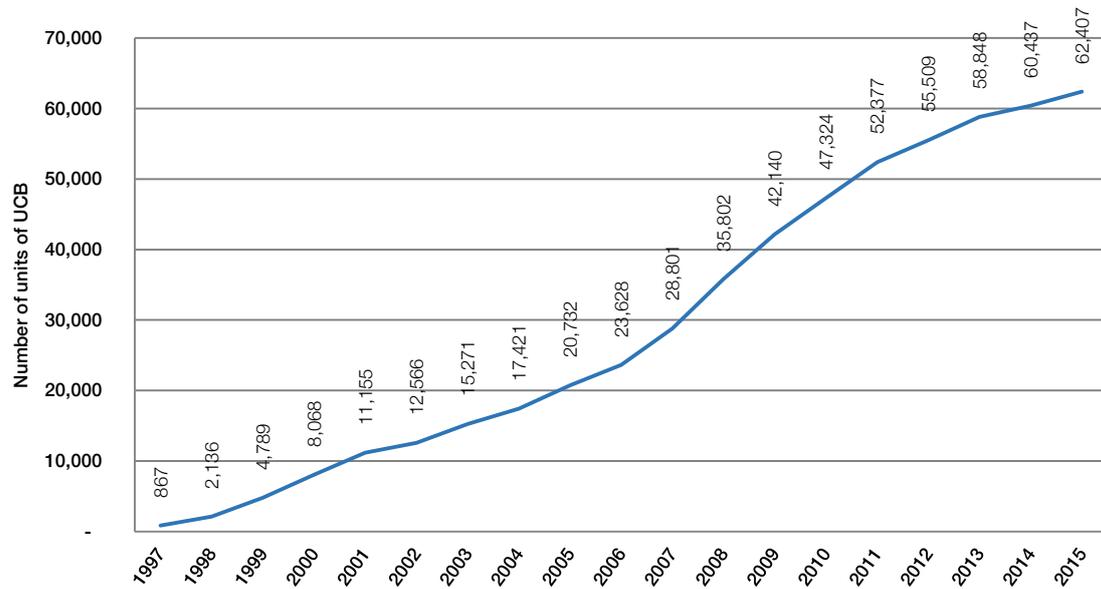
Hematopoietic stem cell transplantation (HSCT) using stem cells from umbilical cord blood (UCB), peripheral blood or bone marrow has become a consolidated therapy. Of particular interest are allogeneic transplants involving unrelated donors (URD).

The main indications of HSCT include certain neoplasias (when all conventional treatment options have been exhausted), certain non-malignant diseases such as severe bone marrow aplasia, serious genetic diseases and autoimmune diseases.



Every year about 3,000 HSCTs are performed (3,068 in 2015). Of them two thirds are autologous (the cells come from the same patient) and the remaining third are allogeneic (the cells come from a different person); the source can be relatives, a donor from the donor register or UCB banks.

Graph 4-14 Changes in the number of umbilical cord blood units, 1997-2015



Source: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT)

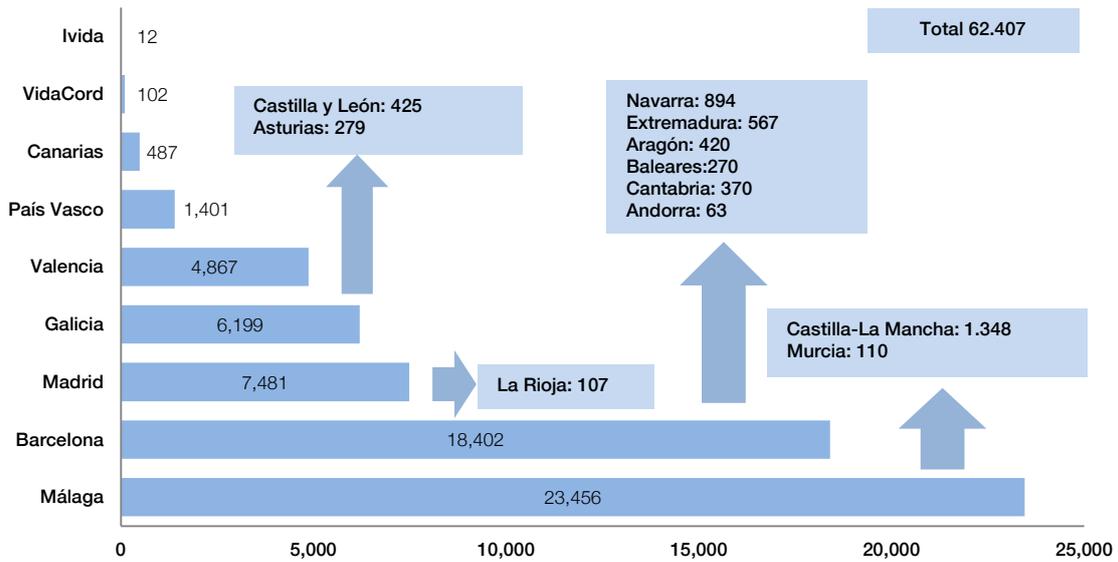
The National UCB Plan was initiated in 2008 and as of 2015 a total of 62,407 high quality units are stored in the public banks of Spain.

Spain ranks second in the world in absolute numbers of UCB storage; 11.0% of all units stored in Bone Marrow Donors Worldwide (BMDW) are located in Spanish public banks.

The storage of UCB works as a network, with a single bank being shared by different autonomous communities, a clear indication of the system's cohesion. Over 2,000 units of UCB have already been used in the treatment of patients who needed a HSCT.

At the end of 2015, the Spanish Register of Bone Marrow Donors (REDMO) had a total of 200,678 registered donors.

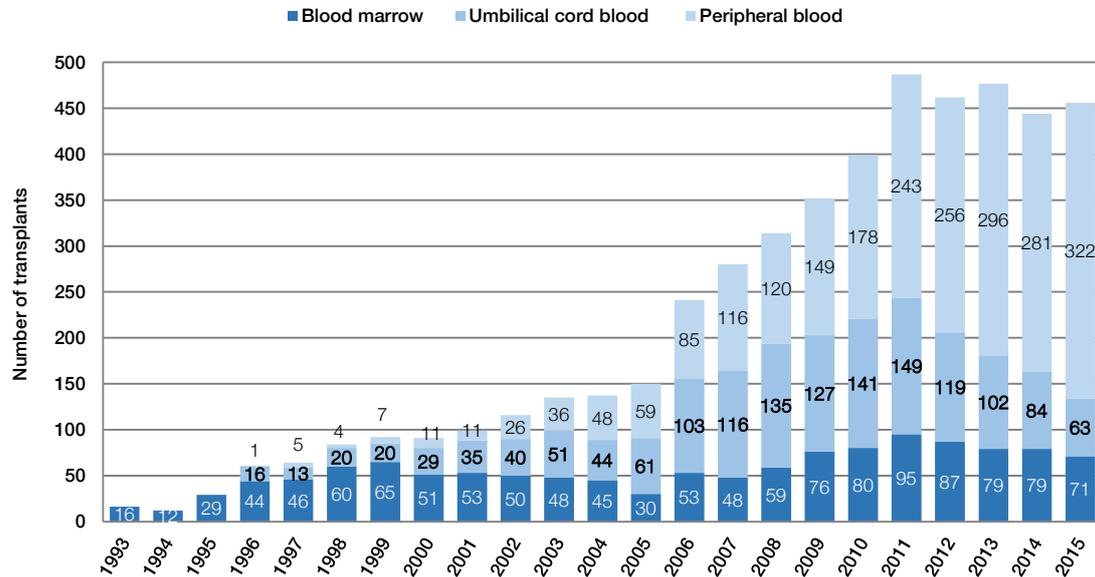
Graph 4-15 Distribution of the units of umbilical cord blood stored, 2015



Remarks: Ivida and VidaCord are private cord blood banks authorised in Spain.

Source: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT).

Graph 4-16 Trends in the source of stem cells in allogeneic hematopoietic stem cell transplantation, unrelated donor, 1993-2015



Source: Ministry of Health, Social Services and Equality. National Transplant Organisation (ONT).

4.6 Transfusion medicine

The transfusion network⁶⁵ has 20 transfusion centres and 400 transfusion services in which over 1.7 million voluntary and non-remunerated donations take place, representing a donation index of 36.9 donations per 1,000 inhabitants.

Over the last 30 years the donation index per 1,000 population has increased by 16.9 points, growing from 20.0 to 36.9 per 1,000 population.

Table 4-42 Index of donation per 1,000 population by autonomous community, 2015

Andalucía	33.5
Aragón	32.6
Asturias	42.6
Baleares	33.6
Canarias	30.0
Cantabria	40.2
Castilla y León	43.0
Castilla-La Mancha	36.1
Cataluña	34.7
Comunidad Valenciana	36.3
Extremadura	45.6
Galicia	40.5
Madrid	40.7
Murcia	34.8
Navarra	41.3
País Vasco	41.2
La Rioja	33.0
Spain	36.9

Source: Ministry of Health, Social Services and Equality. Information System of the National System for Transfusion Safety (SI-SNST).

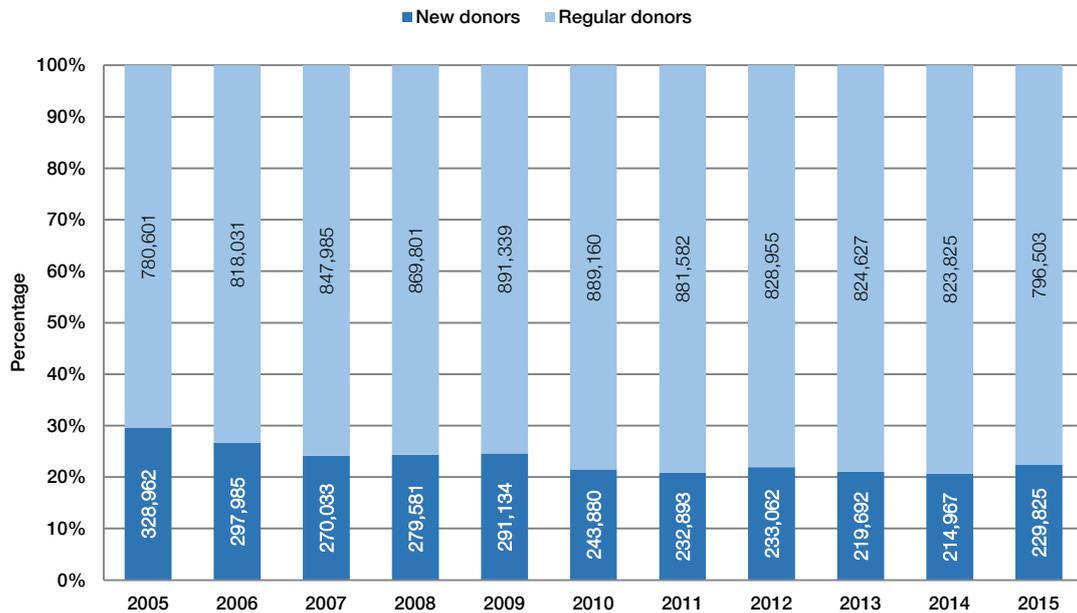
These donations are the result of the act of generosity of 1,026,328 blood donors, who together enable the country to be self-sufficient in blood components. In Spain, donation is always voluntary and non-remunerated.⁶⁶

The number of donations has allowed for the transfusion of 1,900,000 components and has provided industry with 373,055 litres of plasma for the preparation of plasma derivatives (coagulation factors, immunoglobulins, albumins).

⁶⁵ Spain, following European Union guidelines, has a structure called the National System for Transfusion Safety (SNST) (Art. 36 of Royal Decree 1088/2005 of 16 September, which establishes the technical requisites and minimum conditions necessary for blood donation and transfusion centres and services). The system is comprised of the Scientific Committee for Transfusion Safety (CCST), which is an expert advisory body the function of which is to *propose guidelines regarding transfusion safety at the state level*, and also the National Commission on Haemotherapy, which is a body that co-ordinates actions among autonomous communities. Also taking part in the system are the haemotherapy commissions of the autonomous communities that have such bodies, and hospital transfusion committees, where such committees exist.

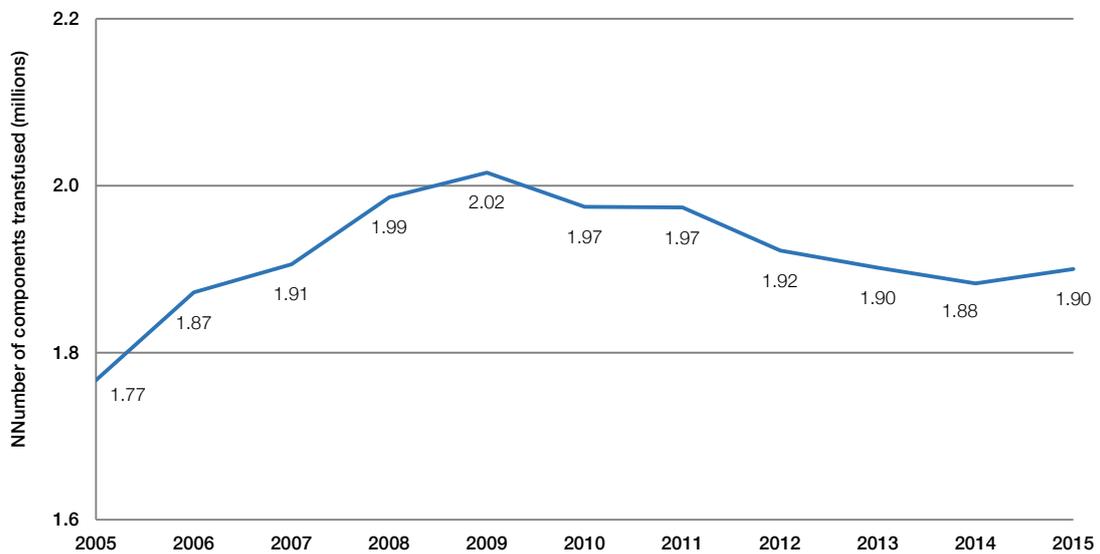
⁶⁶ Art. 4 of Royal Decree 1088/2005 of 16 September, which establishes the technical requisites and minimum conditions of blood donation and transfusion centres and services.

Graph 4-17 Changes in the proportion and number of new blood donors and regular blood donors, 2005-2015



Source: Ministry of Health, Social Services and Equality. Information System of the National System for Transfusion Safety (SI-SNST).

Graph 4-18 Changes in the number (millions) of blood components transfused, 2005-2015



Source: Ministry of Health, Social Services and Equality. Information System of the National System for Transfusion Safety (SI-SNST).

4.7 Quality of the health care services

Among all the possible indicators of care quality, for this report certain indicators were selected, by care level, from the ones available in the SNS Information System.⁶⁷

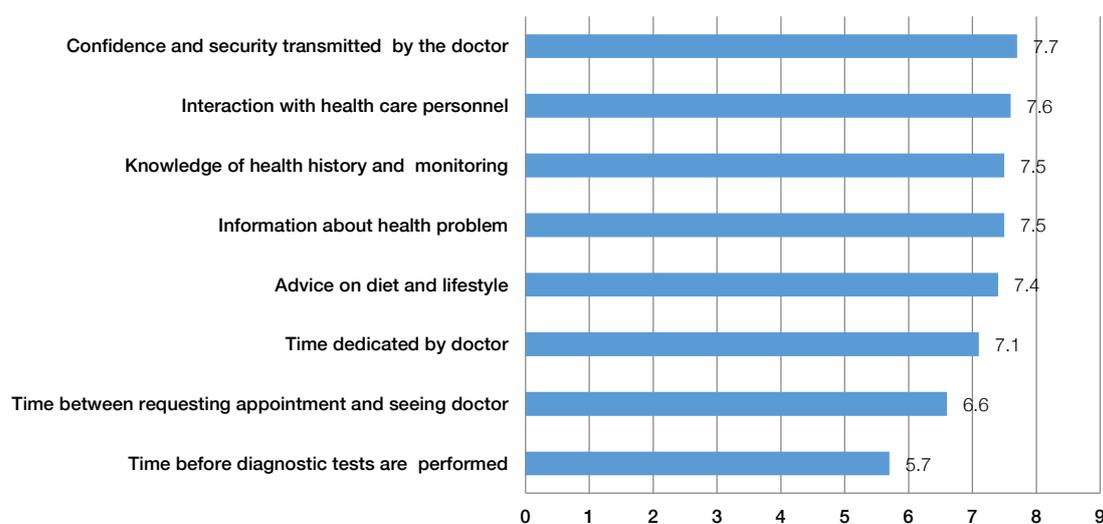
4.7.1 Primary Care

4.7.1.1 Perceived quality

Quite good (7.3) is the average score given by citizens⁶⁸ to medical consultations in public primary care, based either on their personal experience or on the ideas they have about the services.

Whether based on personal experience or on the ideas they have about public primary care services, citizens give the highest scores to the *confidence and security transmitted by the doctor* (7.7), the *interaction with health care personnel* (7.6), the *doctor's knowledge of the patient's health history and monitoring of his/her health problems* and the *information received about his/her health problem* (both with 7.5). The lowest score (5.7) goes to the *wait time for having diagnostic tests performed*.

Graph 4-19 Citizen assessment of different aspects of the care provided at general practice and paediatric consultations in the public health system, 2015



Remarks: score on a scale of 1 (totally unsatisfied) to 10 (totally satisfied). Data appears in order from highest to lowest score.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

Of the citizens who have been to see an SNS general practitioner, 86.3% consider the care received to be *good or very good*, while 13.1% consider it *rather poor, bad or very bad*. In relation

⁶⁷ Ministry of Health, Social Services and Equality. SNS Statistics Portal.

<https://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/home.htm>

⁶⁸ Ministry of Health, Social Services and Equality. Health Barometer, 2015. In the scale used a response of 1 means totally unsatisfactory and 10 means totally satisfactory.

to their expectations, for 70.4% the care was *more or less the same* as what they expected, for 22.3% it was *better or much better* while 6.6% consider that it was *worse or much worse* than what they expected. 77.1% state that they were able to take part in the decision-making regarding their health problem and treatment and 86.6% say that the doctor gave them the chance to ask questions or express concerns.

4.7.1.2 Delays in appointment with general practitioner

The main characteristic of primary care is its accessibility, because this level of care is the closest one to citizens and it has a comprehensive vision of the patient. The demand for services by citizens is mostly spontaneous and it is usually necessary to make an appointment in order to have an ordinary, non-urgent consultation.

Of every 10 people, around 4 state that when they request an appointment with their general practitioner for the same day, they *always or almost always* are given such an appointment.

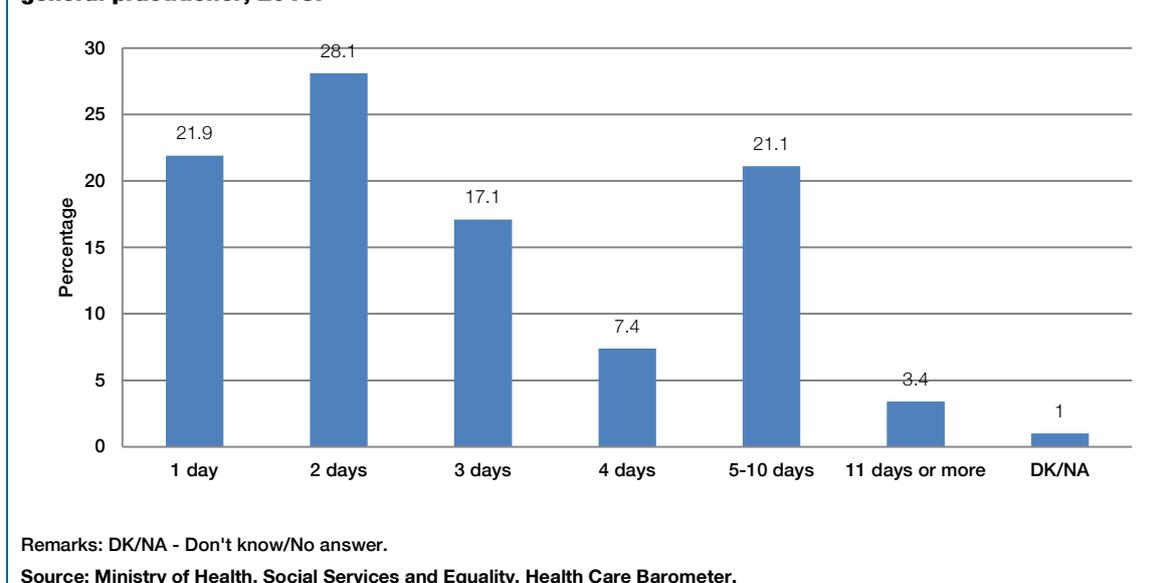
Table 4-43 Appointments with the general practitioner, 2011-2015

When you request an appointment with your doctor at the primary care centre for the same day, you are given such an appointment...?"					
	2011	2012	2013	2014	2015
Always + almost always (%)	39.5	39.2	40.5	36.0	35.9
Never + almost never (%)	58.4	58.8	57.5	62.3	61.8
DK/NA (%)	2.1	2.0	2.0	1.7	2.3

Remarks: DK/NA - Don't know/No answer.
Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

Among those who have been to a general practitioner in the public health system and *never or almost never* are given an appointment for the same day they ask for it, which occurs to slightly over 6 out of 10 people, the wait to receive the care requested is an average of 3.6 days.

Graph 4-20 Proportion of patients by days of delay the last time they made an appointment with their general practitioner, 2015.



As for how people make appointments with their general practitioner, 72.7% of the citizens are aware of the online appointment service, although only 48.5% use it. This service is given a score of 8.4 points on a scale of 0 to 10.

Table 4-44 Awareness, use and assessment of online service to make appointments with general practitioner by autonomous community, 2015

	Aware of it %	Uses it %	Score given (0-10)
Andalucía	82.2	61.3	8.8
Aragón	65.0	51.3	9.2
Asturias	53.9	27.9	8.1
Baleares	61.8	36.0	7.4
Canarias	44.5	36.2	8.8
Cantabria	70.2	29.1	9.1
Castilla y León	34.5	31.6	8.2
Castilla-La Mancha	75.7	62.0	8.6
Cataluña	72.3	43.8	7.8
Comunidad Valenciana	83.3	42.5	8.3
Extremadura	68.2	44.3	8.6
Galicia	80.6	48.2	8.0
Madrid	80.0	51.6	8.0
Murcia	87.7	58.4	9.7
Navarra	49.9	26.0	8.1
País Vasco	73.0	32.7	7.9
La Rioja	76.7	59.3	7.9
Ceuta	32.7	-	-
Melilla	21.0	-	-
Spain	72.7	48.5	8.4

Remarks: score on a scale of 0 to 10, with 0 being very bad and 10 being very good. In Ceuta (-) and Melilla (-) the sample is insufficient.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

4.7.1.3 Potentially avoidable hospitalisation

Avoidable hospitalisations can be considered an indirect indicator of the effectiveness of the health care delivered at the primary care level and more broadly in ambulatory care as a whole: more and better health care throughout the ambulatory care sphere (including the role of the monographic specialist) will result in a lower prevalence of hospitalisation resulting from certain pathologies.

In patients aged 15 and over, 9% of all discharges from SNS acute care hospitals correspond to pathologies originating in situations considered potentially avoidable.

The diagnoses falling into this group are: chronic obstructive pulmonary disease, congestive cardiac insufficiency, arterial hypertension, pneumonia and urinary tract infection. These pathologies, which generally evolve over long periods of time, require multiple forms of care, actions designed to promote self-care and preferably ambulatory treatment and surveillance that is essentially provided at the primary care level in coordination with specialised care.

The percentage of hospital discharges corresponding to pathologies originating in situations considered potentially avoidable has been over 8% for several years (8.2% in 2010).

Table 4-45 Potentially avoidable hospitalisation in SNS acute care hospitals, 2014

	% of total no. of discharges
Total	9.0
Chronic obstructive pulmonary disease	1.9
Congestive cardiac insufficiency	3.3
Arterial hypertension	0.2
Pneumonia	2.2
Urinary tract infection	1.5

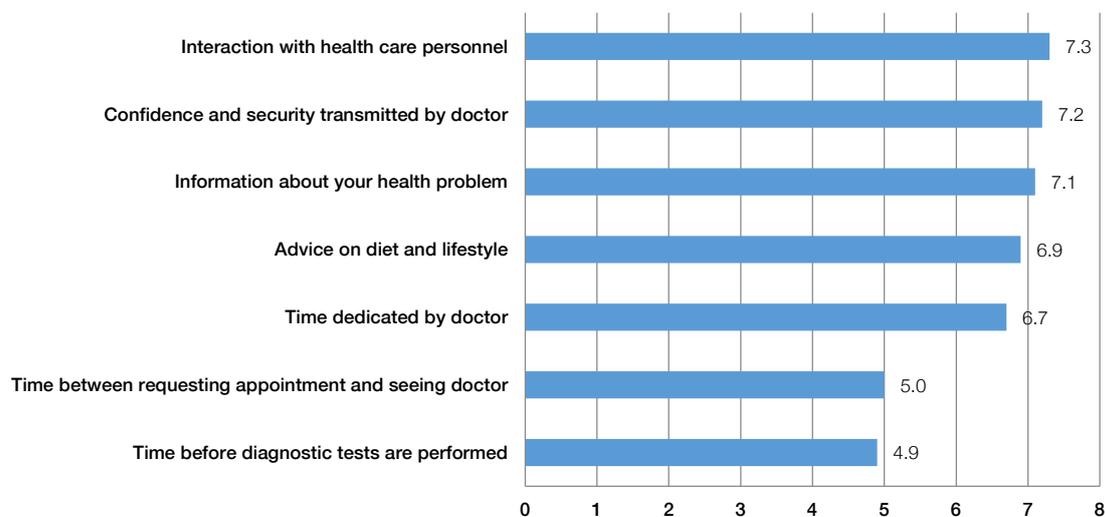
Source Ministry of Health, Social Services and Equality. Discharge register - Minimum Data Set of SNS acute care hospitals, iMDS (Minimum Data Set indicators and analytical themes).

4.7.2 Specialised care

4.7.2.1 Perceived quality

Regarding consultations with specialists in the public system, citizens give them an average score of 6.7. The *interaction with health care personnel* is the most highly valued aspect (7.3) of the system, while the lowest score (4.9) goes to the *wait time prior to having the diagnostic tests*.

Graph 4-21 Citizen assessment of different aspects of the care provided at consultations with specialists in the public health system, 2015

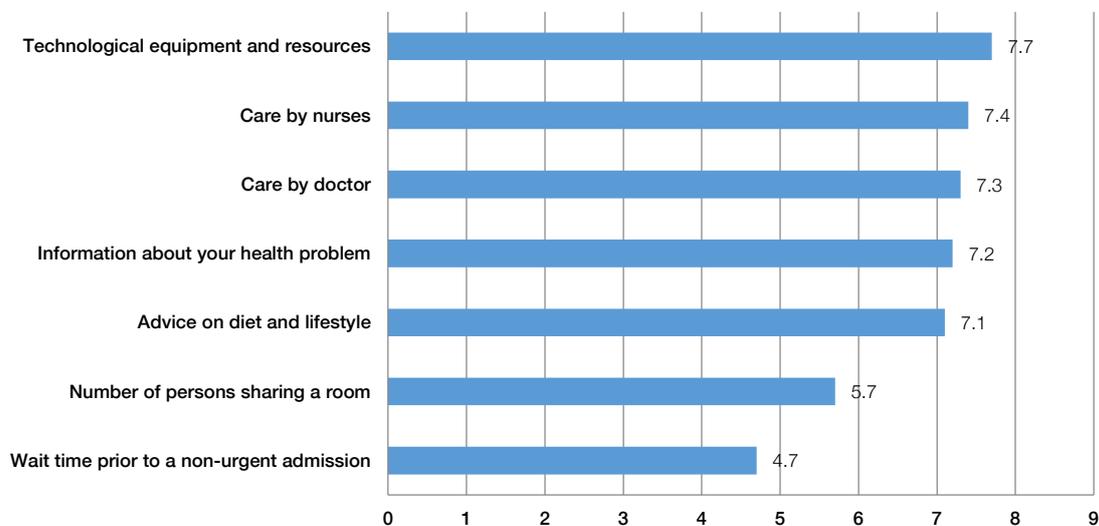


Remarks: score on a scale of 1 (totally unsatisfied) to 10 (totally satisfied). Data appears in order from highest to lowest score.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

Of the citizens who have been to consultations with specialists, 82.2% consider the care received to be *good or very good*, while 15.2% consider it *rather poor, bad or very bad*. In relation to their expectations, for 63.0% the care was *more or less the same* as they expected it to be, while for 24.3% it was *better or much better* than expected and for 9.6% it was *worse or much worse* than expected. 70.4% state that they were able to take part in the decision-making regarding their health problem and treatment and 84.8% say that the doctor gave them the chance to ask questions or express concerns.

Graph 4-22 Citizen assessment of different aspects of the care provided at the hospitals of the public health system, 2015



Remarks: score on a scale of 1 (totally unsatisfied) to 10 (totally satisfied). Data appears in order from highest to lowest score.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

As for hospitalisation and the care provided in public hospitals, citizens give them an average score of 6.6. Based either on personal experience or on the ideas they have, they consider the *equipment and technological resources* at the hospitals to be the best aspect (7.7) and the *wait time prior to a non-urgent admission* the worst aspect, with a failing score of 4.7.

Of the citizens who have been hospitalised at a public hospital, 88.3% consider the care received to be *good or very good*, while 10.0% consider it *rather poor, bad or very bad*. In relation to their expectations, for 54.0% the care was *more or less the same* as they expected it to be, while for 37.0% it was *better or much better* than expected and for 6.5% it was *worse or much worse* than expected. Of these citizens 60.0% say that they were able to take part in decision-making regarding their health care and treatment and 75.6% state that during their stay at the hospital they were assigned a doctor to whom they could turn for anything related to their health problem.

4.7.2.2 Waiting list for scheduled surgery and outpatient consultations

The SNS monitors the situation of the Surgery Waiting List (LEQ) with a specific information system. This system's data indicates that, in the case of scheduled surgery, as of 31 December 2015 the rate of patients on the structural waiting list⁶⁹ is 12.2 patients per 1,000 population. The percentage of patients that must wait for over 6 months is 10.6%, while the mean wait time is 89 days for the group as a whole, which is 2 days more than 31 December 2014.

⁶⁹ Patients waiting to have a non-urgent surgical intervention when the wait can be attributed to the resources available and to organisational factors.

Table 4-46 Surgery waiting list in the SNS. Distribution by specialties, 2015

Specialty	Patients on structural waiting list	Patients per 1,000 pop.	% waiting over 6 months	Average wait time (days)
Neurosurgery	10,437	0.2	24.5	160
Plastic surgery	15,583	0.3	19.5	135
Traumatology	149,159	3.3	16.7	112
Paediatric surgery	15,279	0.3	13.8	105
Angiology / Vascular Surgery	13,824	0.3	9.4	88
Maxillofacial Surgery	8,577	0.2	11.4	98
General / Digestive Surgery	100,298	2.2	9.5	84
Otorhinolaryngology (ORL)	37,891	0.8	10.9	85
Thoracic Surgery	1,447	0.0	5.5	55
Cardiac Surgery	3,496	0.1	3.2	70
Ophthalmology	116,548	2.6	4.5	69
Urology	38,139	0.9	7.7	75
Gynaecology	22,047	0.5	3.4	60
Dermatology	16,705	0.4	2.3	54
TOTAL	549,424	12.2	10.6	89

Remarks: data appears in order from highest to lowest average wait time.

Data from the 17 autonomous communities and INGESA. In the case of one regional health service (Cataluña) the total LEQ data are estimates based on selected processes. The percentage of patients waiting over 6 months and the average wait time are for these processes.

Source: SNS Waiting List Information System (SISLE-SNS).

Table 4-47 Changes in the surgery waiting list in the SNS, 2004-2015

	% of patients waiting over 6 months	Average wait time (days)
December 2004	8.4	78
December 2005	8.5	83
December 2006	7.1	70
December 2007	7.4	74
December 2008	6.7	71
December 2009	5.7	67
December 2010	5.4	65
December 2011	9.9	73
December 2012	16.5	100
December 2013	14.0	98
December 2014	9.3	87
December 2015	10.6	89

Remarks: prior to 2012 the data is from 14 autonomous communities and INGESA. Since 2012 it is from 15 autonomous communities and INGESA.

Source: Ministry of Health, Social Services and Equality. SNS Waiting List Information System (SISLE-SNS).

The percentage of citizens⁷⁰ who think that in the last year the waiting list problem has worsened or remained the same is 75.5%.

⁷⁰ Ministry of Health, Social Services and Equality. Health Barometer, 2015. In general, do you believe that over the past 12 months the waiting list problem...? *Has improved* (9.6%), *Has worsened* (33.3%), *Has stayed the same* (42.2%), *Don't know/No answer* (15.0%).

Most citizens are of the opinion that the medical criterion (86.8%) is the main or most important circumstance to be taken into account when determining the order of patients on the LEQ, whether it be the particular seriousness of the process or the doctor's general assessment of the patient, with other motives lagging far behind.

Table 4-48 Circumstances for determining the order of the surgery waiting list, 2015

In patients with the same health problem and need for an operation, which of the following circumstances do you believe should be taken into account in determining the surgery waiting list?	
	2015
Medical criterion regarding priority or seriousness	86.8
The health problem has repercussions on the patient's autonomy and ability for self-care	34.5
The date the patient was placed on the waiting list	31.7
The health problem prevents the patient from working	25.1
The health problem has repercussions on the patient's ability to care for the persons under his or her charge	23.0
DK/NA	3.9

Remarks: maximum of 3 responses allowed. DK/NA - Don't know/No answer.
Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

As of December 2015, the rate of patients waiting for an initial consultation with a specialist is 43.4 per 1,000 population, with an average wait time of 65 days, which is a reduction of 7 days compared to December 2014.

Table 4-49 Situation of the waiting list for outpatient consultations in the SNS by basic specialties, 2015

	Total initial consultations and basic specialties		
	Number of patients waiting per 1,000 pop.	% patients with assigned surgery date over 60 days away	Average wait time (days)
Gynaecology	2.7	42.5	58
Ophthalmology	7.2	47.2	68
Neurology	1.9	42.8	57
Traumatology	7.5	53.4	61
Digestive system	2.5	43.9	59
Dermatology	5.4	44.6	58
Cardiology	1.5	35.8	49
Urology	1.7	38.8	47
General and Digestive System Surgery	1.5	23.3	45
ORL	2.6	27.9	44
Total	43.4	42.4	58

Remarks: data appears in order from highest to lowest average wait time. Percentage of basic specialties out of all specialised outpatient consultations: 78%. Data from 15 autonomous communities and INGESA (Ceuta and Melilla).

Source: Ministry of Health, Social Services and Equality. SNS Waiting List Information System (SISLE-SNS).

Table 4-50 Changes in the waiting list for outpatient consultations in the SNS, 2007-2015

	Patients per 1,000 pop.	% patients given appointment over 60 days after referral	Average wait time (days)
December 2007	39.3	34	58
December 2008	37.5	37	59
December 2009	40.2	37	59
December 2010	33.0	35	53
December 2011	36.1	38	58
December 2012	42.2	36	59
December 2013	39.0	39	67
December 2014	39.4	39	65
December 2015	43.4	42	58

Remarks: data from the 14 autonomous communities (15 starting in 2012) and INGESA.

Source: Ministry of Health, Social Services and Equality. SNS Waiting List Information System (SISLE-SNS).

4.7.2.3 Hip fracture in hospitalised patients

Hip fracture in hospitalised patients is an adverse event that should occur only rarely; its presence, measured as the number of discharges with a diagnosis of hip fracture, out of the total number of discharges, is a good indicator of patient safety.

