

Characterization of non-communicable health problems from primary care clinical records (BDCAP)



### Primary Care Clinical Data Base - BDCAP

Spanish National Health System

### Characterization of non-communicable health problems from primary care clinical records (BDCAP)

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## LIST OF ACRONYMS

- LDL: Low-density lipoprotein
- HbA1c: glycosylated hemoglobin
- INR: International normalized ratio
- BMI: Body mass index
- FEV1: Peak expired volume in the first second of forced exhalation
- TSH: Thyroid-stimulating hormone
- GFR: Glomerular filtration rate



# Presentation

This report aims to present a systematic characterization of a set of non-communicable health problems. This categorization, which generally includes chronic, relatively frequent and vulnerable health problems, studies this set of problems in a manner related to the one used in the observation of communicable health problems, which are subject to special surveillance by public health entities. The purpose of this categorization is to highlight the fact that certain health problems can and should be subject to special analysis or surveillance, mainly because of their vulnerability or the possibility of addressing them to reduce their effects on people.

It has been decided to use a common exposition for all the selected health problems in the form of a fact sheet, where the same variables are collected graphically, except when this is not possible. All the corresponding data have been systematized in the tables in the annex.

The body of the study discusses methodological difficulties and summarizes the findings. Given the large number of health problems and factors considered, a synthetic graphic overview of the main findings was created to identify common trends and emphasize singularities.

A brief narrative and general exposition of the most relevant findings is also presented.

Thus, there are four levels of exposure, from the lowest to the highest level of detail:

- Summary
- Graphical summary (in separate document)
- Main results
- Problem sheets

An orderly presentation of relevant indicators for monitoring and surveillance, like those proposed by national and international organizations included in the health strategies of the Spanish National Health System (SNS in Spanish) or in the key indicators of the SNS, or proposed by the World Health Organization (WHO), is left for another occasion, although many of them can be found in this report, whose focus is, as has been said, to characterize these health problems in a systematic and common way.



# Summary

(Available graphic summary in a separate pdf file)

## Selected problems

Thirty-six health problems have been selected for analysis. In addition to those classically included under the heading of non-communicable health problems, such as cardiovascular health problems and their risk factors, mental health problems and chronic respiratory problems, a representation of the problems of all apparatus and systems selected based on frequency, burden of disease/severity and vulnerability is also addressed. Thus, we study health problems of the senses (deafness and blindness), the locomotor system (osteoarthritis or spinal column syndrome), neurological problems such as dementia, chronic skin ulcers, anemia or non-serious problems, but with a significant burden of suffering, such as irritable bowel syndrome, urinary incontinence, endometriosis or benign prostatic hypertrophy. The nomenclature of the International Classification of Primary Care CIAP-2 is used. Cancer has not been included, as it has already been the subject of another report (BDCAP-series No. 3).

## Overall prevalence

Lipid disorders (21.2%), arterial hypertension (18.4%), spinal syndromes (13.9%) and anxiety disorders (12.6%) are more prevalent in the general population than 10%. In the population aged 75 years and older, 67.2% had high blood pressure, 52.1% had lipid disorders, 39.9% (of men) had benign prostatic hypertrophy, 37.3% had osteoarthritis and 37.3% had cataracts.

## Prevalence by sex

The vast majority of health problems are suffered mainly by women. It should be noted that 95.5% of people diagnosed with osteoporosis are women, as are 81.7% of people with hypothyroidism, or more than 70% of people with iron deficiency anemia, urinary incontinence or depression. In only three problems do men account for over 60% of sufferers: hyperkinetic disorder (in people under 20 years of age), ischemic heart disease and chronic obstructive pulmonary disease. A particular phenomenon is observed in a group of problems: a higher proportion of men suffer from it below a certain age and a higher proportion of women above that age; here we find fractures, asthma, arterial hypertension, heart failure and lipid disorders.

## Prevalence by age

Most of the health problems increase with age, with a greater or lesser slope, or with a more or less early onset of the increase, and their frequency decreases after the age of 85 or 95 years. A bimodal pattern is found, with one curve (ascending and descending) in childhood, and another in adulthood, in the case of blindness and fractures, while in others the age distribution is more stable, or predominates in a wide age group, as occurs in anxiety disorder, irritable bowel syndrome, and asthma (predominantly in children and adolescents) or iron deficiency anemia (predominantly in middle age and in the elderly).