The avoidance of adverse effects in hospitalised patients is a primary concern in Spain's health system. Data regarding the SNS shows that the rate is very low (0.05 hip fractures in hospitalised patients per 100 hospital discharges) and very stable.

4.7.2.4 In-hospital mortality in relevant processes: acute myocardial infarction and stroke

Advances in the diagnosis and treatment of acute problems have brought significant improvements to the prognosis of potentially fatal pathologies. One of the indicators of care quality is in-hospital mortality following acute myocardial infarction, measured as the number of discharges due to post-infarction death, out of the total number of discharges following acute myocardial infarction.

The data in the SNS indicate that in 2014 the rate of deaths following acute myocardial infarction was 7.1 per 100 discharges with a diagnosis of acute myocardial infarction. Mortality following hemorrhagic stroke is 26.4 and following ischaemic stroke is 10.3 out of every 100 discharges with these diagnoses. A clear downward trend can be seen in the three indicators if we compare 2014 to 2005.

Table 4-51 Trends in mortality following acute myocardial infarction and stroke in the SNS, 2005-2014

	Mortality following acute myocardial infarction %	Mortality following hemorrhagic stroke %	Mortality following ischaemic stroke %
2014	7.1	26.4	10.3
2005	10.1	29.4	12.0

Source: Ministry of Health, Social Services and Equality. Discharge Register - Minimum Data Set (MDS) of SNS acute care hospitals.

4.7.3 Best practices in the SNS

Adherence to best practices is one of the principles set forth in Law 16/2003 on the Cohesion and Quality of the SNS. This law states that the improvement of the quality of the health system as a whole should guide the actions of public and private health care institutions. The law also details the elements that make up what is called the Quality Infrastructure, which encompasses quality and safety standards, indicators, clinical practice guidelines and best practice and adverse event registers. It also calls for the creation of a Register of Best Practices for those practices that offer an innovation or way of providing a service that is better than current practices.

Royal Decree-Law 16/2012, of 29 April, on urgent measures to guarantee the sustainability of the SNS and improve the quality and safety of its benefits, reflects the importance of undertaking health system reforms aimed at sustainability not just through rules but also by fomenting best practices and pooling experiences, always upon the basis of dialogue and collaboration with the autonomous communities and all associations and entities that act in this sphere.

In 2012 the Ministry of Health, Social Services and Equality initiated, in collaboration with the Commission against Gender Violence of the CISNS and with the Health Strategy Committees, a systematized joint process for identifying, gathering, ratifying and disseminating Best Practices.

The CISNS, through efforts of the Commission against Gender Violence and its working groups, which have representatives from all the autonomous communities, decided on both the generic definition of best practices and on the 14 common criteria with which to assess quality: suitability, pertinence, evaluation, based on the best scientific knowledge available, effectiveness, transfer, ethical matters, participation, equity, intersectoriality, gender perspective, innovation, efficiency and sustainability.

These criteria were agreed upon and described by the Subdirector General of Quality and Cohesion, along with the specific methodological tools considered necessary: form for

collection of data regarding the best practices submitted, check-list for the evaluation of the 14 quality criteria in each of them and the assessment or scoring system.

Following the pilot project carried out in 2012 - which gathered and evaluated best practices in response to gender violence - in 2013 an invitation to submit proposals was made. The idea was to gather best practices in the SNS, both in health care actions in relation to gender violence and in relation to the SNS Rare Disease Strategy, since that year was Rare Disease Year in Spain. In the 2013 invitation to submit, a total of 10 best practices related to gender violence and 8 best practices related to the SNS Rare Disease Strategy were identified.

Invitations to submit Best Practices have continued in 2014 and 2015, extending to 8 additional SNS strategies (childbirth and reproductive health, cancer, ischaemic cardiomyopathy, palliative care, diabetes, COPD, rheumatic and musculoskeletal diseases, health promotion and disease prevention). Thus the SNS Best Practices catalogue currently comprises 225 best practices in the context of 10 SNS strategies.⁷¹

⁷¹ Available at: <https://www.mssi.gob.es/organizacion/sns/planCalidadSNS/BBPP.htm>.

5 Professional Regulation and Ongoing Training

5.1 Specialised Health Care Training

5.1.1 National Council on Health Science Specialties

In 2015 elections were held in the National Council on Health Science Specialties (CNECS). The CNECS is the advisory and scientific body in the area of specialised training in the Health Sciences of the Ministry of Health, Social Services and Equality and the Ministry of Education, Culture and Sports.

Its functions are:

1. Ratify the training programmes in the Health Science Specialties and the Specific Skill Areas.
2. Report on the slots available in Specialised Health Care Training (FSE).
3. Propose the generic or transversal competencies of the Health Science Specialties.
4. Provide information about the members of the Delegate Committees on the Common Pathways.
5. Oversee the implementation, development and other issues related to the incorporation of common pathway criteria in FSE.
6. Prepare any required proposal reports on regulatory projects related to the service baskets in Health and Education.
7. Propose the internal regulations applicable to the council itself.

The CNECS elections were held to choose new members for its 11-member Permanent Committee.

5.1.2 Slots in Specialised Health Care Training for the application period 2015/16

There were 7501 slots available for graduates seeking acceptance in Specialised Health Care Training in the application period 2015/16,⁷² an increase of 0.1% over the previous period. For the first time there was a single application period for graduates of all degree programmes and, to facilitate the choice the applicants had to make, the teaching committees were required to publish typical training itineraries; that is, the characteristics of the official programme in the teaching unit. The number of slots reserved for disabled students remains the same; 7% of graduates in all types of degrees, which is a total of 525 slots. The number of non-EU students allowed is a maximum of 4% in medicine, 3% in pharmacy and 2% in nursing.

⁷² Ministerial Order SSI/1892/2015, of 10 September, which approves the number of slots available and the call to participate in selective exams in 2015, leading to access in 2016 to specialised health care programmes for doctors, pharmacists, nurses and other university graduates in the areas of psychology, chemistry, biology and physics. <https://www.boe.es/boe/dias/2015/09/18/pdfs/BOE-A-2015-10053.pdf>.

All slots are for residency-based training systems,⁷³ which explains the reduction in the number of slots for graduates of pharmacy.

Table 5-1 Changes in the number of slots for graduates seeking Specialised Health Care Training, 2009-2015

	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	% variation
								2015/16– 2014/13
Medicine	6,948	6,874	6,707	6,389	6,145	6,079	6,098	0.3
Pharmacy	304	298	309	273	278	264	218	-17.4
Chemistry	31	20	19	22	12	15	20	33.3
Biology	39	41	52	39	43	30	36	20.0
Psychology	131	136	141	128	130	127	129	1.6
Medical radiophysics	34	34	34	31	29	30	32	6.7
Nursing	611	848	1,002	963	955	950	968	1.9
Total	8,098	8,251	8,264	7,845	7,784	7,495	7,501	0.1

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

5.1.3 Specialists-in-training

In 2015 there are 28,749 specialists receiving training in one of the 57 health science specialties, 2.7% less than in 2014. A total of 6,255 residents are receiving training in the specialty of Family and Community Medicine (25% of the 24,988 specialists-in-training who have a degree in medicine), this being the specialty with the most residents in training, followed by Paediatrics and its Specific Areas (1,639) and Internal Medicine (1,539).

The number of residents per 100,000 inhabitants is 61.7, with Madrid and Navarra standing out with 89.9 and 83.3 residents per 100,000 inhabitants, respectively. In absolute numbers, Madrid is also the community with the highest number of specialists-in-training, 20.1% of the total (5,786), followed by Andalucía with 15.9% (4,574) and Cataluña, with 15.4% (4,419).

⁷³ Royal Decree 639/2014, of 25 July, called for the suppression of specialist training systems based on class attendance.

Table 5-2 Specialists-in-training by specialty, 2013-2015

Specialty	2013	2014	2015	Specialty	2013	2014	2015
Allergology	194	188	163	Immunology	99	97	91
Clinical Analyses	319	305	275	Occupational Medicine	320	221	192
Anatomical Pathology	317	325	319	Sports and Physical Education Medicine	186	159	82
Anaesthesiology and Recovery	1309	1279	1241	Family and Community Medicine	6544	6384	6255
Angiology and Vascular Surgery	188	171	167	Physical Medicine and Rehabilitation	344	341	330
Digestive System	554	561	549	Intensive Medicine	752	748	726
Clinical Biochemistry	189	166	150	Internal Medicine	1,525	1,578	1,539
Cardiology	748	766	764	Forensic Medicine	119	51	52
Cardiovascular Surgery	128	111	106	Nuclear Medicine	148	133	127
General and Digestive Surgery	904	892	873	Preventive Medicine and Public Health	238	224	206
Oral and Maxillofacial Surgery	164	144	141	Microbiology and Parasitology	274	271	253
Orthopaedic Surgery and Trauma	1,072	1110	1097	Nephrology	353	350	342
Paediatric surgery	108	100	97	Pneumology	424	414	403
Plastic, Cosmetic and Reconstructive Surgery	171	168	170	Neurosurgery	205	188	178
Thoracic surgery	84	72	70	Clinical Neurophysiology	137	139	128
Medical-Surgical Dermatology and Venereology	316	320	314	Neurology	487	484	481
Endocrinology and Nutrition	302	296	290	Obstetrics and Gynaecology	1,057	1,039	999
Mental Health Nursing	367	360	342	Ophthalmology	668	655	649
Occupational Nursing	21	45	39	Medical Oncology	474	502	508
Family and Community Nursing	338	461	513	Radiation Oncology	196	203	197
Geriatric Nursing	130	25	24	Otolaryngology	315	304	301
Obstetrical-Gynaecological Nursing	887	823	761	Paediatrics and its Specific Areas	1,666	1,669	1,639
Paediatric Nursing	200	211	214	Clinical Psychology	540	534	526
Pharmacy in Hospitals	594	579	564	Psychiatry	957	941	906
Industrial and Galenic Pharmacy	86	84	87	Diagnostic Radiology	858	864	839
Clinical Pharmacology	50	47	40	Radiopharmacy	41	16	13
Geriatrics	209	209	204	Medical Radiophysics	98	94	91
Haematology and Haemotherapy	465	462	455	Rheumatology	198	193	189
Medical Hydrology	34	8	12	Urology	464	462	466
Total					30,135	29,546	28,749

Remarks: data correspond to 31 December of each year.

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

Table 5-3 Residents by autonomous community, 2015

	Number	Residents per 100,000 inhab.
Andalucía	4,574	54.5
Aragón	896	68.0
Asturias	675	64.2
Baleares	506	45.8
Canarias	1,050	50.0
Cantabria	468	80.0
Castilla y León	1,614	65.3
Castilla-La Mancha	935	45.4
Cataluña	4,419	58.9
Comunidad Valenciana	2,795	56.1
Extremadura	619	56.6
Galicia	1,409	51.6
Madrid	5,786	89.9
Murcia	972	66.2
Navarra	553	86.3
País Vasco	1,271	58.1
La Rioja	168	53.0
Ceuta	21	24.9
Melilla	18	21.0
Total	28,749	61.7

Remarks: data correspond to December 2015.

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation. National Statistics Institute (INE). Current population figures as of 1 January 2015.

5.1.4 Accreditation of teaching centres, units and structures

The SNS has 3,256 accredited teaching units, with a total of 9,513 professionals authorised to teach (20.4 per 100,000 inhabitants). Of them 218 are Multiprofessional Teaching Units, which are units responsible for the training of residents in a variety of fields, in specialties accessed from different degree programmes but that are in similar areas of care activity. Although the number of teaching units shows a slight increase, the number of professionals authorised to teach falls by 130, due to the application of new accreditation requirements in the specialties of Family and Community Medicine⁷⁴ and Obstetrical-Gynaecological Nursing⁷⁵ (midwives) in the accreditation of Multiprofessional Teaching Units.

⁷⁴ Presidential Order PRE/861/2013, of 9 May, which lays down the requisites for the accreditation of Multiprofessional Teaching Units for the training of specialists in Family and Community Nursing and Family and Community Medicine.

http://www.msssi.gob.es/profesionales/formacion/docs/ANEXO_REQUISITOS_ACREDITACION_AFYC.pdf.

⁷⁵ Joint resolution by the Ministry of Education and the Ministry of Health and Social Policy, establishing the requisites for the accreditation of the Multiprofessional Teaching Units of Obstetrics and Gynaecology, of Occupational Health and of Mental Health.

http://www.msssi.gob.es/profesionales/formacion/docs/Requisito_UDM_OG.pdf.

Table 5-4 Changes in the number of accredited teaching units, 2009-2015

	Total Accredited Teaching Units	Accredited Multiprofessional Teaching Units
2009	3,168	7
2010	3,174	65
2011	3,196	137
2012	3,223	164
2013	3,235	192
2014	3,242	215
2015	3,256	218

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

Table 5-5 Changes in the number of professionals authorised to teach by autonomous community, 2012-2015

	2012	2013	2014	2015	Ratio of authorised teaching professionals per 100,000 inhab.
Andalucía	1,504	1,520	1,519	1,511	18.0
Aragón	343	343	343	325	24.7
Asturias	239	248	248	222	21.1
Baleares	175	175	175	180	16.3
Canarias	332	339	339	339	16.1
Cantabria	136	136	136	136	23.2
Castilla y León	647	650	645	569	23.0
Castilla-La Mancha	452	453	453	439	21.3
Cataluña	1,509	1,597	1,586	1,589	21.2
Comunidad Valenciana	877	880	880	868	17.4
Extremadura	190	193	193	204	18.7
Galicia	490	494	523	524	19.2
Madrid	1,576	1,579	1,558	1,560	24.2
Murcia	313	353	353	355	24.2
Navarra	173	173	173	173	27.0
País Vasco	442	447	447	447	20.4
La Rioja	54	54	54	54	17.0
Ceuta	11	11	11	11	13.1
Melilla	7	7	7	7	8.2
Total	9,470	9,652	9,643	9,513	20.4

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation. National Statistics Institute (INE). Current population data.

A total of 21 audits were conducted as part of the annual programme of audits of teaching centres accredited to provide training in the health science specialties, with the support of audit teams linked to the autonomous communities.

Table 5-6 Audits of hospital-teaching centres accredited to provide training in the health science specialties, 2015

Hospital/Health centre	Location	Autonomous Community
Hospital Universitario Puerta del Mar	Cádiz	Andalucía
Hospital Nuestra Señora de Valme	Sevilla	
Hospital Obispo Polanco	Teruel	Aragón
Hospital Doctor Peset	Valencia	Comunidad Valenciana
Hospital Universitario La Fe	Valencia	
Hospital Nuestra Señora del Prado	Talavera de la Reina	Castilla-La Mancha
Complejo Asistencial Universitario de León	León	Castilla y León
Hospital Universitario Germans Trias i Pujol	Badalona	Cataluña
Hospital Clínic i Provincial de Barcelona	Barcelona	
Capio Hospital General de Catalunya	San Cugat del Vallés	
Complejo Hospitalario Universitario A Coruña (Hospital Juan Canalejo)	A Coruña	Galicia
Hospital Universitario Lucus Augusti (before Xeral Calde)	Lugo	
Complejo Hospitalario de Pontevedra	Pontevedra	
Hospital Universitario Fundación Alcorcón	Alcorcón	Madrid
Hospital Universitario La Princesa	Madrid	
Hospital Rafael Méndez	Lorca	Murcia
Hospital General Universitario J. M. Morales Meseguer	Murcia	
Hospital General Universitario Reina Sofía de Murcia	Murcia	
Clínica Universitaria de Navarra	Pamplona	Navarra
Hospital de Basurto	Bilbao	País Vasco
Hospital Universitario de Araba	Vitoria	

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Quality and Cohesion.

Three teaching units were also audited, to evaluate compliance of the training programme in obstetrical/gynaecological nursing in the following units:

Table 5-7 Audits of teaching units accredited to provide training in the specialty of obstetrical/gynaecological nursing, 2015

Teaching Unit	Location	Autonomous Community
Albacete	Albacete	Castilla-La Mancha
Hospital Universitario Río Hortega	Valladolid	Castilla y León
Hospital Universitario Xeral Cies	Vigo	Galicia

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Quality and Cohesion.

In addition, documentary evaluations are performed in 9 hospitals accredited as teaching centres to provide training in the health science specialties, to certify their compliance with the criteria laid down in Royal Decree 183/2008,⁷⁶ of 8 February. Some of them are teaching centres with less than 3 accredited teaching units, which suggests a small number of specialists-in-training, and some are centres that have been audited in the past and asked to implement improvement plans.

⁷⁶ RD 183/2008, which establishes and classifies the health science specialties and regulates certain aspects of the specialised health care training system.

Table 5-8 Documentary audits of hospitals-teaching centres accredited to provide training in the health science specialties, 2014

Hospital	Location	Autonomous Community
Hospital de la Serranía	Ronda	Andalucía
Hospital de La Línea de la Concepción	Línea de la Concepción	
Hospital de Can Misses	Ibiza	Baleares
Hospital de Sierrallana	Torrelavega	Cantabria
Complejo Asistencial de Soria	Soria	Castilla y León
Hospital Asepeyo Sant Cugat	Sant Cugat del Vallés	Cataluña
Hospital de la Virgen del Puerto	Plasencia	Extremadura
Grupo Sanitas	Madrid	Madrid
Hospital de la Cruz Roja	Madrid	

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Quality and Cohesion.

5.2 Recognition of qualifications in the health care professions

In 2015 the qualifications of 742 health care professionals (holders of basic degrees and specialised training) from other countries of the European Union⁷⁷ were recognised, 27.1% more than the preceding year. Italy is the country of origin of the highest number of recognised medical qualifications (79), followed by Germany (34) and France (20). Recognition was granted to 135 qualifications in General Practice Nursing, of which 51 were obtained in Portugal and 23 in Romania. Most of the Odontology qualifications were obtained in Portugal (27).

As for the recognition of specialist qualifications obtained in non-EU countries,⁷⁸ 172 credentials have been issued (increase of 44.5%). The countries with the highest number of recognised qualifications are Cuba (55) and Argentina (49). By specialty, most of the qualifications recognised were in Paediatrics (52), Anaesthesiology and Recovery (46) and Family and Community Medicine (34).

⁷⁷ Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications.

<http://eur-lex.europa.eu/legal-content/ES/TXT/?uri=URISERV:c11065>

⁷⁸ Royal Decree 459/2010, of 16 April, which regulates conditions for recognition for professional purposes of foreign qualifications in health science specialties obtained in countries not members of the European Union. <https://www.boe.es/buscar/pdf/2010/BOE-A-2010-6960-consolidado.pdf>.

Table 5-9 Recognition of EU qualifications, 2014-2015

Qualification	2014	2015	Qualification	2014	2015
Doctor (basic degree)	191	202	Doctor specialised in Internal Medicine	0	10
Doctor specialised in Anatomical Pathology	1	1	Doctor specialised in Nuclear Medicine	0	1
Doctor specialised in Anaesthesiology and Recovery	6	14	Doctor specialised in Medical Oncology	0	2
Doctor specialised in the Digestive System	1	2	Doctor specialised in Child and Adolescent Psychiatry	0	8
Doctor specialised in Cardiology	1	1	Doctor specialised in Radiation Oncology	1	1
Doctor specialised in General and Digestive System Surgery	10	15	Doctor specialised in Otolaryngology	4	3
Doctor specialised in Orthopaedic Surgery and Trauma	6	12	Doctor specialised in Paediatrics and its Specific Areas	4	9
Doctor specialised in Paediatric Surgery	2	2	Doctor specialised in Psychiatry	5	6
Doctor specialised in Plastic, Cosmetic and Reconstructive Surgery	7	7	Doctor specialised in Diagnostic Radiology	3	20
Doctor specialised in Medical/Surgical Dermatology and Venereology	3	7	Doctor specialised in Rheumatology	3	0
Doctor specialised in Endocrinology and Nutrition	1		Doctor specialised in Urology	5	3
Doctor specialised in Geriatrics	1		Nurse responsible for general care	98	135
Doctor specialised in Occupational Medicine	1		Nurse specialised in Family and Community Nursing	2	0
Doctor specialised in Family and Community Medicine	20	14	Nurse specialised in Mental Health Nursing	1	0
Doctor specialised in Physical Medicine and Rehabilitation	2		Nurse specialised in Obstetrical-Gynaecological Nursing	46	39
Doctor specialised in Nephrology	1	1	Pharmacist	17	28
Doctor specialised in Pneumology	2	2	Pharmacist specialised in Hospital Pharmacy	2	0
Doctor specialised in Neurosurgery	2	4	Physical therapist	39	60
Doctor specialised in Neurology	5	1	Odontologist	54	74
Doctor specialised in Obstetrics and Gynaecology	7	10	Veterinarian	14	14
Doctor specialised in Ophthalmology	8	3	Optician-optometrist	3	4
Doctor specialised in Allergology	0	1	Speech therapist	1	3
Doctor specialised in Angiology and Vascular Surgery	0	2	Podiatrist	3	1
Doctor specialised in Cardiovascular Surgery	0	2	Specialist biologist	1	2
Doctor specialised in Oral and Maxillofacial Surgery	0	1	Specialist in Medical Radiophysics	0	2
Doctor specialised in Stomatology	0	2	General Health Psychologist *	0	3
Doctor specialised in Clinical Genetics	0	3	Occupational Therapist	0	4
Doctor specialised in Intensive Medicine	0	1			
			Total	584	742

Remarks: (*)The competencies of General Health Psychologists are set forth in General Law 33/2011, of 4 October, on Public Health.

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

Table 5-10 Recognition of specialist qualifications from non-EU countries, 2015

Specialty	TOTAL	Argentina	Armenia	Brazil	Chile	Colombia	Cuba	Ecuador	Guatemala	Italy*	Mexico	Moldavia	Paraguay	Peru	Dominican Republic	Russia	Syria	Uruguay	Venezuela
Paediatrics	52	23				1	10				2			1	3	1		1	10
Anaesthesiology and Recovery	46	8	1		1	8	10	1					1	3	1		1	3	8
Family and Community Medicine	34	2					30					1						1	
Cardiology	10	5					2							1					2
Obstetrical-Gynaecological Nursing	8	3												5					
Neurology	4	2					1												1
Urology	3	1								1			1						
Digestive System	2																		2
Plastic, Cosmetic and Reconstructive Surgery	2	1									1								
Dermatology	2	1									1								
Obstetrics and Gynaecology	2								1										1
Ophthalmology	2	1					1												
Orthopaedic Surgery and Trauma	1					1													
Endocrinology and Nutrition	1			1															
Internal Medicine	1						1												
Nephrology	1	1																	
Medical Oncology	1	1																	
Total	172	49	1	1	1	10	55	1	1	1	4	1	2	10	4	1	1	7	22

Remarks: (*) Italian degree obtained by a professional who does not have European nationality and is thus within the scope of application of Royal Decree 459/2010, of 16 April.

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

5.3 Training visits for foreign health care professionals in SNS centres

In 2015 a total of 940 training visits were authorised, 884 of them for persons holding degrees in different medical specialties (147 in Paediatrics and its Specific Areas, 60 in Cardiology, 58 in Anaesthesiology and Recovery, 53 in Internal Medicine and 47 in Obstetrics and Gynaecology). The professionals come from 39 countries, predominantly Latin America, with 298 being from Argentina, 156 from Peru and 136 from Mexico. As regards EU countries, training visits were authorised for 88 individuals from Portugal and 42 from Italy.

Training visits have been authorised in all autonomous communities, except La Rioja, Ceuta and Melilla. The highest numbers were in Cataluña with 495 and Madrid with 254 authorizations.

The training visits for foreign graduates and health science specialists are authorised by the Ministry of Health with the favourable report issued by the teaching commission at the

corresponding teaching centre and autonomous community.⁷⁹ These professionals are considered personnel in training, so the care activities they take part in are planned, directed and supervised at all times. They are normally limited to 6 months but can, exceptionally, be extended for another six months.

Table 5-11 Training visits for foreign health care professionals in SNS centres, by autonomous community, 2015

	Number
Andalucía	24
Aragón	2
Asturias	1
Baleares	6
Canarias	5
Cantabria	7
Castilla y León	16
Castilla-La Mancha	1
Cataluña	495
Comunidad Valenciana	72
Extremadura	1
Galicia	21
Madrid	254
Murcia	5
Navarra	18
País Vasco	12
La Rioja	0
Ceuta	0
Melilla	0
Total	940

Source: Ministry of Health, Social Services and Equality. Sub-Directorate General of Professional Regulation.

5.4 Ongoing training for Health Care Professionals

5.4.1 Actions related to ongoing training and the accreditation system

Over the course of 2015 the main objectives of the plenary sessions of the Commission on the Ongoing Training of the Health Care Professions (CFCPS) were focused on updating the Accreditation System for evaluating ongoing training activities for health care professionals⁸⁰ and on developing the Accreditation Diplomas and Advanced Accreditation Diplomas as recognition for the training achievements of a health care professional in a specific functional area of a given

⁷⁹ Following the procedure provided for in Art. 30 of Royal Decree 183/2008, of 8 February <https://www.boe.es/buscar/act.php?id=BOE-A-2008-3176>.

⁸⁰ For more information see:

<https://www.msssi.gob.es/profesionales/formacion/formacionContinuada/home.html>.

profession or specialty, with regard to the accredited ongoing training activities undertaken by the person in the corresponding functional area.⁸¹

The Accreditation System received 48,653 activities for assessment as ongoing training: 94.72% of them were granted accreditation. By academic level, more than 4 out of 10 activities are for University graduates (doctors, pharmacists, veterinarians, physiotherapists, nurses, occupational therapists, podiatrists, opticians-optometrists, speech therapists and nutritional dietician).

Table 5-12 Activities granted accreditation as ongoing training by academic level, 2015

	%
University graduates Doctors, pharmacists, dentists, veterinarians, physical therapists, nurses, occupational therapists, podiatrists, opticians-optometrists, speech therapists, human nutrition/dieticians.	45.3
Technicians with advanced vocational training High-level technicians in anatomical pathology and cytology, dietetics, health care documentation, dental hygiene, imaging diagnostics, clinical laboratory diagnostics, orthoprosthetics, dental prosthetics, radiotherapy, environmental health, hearing prosthetics	1.6
Technicians with intermediate level vocational training Nursing assistants, pharmacy assistants, health emergency assistants	12.0
Multidisciplinary activities	40.5
Others Biologists, chemists, biochemists, physicists and psychologists specialised in Health Sciences.	0.4

Source: Ministry of Health, Social Services and Equality. Sub-directorate General of Human Resources in the SNS.

5.4.2 Certification of Radiological Protection Course for professionals who perform interventional radiology procedures

In 2015 ten second-level courses on radiological protection requested⁸² accreditation and 92 medical professionals successfully completed the courses. Of all the professionals who passed the courses, 40.2% belong to the specialty Angiology and Vascular Surgery, followed by Cardiology (18.5%).

⁸¹ Royal Decree 639/2015, of 10 July, which regulates the Diplomas of Accreditation and the Diplomas of Advanced Accreditation

⁸² Order SCO/3276/2007, of 23 October, publishes the Accord of the Commission of Human Resources in the SNS that establishes the second level of training in radiological protection for professionals who perform interventional radiology procedures.

<https://www.msssi.gob.es/profesionales/formacionContinuada/certiSegundoNivelProteccionRadio/home.html>

Table 5-13 Professionals passing the second-level course in radiological protection, by medical specialty, 2015

	Number	%
Angiology and Vascular Surgery	37	40.2
Digestive System	2	2.2
Cardiology	17	18.5
Orthopaedic Surgery and Trauma	3	3.3
Internal Medicine	1	1.1
Pneumology	4	4.3
Neurosurgery	12	13.0
Diagnostic Radiology	12	13.0
Urology	4	4.3
Total	92	100.0

Source: Ministry of Health, Social Services and Equality. Sub-directorate General of Human Resources in the SNS.

6 Pharmaceutical Benefits

The SNS pharmaceutical benefits package encompasses medicines and health products and also the set of actions undertaken to ensure that patients receive them according to their clinical needs, in the dose exactly suited to their individual requirements, for the appropriate period of time and at the lowest possible cost to them and the community.

The package of benefits is governed by the provisions of the consolidated text of the Spanish Law on guarantees and the rational use of medicines and health products, approved by Royal Legislative Decree 1/2015, of July 24 (*Ley de garantías y uso racional de los medicamentos y productos sanitarios, aprobado por el Real Decreto Legislativo 1/2015, de 24 de julio*).⁸³

In the case of non-hospitalised patients, it includes indication, prescription and dispensation of the following products:

- Medicines for which, in compliance with current legislation, SNS financing and dispensation conditions have been established and which have been authorised and registered by the Spanish Agency of Medicines and Health Products or as provided by European legislation on EU procedures for the authorisation and oversight of medicines for human use.
- Health products which have the appropriate European approval mark (CE marking) and for which, in compliance with current legislation, SNS financing and dispensation conditions have been established.
- Extemporaneous formulations and officinal preparations made by pharmacies as indicated in Spain's National Pharmacopoeia and the Royal Spanish Pharmacopoeia and that fulfil the requirements regarding the rules for their correct preparation and quality control, in the conditions specified in the agreements signed between the regional health care authorities and pharmacies.
- Individualised anti-allergy and bacterial vaccines, prepared with immunizing agents, at a specific concentration and dilution based on the medical prescription given for a certain patient, in compliance with current regulations.

In the case of hospitalised patients, pharmaceutical benefits include the pharmaceutical products that the patients need in accordance with the common service basket corresponding to specialised care.

In order for the pharmacies to dispense the medicines and other products included in the pharmaceutical benefits, they must be prescribed using an official SNS medical prescription or dispensation order.

6.1 Medicines and health products added to SNS pharmaceutical benefits

Medicines and health products must be included in the SNS public financing system in order to become part of the pharmaceutical benefits package. The procedure is governed by the consolidated text of the Spanish Law on guarantees and the rational use of medicines and health products. To be considered for inclusion, a medicine must be duly authorised and it is the task of the Ministry of Health, Social Services and Equality, through the Directorate General of the Basic Basket of SNS Services and Pharmacy, to decide whether it will be included in SNS pharmaceutical benefits and, if so, what its financing conditions will be. Financing is selective,

⁸³ <http://boe.es/boe/dias/2015/07/25/pdfs/BOE-A-2015-8343.pdf>

depending on the therapeutic utility of the medicines and whether they are needed to improve the health of citizens.

As an additional mechanism that complements the decision on public financing and plays a vital role in the health system's sustainability, the prices of medicinal and health products are subject to control measures. It is the duty of the Interministerial Commission on Medicine Prices, of the Ministry of Health, Social Services and Equality, to set the maximum ex-factory price of the medicines and health products that are to be included in the SNS pharmaceutical benefits.

6.1.1 Medicines added to SNS pharmaceutical benefits during the year

6.1.1.1 Medicines added

In 2015 a total of 1,456 presentations of medicines were added⁸⁴ to the SNS public financing system. Of these presentations, 1,364 are in normal packs (93.7%) and 92 are in clinical packs (for use in hospitals). Of the presentations in normal packs, 1,115 correspond to medicines that can be dispensed in pharmacies and 249 are medicines for hospital use and dispensation (they are not invoiced through pharmacies and can only be used in hospital settings or authorised care centres).

As regards the Anatomical Therapeutic Chemical (ATC)⁸⁵ classification, the anatomical group with the most additions in 2015 is N (Nervous system) with 655 presentations, among which it is interesting to note the high number of generic presentations of Pregabalin, Aripiprazol, Levodopa/Carbidopa/Entacapone and Duloxetine, due to the expiration of the patents of these molecules. These generic presentations alone account for 56% of the additions to group N.

⁸⁴ This data refers to presentations of medicines added to SNS pharmaceutical benefits by virtue of a ruling made in 2015, regardless of when they began to be marketed.

⁸⁵ The Anatomical Therapeutic and Chemical (ATC) classification is a system for coding medicines according to their pharmacological effect, therapeutic indications and chemical structure. It is divided into five levels: the first level (ATC1) is the most general and the fifth level (ATC5) is the most detailed.

Level 1 (ATC1): organ or system upon which the pharmaceutical acts. This level has 14 main anatomical groups, each one identified by a letter of the alphabet.

Level 2 (ATC2): therapeutic subgroup.

Level 3 (ATC3): therapeutic or pharmacological subgroup.

Level 4 (ATC4): therapeutic, pharmacological or chemical subgroup.

Level 5 (ATC5): the specific active ingredient or pharmacological association.

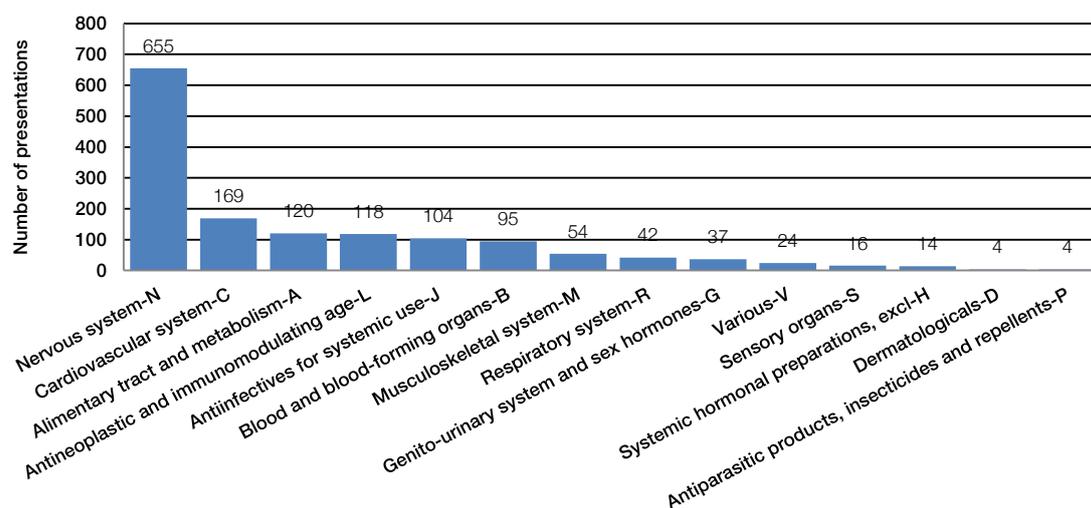
Table 6-1 Number of presentations of medicines added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began, by ATC1 group

ATC1 Group		Normal Pack		Clinical Pack	Total
		Dispensable in pharmacies	For hospital use and dispensation		
A	Alimentary tract and metabolism	114	4	2	120
B	Blood and blood-forming organs	37	35	23	95
C	Cardiovascular system	146	21	2	169
D	Dermatological agents	4		-	4
G	Genito-urinary system and sex hormones	33	3	1	37
H	Systemic hormonal preparations, excluding sex hormones and insulins	6	8	-	14
J	Antiinfectives for systemic use	29	62	13	104
L	Antineoplastic agents and immunomodulating agents	41	75	2	118
M	Musculoskeletal system	38	15	1	54
N	Nervous system	601	9	45	655
P	Antiparasitic products, insecticides and repellents	4	-	-	4
R	Respiratory system	41	1	-	42
S	Sensory organs	15	1	-	16
V	Various	6	15	3	24
Subtotal		1,115	249	92	1,456
Total		1,364			

Remarks: ATC1 - Anatomical, Therapeutic and Chemical Classification Level 1, organ or system upon which the pharmaceutical acts. This level has 14 main groups, each identified by a letter of the alphabet.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

Graph 6-1 Number of presentations of medicines added to SNS pharmaceutical benefits in 2015, regardless of when marketing began, by ATC1 group



Remarks: ATC1 - Anatomical, Therapeutic and Chemical Classification Level 1, organ or system upon which the pharmaceutical acts. This level has 14 main groups, each identified by a letter of the alphabet.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.1.2 Medicines dispensable in pharmacies

In outpatient pharmaceutical benefits, co-payment, or the contribution that users and their beneficiaries make to the cost of their medicines, is governed by the provisions of Art. 102 of the consolidated text of the Spanish law on guarantees and the rational use of medicines and health products. This law states that only outpatient pharmaceutical benefits dispensed by means of an official medical prescription or dispensation order and through a pharmacy are subject to such a user contribution. For medicines that must be dispensed by hospital pharmaceutical services the user does not make a contribution.

In the case of dispensation through pharmacies, the law provides that all users, except those belonging to groups exempt from contribution, must pay a certain percentage of the price of the medicine depending on their level of income. It also defines maximum monthly contributions for pensioners and their beneficiaries.

For the treatment of chronic diseases there are medicines for which a reduced contribution has been established and in these cases users pay 10% of the price of the medicine, with a maximum of €4.2 per package.

Table 6-2 Number of presentations of medicines, dispensable in pharmacies, added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began, by ATC1 group and type of contribution

ATC1 Group		User contribution		Total	Reduced contribution presentations % of total
		General	Reduced		
A	Alimentary tract and metabolism	59	55	114	48.2
B	Blood and blood-forming organs	31	6	37	16.2
C	Cardiovascular system	79	67	146	45.9
D	Dermatological agents	3	1	4	25.0
G	Genito-urinary system and sex hormones	23	10	33	30.3
H	Systemic hormonal preparations, excluding sex hormones and insulins	-	6	6	100.0
J	Antiinfectives for systemic use	29	-	29	-
L	Antineoplastic agents and immunomodulating agents	-	41	41	100.0
M	Musculoskeletal system	37	1	38	2.6
N	Nervous system	121	480	601	79.9
P	Antiparasitic products, insecticides and repellents	4	-	4	-
R	Respiratory system	12	29	41	70.7
S	Sensory organs	15	-	15	-
V	Various	-	6	6	100.0
Total		413	702	1,115	63.0

Remarks: ATC1 - Anatomical, Therapeutic and Chemical Classification Level 1, organ or system upon which the pharmaceutical acts. This level has 14 main groups, each identified by a letter of the alphabet.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

Of the 1,115 presentations of medicines that were added to SNS benefits in 2015 and are invoiced through SNS medical prescriptions dispensed at pharmacies, 63% (702 presentations) have reduced user contribution. All of the newly-added presentations in groups L (Antineoplastic and immunomodulating agents), H (Systemic hormonal preparations, excluding sex hormones and insulins) and V (Various) have reduced contribution. Group N (Nervous system) is next in terms of the proportion of medicines financed with reduced contribution (79.9%).

6.1.1.3 New active ingredients added

In 2015 a total of 51 new active ingredients, in 102 presentations of medicines, were incorporated into the SNS financing scheme. In Group J (Antiinfectives for systemic use) the new antiviral agents indicated for the treatment of chronic hepatitis C, Daclatasvir, Dasabuvir and the fixed dose combinations of Sofosbuvir/Ledipasvir, and also of Ombitasvir/Paritaprevir/Ritonavir have been added. Group A (Alimentary tract and metabolism) is the group with the highest number of inclusions of new active ingredients (11). Group L (Antineoplastic and immunomodulating agents) is the one with the highest number of inclusions of new active ingredients that are orphan drugs: Obinutuzumab and Ramucirumab (monoclonal antibodies) as well as Ruxolitinib and Nintedanib (protein kinase inhibitors).

As for dispensation conditions, 36 of the 102 presentations are classified as being for Hospital Use (HU) and 13 are classified as Hospital Diagnosis (HD) medicines and in these presentations dispensation to non-hospitalised patients has been limited to hospital pharmaceutical services, although no special authorisation is required. The rest of the new presentations can be dispensed through SNS medical prescription in pharmacies. Of them, 9 are subject to specific exceptions (special authorisation) in their conditions of prescription and dispensation.

Table 6-3 Active ingredients added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began

ATC1 Group	ATC5	Active ingredients	Number of presentations	Dispensation conditions as of December 2015
A/ Alimentary tract and metabolism	A05AA03	Cholic acid	2	Hospital use-Orphan
	A10BD09	Pioglitazone and alogliptin	2	Medical prescription required
	A10BD13	Metformin and alogliptin	4	Medical prescription required
	A10BD15	Metformin and dapagliflozin	2	Medical prescription required
	A10BD16	Metformin and canagliflozin	4	2 presentations require medical prescription while 2 others require prescription and authorisation
	A10BD20	Metformin and empagliflozin	4	Medical prescription required
	A10BH04	Alogliptin	3	Medical prescription required
	A10BX11	Canagliflozin	2	1 presentation requires medical prescription and the other requires prescription and authorisation
	A10BX12	Empagliflozin	2	Medical prescription required
	A10BX13	Albiglutide	2	Medical prescription and authorisation required
	A10BX14	Dulaglutide	2	Medical prescription and authorisation required

B/ Blood and blood-forming organs	B02BD07	Coagulation factor XIII	1	Hospital use
C/ Cardiovascular system	C02KX04	Macitentan	1	Hospital use-Orphan
	C02KX05	Riociguat	4	Hospital use-Orphan
	C08CA16	Clevidipine	1	Hospital use
	C10BA05	Atorvastatin and ezetimibe	8	Medical prescription required
G/ Genito-urinary system and sex hormones	G01AC05	Dequalinium, chloride	1	Medical prescription required
	G04CA53	Tamsulosin and solifenacin	2	Medical prescription required
J/ Antiinfectives for systemic use	J01DI01	Ceftobiprole medocaril	1	Hospital use
	J01XX11	Tedizolid	2	Hospital use
	J05AR13	Lamivudine, abacavir and dolutegravir	1	Hospital use
	J05AR14	Darunavir and cobicistat	1	Hospital use
	J05AR15	Atazanavir and cobicistat	1	Hospital use
	J05AX14	Daclatasvir	2	Hospital Diagnosis, SCP hospital dispensation
	J05AX16	Dasabuvir	1	Hospital Diagnosis, SCP hospital dispensation
	J05AX65	Sofosbuvir and ledipasvir	1	Hospital Diagnosis, SCP hospital dispensation
	J05AX67	Ombitasvir, paritaprevir and ritonavir	1	Hospital Diagnosis, SCP hospital dispensation
	J07BB03	Live attenuated influenza vaccine	2	Medical prescription and authorisation required
L/ Antineoplastic and immunomodulating agents	L01DB11	Pixantrone	1	Hospital Use
	L01XC14	Trastuzumab emtansine	2	Hospital Use
	L01XC15	Obinutuzumab	1	Hospital Use-Orphan
	L01XC21	Ramucirumab	2	Hospital Use-Orphan
	L01XE18	Ruxolitinib	3	Hospital Diagnosis, SCP hospital dispensation Orphan
	L01XE21	Regorafenib	1	Hospital Diagnosis, SCP hospital dispensation
	L01XE31	Nintedanib	4	2 presentations are Hospital Use and Orphan. Two other presentations are Hospital Diagnosis, SCP hospital dispensation- Not orphan
	L03AB13	Peginterferon beta-1a	4	Hospital Use
	L04AA33	Vedolizumab	1	Hospital Use
	L04AC10	Secukinumab	2	Hospital Diagnosis, SCP hospital dispensation
N/ Nervous system	N06AX14	Tianeptine	4	Medical prescription required
	N06AX26	Vortioxetine	3	Medical prescription required
	N07XX09	Dimethyl fumarate	2	Hospital Use
R/ Respiratory system	R03AC19	Olodaterol	1	Medical prescription required
	R03AL03	Vilanterol and Umeclidinium bromide	1	Medical prescription required
	R03AL05	Formoterol and aclidinium bromide	2	Medical prescription required
	R03BB07	Umeclidinium bromide	1	Medical prescription required

S/ Sensory organs	S01EC54	Brinzolamide, combinations	1	Medical prescription required
V/ Various	V03AX03	Cobicistat	1	Hospital Use
	V09AX04	Flutemetamol (18F)	2	Hospital Use
	V09AX06	Florbetaben (18F)	1	Hospital Use
	V09CA06	Technetium (99mTc), ethylenedicysteine	1	Hospital Use
	V10XX03	Radium 223 dichloride (223Ra)	1	Hospital Use
		51	102	
Remarks: SCP - packaged without tamper-evident label, dispensed through hospital pharmaceutical services. Tamper-evident labels are used for invoicing by pharmacies.				
Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.				

6.1.1.4 Average prices of the medicines added

The average manufacturer's selling price (MSP) of all the presentations added to the public financing system during the year 2015 is €163.1. The medicines that can be dispensed in pharmacies have an average MSP of €31.4 (which corresponds to a retail price of €47.1) and, in the case of hospital medicines (clinical packs and medicines for hospital use and dispensation), the average MSP is €593.5.

Table 6-4 Changes in the average prices of the presentations of medicines added to SNS pharmaceutical benefits, regardless of when their marketing began, 2011-2015

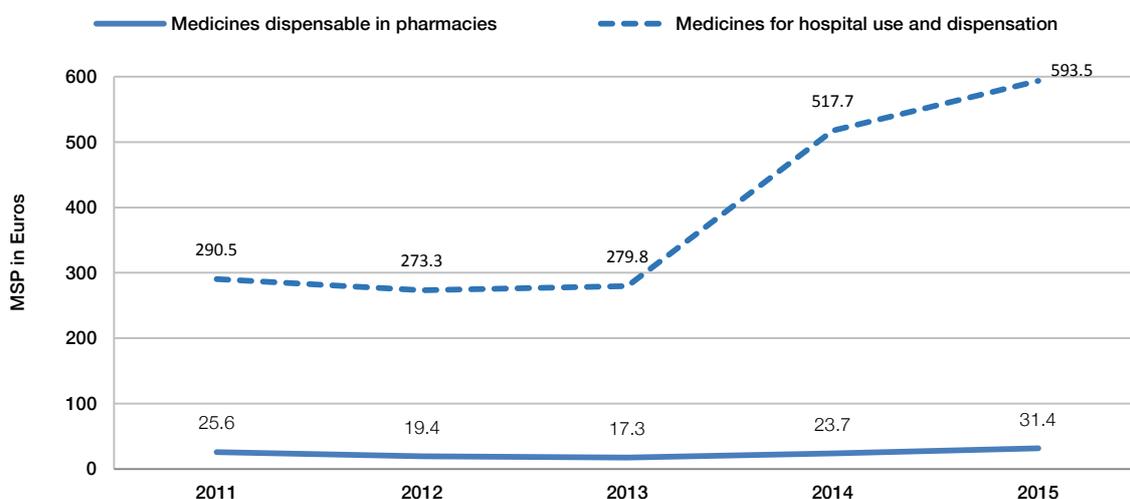
	Dispensable in pharmacies		Hospital use and dispensation (CP-HU-SCP)	Total
	Average MSP (Euros)	Average RP-VAT (Euros)	Average MSP (Euros)	Average MSP (Euros)
2011	25.6	36.5	290.5	62.7
2012	19.4	29.8	273.3	67.2
2013	17.3	26.5	279.8	57.5
2014	23.7	35.3	517.7	121.9
2015	31.4	47.1	593.5	163.1

Remarks: CP - Clinical Pack. HU - Hospital Use. SCP - Packaged without tamper-evident label, dispensed through hospital pharmaceutical services. MSP - Manufacturer's Selling Price. RP-VAT - Retail Price including Value-Added Tax.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

As regards the changes in the average MSP of the medicines included in the financing scheme over the last five years, a downward trend was visible from 2011 to 2013 but that changed in 2014. In 2014 and 2015 the average MSP rose, due to the specificity of the medicines incorporated into the pharmaceutical benefits.

Graph 6-2 Changes in the average prices of the presentations of the medicines added to SNS pharmaceutical benefits, regardless of when their marketing began, 2011 - 2015



Remarks: MSP - Manufacturer's Selling Price.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

In medicines dispensable in pharmacies, especially noteworthy is the incorporation of presentations of Folitropin alfa for treating infertility and of the anti-diabetic Dulaglutida. The aforementioned increase is very significant in medicines for hospital use and dispensation, as the average MSP jumps from €279.8 in 2013 to €517.7 in 2014 and €593.5 in 2015, which means that in 2 years the average MSP has more than doubled. It should also be noted that 2014 saw the incorporation, among others, of some very expensive new medicines for the treatment of serious pathologies such as hepatitis C (Simeprevir and Sofosbuvir), for certain types of cystic fibrosis (Ivacaftor) and for the treatment of multiple myeloma (Pomalidomide). In 2015 the SNS continued adding medicines for the treatment of hepatitis C (Daclatasvir, Dasabuvir, combination of Sofosbuvir and Ledipasvir, combination of Ombitasvir, Paritaprevir and Ritonavir), as well as other expensive medicines, such as the antitumour radioisotope Radium 223, antineoplastic agents (Ruxolitinib and Obinutuzumab) and Cholic Acid for treating persons with a genetic anomaly that prevents them from producing bile, and others.

6.1.1.5 Generic medicines added

Generic medicines have the same quality and efficacy as the original to which they correspond, their prices are lower and they have the advantage of greater security because they are named after their active ingredient. They therefore help rationalise public expenditure, without affecting the quality or efficacy of SNS pharmaceutical benefits. They also benefit those users who make a contribution to the cost of their medicines, since they have lower prices.

Of all the presentations of medicines added to the public financing system over the course of 2015, generic medicines represent 72.9%, with the average MSP for these medicines being €69.4. Non-generic, or proprietary, medicines represent 27.1% of the total and their average MSP is €414.6, six times that of the generic product.

Table 6-5 Number of presentations of generic and proprietary medicines added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began

	Number of presentations	% of total	Average MSP (Euros)
Generic medicines	1,061	72.9	69.4
Proprietary medicines	395	27.1	414.6
Total	1,456	100.0	163.1

Remarks: MSP - Manufacturer's Selling Price.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

In the last five years, from 2011 to 2015, a total of 110 new generic active ingredients have been added to the public financing system. This promotes the prescription and use of generic medicines.

Table 6-6 Changes in the number of new generic active ingredients added to SNS pharmaceutical benefits, regardless of when their marketing began, 2011- 2015

	2011	2012	2013	2014	2015	Total 2011-2015
New generic active ingredients	27	21	24	20	18	110

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

In 2015 it was possible to finance 18 new generic active ingredients (434 presentations) for the first time, due to the expiration of their patents. Group N (Nervous system) has the most newly-added generic active ingredients (Pregabalin, Levodopa/Carbidopa/Entacapone, Apomorphine, Rasagiline, Aripiprazol and Duloxetine). The active ingredient with the highest number of generic presentations introduced in 2015 is the antiepileptic Pregabalin (137), followed by the antipsychotic Aripiprazol (104) for the treatment of schizophrenia, which requires prior authorisation in the case of patients over the age of 75.

Table 6-7 New generic active ingredients added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began

ATC1 Group		ATC5	Active ingredients	Number of presentations	Dispensation conditions
A	Alimentary tract and metabolism	A03AB06	Otilonium bromide	5	Medical prescription required
C	Cardiovascular system	C09CA02	Eprosartan	2	Medical prescription required
		C09DA08	Olmesartan medoxomil/hydrochlorothiazide	4	Medical prescription required
		C10AX09	Ezetimibe	2	Medical prescription required
J	Anti-infectives for systemic use	J01XX08	Linezolid	8	Hospital Use
		J02AC03	Voriconazol	17	Hospital Use
L	Antineoplastic and immunomodulating agents	L01AA09	Bendamustine	6	Hospital Use
		L01AB01	Busulfan	1	Hospital Use
		L01DB07	Mitoxantrone	4	Hospital Diagnosis - Authorisation
M	Musculoskeletal system	M01AH05	Etoricoxib	3	Medical prescription required
N	Nervous system	N03AX16	Pregabalin	137	Medical prescription required
		N04BA03	Levodopa/carbidopa/entacapone	64	Medical prescription required
		N04BC07	Apomorphine	1	Hospital Diagnosis - Authorisation
		N04BD02	Rasagiline	8	Medical prescription required
		N05AX12	Aripiprazol	104	CPD-E Authorisation
		N06AX21	Duloxetine	60	Medical prescription required
V	Various	V03AF01	Mesna	2	Hospital Use
		V08CA02	Gadoteric acid	6	Hospital Use
Total		18	-	434	-

Remarks: CPD-E Authorisation - special authorisation required for patients aged over 75

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.1.6 Biosimilar medicines added

A biosimilar is a biological medicine similar to another one that already exists but whose patent has expired (the reference product). Biosimilars are a treatment alternative to the original biological product.

In 2015 the first presentations of the biosimilar of the monoclonal antibody Infliximab (pharmaceutical that acts by blocking the tumour necrosis factor alpha) were included in SNS pharmaceutical benefits, for the basic treatment of inflammatory diseases such as rheumatoid arthritis, psoriatic arthritis, ankylosing spondylitis, Crohn's disease and ulcerative colitis. The year 2015 also saw the incorporation of the first biosimilar of insulin glargine, for the treatment of diabetes mellitus.

Table 6-8 New biosimilar medicines added to SNS pharmaceutical benefits in 2015, regardless of when their marketing began

ATC1 Group		ATC5	Active ingredients	Number of presentations	Dispensation conditions
A	Alimentary tract and metabolism	A10AE04	Insulin glargine	1	Medical prescription required
L	Antineoplastic and immunomodulating agents	L04AB02	Infliximab	3	Hospital Use

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.2 Total number of medicines included in SNS pharmaceutical benefits, as of 31 December 2015

6.1.2.1 Total number of medicines included

The total number of presentations of medicines included in the public financing system as of 31 December 2015, regardless of when their marketing began, is 19,177. Of these presentations, 16,268 (84.8%) are in normal packaging and 2,909 (15.2%) are in clinical packaging (for use in hospitals). With regard to the medicines in normal packaging, 13,837 are medicines financed through the invoicing of SNS prescriptions in pharmacies and 2,431 are medicines for hospital use and dispensation (these are not financed through invoicing of prescriptions and can only be used in hospital settings or authorised care centres). By therapeutic group, N (Nervous system) has the highest number of financed medicines (5,420). It is followed by group C (Cardiovascular system) with 3,269 and group J (Antiinfectives for systemic use) with 2,296 presentations.

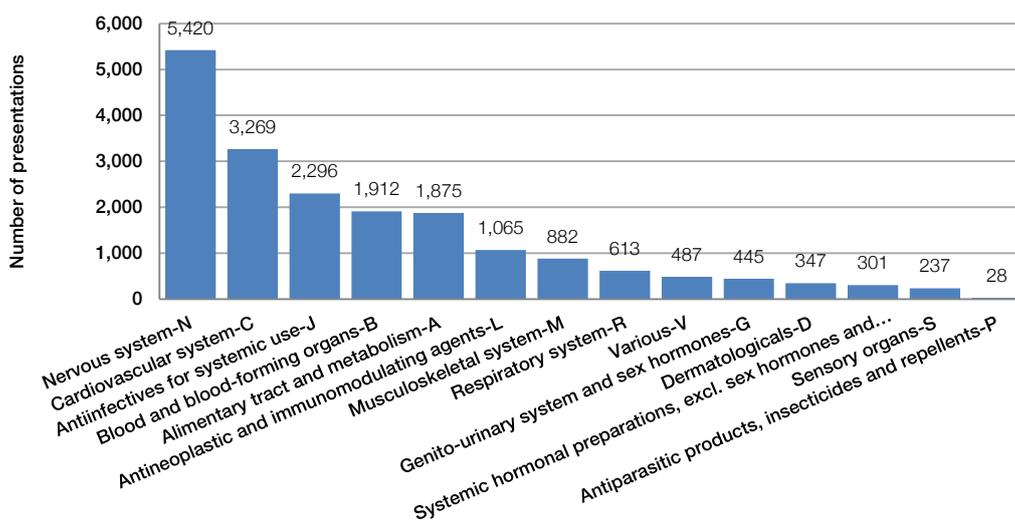
Table 6-9 Number of presentations of medicines included in SNS pharmaceutical benefits, regardless of when their marketing began, as of 31 December 2015

ATC1 Group	Normal Pack		Clinical pack	Total	
	Dispensable in pharmacies	For use and dispensation in hospitals			
A	Alimentary tract and metabolism	1,544	95	236	1,875
B	Blood and blood-forming organs	893	484	535	1,912
C	Cardiovascular system	2,680	66	523	3,269
D	Dermatological agents	335		12	347
G	Genito-urinary system and sex hormones	409	25	11	445
H	Systemic hormonal preparations, excluding sex hormones and insulins	181	70	50	301
J	Anti-infectives for systemic use	1,167	466	663	2,296
L	Antineoplastic and immunomodulating agents	431	573	61	1,065
M	Musculoskeletal system	644	117	121	882
N	Nervous system	4,648	195	577	5,420
P	Antiparasitic products, insecticides and repellents	24	2	2	28
R	Respiratory system	553	11	49	613
S	Sensory organs	225	11	1	237
V	Various	103	316	68	487
Subtotal		13,837	2,431		
Total		16,268		2,909	19,177

Remarks: ATC1 - Anatomical, Therapeutic and Chemical Classification Level 1, organ or system upon which the pharmaceutical acts.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

Graph 6-3 Total number of presentations of medicines included in SNS pharmaceutical benefits, regardless of when their marketing began, as of 31 December 2015



Remarks: ATC1 - organ or system upon which the pharmaceutical acts. This level has 14 anatomical groups, each identified by a letter of the alphabet.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.2.2 Medicines dispensable in pharmacies

Only ambulatory pharmaceutical benefits provided through pharmacies are subject to user contributions, or co-payment, with certain groups being exempt from it. For the treatment of chronic diseases there are medicines for which a reduced contribution has been established.

Of the 13,837 presentations of medicines included in SNS pharmaceutical benefits as of 31 December 2015 that can be dispensed in pharmacies, 45% (6,232 presentations) belong to groups of medicines having a reduced contribution. All of the presentations in group L (Antineoplastic and immunomodulating agents) are in the reduced contribution category. Group N (Nervous system) has a high percentage of medicines that are financed with reduced contributions (67.2%), followed by group H (Systemic hormonal preparations excluding sex hormones and insulins) with 56.9% and by group C (Cardiovascular system) with 55.6%.

Table 6-10 Number of presentations of medicines included in SNS pharmaceutical benefits, dispensable in pharmacies, regardless of when their marketing began, as of 31 December 2015

ATC1 Group		User contribution		Total	Reduced contribution presentations % of total
		General	Reduced		
A	Alimentary tract and metabolism	1,061	483	1,544	31.3
B	Blood and blood-forming organs	774	119	893	13.3
C	Cardiovascular system	1,189	1,491	2,680	55.6
D	Dermatological agents	316	19	335	5.7
G	Genito-urinary system and sex hormones	318	91	409	22.2
H	Systemic hormonal preparations, excluding sex hormones and insulins	78	103	181	56.9
J	Anti-infectives for systemic use	1,150	17	1,167	1.5
L	Antineoplastic and immunomodulating agents	-	431	431	100
M	Musculoskeletal system	618	26	644	4.0
N	Nervous system	1,523	3,125	4,648	67.2
P	Antiparasitic products, insecticides and repellents	16	8	24	33.3
R	Respiratory system	279	274	553	49.5
S	Sensory organs	225	-	225	-
V	Various	58	45	103	43.7
Total		7,605	6,232	13,837	45.0

Remarks: ATC1 - organ or system upon which the pharmaceutical works. This level has 14 main groups identified by a letter of the alphabet.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.2.3 Average prices of medicines included

The average manufacturer's selling price (MSP) of all the presentations included in public financing as of 31 December 2015 is €79.5. The medicines dispensable in pharmacies have an average MSP of €17.5 (which corresponds to an average retail price with VAT of €26.0). In the case of hospital medicines (clinical packs and medicines for hospital use and dispensation) the average MSP is €240.2, almost 14 times higher.

Table 6-11 Changes in average prices of the presentations of medicines included in SNS pharmaceutical benefits, regardless of when their marketing began, as of December 31 of each year, 2011-2015

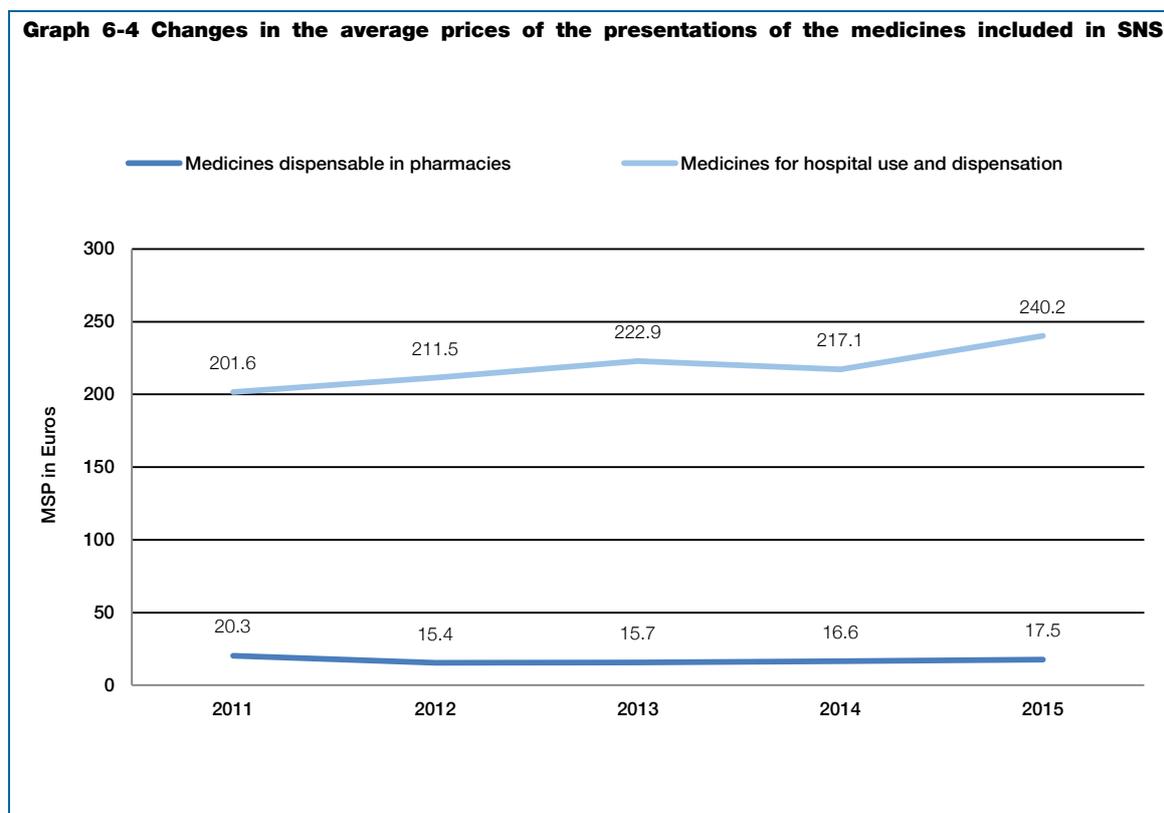
	Dispensable in pharmacies		Hospital use and dispensation (CP-HU-SCP)	Total
	Average MSP (Euros)	Average RP with VAT (Euros)	Average MSP (Euros)	Average MSP (Euros)
As of 31 December 2011	20.3	27.7	201.6	72.8
As of 31 December 2012	15.4	22.6	211.5	72.4
As of 31 December 2013	15.7	23.2	222.9	73.0
As of 31 December 2014	16.6	24.4	217.1	72.9
As of 31 December 2015	17.5	26.0	240.2	79.5

Remarks: CP - Clinical Pack. HU - Hospital use. SCP - Packaged without tamper-evident label, dispensation in hospital pharmaceutical services.
MSP - Manufacturer's Selling Price. RP with VAT - Retail Price including Value-Added Tax.
Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

In the medicines dispensable in pharmacies, there has been a 13.8% decrease in the MSP over these 5 years, from €20.3 to €17.5.

In medicines for hospital use and dispensation, an upward trend in the MSP has been observed, with an increase of 19.1% over these 5 years. The decrease in the price of these medicines in 2014 is largely due to the use, for the first time, of a reference price system for groups of medicines in clinical packaging.

Graph 6-4 Changes in the average prices of the presentations of the medicines included in SNS



6.1.2.4 Generic medicines included

Of all the medicines financed by the SNS, 57.6% are generic medicines, with an average MSP of €36.2. For the presentations of non-generic medicines, the average price is almost 4 times higher (€138.3).

Table 6-12 Number of presentations of generic and proprietary medicines included in SNS pharmaceutical benefits, regardless of when their marketing began, as of 31 December 2015

	Number of presentations	% of total	Average MSP (Euros)
Generic medicines	11,043	57.6	36.2
Proprietary medicines	8,134	42.4	138.3
Total	19,177	100.0	79.5

Remarks: MSP - Manufacturer's Selling Price.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.2.5 Biosimilar medicines included

As of 31 December 2015 there are 88 presentations of biosimilar medicines included, corresponding to 6 active ingredients. The biosimilars of Filgrastim and Erythropoietin are the ones with the most presentations available.

Table 6-13 Biosimilar medicines included in SNS pharmaceutical benefits, regardless of when their marketing began, as of 31 December 2015

	ATC1 Group	ATC5	Active ingredients	Number of presentations	Dispensation conditions
A	Alimentary tract and metabolism	A10AE04	Insulin glargine	1	Medical prescription required
B	Blood and blood-forming organs	B03XA01	Erythropoietin	26	Hospital Use
G	Genito-urinary system and sex hormones	G03GA05	Foliotropin alfa	15	Hospital Diagnosis. Authorisation required
H	Systemic hormonal preparations, excluding sex hormones and insulins	H01AC01	Somatotropin	15	Hospital Use
L	Antineoplastic and immunomodulating agents	L03AA02	Filgrastim	28	Hospital Use
		L04AB02	Infliximab	3	Hospital Use
Total		6	-	88	-

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

6.1.3 All health products included as of 31 December 2015

Because the regulatory provisions regarding health product financing were pending review, in 2015 no additions were made to the health products included in SNS pharmaceutical benefits. As of 31 December 2015, the total number of health products financed by the SNS was 4,784. According to the groups established in Royal Decree 9/1996, of 15 January,⁸⁶ the majority of the products belong to the group of elastic fabrics used to protect against or reduce internal injuries or malformations (1,508), followed by urine incontinence pads (457) and colostomy bags (396). In the reduced contribution groups there are 1,695 products (35.4% of the total); in these cases the users, except those belonging to one of the groups exempt from contribution, must pay 10% of the price of the product, with a maximum price of €4.2 per package. The average price of all the health products included in the public financing system is €24.2. The highest average prices correspond to ileostomy and urostomy bags (€77.8 and €75.9, respectively), while the lowest averages are found in bandages (€1.3) and surgical tape and cotton wool products (€2.2).

Table 6-14 Total number of health products included in SNS pharmaceutical benefits, by group, showing type of contribution and average prices, as of 31 December 2015

Group	User contribution		Total	Average RP with VAT (Euros)
	General	Reduced		
Cotton wool products	174	-	174	2.2
Dressings	257	-	257	14.8
Gauzes	114	-	114	2.5
Bandages	299	-	299	1.3
Surgical tape	125	-	125	2.2
Traqueostomy and laryngectomy cannulae	-	124	124	47.5
Catheters	-	334	334	33.2
Vaginal douches, irrigators and accessories	7	-	7	3.0
Eye patches	13	-	13	3.9
Elastic fabrics for internal injuries or malformations	1,508	-	1,508	7.4
Trusses and suspensory bandages	129	-	129	10.3
Inhalation devices	-	7	7	5.8
Urine collection bags	-	97	97	10.3
Urine collector for incontinence in men, accessories	-	105	105	43.2
Urine incontinence pads	457	-	457	31.6
Other devices for incontinence	6	-	6	17.5
Colostomy bags	-	396	396	58.6
Ileostomy bags	-	323	323	77.8
Urostomy bags	-	118	118	75.9
Ostomy accessories	-	17	17	4.9
Ostomy dressings	-	156	156	19.9
Ostomy irrigation systems and accessories	-	14	14	31.4
Continent colostomy systems	-	4	4	42.3
Total	3,089	1,695	4,784	24.2

Remarks: RP with VAT - Retail Price including Value-Added Tax.

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

⁸⁶ This RD regulates the selection of the effects and accessories, their financing and their supply and dispensation.

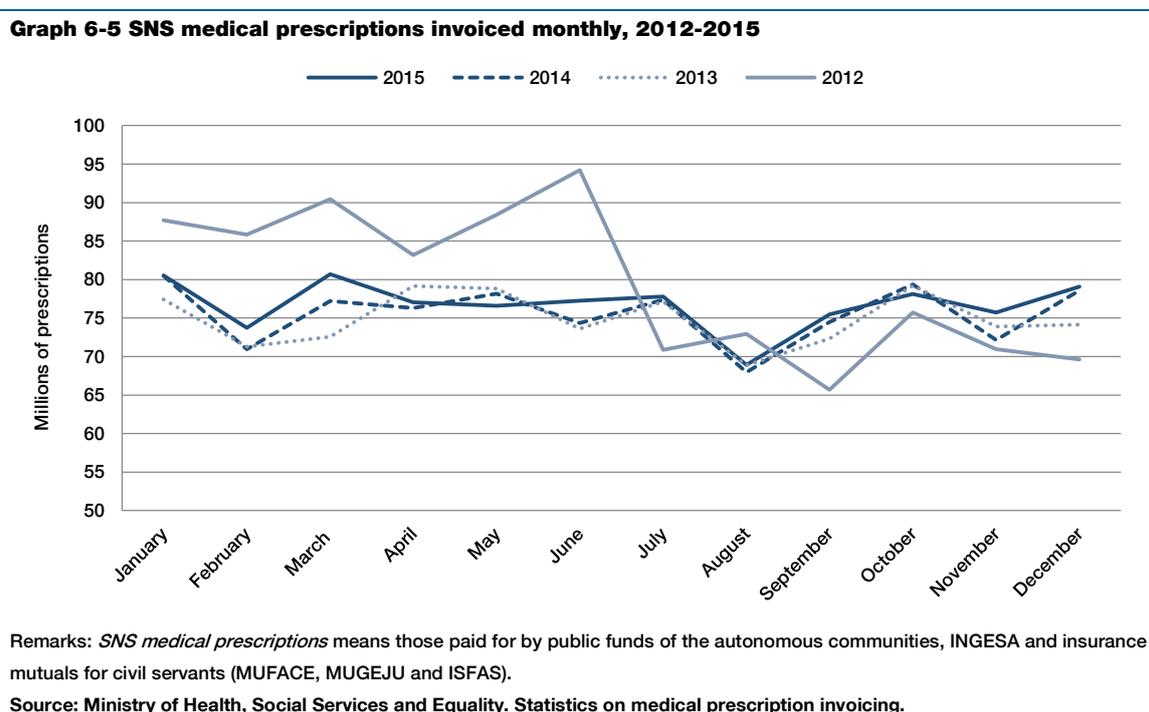
6.2 Consumption of pharmaceutical benefits through SNS medical prescriptions in pharmacies

This section contains information about the invoicing of SNS medical prescriptions dispensed in pharmacies and paid for by the public funds of the autonomous communities, the National Institute of Health Management (INGESA) and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS). The information related to the insurance mutuels has been included because they account for 4.3% of the expenditure and 4.2% of the number of prescriptions invoiced in the SNS as a whole.

6.2.1 Pharmacies that collaborate in SNS pharmaceutical benefits

Almost 22,000 pharmacies⁸⁷ collaborate in the provision of SNS pharmaceutical benefits, invoicing an average of 77 million SNS medical prescriptions per month to the public funds of the autonomous communities, INGESA and the insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS), with an average monthly sales per pharmacy of €46,000.