# Prevalence by income level

After adjusting for age, a social gradient by income (higher frequency of the health problem the lower the income level) is observed in most of the health problems studied, either in both sexes or, more strikingly, in one of them. However, there is a tendency towards an inverse social gradient (higher frequency of the health problem the higher the income level) in osteoporosis, endometriosis and benign prostatic hypertrophy. In epilepsy, the predominance of the very low-income level stands out. No differences by income were observed in rheumatoid arthritis or Parkinson's disease. Finally, they have a similar distribution by income, except in the highest income level (lower frequency) fractures, irritable bowel disease, glaucoma, macular degeneration and psoriasis.

## Prevalence by municipality size

There is no difference in prevalence, after adjustment for age, by municipality size for the vast majority of problems, although there are exceptions: depression and irritable bowel disease tend to be more frequent as the municipality size increases, while chronic skin ulceration follows the opposite trend; sleep disorders, visual problems (blindness, glaucoma and macular degeneration, rheumatoid arthritis and pernicious anemia) appear more frequently in large agglomerations (+500,000 inhabitants): sleep disorders, visual problems (blindness, glaucoma and macular degeneration), rheumatoid arthritis and pernicious anemia) appear more frequently in large agglomerations (under 20 years of age, appears more frequently in large cities (100-500,000 inhabitants); and anxiety disorder is more frequent in medium-sized municipalities (10-50,000 inhabitants).



# Prevalence by country of birth

Health problems are more frequent in those born in Spain than in foreigners, after adjusting for age, especially (more than twice): anxiety disorder, hyperkinetic disorder, asthma and endometriosis. Similar frequencies are observed in anemia, ischemic heart disease, rheumatoid arthritis and hypothyroidism.

## Prevalence by year

In general, and after adjustment for age, the prevalence tends to increase over time. Stable prevalences were observed in several of the most common chronic health problems: arterial hypertension, diabetes mellitus, chronic obstructive pulmonary disease, ischemic heart disease, cerebrovascular disease and Parkinson's disease. The prevalence of fractures and iron deficiency anemia is decreasing.

# Referrals

Most people with non-communicable health problems are referred for consultation with a referral specialist 2 to 5 times more often than the general population. These differences are less marked in arterial hypertension, diabetes mellitus, lipid disorders, asthma, chronic skin ulcer, spinal syndromes, urinary incontinence or sleep disorders.

## Parameter control

Regarding the **control of clinical parameters**, the following should be noted.

- Systolic blood pressure is better controlled (<140 mmHg) than diastolic (<90 mmHg), in health problems requiring it: 85-90% well controlled, compared to 60%, respectively.
- LDL is less than 130 mg/dl in 80-90% of people with health problems which need to be well controlled. Seventy percent of diabetics have HbA1c values below 7.5%.
- 70% of people with atrial fibrillation have a last INR value in range (1.8 to 3.5).
- They do not have obesity (BMI <30 kg/m2), between 50 and 60% of people with health problems which require specific weight control.

- Seventy-nine percent of people with chronic obstructive pulmonary disease (COPD) have a mild (FEV1 80-100%, 24% of people with COPD) or moderate (FEV1 50-79%, 55.6%) degree.
- 95% of women diagnosed with iron deficiency anemia have a normal last hemoglobin value (greater than 12.1 mg/dl). In men with this diagnosis, 60% present a last value higher than 12.7 mg/dl.
- 84% of people with a diagnosis of dementia have some degree of dependence for activities of daily living (Barthel index < 90).</li>
- Between 10 and 15% of people with problems that may be related to thyroid disorders (anxiety disorder, hyperkinetic, depression) have abnormal TSH values.
- 14.8% of people with chronic renal insufficiency suffer from severe renal failure (GFR <30).</li>

# Hospitalization and emergencies

The ratio between the number of hospitalizations per person per year (for any reason) for people with any of the following health problems is higher than that corresponding to the general population: 7.1 times for heart failure, 6.5 times for epilepsy in children under 20, 4.9 times for atrial fibrillation, 4.6 times for fractures, 4.5 times for chronic renal failure and 4.8 times for hypothyroidism.

The number of emergency department visits per person per year is higher than the number of hospitalizations but is more similar to that of people in the general population. Thus, people with fractures have 2.9 times more visits per person per year than the general population, while people with heart failure have 2 times more. Finally, people with atrial fibrillation, Parkinson's disease, iron deficiency anemia or ischemic heart disease had 1.7 times more.

In general, for the same health problem, men have more hospitalizations per person per year than women, and women have more emergency room visits per person per year.

## Drugs

Two types of drug utilization indicators are presented in the card for each health problem for each health problem: the percentage of people with at least one dispensed package during the year, at the pharmacy with an official prescription for the drug, and the number of drugs relevant to the treatment of the corresponding health problem, consumed in terms of DHD-Dose per thousand inhabitants per day. A comprehensive summary of the main results is given in the 'results' section of this text; a selection of the most important results is given here.

Men with ischemic heart disease receive specific medication in a higher proportion than women. For example, statins 81.1% of men and 70.6% of women; anticoagulants, 71.6% and 60.6%; ACE inhibitor/ARAII 63.5% and 61.0%; beta-blockers 62.8% and 56.5%.

83% of diuretic DHD consumed in heart failure correspond to high-ceiling diuretics (furosemide type).

Of the total DHD of antihypertensive drugs consumed, 64% were ACE inhibitor/ARAII, 14% calcium antagonists, 12% diuretics and 7% beta-blockers.

More intense analgesia is performed in women in osteoarthritis, painful syndromes of the spine, or fractures. Thus, about 30-40% more women than men receive at least one package of analgesics and/or NSAIDs per year, and use 1.5 to 2.4 times more opioid DLDs than men. On the other hand, in fractures, 24% of the total DHD of analgesics and NSAIDs consumed correspond to opiates (weak or potent).

60.2% of women with osteoporosis are prescribed at least one package of calcium, vitamin D or associations, 16.2% of bisphosphonates and 11.5% of denosumab.

21.7% of women and 14.7% of men with sleep disorder have received at least one annual package of hypnotics and sedatives (group N05C of the Anatomical, Therapeutic, Chemical classification system (ATC: acronym for Anatomical, Therapeutic, Chemical classification system)). In addition, 43.5% of women and 28.0% of men with insomnia have consumed at least one annual package of benzodiazepine-type anxiolytics.

43.6% of women and 33.3% of men with anxiety disorder are given at least one annual package of anxiolytics (group N05B of the ATC classification).

Second-line antidepressants (venlafaxine, duloxetine, desvenlafaxine) accounted for 41% of the total DHD of antidepressants.

39.7% of people with dementia receive some antidementia drug and 39.8% some antipsychotic.

At least 32.5% of people under 20 years of age with hyperkinetic disorder take at least one annual package of psychostimulants.



At least one annual package of systemic drugs, mainly prednisone, is provided to 22.7% of people with COPD.

65.7% of type 2 diabetics are prescribed at least one package of metformin alone or in association, and 20.0% receive insulin. Of the total DHD corresponding to oral antidiabetics, 30% are associations (based on metformin with gliptins, 20%, or with glycocin, 8%), 27% are biguanides (mainly metformin), 12% "gliptins" alone, 11% sulfonylureas and 10% "glifozins" alone.

Statins alone account for 81% of the total DHD of lipid-lowering drugs (group C10 of the ATC classification) consumed in people with lipid metabolism disorder.

53.7% of men with benign prostatic hypertrophy use a specific drug or alpha blocker (groups G04C and C02CA of the ATC classification) throughout the year.

# Introduction

Non-communicable health problems, as defined by the World Health Organization (WHO), usually have a "chronic" clinical course and are the result of a combination of genetic, physiological, environmental and behavioral factors.

More specifically, the Pan American Health Organization (PAHO), in relation to this set of health problems, characterizes them by determining that they are not primarily caused by an acute infection, as well as that they generate long-term health consequences and often create long-term care and treatment needs.

These health problems constitute a differentiated group due to their special relevance, given the evolution of their epidemiological parameters of frequency and severity over the last decades. In fact, these indicators have reached epidemic proportions, so much so that the WHO itself, during its 72nd World Assembly in 2019, extended its Global Action Plan for the Prevention and Control of Non-communicable Diseases until 2030, asking countries to develop a roadmap for implementation between 2023 and 2030, to accelerate progress in their prevention and control. Likewise, Regulation (EU) 2021/522 of the European Parliament and of the Council of 24 March 2021 establishing a program of action of the Union in the field of health for the period 2021-2027 includes, in its specific objective a), among other proposals, that of supporting actions to improve the surveillance of non-communicable Diseases Initiative", identifies as a priority the area of improving the availability of data on this type of health problem for the development of health policies.