In 2015 a total of 921 million SNS medical prescriptions were invoiced through pharmacies. In the period 2012-2015 the number fell by almost 3,6%⁸⁸



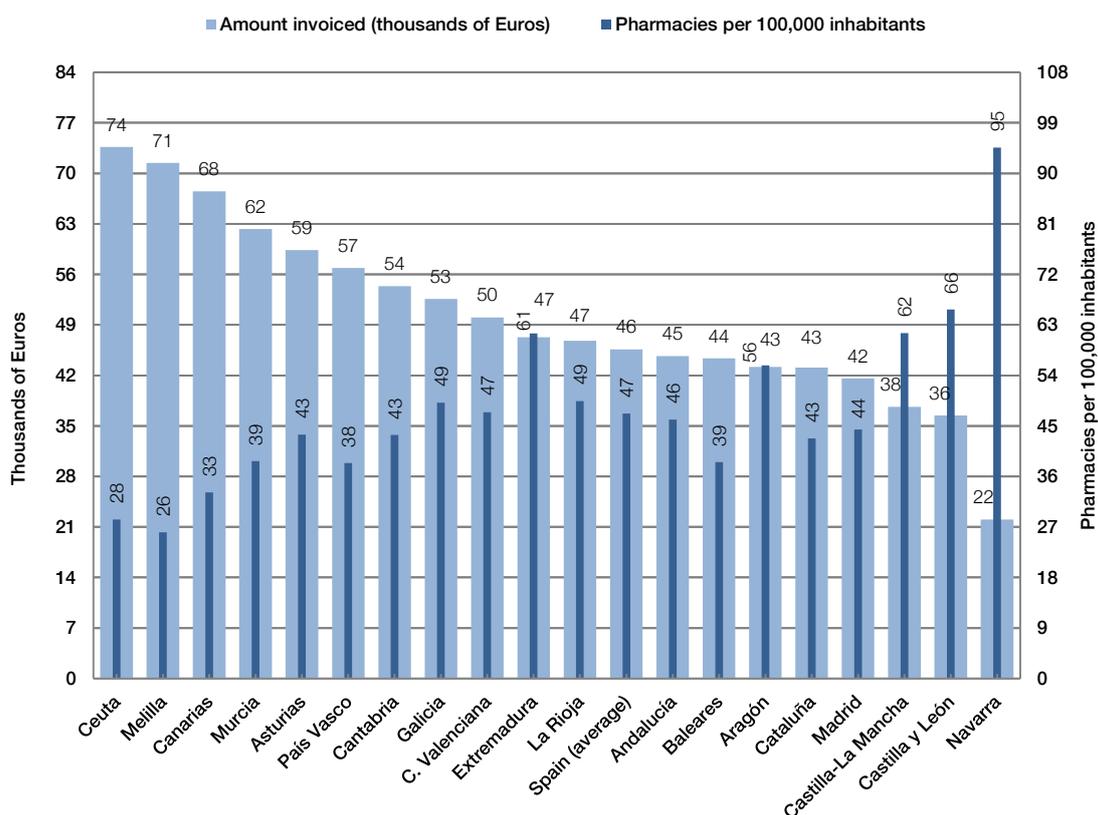
⁸⁷ See section on pharmacies in the Health Care Resources chapter.

⁸⁸ Since 2012 pharmaceutical policy measures have been in effect.

Ceuta is the territory with the highest monthly sales per pharmacy (€74,000), followed by Melilla, Canarias, Murcia and Asturias. In the pharmacies of Navarra average monthly sales are just €22,000. Castilla y León invoices €36,000 and is followed by Castilla-La Mancha and Madrid.

The extensive network and high degree of dispersion of pharmacies facilitate access by Spain's population to the pharmaceutical benefits that patients need, even in isolated areas.

Graph 6-6 Average monthly sales in thousands of Euros by pharmacies and number of pharmacies per 100,000 inhabitants, by autonomous community, 2015



Remarks: Autonomous communities and cities appear in order from highest to lowest according to the amount invoiced monthly. Average sales means the amount invoiced for the SNS medical prescriptions dispensed, to be paid for by public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

6.2.2 Pharmaceutical expenditure

In 2015 the pharmaceutical expenditure generated by the cost of SNS medical prescriptions invoiced by pharmacies was 9,962 million Euros. The amount paid for pharmaceuticals has grown as compared to 2014 but is still below 2012 expenditure. Between 2010 and 2015 pharmaceutical expenditure decreased by 21.6%.

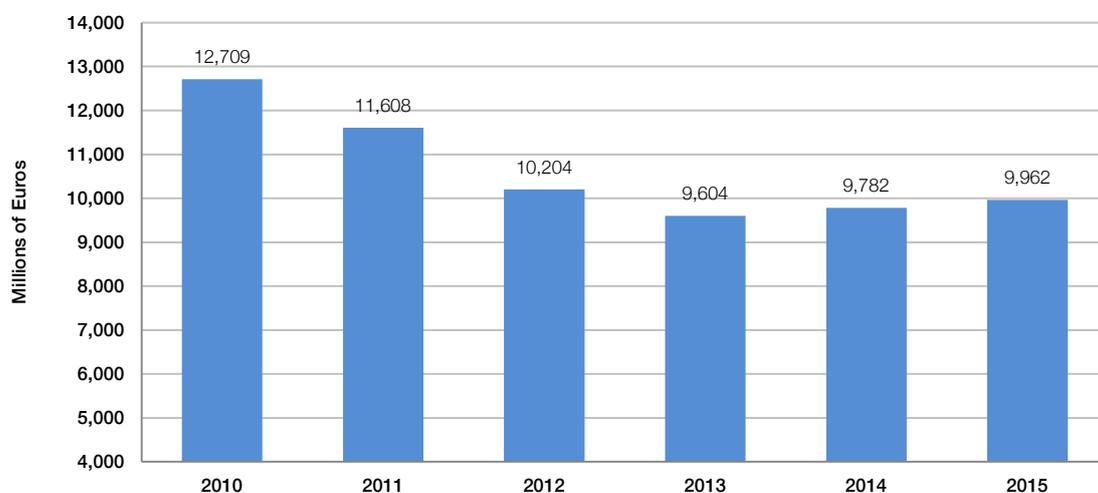
Influencing this contention in the public pharmaceutical expenditure is the continuity of the regulatory measures and efforts to rationalise the use of medicines put in place in recent years (Royal Decree-Laws 4/2010, 8/2010 and 9/2011), having a significant impact:

- Royal Decree-Law 16/2012, of 20 April, on urgent measures to guarantee the sustainability of the SNS and to improve the quality and safety of its services, which entered into effect in July of 2012. This legislation put in place a new system of co-payment for the dispensation of medicines and health products provided by the SNS, the user contribution being determined by the individual's income level and socio-occupational situation, regardless of whether he/she is part of the active population or a pensioner, with exemptions for a series of groups, such as, for the first time, certain long-term unemployed.
- Resolutions of 2 August 2012 and 18 February 2013, of the Directorate General of the Basic Basket of SNS Services and Pharmacy, which excluded, in September of 2012 and March of 2013, a group of 417 presentations of medicines from SNS pharmaceutical benefits, based on the criteria specified in the Law on guarantees and the rational use of medicines and health products, most for being indicated in the treatment of minor symptoms.
- Another factor contributing to the contention and reduction of pharmaceutical expenditure is the modification of the system of reference prices and homogeneous groups of medicines, regulated by provisions adopted in 2014 and 2015:
 - Royal Decree 177/2014, of 21 March, which regulates the system of reference prices and homogeneous groups of medicines in the SNS, and certain information systems concerning financing and prices of medicines and health products, put in place new regulations on reference prices and homogeneous groups of medicines.
 - Implementing this Royal Decree, Ministerial Order SSI/1225/2014, of 4 July, in effect in 2015 until the new Ministerial Order SSI/2160/2015, of 14 October, came into effect, updated as of 1 November 2015 the groups and reference prices for medicines for hospital use and with clinical packaging, and as of 1 December those corresponding to the invoicing of official SNS prescriptions. This system contributes to an obligatory reduction in medicine prices, because it determines, based on the lowest Daily Treatment Cost (DTC), the maximum price at which the presentations of each group will be financed.
 - The application of the homogeneous groups system provided for in the aforementioned Royal Decree promotes, by means of monthly updates of the lowest prices and quarterly updates of low price groups, a competition scheme involving voluntary drops in the prices of medicines participating in the system.

Also contributing to pharmaceutical savings are the programs undertaken by the autonomous communities to promote the rational use of medicines.

Between the application in July of 2012 of the measures adopted to guarantee the sustainability of the SNS and 31 December 2015, the savings in the pharmaceutical expenditure amounted to 5,657.8 million Euros.

Graph 6-7 Changes in pharmaceutical expenditure, in millions of Euros, generated through the invoicing of SNS medical prescriptions, 2010-2015

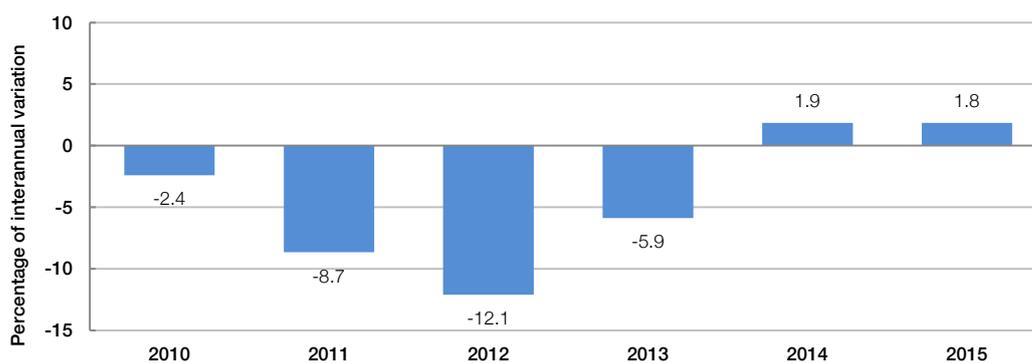


Remarks: *SNS medical prescriptions* means those paid for by public funds of the autonomous communities, INGESA and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS). The pharmaceutical expenditure is the total amount spent on pharmacy dispensation, calculated at retail prices including VAT, minus the contributions made by users and pharmacies and minus the deductions applicable by virtue of RDL 8/2010.

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing.

After the downward trend observed in pharmaceutical spending since 2010, with 2012 being the year with the largest interannual reduction (12.1%), 2014 showed a moderate positive increase and in 2015 the increase stabilized at 1.8%.

Graph 6-8 Changes in the percentage of interannual variation in pharmaceutical expenditure generated through the invoicing of SNS medical prescriptions, 2010-2015

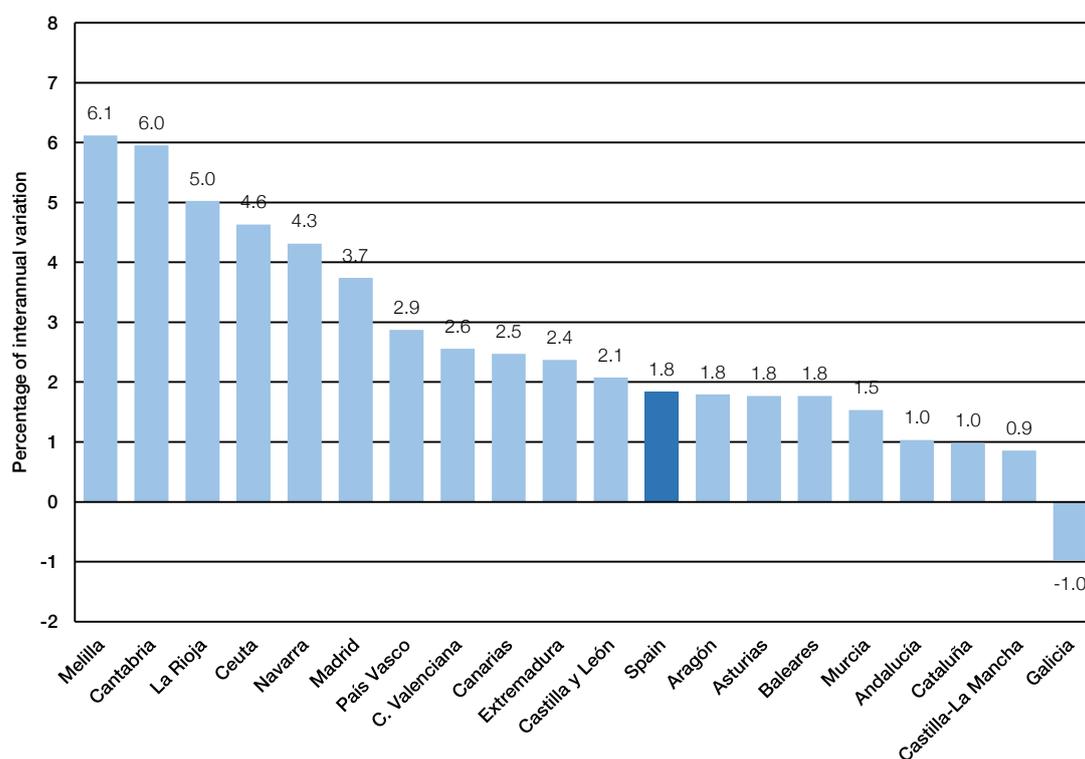


Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS). The pharmaceutical expenditure is the total amount spent on pharmacy dispensation, calculated at retail prices including VAT, minus the contributions made by users and pharmacies and minus the deductions applicable by virtue of RDL 8/2010.

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing.

By territories, the territory presenting the greatest reduction in pharmaceutical spending in 2015, as compared to 2014, is Galicia with -1%. The other autonomous communities show positive growth, the lowest being found in Castilla-La Mancha, Cataluña and Andalucía, and the highest being found in Melilla, Cantabria and La Rioja.

Graph 6-9 Percentage of variation in pharmaceutical expenditure generated through the invoicing of SNS medical prescriptions by autonomous community, 2015-2014



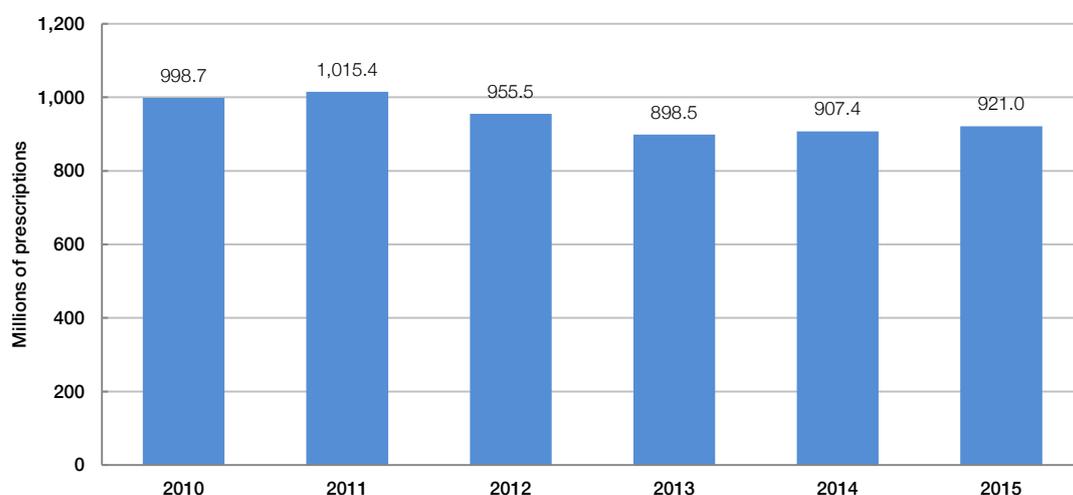
Remarks: SNS medical prescriptions means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing.

6.2.3 Prescriptions invoiced

The number of SNS medical prescriptions invoiced through pharmacies in 2015 is a total of 921 million, although consumption levels remain below those of 2012 and preceding years. Between 2010 and 2015 the prescriptions invoiced decreased by 77.7 million, which represents a drop of 7.8%.

Graph 6-10 Changes in the number of SNS medical prescriptions invoiced, in millions, 2010-2015

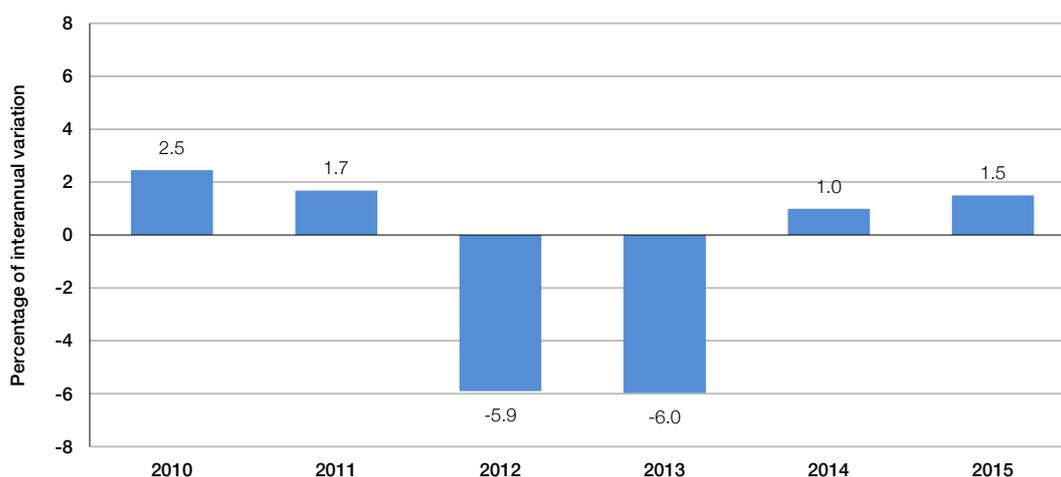


Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing.

After the sharp decrease in the number of prescriptions invoiced in 2012 and 2013 (5.9% and 6%), since 2014 an upward trend has been observed. In 2015 it was 1.5%, growth that, although positive, remains below the figures of 2011 and preceding years.

Graph 6-11 Changes in the percentage of interannual variation in the number of SNS medical prescriptions invoiced, 2010-2015

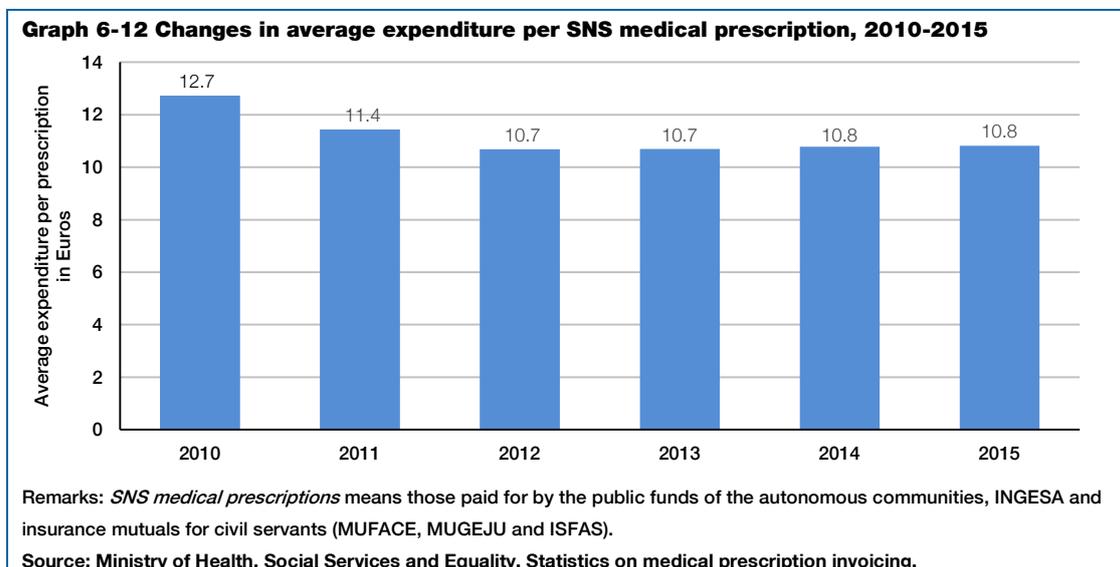


Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuels for civil servants (MUFACE, MUGEJU and ISFAS).

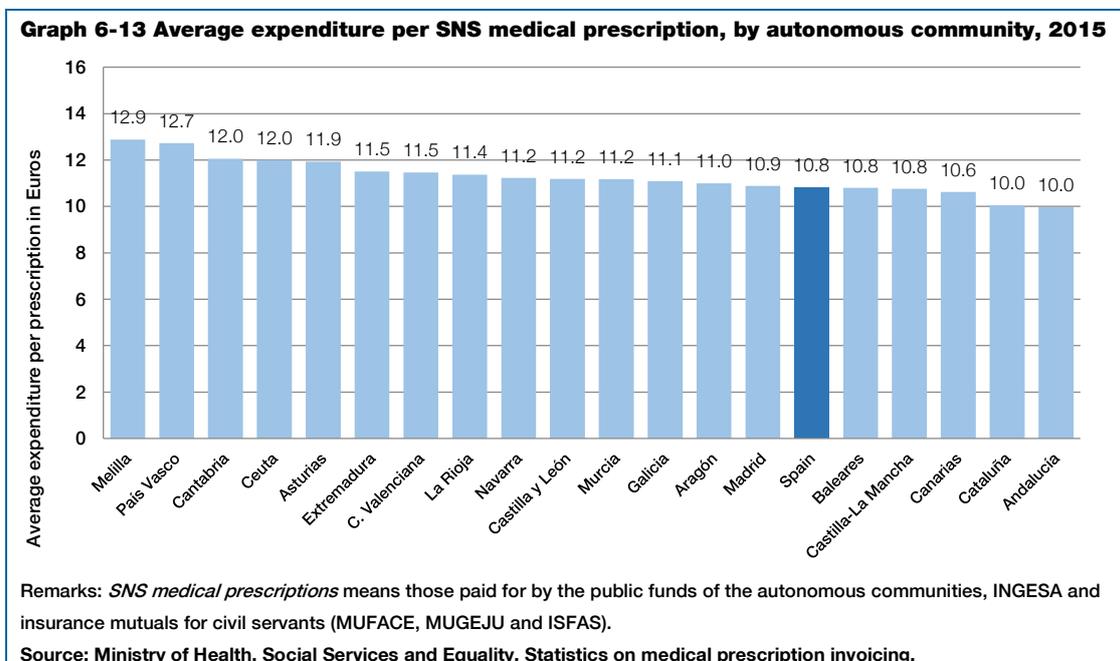
Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing.

6.2.4 Average expenditure per prescription

In 2015 the trend in the average expenditure per prescription was stable (€10.8), the same as the year before, which means almost €2 less than the 2010 figure (€12.7).



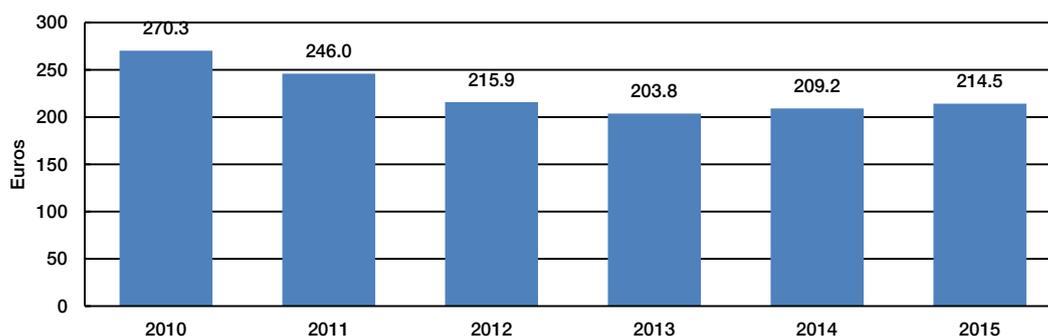
In 2015 Melilla had the highest average expenditure per prescription (€12.9), over €2 above the national average. It was followed by País Vasco (€12.7) and Ceuta and Cantabria (€12). Andalucía and Cataluña continued to have the lowest average expenditure per prescription of all the autonomous communities (€10).



6.2.5 Expenditure per capita

In 2015 the expenditure generated by the invoicing of medical prescriptions per capita was €214.5, which is 2.5% more than in 2014. Between 2010 and 2015 the public pharmaceutical expenditure per capita fell by 20.6%, due to the impact of the aforementioned measures of economic regulation, which have succeeded in reducing pharmaceutical expenditure.

Graph 6-14 Changes in the pharmaceutical expenditure generated by SNS medical prescriptions per capita and year, 2010 - 2015

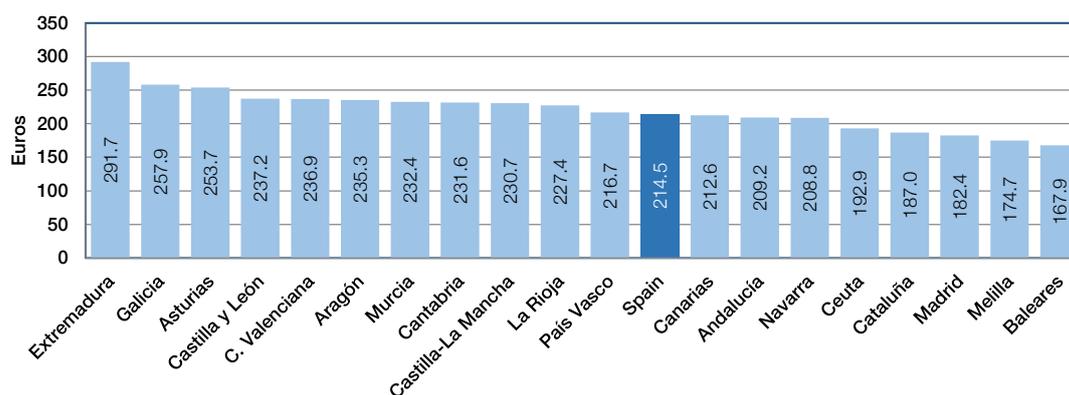


Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing. Population data drawn from municipal records on 1 January of each year (INE).

In 2015 Extremadura showed the highest expenditure per capita (€291.7), followed by Galicia and Asturias (€257.9 and €253.7, respectively). Those with the lowest public pharmaceutical expenditure per capita were Baleares, Melilla and Madrid, with €167.9, €174.7 and €182.4, respectively.

Graph 6-15 Pharmaceutical expenditure generated by SNS medical prescriptions per capita and year by autonomous community, 2015



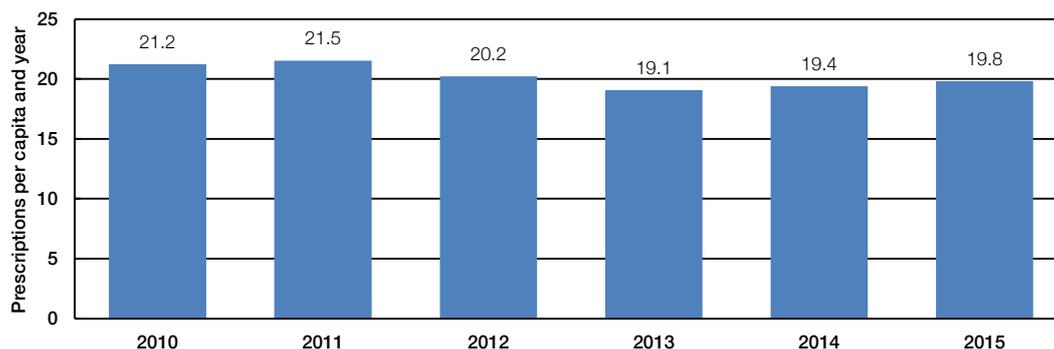
Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing. Population according to municipal records as of 1 January 2015 (INE).

6.2.6 Prescriptions per capita

In 2015 the per capita consumption of prescriptions was 19.8, which is 2.1% more than in 2014. The year 2011 presented the highest number of prescriptions per capita (21.5 prescriptions). Between 2010 and 2015 the per capita consumption of prescriptions fell by 6.6%, due to the drop in the number of prescriptions invoiced.

Graph 6-16 Changes in the consumption of SNS medical prescriptions per capita and year, 2010 - 2015

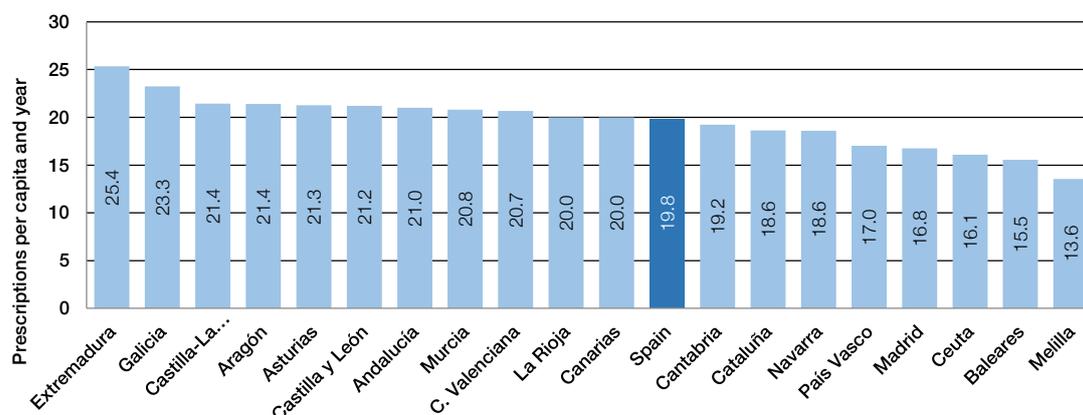


Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing. Population data drawn from municipal records on 1 January of each year (INE).

In 2015 the highest consumption of prescriptions per capita is found in Extremadura (25.4 prescriptions), followed by Galicia and Castilla-La Mancha (23.3 and 21.4 prescriptions respectively). The lowest figures of prescriptions per capita are found in Melilla, Baleares and Ceuta with 13.6, 15.5 and 16.1, respectively.

Graph 6-17 Consumption of SNS medical prescriptions per capita and year by autonomous community, 2015



Remarks: SNS medical prescriptions means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

Source: Ministry of Health, Social Services and Equality. Statistics on medical prescription invoicing. National Statistics Institute (INE). Population according to municipal records as of 1 January 2015.

6.2.7 Consumption by invoicing groups

Of all official SNS medical prescriptions invoiced in pharmacies, medicines are the pharmaceutical benefits group with the highest consumption: they represent 98% of all the packs invoiced and 95% of the total amount invoiced in pharmacy, calculated at retail prices. Health products constitute 1.9% of the packs and 4.1% of the total amount invoiced. The rest corresponds to the invoicing of extemporaneous compounds and officinal preparations and of individualised anti-allergy and bacterial vaccines.

6.2.8 Consumption of medicines by pharmacological subgroup (ATC4)

6.2.8.1 As regards packs invoiced

The fifteen pharmacological subgroups of ATC Level 4 with highest consumption in terms of packs invoiced through SNS medical prescriptions dispensed in pharmacies in 2015 represent almost 50% of the total units of medicine sold.

The subgroup with highest consumption in number of packs is anti-ulcerants: proton pump inhibitors (A02BC), which represent 7.7% of the total, although the amount has fallen by 2% with respect to 2014. This subgroup has a high Daily Dose per Inhabitant (DDI): 120.3. This parameter estimates how many people out of 1,000 are taking a Defined Daily Dose (DDD) of this subgroup every day. Of the proton pump inhibitors on the market, Omeprazole is the most used, with 77.0% of the total of the subgroup A02BC. It is the active ingredient with the highest number of packs invoiced in pharmacies.

The second subgroup is hypolipidemic agents: HMG CoA reductase inhibitors (C10AA), which account for 6.3% of the total number of packs. This group comprises the pharmaceuticals

used to treat hypercholesterolaemia and consumption has increased by 1.9% since 2014. The DDI of this group of medicines is 97.2, in accordance with the prevalence of the disorders for which these medicines are effective. Among the pharmaceuticals in this subgroup that are currently marketed in Spain, the ones with highest consumption are Simvastatin and Atorvastatin, which represent, respectively, 46.0% and 37.0% of total consumption of this subgroup, and occupy third and fifth position in the list of most consumed active ingredients.

Among the analgesics and antipyretics, the pyrazolones (N02BB) have shown the greatest increase in pack consumption of the fifteen subgroups with highest consumption (9.9%), and Metamizole sodium, the only active ingredient financed in this subgroup, ranks sixth among the most consumed active ingredients.

Table 6-15 Top fifteen pharmacological subgroups with highest consumption in packs, 2015

Pharmacological Subgroup ATC4		Packs (millions)	% packs of total	% Δ packs 2015/14	DDI	Retail value* (millions of Euros)	DTC (Euros)
A02BC	Antiulcerants: proton pump inhibitors	70.4	7.7	-2.0	120.3	391.1	0.2
C10AA	Hypolipidemic agents: HMG CoA reductase inhibitors	57.9	6.3	1.9	97.2	535.9	0.3
N05BA	Ansiolitics: benzodiazepine derivatives	52.0	5.7	-0.3	55.7	97.5	0.1
N02BE	Analgesics and antipyretics: anilides	39.7	4.3	4.1	24.6	91.8	0.2
B01AC	Platelet aggregation inhibitors, excl. heparin	31.6	3.5	-0.8	55.2	155.3	0.2
M01AE	Antiinflammatories: propionic acid derivatives	27.8	3.0	-3.9	26.9	94.7	0.2
C09AA	ACE inhibitors, plain	22.9	2.5	1.9	67.3	77.2	0.1
N02BB	Analgesics and antipyretics: pyrazolones	20.2	2.2	9.9	4.5	45.2	0.6
C09CA	Angiotensin II antagonists, plain	20.9	2.3	0.6	52.7	291.7	0.3
N06AB	Antidepressants: selective serotonin reuptake inhibitors	19.2	2.1	1.5	47.4	174.4	0.2
N02AX	Analgesics: other opiates	18.5	2.0	0.4	8.9	145.9	1.0
C09DA	Angiotensin II antagonists and diuretics	17.4	1.9	0.8	28.8	268.5	0.5
A10BA	Blood glucose lowering drugs: biguanides	16.8	1.8	0.2	21.2	33.0	0.1
C03CA	High ceiling diuretics: sulfonamides, plain	15.1	1.7	1.5	21.7	40.5	0.1
C07AB	Beta-blocking agents, selective	15.3	1.7	8.5	17.7	49.7	0.2
% of total		-	48.7	-	-	-	-

Remarks: ATC4 - Anatomical, Therapeutic and Chemical Classification, Level 4, pharmacological subgroup. DDI - Daily Dose per Inhabitant. DTC - Daily Treatment Cost.

*Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System. National Statistics Institute (INE).

Population according to municipal records as of 1 January 2015.

6.2.8.2 As regards amount invoiced

Of the fifteen subgroups with the highest consumption in terms of amount invoiced to the SNS in 2015, which together represent 45.0% of the total amount invoiced for medicines through SNS medical prescriptions in pharmacies, the subgroup with the highest amount invoiced is hypolipidemic agents: HMG CoA reductase inhibitors (C10AA), at 535.9 million Euros (4.9% of the total) and a Daily Treatment Cost (DTC), which indicates the real cost of the DDD of this subgroup, of €0.3. It has increased by 4.7% with respect to the preceding year.