However, there is no general agreement on which health problems should be analyzed jointly under the term "non-communicable". Therefore, the bibliographic searches carried out, both of scientific publications (PubMed) and of gray literature (through Internet browsers), do not provide concordant results, which makes it convenient to determine an initial set of health problems that can contribute to subsequently outlining a more defined general relationship. The configuration of such a set would make it possible to advance beyond the independent study already being made of cardiovascular diseases, cancer, cardiovascular risk factors and the lifestyle-related determinants of health which they all share. It would also make it possible to design joint strategies for the control of all these problems, as proposed by the international organizations mentioned above, and would allow for comparability between different territorial areas.

On the other hand, and given that chronicity is one of the distinguishing characteristics of a large majority of these health problems, it is necessary to consider that the Primary Care (PC) health care setting, being the health care practice closest to the natural environment in which people carry out their daily activities, performs its activities from a perspective that is particularly suitable for the study of these non-communicable health problems. To this end, it should also be recalled that the care provided in this area is particularly based on the length and continuity of care, as well as on its accessibility and its comprehensive and biopsychosocial nature, all of which are its main strengths in addressing most of the non-communicable health problems which persist for long periods of time.

In this sense, it is also necessary to consider that the Primary Care Clinical Database (BDCAP), whose management and maintenance corresponds to the Ministry of Health together with the Autonomous Communities, has data from PC clinical records, which allow us to approach the health problems of the population with both a clinical and epidemiological approach, constituting, for this reason, a uniquely useful information system. For this purpose, it also has sociodemographic data on individuals, such as their income level, the municipality size of the health center to which they belong or their country of origin, which are variables of considerable interest for incorporation in epidemiological analyses.

It is also necessary to bear in mind that the Hospital Discharge Records in the Spanish National Health System (CMBD) of the Ministry of Health collects in another database, information on the visits generated by the entire population, in the hospital setting (through care modalities such as hospitalization or hospital emergencies).

In this way, it is possible to integrate the data contained in both information systems, using them jointly to explore the use of certain hospital care modalities (source CMBD) by people with a given health problem (source BDCAP).

Considering the above, we consider the elaboration of a report on non-communicable health problems, as well as the analysis of BDCAP data (linking them, when necessary, with CMBD records), to be pertinent to carry it out. The uniqueness of this approach is also based on the use



of clinical data produced in PC. In this way, this area of health care makes contributions, from its particular perspective, to the development of work allowing us to know the current epidemiological situation of this set of problems in our country, and which demonstrates its capacity to contribute to the development, at national level, of the control and approach strategies requested by the World Assembly of WHO, as well as by the European Parliament and the Council.

Taking all this into account, the aim of this report is to describe, for a selection of noncommunicable health problems, and using the information provided by BDCAP, is to explore their prevalence and distribution, the use of certain hospital care modalities (linking BDCAP with CMBD), the frequency of certain specific clinical observations and findings, and the use of drugs, corresponding to those health problems. The latest available data, corresponding to the year 2021, has been used.



# **Specific objectives**

Determine, for a selection of non-communicable health problems, in 2021, on the population in patient lists in PC:

- The number of people with the health problem, stratified by sex.
- The overall prevalence, stratified by five-year age groups and sex, and the age-adjusted prevalence and its distribution by Autonomous Community, income level, municipal size and country of birth.
- Annual age-adjusted prevalence, over the five-year period 2017-2021, stratifying it by sex, describing the corresponding linear trend.

Secondarily, to obtain the following results, also in the year 2021, among people suffering from each of the selected health problems, stratifying them by sex:

- The proportion of individuals with at least one hospital admission, and the ratio of individuals with at least one visit with hospital emergency services, as well as the ratio of hospital admissions and the ratio of visits with hospital emergency services, both per person per year.
- The proportion of people with referrals, corresponding to the five specialties with the highest value.
- The proportion of individuals with records of certain procedures and/or specific parameters in the well controlled range, included in BDCAP.
- The proportion of people using a selection of drugs and/or the indicators of consumption of specific drugs for the health problem, both corresponding to dispensing in pharmacies by official prescription.



# Methodology

# Design, study population, and spatial and temporal scopes.

This report is a descriptive cross-sectional observational study.

The study population is the one included in the individual health card database of the Spanish National Health System, in patient lists in PC.

The spatial and temporal scopes are, respectively, the Spanish National Health System and the year 2021, with the exception of the stratification by Autonomous Communities of the ageadjusted prevalence indicators of the health problems studied (in the spatial scope), and the assessment of the time trend of this indicator, determined in each of the years of the five-year period 2017-2021 (in the temporal scope).

# Sample and variables: general BDCAP methodology

The report is made using the BDCAP database, applying its methodology.

In summary, BDCAP is a database made up of clinical information obtained in a standardized way from the electronic medical records of primary care (PC) of individuals included in a random sample of basic health areas, stratified by the combination of Autonomous Community and five categories of municipal size, to guarantee representativeness at the state and Autonomous Community levels. The sample collects information from more than 300 basic health areas with a total of 4.8 million people, which corresponds to approximately 10% of the population with a health card in patient lists in PC (previously referred to as the study population). The BDCAP data are collected on an annual basis and stored pseudonymized (using the same irreversible algorithm as RAE-CMBD to generate the corresponding identifier), while the corresponding results are expressed weighted and raised to the total population with a health card in patient lists in PC, throughout Spain and in each of the Autonomous Communities.

Similarly, BDCAP also contains, for each person included in the sample, data on three sociodemographic classification variables:

- Income level is categorized according to pharmaceutical benefit contribution brackets.
- The municipal size refers to the size of the locality where the head health center of the corresponding basic zone is located.
- Country of birth is categorized dichotomously (Spaniards and foreigners).

It should be noted that BDCAP contains, for each person included in a given year, the following data: their health problems (coded using the inclusion/exclusion criteria of the CIAP-2 classification adapted to BDCAP), the referrals requests made by PC physicians to other medical specialties, the performance of certain procedures, the values recorded for certain parameters, and the use of drugs dispensed in pharmacy offices (classified according to the ATC classification of the World Health Organization; those dispensed in hospital pharmacies are excluded from BDCAP, as they are classified as "hospital use").

The BDCAP-2021 fact sheet and those for the years 2017 to 2021 (inclusive) are available on the website of the Ministry of Health.

In relation to this sheet, it is necessary to remember that the specific secondary objectives are determined on the individuals suffering from each of the health problems studied, among the subjects included in the sample corresponding to the year 2021. This means, on the one hand, that the subjects included in these analyses have not been obtained through independent sampling procedures and, on the other hand, that the health service utilization indicators presented refer to individuals "with" each health problem, without the corresponding utilization being attributable to "because of" that problem.

Finally, it should be noted that the different procedures and parameters are not reported in a uniform manner by the different Autonomous Communities.

# Inclusion and exclusion criteria for health problems

To select the health problems to be included in the report, a preliminary exploration of the prevalence in 2021 of the different non-communicable health problems coded in BDCAP is carried out, establishing their order of priority. From the list generated, an initial selection was



made, considering criteria such as the prevalence value itself, its inclusion among those addressed by the Strategy for Addressing Chronicity in the Spanish National Health System of the Ministry of Health, its relevance in PC (choosing those whose control would generate greater impact in this area of care), or its impact on the morbidity of the population as a major cause of disability, regardless of the duration thereof, or a decrease in the quality of life.

On the other hand, malignant neoplasms are excluded from the report, as they have already been the subject of another publication BDCAP - Series - Monographic reports (Prevalence of the main malignant neoplasms from PC clinical records: Online NIPO 133-21-026-6).

Similarly, headaches, which have already been the subject of a BDCAP publication (online NIPO 133-21-032-6), are also excluded.

Unfortunately, lifestyle-related health problems such as tobacco or alcohol abuse are also excluded from the report, as well as overweight, obesity, due to the lack of a systematic record (in the general population) in PC medical records, and therefore in BDCAP, or sedentary lifestyle (which lacks a CIAP-2 code).