Table 6-16 Top fifteen pharmacological subgroups with highest consumption in amount, 2015

Pharmacological Subgroup ATC4		Retail value* (millions of Euros)	Retail value* as % of total	% Δ retail value* 2015/14	DDI	Number of packs (millions)	DTC (Euros)
C10AA	Hypolipidemic agents: HMG CoA reductase inhibitors	535.9	4.9	4.7	97.2	57.9	0.3
R03AK	Adrenergics in combination with corticosteroids or other drugs, excl. anticholinergics	531.6	4.9	-1.0	15.0	8.5	2.1
A10BD	Combinations of oral blood glucose lowering drugs	417.4	3.8	9.2	11.3	6.6	2.2
N03AX	Other antiepileptic agents	416.2	3.8	-16.3	11.2	11.6	2.2
A02BC	Antiulcerants: proton pump inhibitors	391.1	3.6	-1.7	120.3	70.4	0.2
N05AX	Other antipsychotics	343.0	3.2	-8.2	4.2	3.3	4.9
A10AE	Insulins and analogues for injecting, long-acting	307.8	2.8	5.9	8.8	4.0	2.1
N06AX	Other antidepressants	299.4	2.8	-11.9	23.2	15.3	0.8
C09CA	Angiotensin II antagonists, plain	291.7	2.7	-5.2	52.7	20.9	0.3
C09DA	Angiotensin II antagonists and diuretics	268.5	2.5	-1.8	28.8	17.4	0.5
B01AB	Anti-thrombotics: heparin group	257.7	2.4	5.8	6.0	2.9	2.6
G04CA	Pharmaceuticals for benign prostatic hypertrophy: alpha adrenoreceptor antagonists	230.4	2.1	9.2	18.4	10.3	0.7
R03BB	Bronchodilator inhalers: anticholinergics	221.5	2.0	-4.2	12.7	6.3	1.0
N02AB	Opioid analgesics: phenylpiperidine derivatives	177.9	1.6	9.9	2.4	3.4	4.4
N05AH	Antipsychotics: Diazepines, oxazepines thiazepines and oxepines	174.1	1.6	2.5	5.3	4.9	2.0
% of total		-	44.7	-	-	-	-

Remarks: ATC4 - Anatomical, Therapeutic and Chemical Classification, Level 4, pharmacological subgroup. DDI - Daily Dose per Inhabitant. DTC - Daily Treatment Cost. *Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System. National Statistics Institute (INE). Population according to municipal records as of 1 January 2015.

The second subgroup is R03AK (Adrenergics in combination with corticosteroids or other drugs, excluding anticholinergics) for the treatment of asthma and COPD. This group invoices 531.6 million Euros and has fallen by 1% with respect to 2014.

The subgroup showing the greatest growth with respect to 2014 is N02AB (Opioid analgesics: phenylpiperidine derivatives), the consumption of which is almost entirely in the form of Fentanyl, which occupies 7th position in consumption in ATC5.

The subgroup N03AX (Other antiepileptics) is the group showing the largest drop in amount invoiced, 16.3%, due to the incorporation in the financing system, in January of 2015, of the generic presentations of Pregabalin and the creation of its homogeneous groups. In addition, the subgroups: Other antidepressants (N06AX) and Other antipsychotics (N05AX) fell by 11.9% and 8.2%, respectively, due to the incorporation of generic presentations of Duloxetine and Aripiprazole, respectively.

6.2.9 Consumption of medicines by active ingredient (ATC5)

6.2.9.1 As regards the number of packs invoiced

The fifteen most widely-used active ingredients in terms of the number of packs invoiced to the SNS represent 33.5% of all pharmaceutical packs. Omeprazole is the active ingredient with highest consumption (54 million packs), which is 5.9% of all packs invoiced, although in 2015 there was a decrease of 2.5%. With a DDI of 97.4, it is considered the pharmaceutical of choice in the antiulcerant group and it has a low DTC, 0.1 €.

Paracetamol occupies second position, with 4% of the total and a 3.2% increase in the number of packs invoiced with respect to the preceding year.

Simvastatin occupies third position with 2.9% of the total; it can be considered the pharmaceutical of choice for the treatment of hypercholesterolaemia. Its DTC is €0.1, compared to the €0.3 of the other statin (Atorvastatin), which appears in fifth position.

Ibuprofen shows the largest drop (9.6%) of the 15 active ingredients with the highest number of packs invoiced while Bisoprolol shows the largest increase (14%).

The fifteen active ingredients with the most packs invoiced all have moderate DTCs, between €0.04 and €0.7, since all of them have been part of the reference price/homogeneous groups system for years.

Table 6-17 Top fifteen active ingredients with highest consumption in packs, 2015

Active Ingredient ATC5		Packs (millions)	% packs of total	% Δ packs 15/14	DDI	Retail value* (millions of Euros)	DTC (Euros)
A02BC01	Omeprazole	54.0	5.9	-2.5	97.4	139.2	0.1
N02BE01	Paracetamol	36.5	4.0	3.2	23.9	82.6	0.2
C10AA01	Simvastatin	26.4	2.9	0.6	30.1	39.9	0.1
B01AC06	Acetylsalicylic acid (anti-aggregant)	26.0	2.8	0.2	45.8	43.2	0.1
C10AA05	Atorvastatin	21.2	2.3	5.3	49.8	277.5	0.3
N02BB02	Metamizole sodium	20.2	2.2	9.9	4.5	45.2	0.6
N05BA06	Lorazepam	17.3	1.9	0.6	21.9	28.5	0.1
A10BA02	Metformin	16.8	1.8	0.2	21.2	33.0	0.1
M01AE01	Ibuprofen	16.6	1.8	-9.6	14.5	38.8	0.2
C09AA02	Enalapril	14.5	1.6	1.9	41.9	27.1	0.04
N02AX52	Tramadol, combinations	13.8	1.5	-1.5	5.4	66.5	0.7
N05BA12	Alprazolam	12.3	1.3	-0.6	15.9	30.7	0.1
C07AB07	Bisoprolol	10.8	1.2	14.0	8.5	28.8	0.2
C03CA01	Furosemide	10.3	1.1	4.8	17.9	23.0	0.1
N05CD06	Lormetazepam	9.8	1.1	1.7	21.2	21.7	0.1
% of total			33.5				

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient. DDI - Daily Dose per Inhabitant.

DTC - Daily Treatment Cost. *Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System. National Statistics Institute (INE).

Population according to municipal records as of 1 January 2015.

6.2.9.2 As regards the amount invoiced

The fifteen active ingredients that invoiced the highest amount to the SNS in 2015 represent 24.0% of the total retail value of all the medicines invoiced. The hypolipidemic agent Atorvastatin occupies first position in terms of amount invoiced, with 277.5 million Euros, an increase of 7.4% over 2014. This active ingredient is in fifth position in terms of the number of packs invoiced.

The combinations Salmeterol-Fluticasone and Formoterol-Budesonid, for the treatment of asthma and COPD, occupy second and sixth positions.

Of the fifteen, the antiepileptic Pregabalin is the active ingredient that shows the largest reduction (37.8%) in the amount invoiced with respect to 2014, due to the introduction in 2015 of the first generic presentations, which brought about a drop in the price of these medicines. Similarly, the antidepressant Duloxetine has reduced its amount invoiced by 29.3%, as generic presentations of this active ingredient were also introduced in 2015.

Of the active ingredients with highest consumption in terms of amount invoiced, only two coincide with the fifteen most widely consumed in terms of packs: Atorvastatin and Omeprazole.

Of the fifteen, the antipsychotic Paliperidone is the active ingredient with the highest DTC, 7.6 €.

The DTC of these active ingredients are higher than those of the top fifteen in terms of consumption by packs, because for the majority of these active ingredients it has not been possible to create reference prices and groups that contribute to the lowering of prices.

Table 6-18 Top fifteen active ingredients with highest consumption in amount, 2015

Active Ingredient ATC5		Retail value* (millions of Euros)	% of total	% Δ 15/14	DDI	Packs (millions)	DTC (Euros)
C10AA05	Atorvastatin	277.5	2.4	7.4	49.8	21.2	0.3
R03AK06	Salmeterol and Fluticasone	248.4	2.2	-14.6	6.4	3.6	2.3
A10AE04	Insulin glargine	238.7	2.1	7.8	6.9	3.1	2.0
A10BD07	Metformin and Sitagliptin	203.4	1.8	7.2	5.5	3.3	2.2
N05AX13	Paliperidone	187.2	1.6	5.1	1.5	0.7	7.6
R03AK07	Formoterol and Budesonid	183.9	1.6	0.7	5.2	2.9	2.1
N02AB03	Fentanyl	177.7	1.6	9.9	2.4	3.4	4.4
B01AB05	Enoxaparine	169.8	1.5	5.1	4.5	2.1	2.2
N03AX16	Pregabalin	167.8	1.5	-37.8	4.3	4.8	2.3
A10BD08	Metformin and Vildagliptin	166.6	1.5	6.5	4.5	2.5	2.2
R03BB04	Tiotropium bromide	158.8	1.4	-7.4	5.7	3.2	1.6
A02BC01	Omeprazole	139.2	1.2	-1.3	97.4	54.0	0.1
C10AA07	Rosuvastatin	132.0	1.2	4.7	9.2	4.7	0.8
G04CA52	Tamsulosin and dutasteride	127.3	1.1	8.1	5.8	3.3	1.3
N06AX21	Duloxetine	112.9	1.0	-29.3	5.1	3.8	1.3
% of total			23.6				

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient. DDI - Daily Dose per Inhabitant. DTC - Daily Treatment Cost.

*Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System. National Statistics Institute (INE). Population according to municipal records as of 1 January 2015.

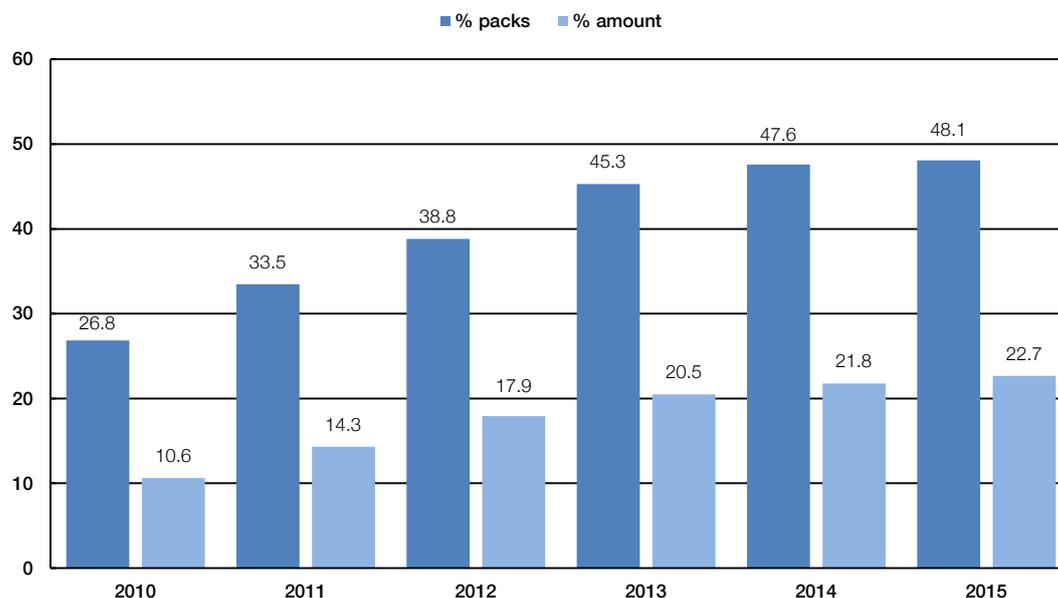
6.2.10 Consumption of generic medicines

Policies to promote the use of generic medicines have resulted in these medicines being more frequently used in medical prescribing, thus boosting consumption.

In 2015 consumption of generic medicines through SNS medical prescriptions dispensed in pharmacies in the SNS as a whole (autonomous communities, INGESA and insurance mutuals for civil servants) amounted to 48.1% of the total number of packs invoiced. It accounts for 22.7% of the amount invoiced, less than the percentage of packs invoiced because the prices of generics are lower.

The incorporation of generic medicines in consumption has grown year after year. In the analysis of the last six years, generics increase their presence in the consumption of packs by 80%, growing from 26.8% in 2010 to 48.1% in 2015. In terms of amount, the increase is of 114%, from 10.6% to 22.7%.

Graph 6-18 Changes in the consumption of generic medicines through SNS medical prescriptions, by percentage of packs and percentage of amount, 2010-2015



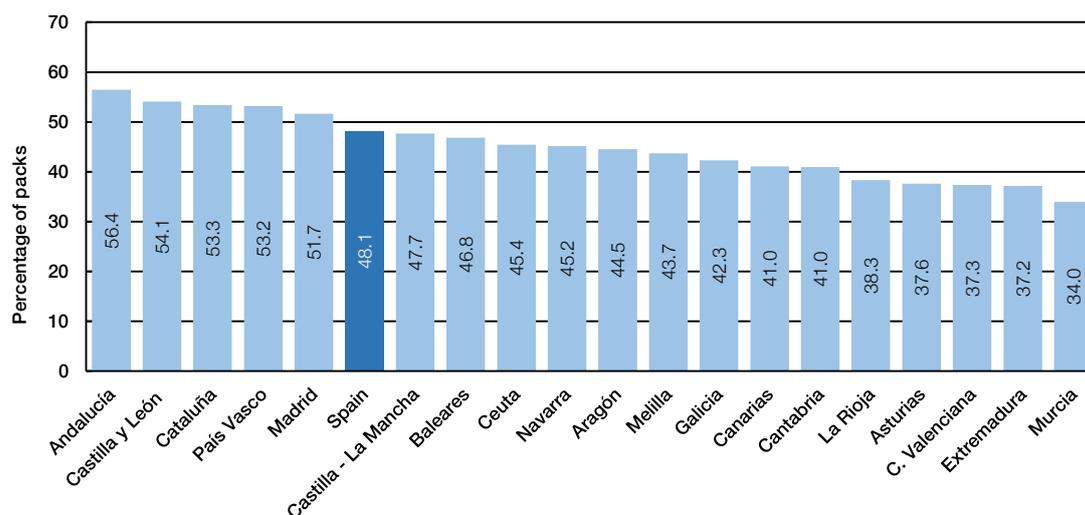
Remarks: *SNS medical prescriptions* means those paid for by the public funds of the autonomous communities, INGESA and insurance mutuals for civil servants (MUFACE, MUGEJU and ISFAS).

*Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

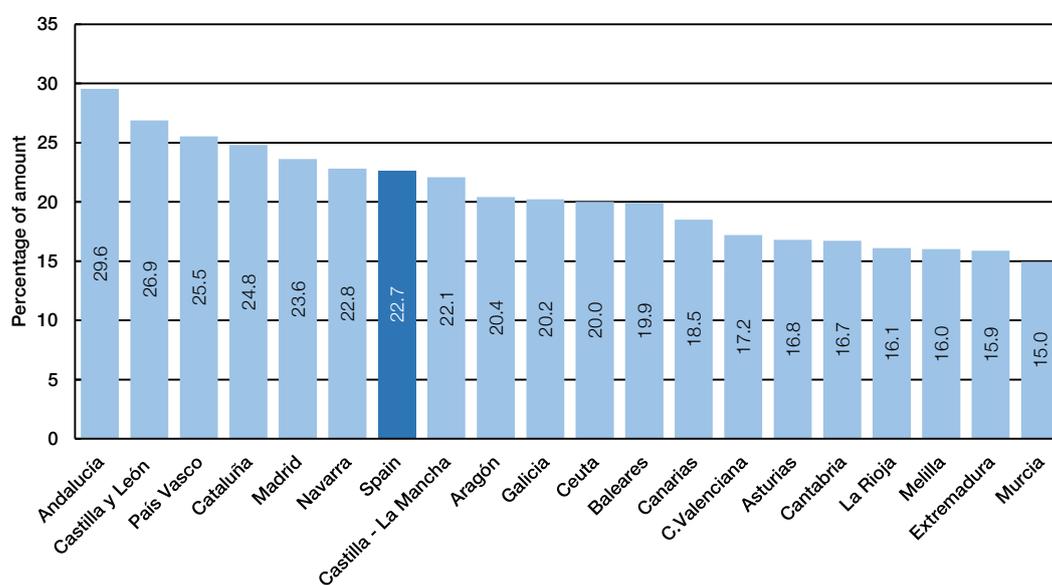
By autonomous community, Andalucía and Castilla y León have the highest percentages of generic consumption in packs and amount in 2015. They are followed by Cataluña, País Vasco and Madrid, which are also above the national average.

Graph 6-19 Consumption of generic medicines by autonomous community. Percentage of packs with respect to all medicines, 2015



Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

Graph 6-20 Consumption of generic medicines by autonomous community. Percentage of amount with respect to all medicines, 2015



Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

The fifteen active ingredients with the highest number of generic packs invoiced represent 55.5% of all generic packs. Omeprazole is the active ingredient with highest consumption in packs of generic presentations (48.2 million packs), accounting for 89.4% of the total consumption of packs invoiced (generic and non-generic packs of this active ingredient).

The active ingredients that invoice the highest number of generic packs coincide very closely with those of total consumption.

Simvastatin and Amlodipine are the active ingredients showing highest consumption of generics with respect to the total (98.1% and 94.8% respectively).

Table 6-19 Top fifteen active ingredients with highest consumption in generic packs, 2015

Active Ingredient ATC5		Packs (millions)	Order by total consumption (generics and non-generics)	Generic consumption as % of total
A02BC01	Omeprazole	48.2	1	89.4
N02BE01	Paracetamol	32.3	2	88.5
C10AA01	Simvastatin	25.9	3	98.1
B01AC06	Acetylsalicylic acid (Antiaggregant)	22.0	4	84.6
C10AA05	Atorvastatin	17.8	5	84.0
A10BA02	Metformin	15.6	8	92.5
M01AE01	Ibuprofen	14.5	9	87.2
N05BA06	Lorazepam	11.3	7	65.0
N02BB02	Metamizol sodium	10.5	6	52.3
C09AA02	Enalapril	10.2	10	70.7
C08CA01	Amlodipine	8.8	16	94.8
N05CD06	Lormetazepam	6.9	15	70.8
C03CA01	Furosemide	6.8	14	65.9
C07AB07	Bisoprolol	6.7	13	62.0
N05BA12	Alprazolam	6.5	12	53.1
% Total		55.5		

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

The fifteen active ingredients that invoice the highest amount in generic presentations represent 39.4% of the amount invoiced for all generics. Atorvastatin is the active ingredient that invoices the most in generic presentations (236.8 million Euros), which represent 85.3% of the total amount invoiced (generics and non-generics).

Just two of the active ingredients showing highest consumption in terms of retail value in generic presentations coincide with the fifteen showing highest total consumption (generics and non-generics): Atorvastatin and Omeprazole.

The antidepressant Escitalopram and the hypolipidemic agent Simvastatin are those with the highest amounts invoiced for generics in proportion to the total invoiced (99.2% and 98.2% respectively).

Table 6-20 Top fifteen active ingredients with highest consumption in total amount for generics, 2015

Active Ingredient ATC5		Retail value* (millions of Euros)	Order by total consumption (generics and non-generics)	Generic consumption as % of total
C10AA05	Atorvastatin	236.8	1	85.3
A02BC01	Omeprazole	117.4	12	84.3
A02BC02	Pantoprazole	82.4	18	79.9
N02BE01	Paracetamol	72.4	23	87.7
N06AB10	Escitalopram	71.0	29	99.2
N05AH04	Quetiapine	54.2	26	68.6
B01AC04	Clopidogrel	51.3	36	75.0
C09CA03	Valsartan	47.9	39	71.4
N05AH03	Olanzapine	42.2	25	53.1
N06DX01	Memantine	42.2	24	51.1
J01CR02	Amoxicilin and beta-lactamase inhibitors	41.8	48	66.8
N03AX14	Levetiracetam	41.4	17	38.7
C09DA03	Valsartan and diuretics	39.9	50	65.2
C10AA01	Simvastatin	39.2	76	98.2
N06DA02	Donepezil	37.0	45	57.2
% of total		39.4	-	-

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient.
 *Amount spent on dispensation by SNS, calculated at retail prices including VAT.
 Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

6.2.11 Consumption of health products

In 2015 the consumption of health products dispensed through SNS medical prescriptions reached a volume of 17.4 million packs and a total amount invoiced of 487 million Euros. Health products showed greater consumption than in 2014, with an increase of 3.1% in terms of number of packs invoiced and of 2.7% in terms of. The group *high compression stockings* shows sharp increases in consumption compared to 2014, in packs and also in retail value (12.4% and 11.3% respectively).

Pads for urinary incontinence account for the highest percentage of the amount invoiced, in both packs and retail value (42.8% and 59.3% respectively). Sterile dressings occupy second position in the invoicing of packs while in terms of retail value they are in third place. Ostomy products occupy second position in retail value and fourth in number of packs invoiced.

Table 6-21 Consumption of groups of health products by number of packs, 2015

Group	Packs (millions)	% of total	% Δ 2015/14
Urinary incontinence pads	7.5	42.8	1.6
Sterile dressings	2.4	13.7	1.4
Cotton wool, bandages, gauzes, surgical tape	2.1	11.9	-0.6
Ostomy products	2.1	11.8	7.3
Others	1.1	6.4	8.9
High compression stockings	1.0	5.9	12.4
Urine collection bags and urine collectors	0.8	4.8	2.9
Bladder catheters	0.5	2.8	2.7
Total	17.4	100.0	3.1

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

Table 6-22 Consumption of groups of health products by amount, 2015

Group	Retail value* (millions of Euros)	% of total	% Δ 2015/14
Urinary incontinence pads	288.9	59.3	1.6
Ostomy products	98.3	20.2	5.4
Sterile dressings	37.6	7.7	-0.9
Bladder catheters	18.6	3.8	6.8
Urine collection bags and urine collectors	16.2	3.3	2.4
High compression stockings	10.7	2.2	11.3
Cotton wool, bandages, gauzes, surgical tape	8.6	1.8	-1.6
Others	8.0	1.6	13.6
Total	487.0	100.0	2.7

Remarks: *Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

6.2.12 Sales by pharmaceutical manufacturers

In 2015 the medicines invoiced to the SNS through medical prescriptions dispensed in pharmacies are supplied by a total of 360 pharmaceutical manufacturers.

In relation to the packs invoiced, 27.6% come from 5 manufacturers. The top 10 manufacturers account for 40.3% of the packs invoiced, while the top 50 manufacturers account for 80.1%.

As regards the amount invoiced, 22.2% of all the invoicing is concentrated in 5 manufacturers. The top 10 manufacturers account for 37.2% of all medicines invoiced while the top 50 manufacturers account for 81.9% of the total.

The ranking of the manufacturers in terms of number of packs does not necessarily coincide with its ranking in terms of amount.

Table 6-23 Medicine sales by supplying manufacturer through pharmacies. 2015

	Packs invoiced (millions)	% of total	Retail value* of medicines invoiced (millions of Euros)	% of total
Top 5 laboratories	252.3	27.6	2,529.6	22.2
Top 10 laboratories	369.3	40.3	4,247.2	37.2
Top 20 laboratories	520.9	56.9	6,424.7	56.3
Top 30 laboratories	620.5	67.8	7,769.6	68.1
Top 40 laboratories	685.7	74.9	8,653.2	75.9
Top 50 laboratories	733.4	80.1	9,337.8	81.9
Overall total (360 laboratories)	915.5	100.0	11,403.6	100.0

Remarks: *Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

6.2.13 Sales by health product suppliers

In 2015 the health products invoiced to the SNS through medical prescriptions dispensed in pharmacies are supplied by 142 companies.

In relation to the packs invoiced, 54% are supplied by 5 manufacturers. The top 10 suppliers account for 75.8% of the total number of packs and the top 25 for 95.2%.

In terms of retail value, just five suppliers account for 71.9% of the total, while 25 suppliers account for 98.6% of the retail value.

Table 6-24 Health product sales by suppliers through pharmacies. 2015

	Packs invoiced (millions)	% of total	Retail value* of health products invoiced (millions of Euros)	% of total
Top 5 suppliers	9.4	54.0	350.0	71.9
Top 10 suppliers	13.2	75.8	429.0	88.1
Top 15 suppliers	14.8	84.7	460.7	94.6
Top 20 suppliers	15.8	90.7	473.3	97.2
Top 25 suppliers	16.6	95.2	480.1	98.6
Overall total (142 suppliers)	17.4	100.0	487.0	100.0

Remarks: *Amount spent on dispensation by SNS, calculated at retail prices including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

6.3 Pharmaceutical benefits provided in hospitals

This section provides information about the 2015 pharmaceutical expenditure⁸⁹ by the Pharmaceutical Services of the SNS public hospital network. The data appearing herein is based on ex-factory prices (MSP) and was obtained from the consumption information of the

⁸⁹ Provisional invoicing data. The information system on pharmaceutical consumption at the hospital level has not yet been fully implemented. When complete, it will provide more in-depth information and will also allow for systematic analysis of the changes in consumption in the SNS public hospital network.

autonomous communities and INGESA. It was calculated using the MSP specified in the positive list of SNS pharmaceutical benefits.

6.3.1 Expenditure on medicines by pharmacological subgroup (ATC4)

The fifteen subgroups with the highest consumption, in terms of MSP, in hospitals represent over 67.0% of the total expenditure.

The subgroup Other antivirals (J05AX), which includes, among others, active ingredients for the treatment of hepatitis C, occupies top position with 18.3% of total consumption and has seen a very sharp increase in 2015. The second subgroup is Immunosuppressors: Inhibitors of tumour necrosis factor alpha (TNF- α inhibitors) (L04AB), which comprises medicines used mainly for rheumatoid arthritis, represents 9.7% of the total. Three other subgroups of Immunosuppressors, L04AA (Selective immunosuppressors), L04AC (Interleukin inhibitors) and L04AX (Other immunosuppressors) are also among the fifteen ATC4 subgroups with highest consumption in terms of MSP.

The subgroups with highest expenditure also include the antivirals J05AR and J05AE, for the treatment of HIV infection and in some cases also for the treatment of hepatitis C.

Third and fifth positions are held by the antineoplastic treatment subgroups L01XC (Monoclonal antibodies) and L01XE (protein kinase inhibitors).

The Interferons subgroup (L03AB), which has a wide variety of therapeutic indications (treatment of some types of lymphoid leukaemia, multiple sclerosis and hepatitis C, among others), show a reduction in expenditure of 12.3% in 2015.

Table 6-25 Top fifteen pharmacological subgroups with highest hospital expenditure, 2015

Pharmacological Subgroup ATC4		Expenditure MSP (millions of Euros)	MSP as % of total	% Δ 2014/13
J05AX	Other antivirals	1361.7	18.3	1303.8
L04AB	Inhibitors of tumour necrosis factor alpha (TNF- α inhibitors)	719.6	9.7	6.0
L01XC	Monoclonal antibodies	497.8	6.7	12.9
J05AR	Combination of antivirals for the treatment of HIV infections	457.0	6.2	12.8
L01XE	Protein kinase inhibitors	353.4	4.8	12.5
J05AE	Protease inhibitors	295.3	4.0	30.1
L04AA	Selective immunosuppressors	233.0	3.1	32.3
B03XA	Other anti-anaemic preparations	184.2	2.5	12.2
B02BD	Blood coagulation factors	182.7	2.5	7.6
L03AB	Interferons	165.2	2.2	-12.3
J06BA	Immunoglobulins, normal human	120.6	1.6	12.7
L04AC	Interleukin inhibitors	118.1	1.6	21.8
L04AX	Other immunosuppressors	114.2	1.5	40.3
A16AB	Enzymes	112.4	1.5	12.0
R03DX	Other systemic drugs for obstructive airway diseases, inhalants	85.8	1.2	23.8
	% of total		67.4	

Remarks: ATC4 - Anatomical, Therapeutic and Chemical Classification Level 4, pharmacological subgroup. MSP - Manufacturer's Selling Price.

Source: Ministry of Health, Social Services and Equality. Information from the autonomous communities and INGESA.

6.3.2 Expenditure on medicines by active ingredient (ATC5)

The fifteen active ingredients with highest consumption in hospitals represent 39.0% of the total expenditure in medicines.

In first, second, fourth and seventh position are active ingredients for the treatment of hepatitis C, which were added to the public financing system in 2014 and 2015 and have generated very significant expenditure in 2015.

Also occupying top positions are the immunosuppressors Adalimumab, Etanercept and Infliximab, used mostly in pathologies such as rheumatoid arthritis, Crohn's disease and psoriasis. There are also 4 active ingredients used for antineoplastic treatment, Trastuzumab, Rituximab, Bevacizumab and Imatinib.

As the table below illustrates, Tenofovir disoproxil and emtricitabine (J05AR03), used in the treatment of HIV infection, has fallen by 5.7% with respect to 2014.

Table 6-26 Top fifteen active ingredients with highest hospital expenditure, 2015

Active Ingredient ATC5		Expenditure in MSP (millions of Euros)	MSP as % of total	% Δ 2015/14
J05AX65	Sofosbuvir and Ledipasvir	557.8	7.5	-
J05AX15	Sofosbuvir	364.2	4.9	-
L04AB04	Adalimumab	303.7	4.1	8.2
J05AX67	Ombitasvir, Paritaprevir and Ritonavir	230.2	3.1	-
L04AB01	Etanercept	174.0	2.3	1.6
L04AB02	Infliximab	170.7	2.3	-1.8
J05AE14	Simeprevir	162.3	2.2	547.7
L01XC03	Trastuzumab	135.7	1.8	2.9
L01XC02	Rituximab	121.0	1.6	5.4
L01XC07	Bevacizumab	118.1	1.6	8.8
J06BA02	Immunoglobulins, normal human, for intravascular adm.	118.0	1.6	16.8
L01XE01	Imatinib	115.7	1.6	1.6
L03AB07	Interferon beta-1a	112.8	1.5	-3.6
J05AR03	Tenofovir disoproxil and emtricitabine	112.5	1.5	-5.7
B02BD02	Coagulation factor XIII	106.0	1.4	-0.9
% of total			39.0	

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient. MSP - Manufacturer's Selling Price.

Source: Ministry of Health, Social Services and Equality. Information from the autonomous communities and INGESA.

Of the medicines that contain the fifteen active ingredients with highest consumption, seven of them are classified as being for Hospital Use (HU) (they can only be used in hospital settings or authorised care centres). The rest, Sofosbuvir, Simeprevir, the combinations Sofosbuvir/Ledipasvir and Ombitasvir/Paritaprevir/Ritonavir, and also Adalimumab, Etanercept and Imatinib, are classified as Hospital Diagnosis (DH) and a system of specific exceptions has been established regarding their use in the SNS, consisting of limiting their dispensation to non-hospitalised patients to hospital pharmaceutical services.

6.4 Consumption of orphan medicinal products

Orphan medicinal products are those intended for the treatment of certain rare diseases (with a low prevalence, fewer than 5 cases for 10,000 inhabitants). Patients with these pathologies often have difficulty accessing treatments because research by the pharmaceutical industry into these diseases is not a priority, since the low number of cases means profitability is also low. Therefore, to safeguard the right to health of these patients, the health care authorities are taking steps that encourage the pharmaceutical industry to promote the research, development and marketing of medicines for the treatment of these rare diseases.

Most orphan medicinal products, because of their particular characteristics, require special surveillance and oversight and patients taking them need close pharmacotherapeutic monitoring, so they are classified as medicines for hospital use (HU), or as medicines for hospital dispensation.

As of 31 December 2015 the SNS pharmaceutical benefits basket includes 59 authorised active ingredients in 107 presentations of orphan medicinal products, regardless of their marketing. Of these, 48 active ingredients (80 presentations) are HU, and 11 active ingredients (27 presentations) are HD. Of these 11 active ingredients, only 5 (10 presentations) can be dispensed in pharmacies, because for the 6 remaining (17 presentations) specific exceptions have been established in relation to their financing and they can only be dispensed in hospital settings.

Over the course of the year 2015 the following new active ingredients were added to SNS pharmaceutical benefits as orphan medicinal products.

Table 6-27 New active ingredients added to SNS pharmaceutical benefits as orphan medicinal products in 2015

Active Ingredient ATC5	
A05AA03	Cholic acid
C02KX04	Macitentan
C02KX05	Riociguat
L01XC15	Obinutuzumab
L01XC21	Ramucirumab
L01XE18	Ruxolitinib
L01XE31	Nintedanib

Source: Ministry of Health, Social Services and Equality. Positive list of SNS pharmaceutical benefits.

The expenditure on orphan medicinal products at the hospital level in 2015 was 550.4 million Euros, which represents 7.4% of the total hospital expenditure. In 2015 there has been greater expenditure on these medicines than in 2014 (an increase of 17.5%). The 15 active ingredients with highest consumption represent 79.9% of the total expenditure on orphan drugs.

Lenalidomide, for the treatment of patients with multiple myeloma and myelodysplastic syndrome, is the active ingredient generating the highest expenditure; its marketing began at the end of 2011 and its consumption grows every year. In second place is Bosentan for treating pulmonary hypertension. Its consumption fell by 3% because other pharmaceuticals with the same indication are now on the market, such as Sildenafil and Ambrisentan. In third place is the immunosuppressor Eculizumab, showing an increase of 26.2% in the expenditure, due to it being the only substance with specific approved studies for the indications of paroxysmal nocturnal hemoglobinuria and atypical haemolytic-uremic syndrome.

Also occupying top positions are other antineoplastic agents: Nilotinib, Dasatinib, Sorafenib and Ruxolitinib, the last with very high growth.

In addition, the 15 active ingredients include 2 enzymes for hereditary metabolic disorders, Alglucosidase Alfa and Idursulfase, which both showed increases with respect to 2014, as they, by replacing the enzyme the body lacks, are the only possible treatments for these pathologies.

The immunosuppressor Pomalidomide, which went on the market in 2014, shows an increase in the 2015 expenditure of 236.1%.

Table 6-28 Hospital consumption of top fifteen orphan active ingredients with highest expenditure, 2015

Active ingredient - ATC5		Expenditure MSP 2015 (millions of Euros)	Expenditure MSP 2014 (millions of Euros)	% 2015/14
L04AX04	Lenalidomid	85.7	76.0	12.8
C02KX01	Bosentan	58.7	60.5	-3.0
L04AA25	Eculizumab	55.9	44.3	26.2
L01BC07	Azacitidine	35.5	33.7	5.3
L01XE08	Nilotinib	30.3	27.5	10.2
L01XE06	Dasatinib	27.2	25.8	5.4
L01XE05	Sorafenib	22.3	24.7	-9.7
A16AB07	Alglucosidase alfa	21.5	19.1	12.6
N04BA02	Levodopa with decarboxylase inhibitor	20.7	17.1	21.1
A16AB09	Idursulfase	19.0	18.3	3.8
G04BE03	Sildenafil	13.7	14.5	-5.5
B02BX04	Romiplostim	12.5	11.3	10.6
L01XE18	Ruxolitinib	12.3	0.2	6050.0
L04AX06	Pomalidomide	12.1	3.6	236.1
C02KX02	Ambrisentan	11.9	10.3	15.5
% of total expenditure on orphan active ingredients		79.9		
Total expenditure on orphan active ingredients		550.4	468.3	17.5

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient. MSP - Manufacturer's Selling Price. Data in order from highest to lowest by MSP expenditure column 2015.

Source: Ministry of Health, Social Services and Equality. Information from the autonomous communities and INGESA.

Data on consumption of orphan medicinal products invoiced in 2015 through SNS medical prescriptions dispensed in pharmacies correspond to just 4 active ingredients. All four are classified as Hospital Diagnosis medicines and they account for 0.05 million packs and 21.5 million Euros. Deferasirox, the one with the highest consumption in both packs and retail value, is used to treat iron overload caused by frequent blood transfusions. The cytostatics Anagrelide and Mitotane are in second and fourth position and the antiepileptic Rufinamide occupies third position.

Table 6-29 Consumption of orphan medicinal products through SNS medical prescriptions. 2015

Active Ingredient ATC5		Packs (millions)	% Δ packs 2015/14	Retail value* (millions of Euros)	% Δ amount 2015/14
V03AC03	Deferasirox	0.02	0.7	11.1	1.6
L01XX35	Anagrelide	0.02	8.8	7.4	8.8
N03AF03	Rufinamide	0.01	-2.7	2.1	0.2
L01XX23	Mitotan	0.001	3.0	0.8	3.0
Total		0.05		21.5	

Remarks: ATC5 - Anatomical, Therapeutic and Chemical Classification Level 5, active ingredient.

*Amount spent on dispensation by SNS, calculated at retail price including VAT.

Source: Ministry of Health, Social Services and Equality. Alcántara Information System.

7 Health expenditure

According to the System of Health Accounts methodology, the total expenditure of the Spanish health care system, understanding this to be the sum of both public and private care resources, was 95,722 million Euros (66,826 million by the public sector and 28,895 million by the private sector) in 2014.

The average annual growth of the total expenditure on health in the period 2010-2014 was -1.1%. The public sector health expenditure presented a growth rate of -2.8%, while the private health expenditure grew an average of 3.8% annually.

Table 7-1 Total health expenditure, public and private. Millions of Euros, percentage of gross domestic product (GDP) and Euros per capita. Spain, 2010-2014

	2010	2011	2012	2013	2014
Millions of Euros					
Total health expenditure	99,899	99,167	96,174	93,856	95,722
Public sector health expenditure	74,987	73,238	69,211	66,522	66,826
Private sector health expenditure	24,912	25,930	26,963	27,334	28,895
Percentage of GDP					
% Total health expenditure	9.2	9.3	9.2	9.1	9.2
% Public sector health expenditure	6.9	6.8	6.6	6.5	6.4
% Private sector health expenditure	2.3	2.4	2.6	2.7	2.8
Euros per capita					
Total health expenditure	2,149	2,125	2,054	2,009	2,058
Public sector health expenditure	1,613	1,569	1,478	1,424	1,437
Private sector health expenditure	536	556	576	585	621

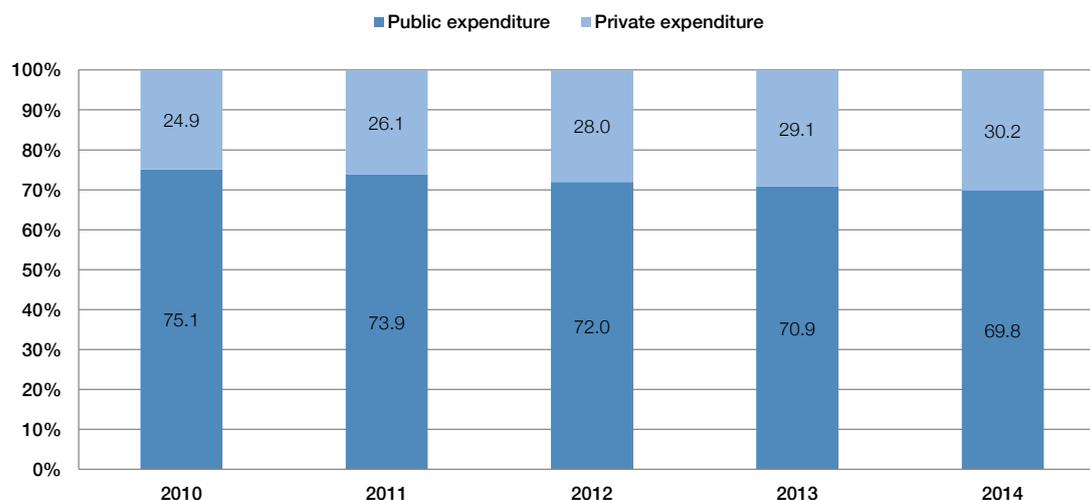
Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

In 2014 the health expenditure represents 9.2% of the gross domestic product (GDP), with 6.4% being financed with public resources and 2.8% being financed with private resources.

In relation to the population, the total health expenditure decreased from 2,149 Euros per capita in 2010 to 2,058 Euros per capita in 2014, which is an average annual decrease of 1.1% over the five-year period.

In the 2010-2014 period the share of the public sector health expenditure in the total health expenditure fell 5.2 percentage points, from 75.1% in 2010 to 69.8% in 2014.

Graph 7-1 Total health expenditure. Percentage contribution of public expenditure and private expenditure. Spain, 2010-2014



Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

7.1 Health expenditure by function

The expenditure in curative and rehabilitative care services, which in 2014 was 55,393 million Euros, absorbs more than half of the total health expenditure.

Table 7-2 Total health expenditure by health care function. Millions of Euros. Spain, 2010-2014

	2010	2011	2012	2013	2014
Curative and rehabilitative care services	56,156	56,773	55,627	53,553	55,393
Long-term care services	9,372	9,069	8,949	8,665	8,678
Services ancillary to health care	5,006	5,025	4,808	4,550	4,700
Medical products dispensed to outpatients	21,764	21,227	20,313	21,209	21,074
Prevention and public health services	2,264	2,124	1,983	1,893	1,875
Health administration and health insurance	2,867	3,076	3,089	2,831	2,814
Capital formation of health care provider institutions	2,470	1,873	1,405	1,156	1,188
Total health expenditure	99,899	99,167	96,174	93,856	95,722

Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

So, in 2014, 57.9% of the total health expenditure went to curative and rehabilitative care services. Next in importance were the expenditures on medical products dispensed to outpatients (22.0%), on long-term care (9.1%) and on services ancillary to health care, which represented 4.9% of the total health expenditure.

The weight of the expenditure in the main health care functions diverged during the 2010-2014 period: while the expenditures in curative and rehabilitative care services and medical products dispensed to outpatients increased by 1.7 and 0.2 percentage points, respectively, the expenditures in long-term care and services ancillary to health care dropped by 0.3 and 0.1 percentage points, respectively.

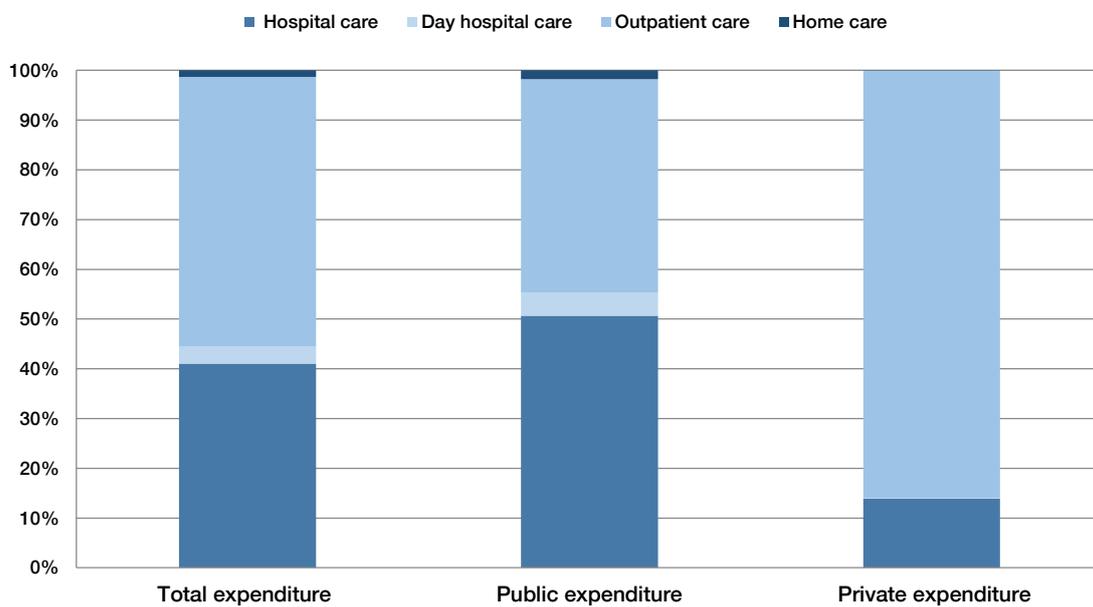
The contribution of the capital formation of health care provider institutions to the total health expenditure fell 1.2 percentage points, dropping from 2.5% in 2010 to 1.2% in 2014.

Expenditure in prevention and public health services shows the highest negative average annual growth rate (-4.6%) in the 2010-2014 period.

Looking at last year, the expenditure has increased in: curative and rehabilitative care services (3.4%), in services ancillary to health care (3.3%) and in long-term care services (0.2%). In contrast, the expenditure in public health prevention services has fallen (0.9%), as has expenditure in medical products dispensed to outpatients (0.6%) and in health administration and health insurance (0.6%).

As for curative and rehabilitative care services, in 2014 almost three quarters of the expenditure was financed with public funds. Hospital care absorbs 50.7% of the public expenditure in curative and rehabilitative care services. Outpatient care absorbs 85.9% of the private expenditure, due to the weight of dental services.

Graph 7-2 Total health expenditure, public and private, in curative and rehabilitative care services. Percentage distribution by how care is delivered. Spain, 2014



Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

7.2 Total health expenditure by provider

Looking at expenditure by the different health care providers, the expenditure of hospitals, which in 2014 was 39,930 million Euros, represents the highest percentage of the total health care expenditure.

More specifically, in 2014, the country's hospitals generated 41.7% of the total health expenditure. The expenditure of outpatient care providers was 25.8%, that of retailers and other providers of medical products, 22.0%, and that of residential care establishments, 5.4%.

The contributions of the main health care providers to the total health expenditure have been disparate during the 2010-2014 period: the expenditure corresponding to hospitals rose by 0.7 percentage points, the expenditure of retailers and other providers of medical products (mainly pharmacies) rose by 0.2 percentage points, the expenditure of outpatient care providers fell by 0.3 percentage points and that of residential care establishments fell by 0.5 percentage points.

Table 7-3 Total health expenditure by health care provider, millions of Euros, 2010-2014

	2010	2011	2012	2013	2014
Hospitals	40,981	41,862	40,240	38,534	39,930
Residential care establishments	5,897	5,477	5,333	5,236	5,192
Providers of outpatient care	26,104	25,381	25,073	23,988	24,705
Retailers and other providers of medical products	21,763	21,227	20,312	21,208	21,073
Providers offering and managing programmes on public health	792	778	727	695	681
Providers of general health administration and health insurance	3,139	3,296	3,373	3,027	3,063
Other branches of activity	1,221	1,145	1,114	1,166	1,077
Rest of the world	2	1	1	1	1
Total health expenditure	99,899	99,167	96,174	93,856	95,722

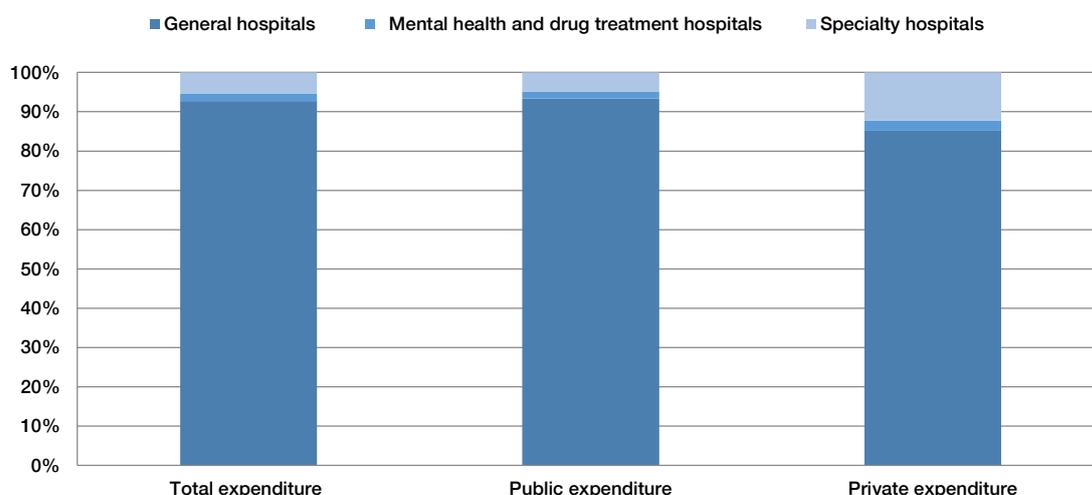
Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

In the five-year period lasting from 2010 to 2014, the expenditures of all the providers of health care present a negative average annual growth rate.

In the past year, the expenditure has increased in hospitals (3.6%), in outpatient care providers (3.0%) and in general health administration and health insurance (1.2%). However, there has been a drop in the expenditures corresponding to other branches of activity (7.7%), providers offering and managing programmes on public health (2.0%), residential care establishments (0.8%) and retailers and other providers of medical products (0.6%).

In 2014, general hospitals generate 92.7% of the total expenditure of hospitals.

Graph 7-3 Total health expenditure, public and private, of hospitals. Percentage distribution by where care is delivered, 2014



Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

7.3 Total health expenditure by financing agent

The health expenditure by the various levels of public administration in 2014 amounted to 66,826 million Euros, 69.8% of the total health expenditure.

In 2014, the governments of the autonomous communities bear the greatest burden in the public financing of health care, paying for 91.6% of the expenditure. The social security administrations (which include mutuels for civil servants) pay for 6.9% of the public sector health expenditure. The central government contributes 0.6%.

Table 7-4 Total health expenditure by financing agent, millions of Euros, 2010-2014

	2010	2011	2012	2013	2014
Public administrations	74,987	73,238	69,211	66,522	66,826
Central government	529	494	431	400	404
Regional governments	68,731	67,163	63,474	60,866	61,187
Local governments	1,008	915	789	694	656
Social Security administrations	4,718	4,666	4,517	4,561	4,579
Private sector	24,912	25,930	26,963	27,334	28,895
Private insurance companies	4,034	4,661	4,684	4,348	4,894
Direct out-of-pocket payment by households	20,220	20,515	21,574	22,299	23,324
Non-profit institutions serving households	406	385	432	412	403
Corporations (except health insurance companies)*	251	368	272	275	275
Total health expenditure	99,899	99,167	96,174	93,856	95,722

Remarks: * Includes only capital expenditures.

Source: Ministry of Health, Social Services and Equality. System of Health Accounts.

Since 2009, when the long-standing upward trend in health spending came to an end, the expenditure of the public administrations has decreased by 11.4%, showing the effect of the extraordinary measures aimed at deficit reduction that were adopted in May 2010 because of the

severe economic recession. In fact, especially noteworthy among the biggest drops in public sector health expenditure is spending on pharmaceuticals and other non-durable medical products, which, since 2009, has fallen by 22.6%.

With respect to private health care expenditure, it is households that make the greatest contribution to the financing, with a share of 80.7%. In the 2010-2014 period, the private health expenditure grew an average of 3.8% annually.

7.4 Public expenditure on health by autonomous communities

According to the Statistics on Public Health Expenditure, the consolidated public expenditure on health by the autonomous communities sector represents 57,128 million Euros in 2014, which is 5.5% of the GDP. The average per capita expenditure is 1,233 Euros. To interpret this data it is important to keep in mind that 7.8% of Spain's public expenditure on health is not broken down into autonomous communities.

Table 7-5 Consolidated public health expenditure by autonomous community, millions of Euros, percentage of GDP and Euros per capita. Autonomous Communities expenditure sector, 2014

	Millions of Euros	Percentage of GDP	Euros per capita
Andalucía	8,737	6.3	1,042
Aragón	1,899	5.8	1,427
Asturias	1,517	7.3	1,433
Baleares	1,332	5.1	1,194
Canarias	2,605	6.4	1,232
Cantabria	826	7.0	1,406
Castilla y León	3,164	6.0	1,268
Castilla-La Mancha	2,517	6.9	1,213
Cataluña	9,205	4.7	1,241
Comunidad Valenciana	5,924	6.1	1,195
Extremadura	1,588	9.4	1,448
Galicia	3,553	6.6	1,293
Madrid	7,423	3.8	1,164
Murcia	2,075	7.7	1,419
Navarra	914	5.2	1,435
País Vasco	3,430	5.4	1,582
La Rioja	419	5.4	1,330
Total spent by sector	57,128	5.5	1,233

Source: Ministry of Health, Social Services and Equality. Statistics on Public Health Expenditure.

In absolute values, 44.4% of this sector's public expenditure on health was generated by three autonomous communities: Cataluña, Andalucía and Madrid, which spent 9,205 million Euros, 8,737 million Euros and 7,423 million Euros, respectively. In contrast, La Rioja, Cantabria and Navarra were the autonomous communities generating the smallest expenditure.

Relative to their population, the autonomous communities with the largest public expenditure on health were País Vasco (1,582 Euros per capita), Extremadura (1,448 Euros per capita) and Navarra (1,435 Euros per capita). The communities with the lowest public expenditure on health were Andalucía (1,042 Euros per capita), Madrid (1,164 Euros per capita) and Baleares (1,194 Euros per capita).

To analyse the distribution of the public expenditure on health among the autonomous communities and the weight of the expenditure in each of the regional economies, it is useful to look at the health expenditure as a share of the GDP. However, it must be kept in mind that the data obtained at the regional level can be explained not only by differences among levels of income but also by solidarity among territories, since the assignment of resources among the autonomous communities contains levelling mechanisms intended to guarantee the system's equity.

The autonomous communities with the highest figures in 2014 in terms of health expenditure as a share of the GDP were Extremadura (9.4%), Murcia (7.7%) and Asturias (7.3%). At the opposite end of the spectrum are Madrid (3.8%), Cataluña (4.7%) and Baleares (5.1%).

The total expenditure of the autonomous communities sector increased by 0.7% in the last year. The communities that have most increased their health expenditure are Aragón (14.7%), Comunidad Valenciana (4.5%) and Baleares (4.2%).

Table 7-6 Consolidated public expenditure on health by autonomous community. Interannual variation rate, expressed as percentage. Autonomous Communities expenditure sector, 2013-2014

	Interannual variation rate (%) 2014/2013
Andalucía	-0.8
Aragón	14.7
Asturias	-0.2
Baleares	4.2
Canarias	2.0
Cantabria	3.1
Castilla y León	-6.7
Castilla-La Mancha	0.5
Cataluña	-0.7
Comunidad Valenciana	4.5
Extremadura	2.9
Galicia	-0.1
Madrid	0.3
Murcia	-0.6
Navarra	2.4
País Vasco	1.0
La Rioja	1.1
Total spent by sector	0.7

Source: Ministry of Health, Social Services and Equality. Statistics on Public Health Expenditure.

In terms of economic classification, the largest component of the expenditure by autonomous communities is remuneration of personnel, which in 2014 amounted to 26,262 millions of Euros and 46.0% of the consolidated expenditure, showing an increase of 0.5% with respect to the previous year.

The percentage of the public expenditure on health that the autonomous communities dedicate to the remuneration of their personnel varies from 35.7% in Cataluña to 54.9% in Castilla y León.

Table 7-7 Public expenditure on health dedicated to remuneration of personnel by autonomous community, millions of Euros and percentage of total consolidated public expenditure on health. Autonomous Communities expenditure sector, 2014

	Millions of Euros	% of total health expenditure by the autonomous community
Andalucía	4,156	47.6
Aragón	983	51.7
Asturias	746	49.2
Baleares	649	48.7
Canarias	1,306	50.2
Cantabria	403	48.8
Castilla y León	1,738	54.9
Castilla-La Mancha	1,313	52.2
Cataluña	3,283	35.7
Comunidad Valenciana	2,349	39.7
Extremadura	817	51.5
Galicia	1,643	46.2
Madrid	3,407	45.9
Murcia	999	48.1
Navarra	475	52.0
País Vasco	1,789	52.2
La Rioja	205	48.8
Total spent by sector	26,262	46.0

Source: Ministry of Health, Social Services and Equality. Statistics on Public Health Expenditure.

8 e-Health

The electronic identification of SNS users, the Electronic Health Records System and the Electronic Prescribing System are three key instruments that connect the agents of the SNS and Information and Communication Technologies (ICT) play a major role in all of them.

8.1 Electronic identification of SNS users

Without interfering in the wide range of organisational, administrative and service formulas substantial to a decentralised State, the care provided to citizens must respond to some basic, common guarantees and, as an essential element of such guarantees, the Individual Health Card represents the standardised means of identification of all persons entitled to health protection in the SNS.

The Individual Health Card (or TSI, for *Tarjeta Sanitaria Individual*) is issued by each autonomous community to the individuals residing in its territory. To facilitate the management of the card system and to ensure the secure and positive identification of SNS users, the Ministry of Health, Social Services and Equality maintains the SNS Protected Population Database (BDPP-SNS) and generates for each user a unique personal identification number that lasts the person's lifetime. This number serves as a link to all the other personal identification codes that an individual may be assigned over his or her lifetime by the autonomous community. This is going to allow the clinical information associated with such identification codes to be retrieved later.

The BDPP-SNS thus serves as one of the strategic tools of the public health care system, playing a vital part in both the identification of users and in projects related to interoperability and electronic traceability of clinical information.

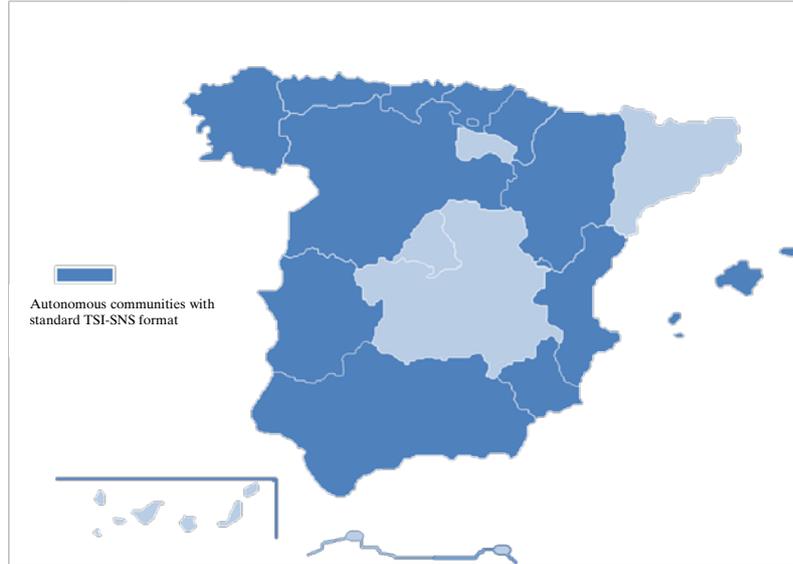
In Spain it is estimated that each year about 4 million people receive care in an autonomous community other than the one in which their TSI is active.

The TSI-SNS system constitutes the standardized identification method used with all persons entitled to health protection throughout the SNS. This identification makes it possible to access a person's clinical and administrative data in all of his or her contacts with the public health care system.

The cards existing in each autonomous community, while already valid for receiving care all over the SNS, are gradually being replaced – whenever the card must be renewed for any reason – by ones with a new standard format for the entire SNS. The standardisation process was initiated in 2013 and the new standardised cards contain a series of basic common data and a magnetic strip that facilitates its use in all autonomous communities.

As of the end of October 2016 a total of 6 million individual health cards with the new format had been issued. The autonomous communities issuing the new cards are Andalucía, Aragón, Asturias, Baleares, Cantabria, Castilla y León, Comunidad Valenciana, Extremadura, Galicia, Murcia, Navarra and País Vasco.

Graph 8-1 Autonomous communities issuing Individual Health Cards (TSI) with the new standard format for the entire SNS, 2016

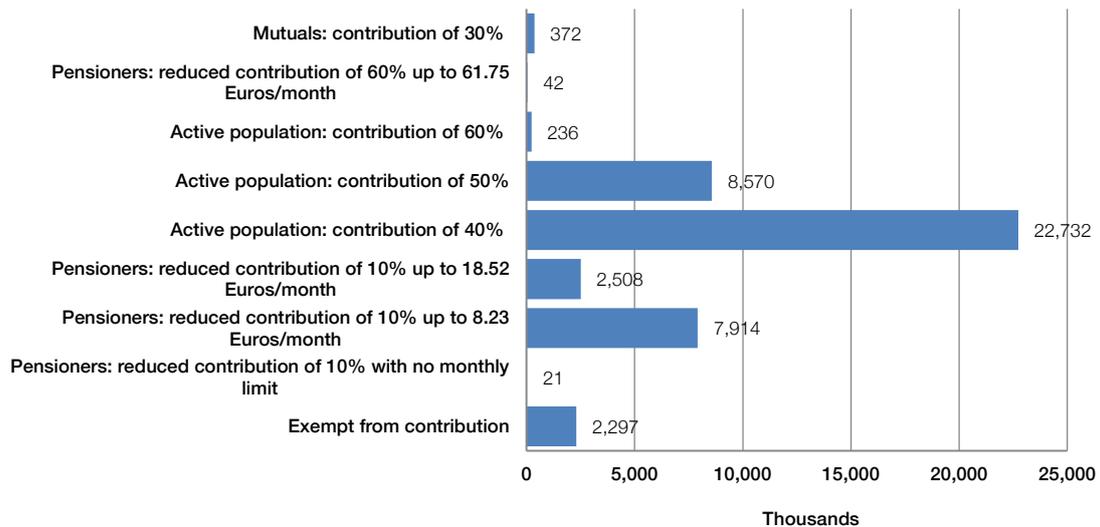


Remarks: the single standard format for the entire SNS is regulated by Royal Decree 702/2013. Data correspond to October 2016.
 Source: Ministry of Health, Social Services and Equality. SNS Protected Population Database (BDPP-SNS).

In 2016 the SNS began the task of incorporating the users of insurance mutuals for civil servants into the BDPP-SNS; as a pilot project, the process started with the inclusion of those civil servants in the autonomous community of Extremadura who have opted for private health care coverage by MUFACE.

The BDPP-SNS processes 141,327,759 messages per year and executes 23,340,004 transactions between health care administrations. As of October 2016, the population protected by the SNS was 44,902,674 people.

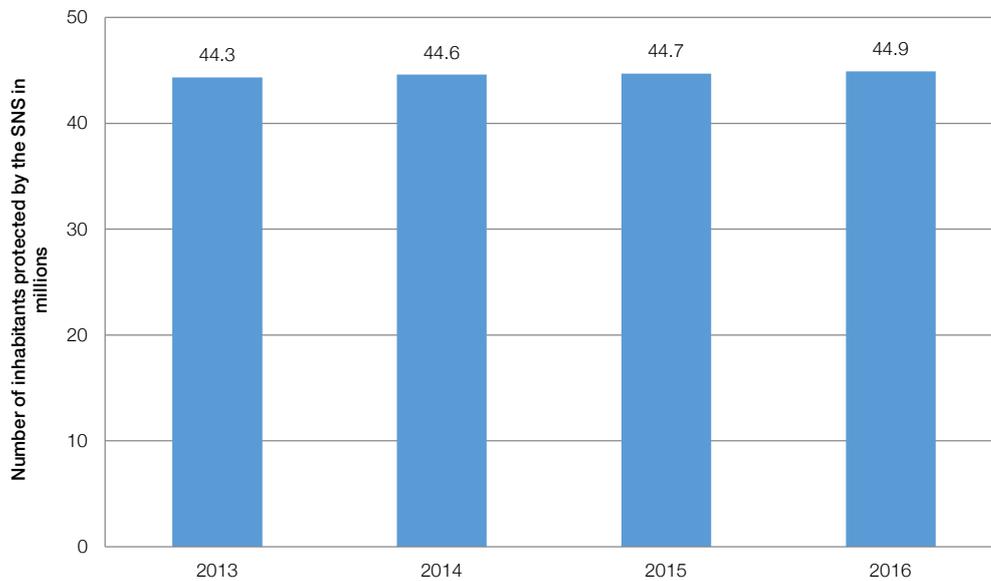
Graph 8-2 Population protected by the SNS, in thousands of persons, by type of contribution, 2016



Remarks: type of contribution updated according to the Consumer Price Index (CPI). Data from September 2016. Includes users of MUFACE mutual insurance for civil servants in Extremadura who have opted for private health care coverage.

Source: Ministry of Health, Social Services and Equality. SNS Protected Population Database (BDPP-SNS).

Graph 8-3 Changes in number of inhabitants protected by the SNS in millions of persons, 2013-2016



Remarks: 2013 and 2014 data correspond to 31 December while 2015 and 2016 data correspond to 31 October.

Source: Ministry of Health, Social Services and Equality. SNS Protected Population Database (BDPP-SNS).

8.2 Electronic Health Records in the SNS

Electronic Health Records are widespread in the spheres of Primary Care and Specialised Care in all of the autonomous communities.

The Electronic Health Records of the SNS system (EHR-SNS) is an interoperability system that enables content extracted from Electronic Health Records and other information systems of the autonomous communities to be transmitted, making it accessible to citizens and authorised health care professionals anywhere in state territory or abroad.

The EHR-SNS constitutes an element of cohesion within the SNS. It contributes to improving health care quality, clinical safety and care continuity because it allows medical or nursing professionals who are attending a citizen in need of assistance to gain access to certain elements of the patient's clinical data, regardless of which regional health service generated such data.

Through the EHR-SNS citizens can, in addition to having access to relevant parts of their clinical data, find out which centres and services have accessed their personal health information. They can also limit, in a selective manner, access to documents and make formal complaints if they believe access to be unjustified.

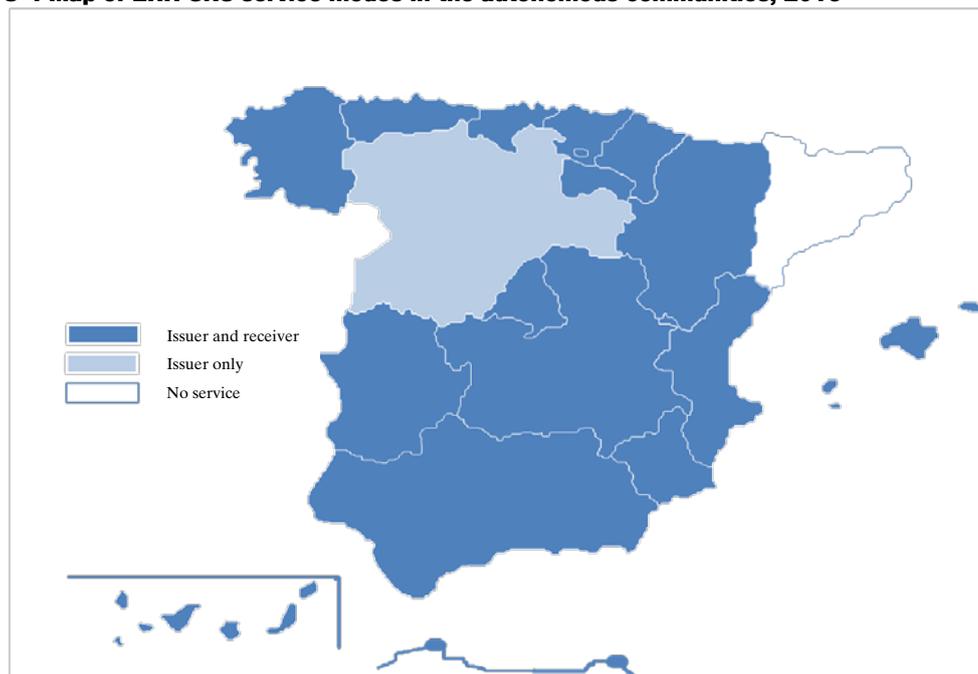
The EHR-SNS is now part of the Digital Agenda for Spain. It was previously developed within the framework of the On-line Health Programme (2006-2013). It is led and co-ordinated by the Ministry of Health, Social Services and Equality, in collaboration with the regional health authorities of the 17 autonomous communities and the National Institute of Health Management (INGESA), which is in charge of public health care in the autonomous cities of Ceuta and Melilla.

As of 1 September 2016, the status of EHR-SNS services is as follows⁹⁰:

- 16 regional health services can work in issuing mode (they have the capability of issuing clinical documents regarding their patients) and receiving mode (they can consult the clinical information of patients from other autonomous communities).
- 1 regional health service can work only in issuer mode.
- In one regional health service activation of the services is still pending.
-

As of the aforementioned date, the system includes the clinical information of 35,751,172 users, which means the EHR-SNS covers 77.69% of the population having an Individual Health Card (TSI). Comparing this number to the data appearing in the 2015 SNS Annual Report (cut-off date: August 2015), there has been an increase of 28.77% in coverage (10,285,744 persons).

Graph 8-4 Map of EHR-SNS service modes in the autonomous communities, 2016

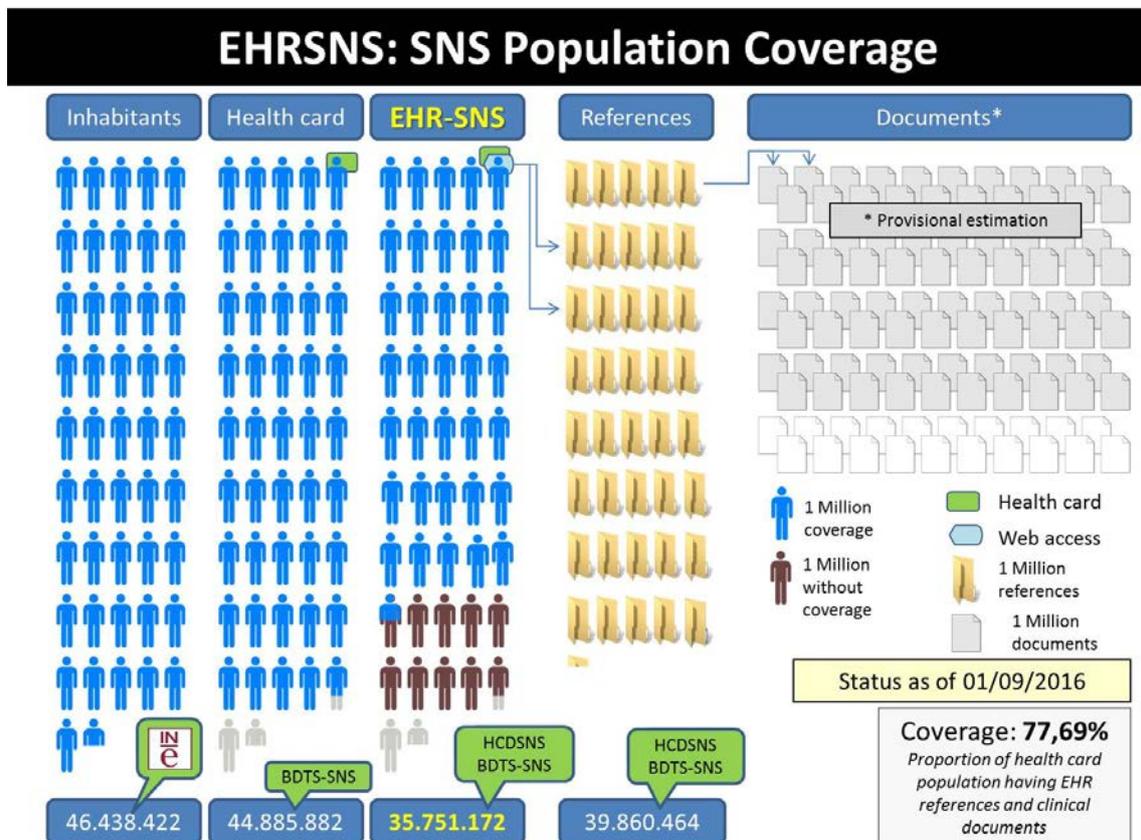


Remarks: as of 1 September 2016 Comunidad Valenciana was in the process of verifying the services available to its citizens

Source: Ministry of Health, Social Services and Equality. EHR-SNS statistical repository.

⁹⁰ The real time situation of EHR-SNS services can be consulted on the web page of the Ministry of Health, Social Services and Equality: <http://www.msssi.gob.es/profesionales/hcdsns/contenidoDoc/home.htm>.