Therefore, 36 non-communicable health problems were selected and are shown in the table:

CIAP-2 apparatus	Health problem	Apparatus	Health problem
B Blood	Iron deficiency anemia	N Nervous	Parkinson's disease
	Pernicious anemia		Epilepsy (<20 years)
D Digestive	Irritable bowel syndrome		Sleep disorder
F Eye	Blindness	P Mental	Dementia (65+ years old)
	Macular degeneration		Anxiety disorder
	Cataract		Depression
	Glaucoma		Hyperkinetic disorder (<20 years)
H Hearing	Deafness	R Respiratory	COPD
K Circulatory	Ischemic heart disease		Asthma
	Heart failure	S Skin	Psoriasis
	Atrial fibrillation		Chronic skin ulcer (65+ years old)
	Arterial hypertension	Endocrine disorder	Hypothyroidism
	Cerebrovascular disease		Diabetes mellitus
L Locomotor	Fractures		Lipid diseases
	Spine syndrome	U Urinal	Urinary incontinence
	Rheumatoid arthritis		Renal insufficiency
	Arthrosis	XY Genital	Endometriosis
	Osteoporosis		Benign prostatic hyperplasia

H = hypertrophy

Epilepsy and hyperactivity disorder are studied in people under 20 years old; dementia and chronic skin ulcer in people aged 65 and over.



No age restrictions are made for most of the health problems studied, to minimize the introduction of limitations in the validity of the results presented, since the BDCAP sampling is performed on a population of all ages, as well as to avoid adding complexity to the report, which would result from the use of different age ranges for different health problems. However, for the four health problems mentioned in the table above, it is considered appropriate to restrict them to certain age groups on a case-by-case basis, based on their clinical profile or their relative frequency compared to other health problems.

# **Resulting variables**

For each health problem studied, the values achieved, in 2021, for the outcome variables set out in the corresponding specific objectives are determined.

Regarding the results of the use of hospital care modalities by individuals with the selected health problems, among those included in the BDCAP-2021 sample, it should be noted that, for their determination, it is necessary to link BDCAP with CMBD by using the pseudo-anonymized identifier which, as indicated above, is shared by both systems. For this purpose, it is necessary to consider the methodology and characteristics of CMBD.

On the other hand, as a result of the consumption of specific drugs for the health problem, the daily dose per day (DHD) is used. Its value, for each active ingredient, can be interpreted, in the case of chronic drugs, as the hypothetical percentage of people with the health problem who receive the defined daily dose of that ingredient every day of the year.

Likewise, it is necessary to bear in mind that the ATC classification is used to obtain results on drug utilization, according to the strategy detailed in the annex ATC\_Table\_of\_ATC. This annex states that the ATC groups selected to analyze the drugs related to the same health problem may come from different levels of this classification and that, in certain cases, results are presented by using descriptions (see "Name in the chart" columns of the annex) which do not correspond to official ATC group designations, an analysis strategy that is also used for certain groupings,



which are listed beneath the table. All these analysis strategies are adopted to increase the clinical significance of the values obtained and their interpretation. In this annex, it is also evident that there may be ATC classification groups without any dispensing.



# Data analysis

As a general rule, the operations carried out are performed through the interactive query application of the BDCAP database.

Control of the potential confounding introduced by age in the overall prevalence is performed through the calculation of adjusted prevalences by the direct method, by considering the Eurostat 2013 reference population. Similarly, the control of confounding introduced by sex, the reporting Autonomous Community and the BDCAP sociodemographic classification variables is addressed by stratifying the corresponding age-adjusted prevalences for each of the categories of these variables. The global prevalence values, prior to these adjustments and stratifications, can be consulted in the Table\_of\_data\_infographs attached to this document. In the case of the Income level variable, data are provided separately for men and women, given the different distribution by sex of the income level categories.

In general, data from all the Autonomous Communities are used, although the calculation of certain results referring to the Spanish National Health System (especially procedures and parameters) is made by extrapolating the data obtained in the reporting Autonomous Communities to the SNS, as shown in the aforementioned Table\_of\_data\_infographs. Therefore, the distortion which would be introduced in the values obtained by the consideration of the Autonomous Communities not reporting these data is minimized.