Graph 8-5 EHR-SNS coverage of the population in the Protected Population of the SNS Database (BDPP-SNS), 2016



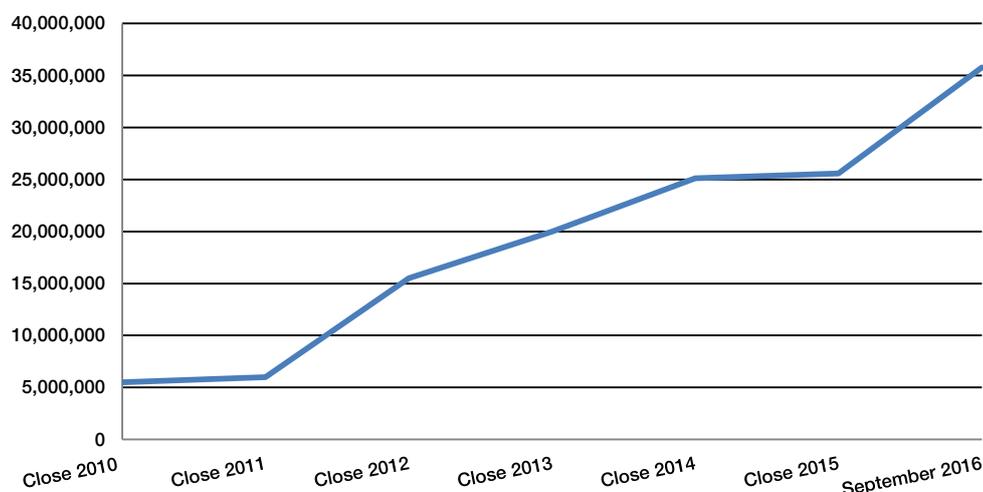
Remarks: *inhabitants* refers to the total resident population as of 1 January 2016 (INE). Situation as of 1 September 2016. *Folder* refers to the Electronic Health Record of a citizen in an autonomous community. *References* refers to the number of folders (EHR) of a citizen in any of the autonomous communities (SNS) which contain some kind of clinical information.

Documents: total number of references to clinical documents.

Source: Ministry of Health, Social Services and Equality. Dashboard of the EHR-SNS project.

Within the contents of EHR-SNS, of particular interest is the Patient Summary, which 15 regional health services are now able to issue. This is a document with changeable content that includes the data considered relevant for non-programmed health care. It is generated in real time, using clinical content that has been saved in the EHR, at the request of a health care professional or citizen.

Graph 8-6 Changes in the volume of references within the EHR-SNS, 2010-2016



Remarks: *references* indicate the folders (citizen-Regional Health Service) that contain clinical information. The data for the close of 2010 is an estimate.

Source: Ministry of Health, Social Services and Equality. EHR-SNS statistical repository.

8.3 Electronic prescribing in the SNS

More than 10 years ago the Spanish health care system introduced an electronic system for the management of prescriptions written as part of the SNS pharmaceutical benefits. Electronic prescribing, a computerised service mode developed to support health care delivery, makes it possible for doctors to write and transmit prescriptions by electronic means, using the Information and Communication Technologies, so that they can be dispensed at a later time.

Looking at all of the autonomous communities, electronic prescribing (e-prescribing) has been implemented in 100% of Primary Care Centres, in 65.9% of Local Primary Care Centres, in 72.5% of specialised care centres and in 100% of pharmacies.

Table 8-1 Implementation of electronic prescribing in the SNS by autonomous community and care area. Spain, 2016

	Primary Care Centres %	Local Primary Care Centres %	SNS hospitals %	Pharmacies %
Andalucía	100	100	100	100
Aragón	100	100	P	100
Asturias	100	100	P	100
Illes Balears	100	100	100	100
Canarias	100	100	100	100
Cantabria	100	100	100	100
Castilla y León	96.0	24.2	P	100
Castilla-La Mancha	100	100	100	100
Cataluña	100	100	100	100
Comunidad Valenciana	100	100	100	100
Extremadura	100	100	100	100
Galicia	100	100	100	100
Madrid	100	100	P	100
Murcia	100	100	10	100
Navarra	100	100	100	100
País Vasco	100	100	100	100
La Rioja	100	100	100	100
Ceuta	100	100	P	100
Melilla	100	100	P	100
Spain (SNS)	99.8	65.9	72.5	100

Remarks: degree of implementation provided by the autonomous communities and INGESA (Ceuta and Melilla) in July of 2016.

P = implementation process is pending.

Source: Ministry of Health, Social Services and Equality. Subdirectorate General of Health Information and Innovation.

As regards citizen awareness, 79.3% of the population knows that the e-prescribing system exists in their autonomous community.⁹¹ In addition, 57.1% state that they not only know of its existence but have already used it. This represents an increase of 29 percentage points over the 2011 figure.

By autonomous community, there is, logically, greater awareness of e-prescribing system in the autonomous communities in which it is more widespread.

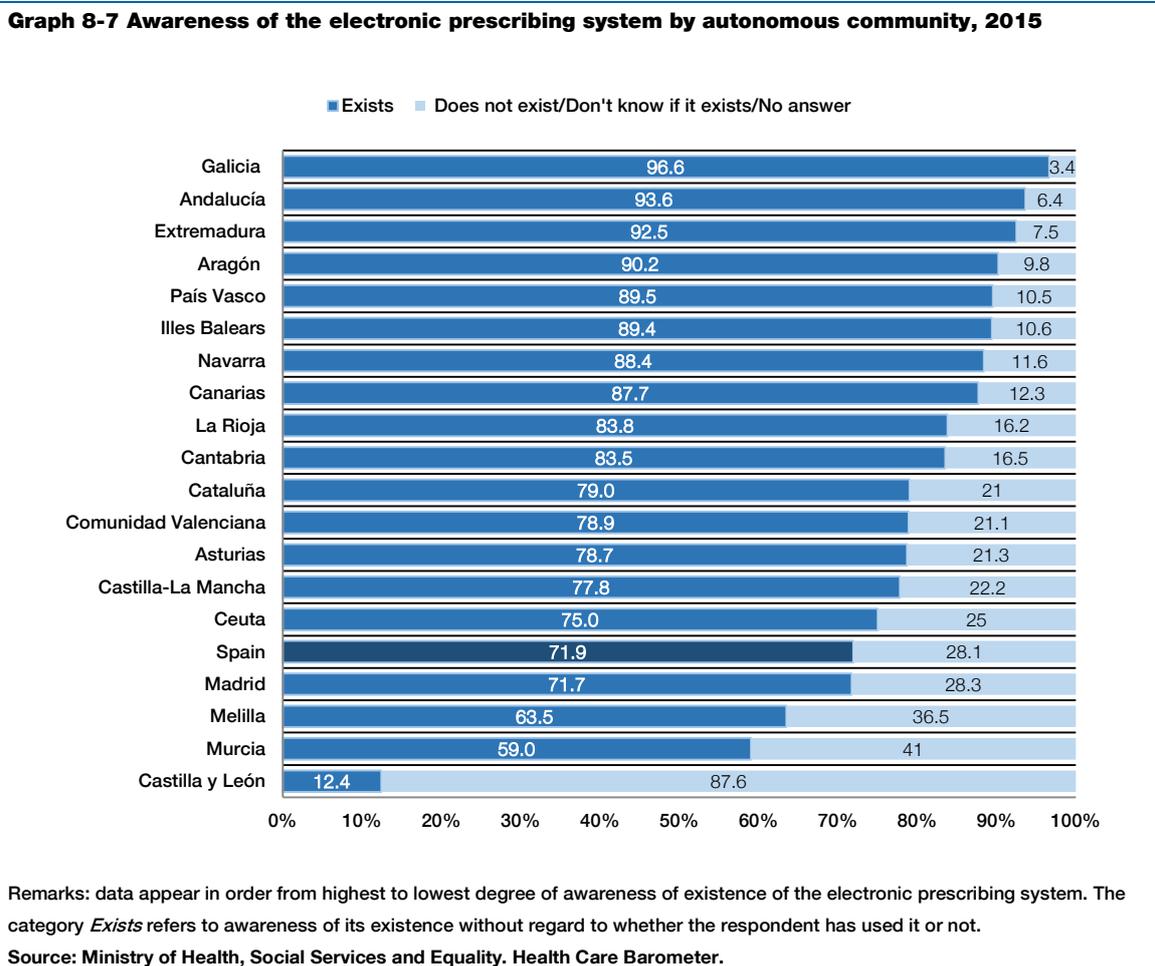
Table 8-2 Changes in the awareness of electronic prescribing, 2011-2015

"Do you know if there is an 'electronic prescribing system' in your autonomous community? That is, is there a system that enables the pharmacy to use a computer to access the prescriptions written by your doctor?"					
	2011	2012	2013	2014	2015
Yes, it exists and I have used it (%)	27.8	30.9	39.5	48.5	57.1
Yes, it exists but I have never been prescribed medicine with it (%)	24.4	22.6	22.1	23.4	22.2
No, it does not exist	7.0	7.8	6.7	4.1	3.2
I don't know if it exists (%)	40.6	38.3	31.4	23.9	17.1
No answer (%)	0.2	0.3	0.3	0.1	0.4

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

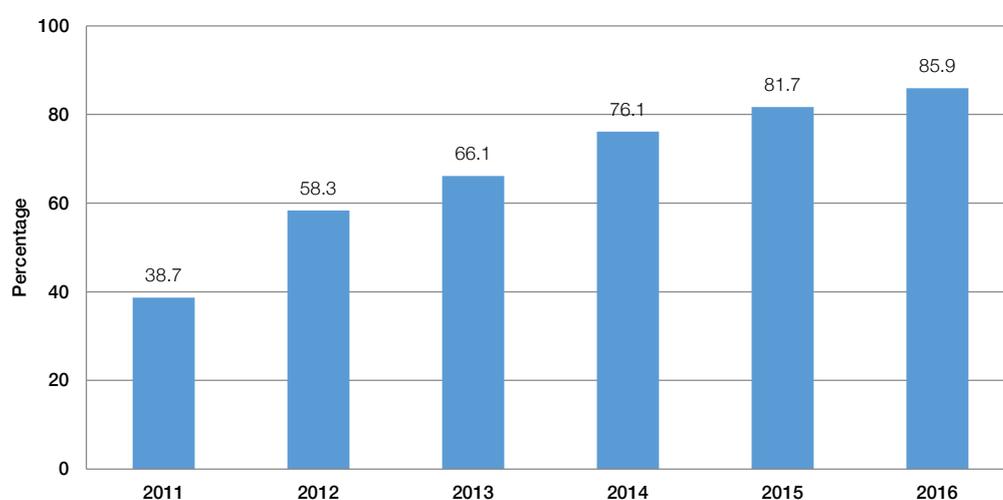
⁹¹ Ministry of Health, Social Services and Equality. Health Care Barometer, 2015

The level of use of e-prescriptions relative to the total number of prescriptions dispensed in the SNS is 85.9%.



The electronic prescribing models in place in each autonomous community are different. In 2013 a project was undertaken to achieve electronic prescribing interoperability in the SNS. Its aim is to make it possible for a patient to pick up his or her medicine in any pharmacy in the country, regardless of the autonomous community in which the prescription was written. In 2015 a pilot project was conducted with the participation of Canarias and Extremadura. Following the pilot experience, prescription information could be transmitted between the two autonomous communities, so patient mobility in the dispensation of prescribed medicines is possible.

Graph 8-8 Changes in the prescriptions dispensed using the electronic prescribing system of the SNS. Spain, 2011-2016



Remarks: 2015 data corresponds to the month of July and 2016 data to the month of May.

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation.

Four regional health services have interoperable medical prescriptions: the autonomous communities of Canarias, Extremadura and Navarra are certified as issuers and receivers while Castilla-La Mancha is certified as an issuer. The regional health service of Galicia has begun the certification tests. The remaining regional health services are in the process of adapting their systems so as to meet the requisites for interoperability.⁹²

Between 7 July 2015, when the aforementioned pilot project concluded, and 30 September 2016 a total of 1,189 medicine packs were dispensed to 276 patients⁹³ in 147 pharmacies.

Table 8-3 Interoperable medical prescriptions, number of patients attended by autonomous community where dispensation takes place, by autonomous community of origin of the patients. 2016

Autonomous community where dispensation takes place	Autonomous community of origin of the patients				
	Extremadura	Canarias	Castilla-La Mancha	Navarra	Total
Extremadura	-	39	103	21	163
Canarias	105	-	8	-	113

Remarks: as of 30 September 2016 Canarias is in a position to soon be able to dispense prescriptions written in Navarra.

Source: Ministry of Health, Social Services and Equality. Subdirectorato General of Health Information and Innovation

⁹² The current situation of the project aimed at the interoperability of health records and e-prescriptions in the SNS can be consulted on the web page of the Ministry of Health, Social Services and Equality:

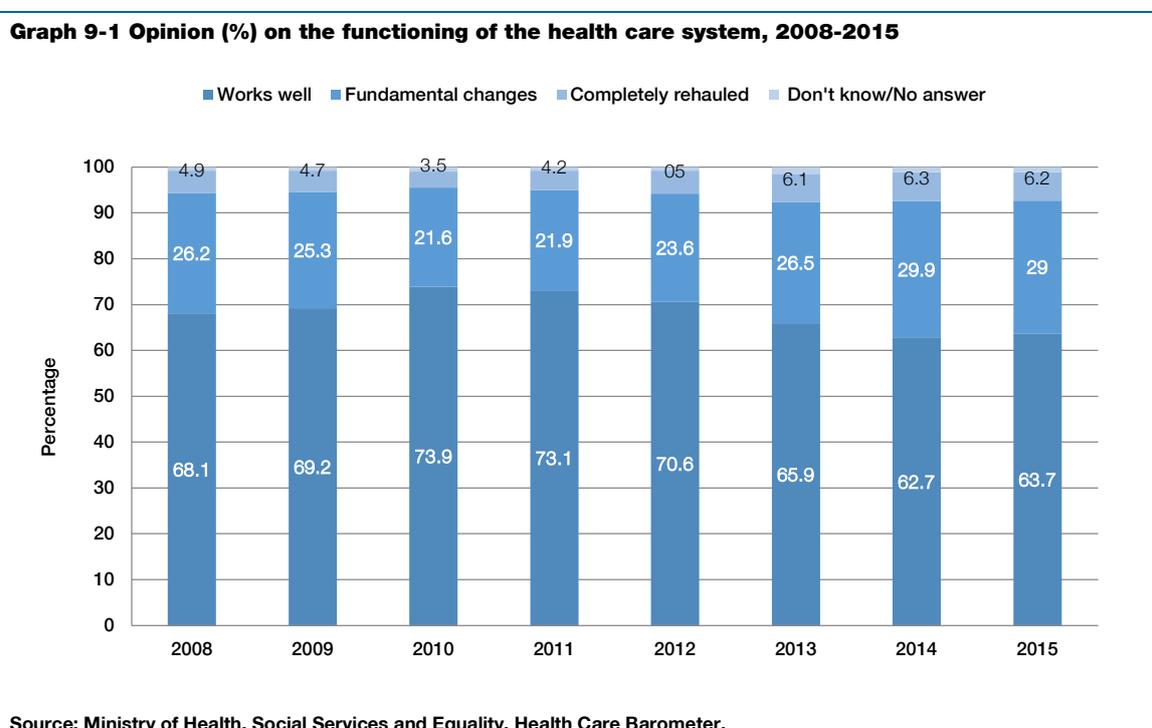
<http://www.mssi.gob.es/profesionales/recetaElectronicaSNS/home.htm>

⁹³ This figure refers to the number of individually identified persons who have used interoperable e-prescriptions.

9 Citizen opinions and perception

9.1 Opinions on the functioning of the health care system

Citizens generally make a favourable assessment of the functioning of Spain’s health care system: 63.7% think that it either *works well* or *works quite well*, with *some fundamental changes being needed*. This share has been decreasing gradually since 2010 (when it was 73.9%) but in 2015 there seems to be a slight increase, the persistence of which will have to be confirmed in future editions.



In 2015 the degree of satisfaction with how the public health care system works in Spain was found to be 6.4 points.

Table 9-1 Degree of satisfaction with how the public health care system works by autonomous community, 2015

Autonomous communities	Score
Andalucía	6.3
Aragón	7.2
Asturias	6.8
Baleares	6.6
Canarias	5.8
Cantabria	6.9
Castilla y León	6.7
Castilla- La Mancha	6.1
Cataluña	6.0
Comunidad Valenciana	6.2
Extremadura	6.2
Galicia	6.2
Madrid	6.6
Murcia	6.9
Navarra	7.4
País Vasco	7.0
La Rioja	6.9
Ceuta	6.2
Melilla	5.4
Spain	6.4

Remarks: score on a scale of 1 (totally unsatisfied) to 10 (totally satisfied).

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

To gain a better understanding of the opinion of citizens regarding the functioning of the public health care system, their satisfaction with specific care services was explored. It has been found that in general the positive assessment is more pronounced in primary care, with a score of 7.3 on a scale of 1 to 10.

Table 9-2 Assessment of public health care services, 2010-2015

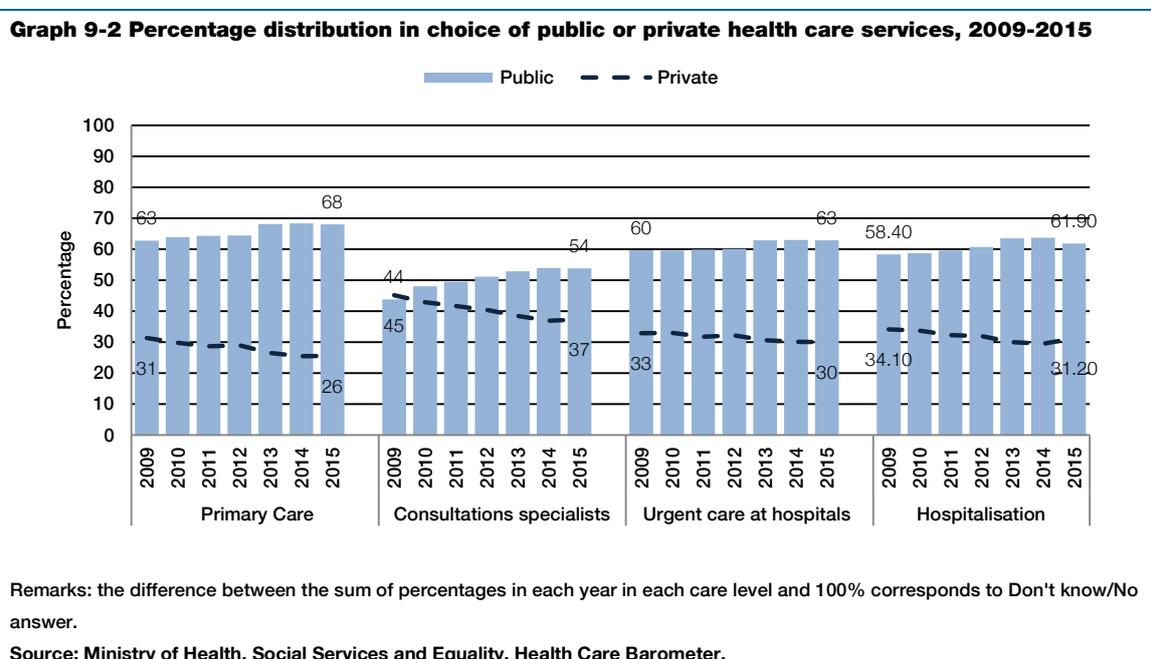
"Based on your experience with them or the idea you have of them, please rate the following public health care services."						
	2010	2011	2012	2013	2014	2015
Primary care (consultations with general practitioner and paediatrician in public primary care centres)	7.1	7.3	7.3	7.4	7.4	7.3
Specialised care (consultations with specialists in public centres)	6.7	6.9	6.9	6.8	6.8	6.7
Urgent care in public hospitals	6.0	6.1	6.1	6.1	6.0	5.9
Hospitalisation and care received in public hospitals	6.7	6.9	6.8	6.8	6.7	6.6

Remarks: score on a scale of 1 (totally unsatisfied) to 10 (totally satisfied).

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

9.2 Choosing between public and private health care

The majority of people would prefer to receive care from the public health care system, if they could choose. This figure has been increasing in the data series available.



The qualitative aspects that citizens mentioned in their preference for the public system are: the technology and resources it has; the skill and expertise of its medical and nursing professionals; the information they receive about their health problem and the personal manner in which patients are treated.

The two factors that would motivate citizens to choose private health care centres are the *speed with which patients are attended* and the *comfort of the facilities*.

Table 9-3 Percentage distribution of qualitative aspects influencing choice between public and private health care services, 2015

"In your particular case, in the hypothetical situation that you could choose, would you prefer public health care or private health care when considering...?"			
	I would choose public	I would choose private	Both
The technology and resources available	68.8	21.9	8.5
The skill/expertise of the doctors	63.8	15.9	19.5
The skill/expertise of the nurses	63.5	16.2	19.4
The speed with which you are attended	32.8	61.7	4.6
The information you receive about your health problem	51.2	29.5	17.8
The personal manner in which patients are treated	47.4	35.6	15.8
The comfort of the facilities	39.1	51.4	8.1

Remarks: the difference between the horizontal sum of the percentages of each concept and 100% corresponds to Don't know/No answer.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

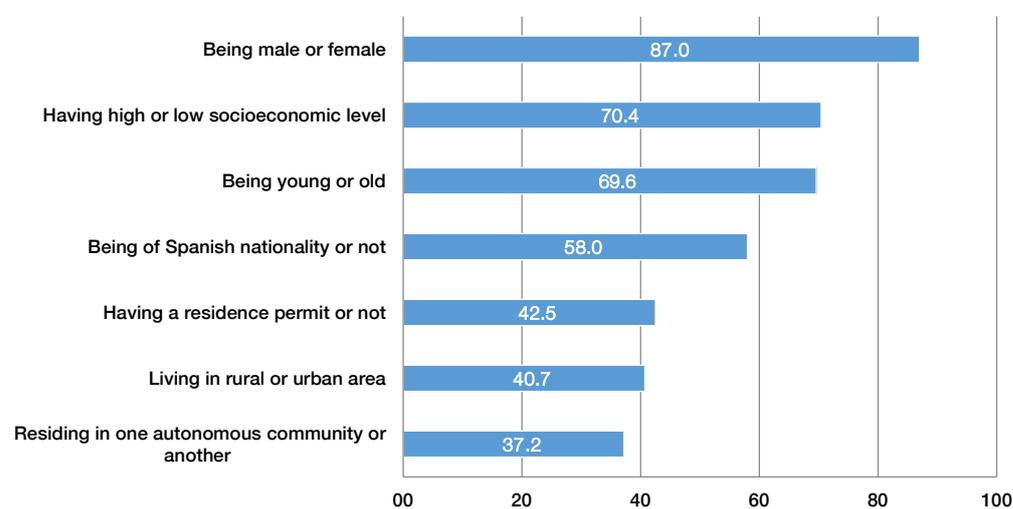
9.3 Equity in the provision of services

To analyse citizen perception of whether the care benefits provided by the public care system are the same for everyone, the Health Barometer (HB) asks respondents to evaluate 7 circumstances. The results show that the condition of being male or female is not considered a differentiating factor (87.0% state that this is their opinion).

The majority also think that the public health care system provides the same care services to all people regardless of their age (69.6%), their socioeconomic level (70.4%), or their nationality (58.0%).

But only 37.2% of the persons interviewed think there is equality in the provision of public health care services if you reside in one autonomous community or another, if you live in a rural or urban area (40.7%), or if you have or do not have a residence permit (42.5%).

Graph 9-3 Percentage distribution of respondents who believe that the SNS provides the same services to all people regardless of their sex, age, socio-economic level, nationality and residence, 2015



Source: Ministry of Health, Social Services and Equality. Healthcare Barometer.

9.4 Opinion on the repercussion of structural measures in health care services

Because of its important contribution to social cohesion, the health care system is among the areas that most garners the interest of the citizens.

The Health Barometers of 2013 and 2014 explored citizen opinion and the extent of agreement with the new pharmaceutical benefit system introduced in 2012.⁹⁴ Although 23% have not formed an opinion, a majority of citizens agree that the new pharmaceutical benefit system should include more income categories so that the contribution to the payment of the medicines is more adjusted to income level.

Table 9-4 The new pharmaceutical benefit system has modified the contribution made by patients according to income level. Do you very much agree, agree quite a lot, disagree or completely disagree that the new system....2013-2014

The new pharmaceutical benefit system has modified the contribution made by patients according to income level. Do you very much agree, agree quite a lot, somewhat disagree or completely disagree that the new system....2013-2014						
	Agree very much or quite a lot		Somewhat disagree or completely disagree		Don't know / No answer	
	2013	2014	2013	2014	2013	2014
Is more fair than the previous system of contributions (based solely on whether the person was a member of the active population or a pensioner)	30.2	35.7	52.3	45.7	17.5	18.6
Protects the least advantaged social groups (the unemployed, the disabled, ...)	29.0	32.6	50.7	46.1	19.6	21.3
Should have more income categories so that the contribution is better matched to the person's income level.	63.6	65.8	12.7	11.3	23.8	22.9
Contributes to avoid the accumulation of medicines at home	58.3	60.8	24.1	22.1	17.5	17.1

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

In the Health Barometer of 2015 this issued was once again explored, but there were slight modifications in the question posed and also in the possible answers, so the results are not directly comparable to those of previous years.

Table 9-5 As you probably know, with the new system of pharmaceutical benefits, each patient pays for his or her medicines according to his or her level of income. With regard to this system, with which of the following opinions do you most agree, 2015

It is good because now each person pays in accordance with his or her level of income	25.0
It should have more income categories so that the contributions can be better matched to the patients' level of income	30.4
It would be better to return to the previous system in which pensioners did not pay anything for their prescriptions and everyone else did	36.3
Don't know / No answer	8.3

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

⁹⁴ Royal Decree-Law 16/2012 on urgent measures to guarantee the sustainability of the SNS and to improve the quality and safety of its benefits (*Decreto-ley 16/2012, de 20 de abril, de medidas urgentes para garantizar la sostenibilidad del Sistema Nacional de Salud y mejorar la calidad y seguridad de sus prestaciones*). The Official State Gazette of 24 April 2012 announced the modification of the contribution that must be made by patients when purchasing the medicines prescribed by doctors of the public health care system and the relation the contribution has to income level.

9.5 Opinion of patients on their participation in the decisions affecting their health

Growing citizen awareness about the need to respect the autonomy of people in general and of patients in particular is an undeniable positive fact. As is the fact that in general doctors now display more open-minded attitudes in their relationships with patients.

One direct consequence of the ethical observance of patient autonomy is the active participation of patients in the decisions made by doctors about their patients' health and the treatment measures they consider necessary to improve it. Also, it is an objective fact that the participation of patients in clinical decisions has a positive influence on both care outcomes and treatment compliance.

And while in health care the progress made toward respect for patient autonomy is evident, in terms of real possibilities for patient participation there is still room for improvement. The Health Barometer findings indicates the following: of the persons who had consultations with specialists or who were hospitalised, slightly over 27% in the former (specialists) and over 36% in the latter (hospitalisation) state that they were not able to participate in the decisions made by the doctors as much as they would have liked. In primary care, however, 77% stated that they were able to.

Table 9-6 Percentage distribution of participation by patients in the decision-making about their health, 2015

When you had a consultation with the general practitioner or a specialist in the public system, or during your stay at a public hospital...Were you able to participate in the decisions made about your health problem and the treatment as much as you would have liked?		
	YES	NO
General practice		
Total	77.1	21.8
Men	75.6	23.1
Women	78.3	20.7
Medical specialist		
Total	70.4	27.2
Men	69.4	27.5
Women	71.3	27.0
At hospital		
Total	60.0	36.9
Men	56.3	39.8
Women	62.8	34.7

Remarks: the difference between the sum of the percentages and 100% corresponds to Don't know/No answer.

Source: Ministry of Health, Social Services and Equality. Health Care Barometer.

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Abbreviations and acronyms

A

AECOSAN	Spanish Food Safety, Nutrition and Consumer Protection Agency
AIDS	Acquired Immune Deficiency Syndrome
ALADINO	Surveillance Study of Growth, Diet, Physical Activity, Child Development and Obesity
ATC	Anatomical, Therapeutic and Chemical classification system, a system that codes medicines based on their pharmacological effect, therapeutic indications and chemical structure. It is divided into five levels: level 1 (ATC1) is the most general and level 5 (ATC5) is the most detailed.
ATC1 (Level 1)	organ or system upon which the pharmaceutical acts. It is divided into 14 main groups, each identified by a letter of the alphabet.
ATC2 (Level 2)	therapeutic subgroup
ATC3 (Level 3)	therapeutic or pharmacological subgroup
ATC4 (Level 4)	therapeutic, pharmacological or chemical subgroup
ATC5 (Level 5)	specific active ingredient or pharmacological association

B

BDCAP	<i>Base de Datos Clínicos de Atención Primaria</i> (Clinical Primary Care Database)
BDPP-SNS	<i>Base de Datos de Población Protegida del SNS</i> (SNS Protected Population Database)

C

CAT	Computerized Axial Tomography
CCST	<i>Comité Científico para la Seguridad Transfusional</i> (Scientific Committee for Transfusion Safety)
CE	<i>Conformité Européene</i> . The EU quality approval marking used for certain groups of products and services
CFCPS	<i>Comisión de Formación Continuada de las Profesiones Sanitarias</i> (Commission on Ongoing Training in the Health Professions)
CIE-10-ES	Spanish version of the 10th revision of the International Classification of Diseases
CIE10-ISHMT	International Shortlist for Hospital Morbidity Tabulation, a reduced list of the diagnostic categories used in ICD-9CM. Adopted by the OECD/Eurostat/WHO to facilitate comparisons.

CISNS	<i>Consejo Interterritorial del Sistema Nacional de Salud</i> (Interterritorial Council of the SNS)
CIS	<i>Centro de Investigaciones Sociológicas</i> (Sociological Research Centre)
CL	<i>Consultorio Local</i> (Local Primary Care Centre)
CMA	<i>Cirugía Mayor Ambulatoria</i> (Major Outpatient Surgery)
CMBD	<i>Conjunto Mínimo Básico de Datos</i> (Minimum Data Set)
CNECS	<i>Consejo Nacional de Especialidades en Ciencias de la Salud</i> (National Council on Health Science Specialties)
CON-11	<p><i>Clasificación Nacional de Ocupaciones</i> (National Classification of Occupations) which entered into force in 2011. The 6 categories used are the following:</p> <p>I. Directors and managers of establishments having 10 or more employees and professionals traditionally associated with University degrees.</p> <p>II. Directors and managers of establishments having less than 10 employees, professionals traditionally associated with 3-year University degree programmes and other professionals that provide technical support. Athletes and artists.</p> <p>III. Intermediate occupations and the self-employed.</p> <p>IV. Supervisors and workers in skilled technical occupations.</p> <p>V. Skilled workers in the primary sector and semi-skilled workers.</p> <p>VI. Unskilled workers.</p>
COPD	Chronic Obstructive Pulmonary Disease
COSI	Childhood Obesity Surveillance Initiative
CP	Clinical Pack
CPD-E	Special authorisation required for dispensation to patients aged over 75
CPI	Consumer Price Index
CSUR	<i>Centros, Servicios y Unidades de Referencia</i> (Reference Centres, Services and Units)
CSUR-SNS	Reference Centres, Services and Units of the SNS
CTS	<i>Centros de Transfusión Sanguínea</i> (Blood Transfusion Centres)
C. Valenciana	Comunitat Valenciana

D

DDD	Daily Defined Dose
DDI	Daily Dose per Inhabitant (DDD per 1,000 inhabitants and day)
DH	<i>Diagnóstico Hospitalario</i> (Hospital Diagnosis)

DK	Don't know
DTC	Daily Treatment Cost
DTPa/dTpa	Combined vaccine against Diphtheria-Tetanus-Pertussis

E

(e)	Estimated data
EAP	<i>Equipo de Atención Primaria</i> (Primary Care Team)
EDADES	Encuesta sobre Alcohol y Drogas en España (Survey on Alcohol and Drugs in Spain)
EDOs	<i>Enfermedades de Declaración Obligatoria</i> (Notifiable Diseases)
EHR-SNS	Electronic Health Records in the SNS
EHIS	European Health Interview Survey
ENSE	<i>Encuesta Nacional de Salud de España</i> (Spanish National Health Survey)
EPA	<i>Encuesta de Población Activa</i> (Economically Active Population Survey)
ETOPs	Elective Terminations of Pregnancy
ERN	European Reference Networks
ESH	European Survey of Health
ESHS	European Survey of Health in Spain
ESTUDES	<i>Encuesta sobre el uso de drogas en estudiantes de enseñanzas secundarias en España</i> (Survey on Drug Use among Secondary School Students in Spain)
Eurostat	European Statistics Office

F

FOB	Faecal Occult Blood
FSE	<i>Formación Sanitaria Especializada</i> (Spain's specialised health care training system)

G

GDP	Gross Domestic Product
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H

HB	Hepatitis B
Heterosex	Unprotected sex between heterosexuals
Hib	Haemophilus influenzae type b
HIV	Human Immunodeficiency Virus
HLY ₆₅	Healthy Life Years at 65
HLY _b	Healthy Life Years at birth

HU Hospital Use

I

ICT Information and Communication Technologies

ICD -9-CM Clinical modification of the 9th revision of the ICD

ICPC International Classification of Primary Care

ICPC2 CPC International Classification of Primary Care, 2nd edition

IDU Injecting drug users

iMDS Application designed to facilitate the use of hospital discharge data obtained from the Minimum Data Set of SNS hospitals

INE *Instituto Nacional de Estadística* (National Statistics Institute)

INGESA *Instituto Nacional de Gestión Sanitaria* (National Institute of Health Management)

IPV Inactivated Polio Virus

ISFAS *Instituto Social de las Fuerzas Armadas* (Social Institute of the Armed Forces insurance mutual)

ISHMT International Shortlist for Hospital Morbidity Tabulation

L

LEB Life Expectancy at Birth

LE₆₅ Life Expectancy at 65

LEQ *Lista de Espera Quirúrgica* (Surgery Waiting List)

M

MATEPSS *Mutuas de Accidentes de Trabajo y Enfermedades Profesionales de la Seguridad Social* (Insurance Mutuals for Workplace Accidents and Occupational Illness of the Social Security System)

MCSS Social Security Collaborating Mutuals

MenC Meningococcal C

MMR Measles-Mumps-Rubella

MRI Magnetic Resonance Imaging

MSM Men who have sex with men

MSP Manufacturer's Selling Price

MUFACE *Mutualidad General de Funcionarios Civiles del Estado* (Mutual Insurance for State Employees)

MUGEJU *Mutualidad General Judicial* (Mutual Insurance for Employees of the Judiciary)

N

(N)	Number of interviews
NA	No answer
NAOS	Strategy for Nutrition, Activity and the Prevention of Obesity
N/D	Nurse/Doctor ratio

O

OECD	Organisation for Economic Cooperation and Development
ONT	<i>Organización Nacional de Trasplantes</i> (National Transplant Organisation)
ORL	Otolaryngology

P

PEN	Plan Estadístico Nacional (National Statistics Plan)
PCC	Primary Care Centres
p.m.p.	per million population
PRE	Order issued by the Prime Minister

R

RAE-CMBD	<i>Registro de Actividad de Atención Especializada del Conjunto Mínimo Básico de Datos al alta hospitalaria</i> (Register of Specialised Care Activity from the Minimum Data Set regarding hospital discharges)
RD	<i>Real Decreto</i> (Royal Decree)
RDL	<i>Real Decreto-ley</i> (Royal Decree Law)
REDMO	Spanish Register of Bone Marrow Donors
RP	Retail Price
RP-VAT	Retail Price-Value Added Tax
R&D	Research and Development
R&D+i	Research and Development + innovation

S

SCO	Ministerial Order issued by the Ministry of Health and Consumer Affairs
SCP	Pharmaceutical pack without tamper-evident label, dispensed by hospital pharmaceutical services
SEE	<i>Sociedad Española de Epidemiología</i> (Spanish Epidemiology Society)
SIAE	<i>Sistema de Información de Atención Especializada</i> (Specialised Care Information System)

SIAP	<i>Sistema de Información de Atención Primaria</i> (Primary Care Information System)
SIFCO	<i>Sistema de Información Fondo de Cohesión</i> (Health Cohesion Fund Information System)
SINIVIH	<i>Sistema de Información sobre nuevos diagnósticos de Virus de Inmunodeficiencia Humana</i> (Information System on New HIV Diagnoses)
SISCAT	<i>Sistema Sanitari Integral D'utilizació Pública de Catalunya</i> (Integrated Health Care System of Catalunya)
SISCSUR	<i>Sistema de Información para el seguimiento de los Centros, Servicios y Unidades de Referencia</i> (Information System for the monitoring of the SNS Reference Centres, Services and Units)
SISLE-SNS	<i>Sistema de Información Sanitaria de Lista de Espera en el SNS</i> (SNS Waiting List Information System)
SI-SNST	<i>Sistema de Información del Sistema Nacional para la Seguridad Transfusional</i> (Information System of the National System for Transfusion Safety)
SNS	<i>Sistema Nacional de Salud</i> (Spain's National Health System)
SS	Social Security
SSI	Ministerial Order issued by the Ministry of Health, Social Services and Equality
ST	<i>Servicios de Transfusión</i> (Transfusion Services)

T

Td	Tetanus-Diphtheria
TPH	<i>Trasplante de Progenitores Hematopoyéticos</i> (Hematopoietic stem cell transplantation)
TSI	<i>Tarjeta Sanitaria Individual</i> (Individual Health Card)

U

UCB	Umbilical Cord Blood
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V

VAT	Value Added Tax
VCN	<i>Vacunación frente al Neumococo</i> (Vaccination against pneumococcal disease)
VHC	Virus Hepatitis C
VVZ	Vaccination against varicella

W

WHO	World Health Organisation
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X

XHUP

Xarxa Hospitalaria d'Utilizació Pública (Network of Public Use Hospitals in Catalunya)

Sources

Accreditation of teaching centres and units in Spain's Specialised Health Care Training programmes

Accreditation is the systematic, independent and documented process by which a centre or service is recognised to be qualified as a teaching centre or unit for the training of specialists in the health sciences, in compliance with certain standards which include minimum requisites regarding human and physical resources, care activity, teaching and research activity, and quality, among others.

The initiative for seeking accreditation is taken by the entity upon which the health centre depends. A report must be obtained by the teaching commission of that entity, along with a favourable opinion by the Ministry of Health of the autonomous community, which will send it to the Ministry of Health, Social Services and Equality. The Ministry of Health, Social Services and Equality makes a decision regarding the request after receiving reports from the national commissions that comprise the National Council on Health Science Specialties.

Accredited teaching centres and units are subject to periodic external teaching audits performed by the Ministry of Health, Social Services and Equality. Also, both the auditing processes and improvement plans are monitored, to ensure ongoing quality improvement.

More information at:

<https://www.msssi.gob.es/profesionales/formacion/AcreDocCntUniForSanEsp.htm>

Alcántara Information System

The Alcántara application of the Ministry of Health, Social Services and Equality compiles data concerning pharmaceutical consumption and expenditure invoiced through SNS medical prescriptions dispensed in pharmacies. It manages the invoicing statistics furnished by the regional health services, INGESA and insurance mutuals for government employees, and the validation of prescription files, to generate data and invoicing reports.

Annual Statistical Report of the Ministry of Employment and Social Security

Prepared and published annually by the Ministry of Employment and Social Security-Subsecretary of Employment and Social Security, this report contains Spain's principal socio-occupational data in the following fields: the job market, immigration and emigration, vocational training and measures to stimulate employment; working conditions, labour relations, social security benefits and other forms of social protection. The area of working conditions and labour relations includes data on accidents at the workplace.

More information at:

<http://www.empleo.gob.es/es/estadisticas/contenidos/anuario.htm>

Catalogue of Best Practices in the SNS

The Ministry of Health, in collaboration with the SNS Commission against Gender Violence and the Health Strategy Committees, has been working since 2012 on a common, systematised process by which to identify, compile, approve and disseminate best practices in the area of health care

response to gender violence and also in the different SNS health strategies. A best practice is any intervention or experience that, within the strategic lines of the SNS and based on the best scientific knowledge available, has proven to be effective, can be transferred and represents an innovative contribution to the health care system. In 2016 the SNS Catalogue of Best Practices comprises 225 best practices that have been identified and published in relation to 10 SNS strategies: promotion and prevention, childbirth and reproductive health, health care actions in response to gender violence, ischaemic cardiopathy, cancer, diabetes, rare diseases, rheumatic and muscular-skeletal diseases, palliative care and chronic obstructive pulmonary disease.

More information at:

<http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/BBPP.htm>

Clinical Primary Care Database

The Clinical Primary Care Database (BDCAP) is a set of data related to the care delivered at the first care level, gathered in a homogeneous and systematic manner and with a historical perspective. With it analysts can learn about the effective content of the care provided using primary sources, that is, the clinical records used in primary care.

The BDCAP is conceived as a population-wide database, representative at the autonomous community level, of the population assigned to SNS Primary Care services.

The analyses focus on the user and on the health problems and related events that occur to the user over time, and on what actions are taken in response.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/home.htm>

Demographic indicators. Total, youth and old-age dependency ratios

The dependency ratio is a basic demographic indicator prepared by the National Statistics Institute (INE). The total dependency ratio is the quotient obtained by dividing the population aged under 16 and over 64 and residing in Spain as of 1 January of year “x” by the population aged 16 to 64, expressed as a percentage.

It is an indicator with clear economic significance, as it expresses the share of the potentially inactive population to the potentially active population.

The youth or <16 dependency ratio is the quotient obtained by dividing the population aged under 16 and residing in Spain as of 1 January of year “x” by the population aged 16 to 64, expressed as a percentage.

The old-age or 64+ dependency ratio is the quotient obtained by dividing the population aged over 64 and residing in Spain as of 1 January of year “x” by the population aged 16 to 64, expressed as a percentage.

More information at:

<http://www.ine.es/jaxiT3/Tabla.htm?t=1453&L=0>

Economically Active Population Survey

The Economically Active Population Survey (EPA), an ongoing sample-based study performed on a quarterly basis, is conducted by the National Statistics Institute (INE). It studies households and its aim is to provide data on the workforce and its various categories, and on the population not connected to the labour market. The initial sample is about 65,000 families per quarter, which equals approximately 180,000 people.

The EPA has been conducted since 1964 and the current methodology, which has been used since 2005, is harmonized with the European Union (EU).

More information at:

http://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=resultados&idp=1254735976595

Electronic Health Records of the SNS

The purpose of the Electronic Health Records of the SNS (EHR-SNS) system is to guarantee that citizens and health care professionals can access the clinical documentation most relevant to each patient's health care. It includes documentation that is available in electronic format anywhere in the SNS and also ensures that the data can be accessed only by the parties authorised to do so.

The EHR-SNS project has been led by the Ministry of Health, Social Services and Equality within the framework of the programme Health Online, in collaboration with the Public Company named red.es, with all 17 autonomous communities and with the National Institute of Health Management (INGESA), the body in charge of public health care in the autonomous cities of Ceuta and Melilla.

More information at:

<https://www.msssi.gob.es/profesionales/hcdsns/home.htm>

Electronic prescribing in the SNS

Medical prescriptions are the standardized document used by authorised professionals to prescribe medicines and health products to patients for subsequent dispensation. Electronic prescribing is a digital mode of service in support of health care that allows the doctor to issue and send prescriptions by electronic means, based on information and communication technologies, so that they can subsequently be dispensed.

The interoperable electronic prescribing project of the SNS (RESNS) has the main objective of enabling dispensation from any pharmacy, through electronic means, of medicine prescribed in another autonomous community, with no need to present a paper prescription slip.

More information at:

<https://www.msssi.gob.es/profesionales/recetaElectronicaSNS/home.htm>

European Survey of Health in Spain

The European Survey of Health in Spain (ESHS), conducted by the National Statistics Institute (INE), is the Spanish part of the European Health Interview Survey (EHIS), coordinated by Eurostat. The questionnaire for Spain was adapted by the INE in collaboration with the Ministry of Health, Social Services and Equality in order to allow comparisons with the main indicators of the Spanish National Health Survey, with a series of additional variables also included. The methodology used makes it possible to continue the series of the main national indicators.

The survey is performed every five years on households, where health information relative to the population residing in Spain, aged 15 and over, is gathered by means of a common

European questionnaire. This information makes it possible to plan and evaluate health care actions, both European and Spanish.

The questionnaire consists of 4 modules: the sociodemographic module (household and individual), the health status module, the health care module and the health determinants module.

More information at:

http://www.msssi.gob.es/estadEstudios/estadisticas/EncuestaEuropea/Enc_Eur_Salud_en_Esp_2014.htm

Health Care Barometer

The Health Care Barometer gathers information, through questionnaires and direct personal interviews, on the perception citizens have of the health care system, its functioning, the impact of measures related to health care policies, citizen awareness and/or attitudes with regard to health problems of particular interest at a given time and the penetration of informative campaigns. The questionnaire has a section that changes, exploring different dimensions defined for each yearly study. The classification variables are age, sex, level of education, occupation, size of municipality in which the respondent lives, his or her income level, and autonomous community in which he or she lives.

The Health Care Barometer forms part of the National Statistic Plan (PEN) 2013–2016. Conducting the survey is the responsibility of the Ministry of Health, Social Services and Equality in collaboration with the Sociological Research Centre (CIS). The data is gathered and published on an annual basis.

More information at:

http://www.msssi.gob.es/estadEstudios/estadisticas/BarometroSanitario/home_BS.htm

Health Trends in 30 Indicators

Since the Spanish National Health Survey (ENSE) of 2006, the Ministry of Health and the National Statistics Institute (INE) have been making great efforts to harmonize Spanish and European health surveys, in such a way that a periodic study takes place every 2-3 years, while ensuring that the value of the data series is preserved, prioritizing whenever possible the comparability of the European Survey of Health in Spain (EESE) of 2014 with the entire ENSE series and complying with EU obligations at all times.

The EESE focuses on the health of the adult population, health determinants and the use of health services and accessibility. It is based on personal home interviews conducted with non-institutionalized adults living in Spain (aged 15 and over) using a common European questionnaire administered with the assistance of a computer.

Currently the ENSE, which studies both adults and children, is conducted jointly with the INE every five years, alternating every two and a half years with the EESE, with which it shares methodology and a group of core variables.

For this publication (Health Trends in 30 Indicators) 30 indicators of the health of the adult population have been selected from both surveys.

More information at:

http://www.msssi.gob.es/estadEstudios/estadisticas/EncuestaEuropea/Tend_salud_30_indic.pdf

iMDS

Application designed to facilitate the use of hospital discharge data obtained from the Minimum Data Set of SNS hospitals. The data, which has been available since 2001, includes various groups of indicators: frequency rates, activity rates, mortality, complications, etc., with different analytical themes (descriptive, time series, best outcomes, etc.), for the different classification and/or MDS filter variables (geographic, demographic, clinical, episode).

More information at:

<http://icmbd.es/login-success.do>

Information System for the Monitoring of Reference Centres, Services and Units

The Information System for the Monitoring of CSUR (SISCSUR), which is based on the patient register that each CSUR must maintain, allows for the yearly monitoring of activity designation criteria as well as procedure indicators and outcomes, with a view to improving standards and detecting deviations in CSUR functioning. The standard used in this process is the activity designation criterion agreed upon by the CISNS in each case.

More information at:

<http://www.msssi.gob.es/profesionales/CentrosDeReferencia/home.htm>

Information System of the National System for Transfusion Safety

The Information System of the National System for Transfusion Safety (SI-SNST) has the objective of gathering and processing the information necessary to monitor, analyse, evaluate and oversee the transfusion system, through the data provided by the persons in charge of the transfusion centres and services.

More information at:

<http://www.msssi.gob.es/profesionales/saludPublica/medicinaTransfusional/indicadores/indicadores.htm>

Information System on New HIV Diagnoses and the National Registry of AIDS Cases

The data obtained through the Information System on New HIV Diagnosis (SINIVIH) are the best way to understand the incidence of Human Immunodeficiency Virus (HIV), although, because infection is asymptomatic, new HIV diagnoses include not only recent infections but also infections occurring years ago. The implementation of SINIVIH began in the decade of 2000, with more and more autonomous communities joining the group progressively. By 2013 implementation was complete.

The National Registry of AIDS Cases contains information about new AIDS diagnoses and it has been in operation in all of Spain since the epidemic started. Because it contains information about advanced HIV infection, its data are very useful for assessing the efficacy of highly effective anti-retroviral therapy.

More information at:

<http://www.isciii.es/ISCIII/es/contenidos/fd-servicios-cientifico-tecnicos/fd-vigilancias-alertas/fd-enfermedades/fd-sida/sistemas-de-informacion-poblacionales-sobre-vih.shtml>

Life Expectancies and Healthy Life Years in Spain

The Life Expectancy estimates have been obtained from abbreviated life tables with five-year age groups (drawn up by the Ministry of Health, Social Services and Equality), the deaths occurring in the calendar year, provided by the Natural Population Movement statistics and the Official Population Figures of the resident population at mid-year, both of which are published by the National Statistics Institute (INE).

To calculate the Healthy Life Years estimates, made by the Ministry of Health, Social Services and Equality, the prevalence of activity limitation, drawing from the Spanish National Health Surveys, are used.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/nivelSalud.htm>

Mortality by cause of death

Statistical operation performed by the National Statistics Institute (INE) in collaboration with the regional statistics institutes and the Ministries of Health of the autonomous communities, and the Civil Registries (Ministry of Justice). It is part of the National Statistics Plan 2013-2016.

Its purpose is to contribute to a better understanding of mortality in terms of the basic cause of death, distinguishing between late foetal deaths and other deaths, and supplying information with which to construct health indicators. The study variables include deceased persons and late foetal deaths. The classification variables are cause of death, sex, age, month of death, province of residence and province in which the death occurred. The data is gathered monthly and published annually.

More information at:

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t15/p417&file=inebase&N=&L=0>

National Catalogue of Hospitals

The National Catalogue of Hospitals provides basic information about the hospitals in operation as of 31 December of each year. As a directory, it contains information about the centre (name, address, telephone number, town and municipality), total number of beds, type of facility, whether an agreement with the private sector exists, and if it is accredited as a teaching centre.

The National Catalogue of Hospitals is created by the Ministry of Health, Social Services and Equality in collaboration with the regional ministries with powers in the area of health of all the autonomous communities, INGESA and the Ministry of Defence. The data is gathered and published on an annual basis.

More information at:

<http://www.msssi.gob.es/ciudadanos/prestaciones/centrosServiciosSNS/hospitales/home.htm>

National Council on Health Science Specialties

The National Council on Health Science Specialties (CNECS) is the scientific and advisory body on specialised training in the health sciences of the Ministry of Health, Social Services and Equality and the Ministry of Education, Culture and Sports.

More information at:

<https://www.msssi.gob.es/profesionales/formacion/consejoEspecialidades.htm>

Natural Population Movement statistics

The statistical reports making up the Natural Population Movement statistics are those pertaining to births, deaths and marriages. They are published annually by the National Statistics Institute (INE).

The Statistical Report on Births provides information on the births occurring in Spain every year. It is prepared in collaboration with the autonomous communities, the Civil Registries being the primary source of information, which in turn comes from the Report of Birth Forms. These forms must be filled in when the demographic event is registered at the Civil Registry, by the parents, relatives or other persons required by law to report the birth, or, in its absence, by the head of the Civil Registry.

The Statistical Report on Deaths provides information on the deaths occurring in Spain every year. It is prepared in collaboration with the autonomous communities. The data comes from the Medical Certificate of Death/Report of Death Forms. This document is completed by various parties. The doctor who certifies the death fills in the sections related to personal data and the causes of death. The Civil Registry in which the death is registered completes the sections concerning the registration, while the informant or family members of the deceased provide the information regarding residence, nationality and profession of the deceased. In the case of deaths occurring under special circumstances and in which a court is involved, the information is provided by the court.

More information at:

Natural Population Movement. Statistical Report on Births

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=%2Ft20%2Fe304&file=inebase&L=0>

Natural Population Movement. Statistical report on Deaths

<http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t20/e306/&file=inebase>

National Register of Specialists in Training

The National Registry of Specialists in Training depends on the Ministry of Health, Social Services and Equality. The names of those who have been given a place in a specialised training programme are added to the Register, once their slot has been assigned to them. The annual evaluations and final evaluations of the specialists in training are also recorded, along with any incidents related to suspension or completion of the training. The National Register of Specialists in Training makes it possible to effectively coordinate and monitor the specialised training received by those who have undergraduate training in the health sciences, once they have passed the corresponding access exam.

More information at:

<https://www.msssi.gob.es/profesionales/formacion/registroEspecialistas/home.htm>

National Survey on Drug Use among Secondary School Students in Spain

The Ministry of Health, Social Services and Equality, through the Government Delegation of the National Plan on Drugs, conducts every two years the National Survey on Drug Use among Secondary School Students in Spain (ESTUDES) which analyses the use of drugs by students in secondary school (compulsory and non-compulsory years) and vocational training, so as to better understand the situation and consumption trends and to design and evaluate policies designed to prevent consumption and drug problems. The main study variables are prevalence and frequency of use of the different psychoactive drugs, perceived risk, perceived accessibility, approval/rejection of different consumption conducts, information received about this issue and how it was received, drug use by peers, attitude of parents regarding drug use. The classification

variables are age, sex, autonomous community, type of school, type of study programme, primary work situation of parents, parents' level of education, repetition of academic year, pocket money available every week and use of free time.

More information at:

http://www.pnsd.msssi.gob.es/profesionales/sistemasInformacion/sistemaInformacion/encuestas_ESTUDES.htm

Notifiable Diseases

In Spain epidemiological surveillance of transmissible diseases takes place through the Notifiable Disease System which, based on continuous observation of the appearance and distribution of the diseases for which notification to the authorities is mandatory, allows risk patterns to be determined and pertinent control measures to be adopted.

The data come from the National Epidemiology Centre. Carlos III Health Institute.

More information at:

<http://www.isciii.es/ISCIII/es/contenidos/fd-servicios-cientifico-tecnicos/fd-vigilancias-alertas/enfermedades.shtml>

Official Population Figures

The Official Population Figures from the National Statistics Institute (INE) provide a quantitative measure of the population residing in Spain, in each autonomous community, in each province and on each island (in the case of insular provinces), disaggregated by basic demographic characteristics such as sex, year of birth, age, nationality and country of birth. The population data series is obtained from intercensal population estimates for the period 1971-2012 and, starting in 2012, from the Official Population Figures.

These data are used as the reference population data in all INE statistical operations (surveys, national accounting, indicators, etc.) and they are transmitted at the international level as Spain's official population data for all purposes.

More information at:

http://www.ine.es/inebaseDYN/cp30321/cp_inicio.htm

Ongoing training and accreditation

The Public Administrations have the responsibility of guaranteeing the quality of the multiple ongoing training activities offered to health care professionals. They have determined that the best manner to attain such a goal is to establish voluntary accreditation systems, the value and efficacy of which will be greater the broader their configuration, scope and participation by Public Administrations of all levels.

Ongoing training is unofficial training, necessary due to the unceasing scientific and technical progress in the health sciences, and it has a direct incidence on the organisation and functioning of health care services, which are increasingly complex and effective.

Accreditation is the assessment by an external body of an individual, centre or activity, based on pre-established criteria and standards. The accreditation, which must be obtained in compliance with the requisites, procedures and criteria established by the Commission on Ongoing Training in the Health Professions, is valid throughout the country, regardless of which Public Administration issued the accreditation. The criteria approved by the aforementioned Commission must adhere to principles of need, objectivity, non-discrimination and proportionality. The autonomous communities, in the sphere of their respective powers, can accredit activities for the ongoing training of health care professionals.

More information at:

<https://www.msssi.gob.es/profesionales/formacion/formacionContinuada/home.htm>

Positive list of SNS pharmaceutical benefits

The positive list of SNS pharmaceutical benefits is the database maintained by the Ministry of Health, Social Services and Equality about the pharmaceutical benefits provided by the SNS.

The list can be accessed electronically and it is available to all Public Administrations involved in the provision of SNS pharmaceutical benefits and to the General Board of Professional Associations of Pharmacists.

Recognition of foreign qualifications

The recognition in Spain, for professional effects, of specialist qualifications obtained in countries not belonging to the European Union follows the procedure set forth in Royal Decree 459/2010 of 16 April which contains implementing provisions for Art. 18 of Law 44/2003 on the Regulation of Health Care Professions.

When petitions for recognition receive a favourable ruling, the foreign qualifications will have the same professional effects as the ones inherent in the corresponding Spanish qualification. Recognition grants the same professional rights and obligations as the Spanish specialist qualification and is a necessary requisite for practicing that specialty in Spain, as either an employee or as a self-employed specialist.

More information at:

<https://www.msssi.gob.es/profesionales/formacion/recoTitulosExtra.htm>

Register of Specialised Care Activity

Statistical use of the Register of Specialised Care Activity (RAE-CMBD) is the responsibility of the Ministry of Health, Social Services and Equality, working in collaboration with the competent ministries of the autonomous communities and INGESA and it forms part of the National Statistics Plan 2013–2016. The statistical operations seek to provide a better understanding of processes related to hospitalisation (diagnosis, comorbidity, type of care and type of process) involving both inpatients and outpatients receiving care at hospitals. The study variables are dates of admission and discharge, main and secondary diagnosis, diagnostic and therapeutic procedures, destination and situation upon discharge, patient health and hospital record codes, and how the care is financed. The classification variables are age, sex, place of residence, place of hospitalisation. The data is gathered and published on an annual basis.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/cmbdhome.htm>

SNS Primary Care Information System

The Primary Care Information System of the SNS (SIAP-SNS) furnishes information on personnel, activity (both general and specific features) and the number of SNS physical and/or functional centres purpose of which is to provide primary care. As study variables it uses personnel, activity and the primary care centres. The data is gathered and published on an annual basis.

It is prepared by the Ministry of Health, Social Services and Equality in collaboration with the Ministries of Health of the autonomous communities. It is part of the National Statistics Plan 2013-2016.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/siap.htm>

SNS Protected Population Database

The identification of users entitled to health protection in the SNS is based on the Individual Health Cards issued by each autonomous community to the persons residing within its territory. The Ministry of Health, Social Services and Equality registers all users of the health system in the SNS Protected Population Database (BDPP-SNS) and to ensure positive identification of each individual covered by the SNS the system generates a unique personal identification number that lasts the person's lifetime.

This number serves as a link to all the other personal identification codes that an individual may be assigned over his or her lifetime by the autonomous community. This is what enables the clinical information associated with such identification codes to be retrieved.

More information at:

<http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/tic01.htm>

SNS Specialised Care Information System. Statistical report on Specialised Care Centres

The general objective of the Specialised Care Information System of the SNS (SIAE-SNS) is to gather information about the care activity, the economic and teaching activities of establishments providing inpatient care (hospitals) and their structural characteristics and of outpatient health care centres, which together are the main providers of specialised care services. Such data makes it possible to develop indicators, study the sector's functioning and monitor its development.

As study variables it uses: the care services offered, bed capacity, personnel, discharges, length of stay, consultations, admissions, diagnostic techniques, activity in other areas, surgical activity, obstetric activity, urgent care services, expenditures, investments and income. As classification variables it uses the type of specialised care centre: inpatient care (hospital), outpatient care, type of care provided, type of centre in terms of financing, legal structure, whether it has an agreement with the SNS, and whether it is accredited as a teaching centre. The data is gathered and published on an annual basis.

Statistical information maintained by the Ministry of Health, Social Services and Equality in collaboration with the Regional Ministries of Health of the autonomous communities and the competent authorities of Ceuta and Melilla. It is included in the National Statistics Plan 2013-2016.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/estHospiInternado/inforAnual/homeESCRI.htm>

SNS Waiting List Information System

The Waiting List Information System (SISLE) furnishes information on the number of patients waiting for programmed surgery and the number of patients waiting for a consultation with a specialist as of the cut-off date. The data is gathered in accordance with Royal Decree 1039/2011, of 15 July, which establishes framework criteria aimed at ensuring that SNS benefits can be

accessed within a reasonable period, so that such access can take place under conditions of effective equality.

The data is published twice yearly, after the CISNS has been informed of the data. The cut-off dates are December 31st and June 30th every year.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/inforRecopilaciones/listaEspera.htm>

This number serves as a link to all the other personal identification codes that an individual may be assigned over his or her lifetime by the autonomous community. This is what enables the clinical information associated with such identification codes to be retrieved.

More information at:

<http://www.msssi.gob.es/organizacion/sns/planCalidadSNS/tic01.htm>

Spanish National Health Survey

The Spanish National Health Survey is a statistical report prepared by the Ministry of Health, Social Services and Equality in collaboration with the National Statistics Institute (INE). Included in the National Statistics Plan 2013-2016, its general objective is to provide information about perceived morbidity, use of health care services, health behaviour and habits, and prevention activities.

Data is gathered by means of a questionnaire and a direct personal interview and the study variables are self-assessment of health, limitations in activity, use of health services and medicines, health habits, health care coverage. The classification variables are age, sex, size of habitat, country of origin and socioeconomic status (level of education, occupation and income). The data is gathered and published every five years.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/encuestaNacional/home.htm>

Spanish Network of Health Technology and SNS Benefits Assessment Agencies

The Spanish Network of Health Technology and SNS Benefits Assessment Agencies is comprised of assessment agencies or units of the central government and of the autonomous communities, working jointly, using a common methodology and guided by the principle of mutual recognition and cooperation. The network was created by the CISNS in 2012, with the aim of promoting quality, efficiency and sustainability in health technology assessment in the SNS. The network's mission is to generate, disseminate and facilitate the implementation of information intended to support decision-making in the SNS, thus contributing to improved quality, equity, efficiency and cohesion in the SNS.

More information at:

<http://redets.msssi.gob.es/>

Spanish Network of Health Schools for Citizens

This network provides patients, family members and caregivers with a source of information and training instruments, giving them access to the best scientific evidence available. It is based on the contributions of various schools and projects within the SNS (Escuela Andaluza de Pacientes, Escuela Cantabria de Salud, Escuela Gallega de Salud para Ciudadanos, Programa Paciente Expert Catalunya, and the Programa Paziente Bizia Osakidetza) along with the Citizen Training Network of the SNS, the Ministry and the Fundació Salut i Envel·liment of the Universidad

Autónoma de Barcelona (UAB). It also receives contributions that different patient and professional associations make to enhance the network's resources.

More information at:

<http://www.escuelas.msssi.gob.es/home.htm>

Statistical report on elective termination of pregnancy

Statistical information about the sociodemographic characteristics and health conditions in which elective terminations of pregnancy occur, the characteristics of the women undergoing the procedure and of the health care centres that perform them. The study variables are reasons, weeks of gestation and method used. The data is gathered on a quarterly basis and published annually.

It is prepared by the Ministry of Health, Social Services and Equality in collaboration with the Ministries of Health of the autonomous communities. It is part of the National Statistics Plan 2013-2016.

More information at:

<http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/embarazo/home.htm>

Statistical report on organ donation and transplants

Statistical report included in the central government's inventory of statistics; it is prepared by the National Organisation of Transplants (ONT) and it provides information about donation, extraction and transplantation of organs. The study variables are donors, extractions performed and transplants performed. The classification variables used are the organ, the health care centre and the autonomous community. The data is gathered and published on an annual basis.

More information at:

<http://www.ont.es/infesp/Paginas/Datos.aspx>

Statistical report on pharmaceutical consumption through SNS prescriptions and insurance mutuels for civil servants

Statistical report included in the National Statistics Plan 2013-2016 prepared by the Ministry of Health, Social Services and Equality with the participation of the health services of all of the autonomous communities, INGESA, MUFACE, ISFAS and MUGEJU. It provides information about the use of medicines and health products included in the SNS pharmaceutical benefits, prescribed by SNS medical prescriptions (including prescriptions by MUFACE, ISFAS and MUGEJU) and dispensed through pharmacies.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/medProdSanit.htm>

Statistical report on public expenditure on health

Statistical information prepared by the Ministry of Health, Social Services and Equality in collaboration with the Ministries of Health of the autonomous communities, MUFACE, MUGEJU, ISFAS, the National Institute Social Security, the Ministry of Defence and the Ministry of the Interior. It is part of the National Statistics Plan 2013-2016.

Its general objective is to obtain the aggregate figure of public expenditure on health; classification by national accounting aggregates and economic, functional and by-sector

classification of expenditure; territorial breakdown of public expenditure on health; and methodological approximation to the OECD's System of Health Accounts.

The study variables of an economic nature are: employee remuneration, intermediate consumption, agreements between the SNS and private centres, current transfers, capital expenditure. As functional variables it uses: hospital and specialised services, primary care services, public health services, collective health services, pharmacy, transportation, prostheses. Its national accounting variables are: collective consumption, individual consumption, non-market production, market production. The classification variables are: services provided and agents executing the expenditure. The data is gathered and published on an annual basis.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/inforRecopilaciones/gastoSanitario2005/home.htm>

Statistical report on traffic accidents with victims – Annual general report

The Directorate General of Traffic of the Ministry of the Interior prepares and publishes, on an annual basis, the data concerning the number of traffic accidents with victims, specifying their circumstances and consequences; the study variables are traffic accidents with victims, deaths, severe injuries and slight injuries and the classification variables are the area where the accident occurred, characteristics of the road, weather conditions, type of vehicle, type of user and sex and age of users and of victims.

More information at:

<http://www.dgt.es/es/seguridad-vial/estadisticas-e-indicadores/publicaciones/anuario-estadistico-accidentes/>

Statistical report on university students

Prepared by the Ministry of Education, Culture and Sports, it provides information annually about the number of students enrolled and of graduates, as well as their gender, age, nationality, place of usual residence, and, in the case of graduates, the range of marks on the academic transcript. This report is part of the National Statistics Plan (PEN) and it is prepared and published annually.

The General Secretariat of Universities is involved in gathering the information. For this purpose it has developed the Integrated University Information System (SIIU), which consists of an information platform shared by the universities, the autonomous communities and the Ministry of Education, Culture and Sports, which gathers information at the micro level concerning University students and personnel. The SIIU is structured around various subject areas: academics, human resources, R&D, scholarships and grants, job integration. The academic area contains information about enrolled university students and graduates.

More information at:

<http://www.mecd.gob.es/educacion-mecd/areas-educacion/universidades/estadisticas-informes/estadisticas/alumnado.html>

Statistical report on Urgent Care and Emergency Services 112/061

The Urgent Care and Emergency Services 112/061 enable citizens facing an urgent health care need –especially emergency situations– to be identified and contacted and facilitate effective coordination of care and a better response to the situation.

All autonomous communities have a coordinating centre linked to the hotline 061 which, although it works in conjunction with the emergency hotline 112, largely maintains its own organisational structure and management.

This statistical report is prepared by the Ministry of Health, Social Services and Equality in collaboration with the regional ministries with powers in this area, of all autonomous communities and Ceuta and Melilla. It is part of the Primary Care Information System (SIAP).

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/estadisticas/estMinisterio/SIAP/Estadisticas.htm>

Statistical report on vaccinations

Its general objective is to gain knowledge about the vaccinations administered in the population, with regard to the vaccination calendar. Study variables are type of vaccine and doses administered and the classification variable is age. The data is gathered and published annually. To calculate vaccination coverage only doses administered through the SNS are calculated. It does not include vaccines acquired in pharmacies and administered through the private health care sector.

It is part of the central government's inventory of statistics. This statistical information is the responsibility of the Ministry of Health, Social Services and Equality in collaboration with the Ministries of Health of the autonomous communities and the competent authorities of Ceuta and Melilla.

More information at:

<http://www.msssi.gob.es/profesionales/saludPublica/prevPromocion/vacunaciones/coberturas.htm>

Study on growth surveillance, diet, physical activity, child development and obesity in Spain (ALADINO)

Spain, through the Spanish Food Safety, Nutrition and Consumer Protection Agency (AECOSAN), and the NAOS Strategy, has taken part in the European Childhood Obesity Surveillance Initiative (COSI) since it began, following the lines of WHO collaboration that have been in place for years. Its participation in COSI took the form of the Study on Growth Surveillance, Diet, Physical Activity, Child Development and Obesity in Spain (ALADINO).

The ALADINO study was conducted for the first time in 2011, on boys and girls aged 6 to 9. The 2013 edition of the ALADINO study was conducted on boys and girls aged 7 and 8. In its 2015 edition ALADINO studied 10,899 children (5,532 boys and 5,367 girls) aged 6 to 9 in 165 schools throughout Spain. This sample is representative of the Spanish population as a whole for these age groups. The field work took place between November of 2015 and March of 2016.

The different waves of the ALADINO study have been designed with the aim of better assessing the prevalence of overweight and obesity in Spanish children, adapting the study design as much as possible to match the protocol of the COSI initiative. This initiative suggests that information regarding overweight and obesity be gathered at several different times, for the purpose of evaluating the measures taken against obesity in different European countries. The age range studied has been established following the recommendation of the WHO, since it focuses on the years preceding puberty, thus reducing, when country-to-country comparisons are made, potential differences attributable to the appearance of puberty. In this third wave, ALADINO 2015 examined the prevalence of overweight and obesity in Spanish boys and girls aged 6 to 9. The data allows for analysis of the evolution in overweight and obesity figures and possible changes in some variables related to the prevalence of this health problem, and its main determinants.

More information at:

http://www.aecosan.msssi.gob.es/AECOSAN/web/nutricion/detalle/aladino_2015.htm

System of Health Accounts

The System of Health Accounts is a statistical framework of operations that has been used in Spain since 2005. The unit responsible for performing the operations is the Subdirector General of the Basic Basket of Services and Cohesion Fund of the Ministry of Health, Social Services and Equality. The Spanish system, which follows the 2000 OECD manual *A System of Health Accounts*, is based on a tri-axial framework, from which a structure of accounts and classifications is created: functions, provision and financing schemes. The functional classification distinguishes between basic functions and related functions. Only expenditures in the former are considered to generate total health expenditure. Expenditures in the areas of health personnel and health care research and development, which are considered related functions, do not form part of the total health expenditure. However, health expenditure does include expenditure on care for dependent persons when such care is strictly health-related. It also includes the personal care necessary to perform the basic activities of daily life.

The main sources of information used by the Spanish system of accounts are, in the area of public expenditure, the Statistical Report on Public Health Care Expenditure (EGSP), and, in the area of private expenditure, the expenditure by households in final consumption of health care good and services, which is provided by the National Statistics Institute, through the National Accounts. Estimates of expenditure in the area of long-term care are based on data about the use and cost of social services used by dependent persons published by the Institute for Social Services and the Elderly (IMSERSO) and also on data about economic benefits provided by the Ministry of Employment and Social Security.

The SHA has been adopted by the OECD, Eurostat and WHO as a frame of reference for gathering and processing health expenditure information. The data is gathered and published on an annual basis.

More information at:

<http://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/SCS.htm>

Survey on the use of psychoactive substances at the workplace in Spain

The National Commission for the Prevention and Treatment of Drug Dependence at the workplace resolved to include a specific module in the Survey on Alcohol and Drugs in Spain (EDADES) conducted every two years in order to obtain information about the use of psychoactive substances at the workplace. This was done for the first time in 2007 and then again in 2013.

More information at:

<http://www.pnsd.msssi.gob.es/gl/noticiasEventos/dossier/pdf/EncuestaLaboral2013.pdf>

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(*) The governing bodies designated Subdirectorate General are thus named because this was the denomination they had at the time the Report was being prepared.

The denomination was updated by Royal Decree 485/2017, of 12 May 2017 (BOE 114).

The Annual Report on the National Health System of Spain 2016 is the continuation of a series of reports initiated in 2003 and offers concise information about the state of Spain's health care system and its evolution over time. The 2016 edition is complemented by annexes prepared by each of the country's autonomous communities and INGESA about the specific and noteworthy actions undertaken within their sphere of responsibility.