Regarding the analysis of the performance of procedures or well controlled parameters, it should be noted that it is limited to determining that they should be recorded in the medical record in 2021, without implying that all these evaluations should be performed annually for the corresponding health problems. This strategy of analysis in a single year was adopted because of the difficulty involved in doing so in previous years on the cohort of subjects in the sample for the study year, and the limited consensus on the periodicity of its performance.

The processing of microdata to obtain interval estimates (in prevalence rates by five-year age and sex and in the indicators resulting from integrating the information from BDCAP and CMBD) was performed with SPSS version 28, using its module for the treatment of complex samples, and



setting a confidence level of 95%. More specifically, and regarding the calculation of confidence intervals, the Poisson distribution has not been used to calculate the overall prevalences stratified by age and sex and/or adjusted for age, for the less prevalent health problems, given that the absolute sample numbers of the corresponding strata are large enough to maintain the approximation to the normal distribution and thus allow the introduction of the aforementioned correction for coming from a complex sample.

Only stratification and rate adjustment are used as confounding control procedures, since the results obtained allow a more direct interpretation than those resulting from the application of multivariate models, used in other BDCAP reports, which are more analytical.

To map the age-adjusted prevalences, previously calculated for each of the health problems during 2021, and for each of the Autonomous Communities, the geographic module of the SAP Business Objects program was used.

An exhaustive analysis of the temporality of the problems studied is not carried out, since this would exceed the limits of a report of a more systematizing and general nature. However, it could be the subject of another monographic report.



# Results

For each of the health problems studied, a standard two-page card has been prepared with the contents described in the following diagram:



A summary of the main results obtained is presented below.

# Prevalence in general population

The following table shows the prevalence of selected non-communicable health problems, ordered from highest to lowest.

CIA	AP-2 classification		Prevalenc	:e (%)	
Apparatus	Health problem	Men	Women	Both sexes	Notes
Т	Lipid diseases	20.7	22.4	21.5	
К	Arterial hypertension	18.0	18.9	18.4	
L	Spine syndrome	11.3	16.4	13.9	
Р	Anxiety disorder	8.7	16.5	12.7	
L	Arthrosis	6.7	12.8	9.8	
Р	Sleep disorder	7.4	8.4	7.9	
XY	Endometriosis	-	0.8	-	
Т	Diabetes mellitus	8.2	6.7	7.5	
R	Asthma	7.0	7.8	7.4	
Т	Hypothyroidism	2.4	10.2	6.4	
	Benign prostatic	6.4	-		
XY	hyperplasia			-	
F	Cataract	4.0	5.7	4.9	
F	Blindness	4.1	5.3	4.7	
н	Deafness	4.7	4.8	4.7	
Р	Depression	2.7	6.6	4.7	
U	Incontinence	2.2	5.8	4.0	
L	Osteoporosis	0.3	5.7	3.1	
К	Ischemic heart disease	3.2	1.4	2.3	
К	Atrial fibrillation	2.4	2.1	2.2	
R	COPD	3.0	1.5	2.2	
F	Glaucoma	1.8	2.5	2.1	
S	Psoriasis	2.2	1.9	2.1	
U	Renal insufficiency	1.7	1.8	1.8	
К	Cerebrovascular disease	1.7	1.5	1.6	
	Irritable bowel	0.8	1.6		
D	syndrome			1.2	
К	Heart failure	1.1	1.3	1.2	
L	Fractures	0.9	1.2	1.0	
Ν	Dementia	0.60	1.28	0.95	(65+: 3.3-5.7-4.6)
S	Chronic skin ulcer	0.83	1.02	0.93	(65+: 3.0-3.7-3.4)
Ν	Epilepsy	0.97	0.88	0.92	(<20: 0.8-0.7-0.7)
Р	Hyperkinetic disorder	1.16	0.39	0.77	(<20: 3.6-1.3-2.5)
L	Rheumatoid arthritis	0.48	1.03	0.76	
В	Iron deficiency anemia	0.35	1.10	0.73	
В	Pernicious anemia	0.39	0.69	0.54	
F	Macular degeneration	0.31	0.56	0.44	
Ν	Parkinson's disease	0.34	0.36	0.35	

H = hypertrophy; - = Not applicable

Prevalence in population aged 75 years and over

The following table shows the prevalence of the health problems studied in the population aged 75 years and older.

CIAP-2 clas	sification	Prevalence (%)		
Apparatus	Health problem	75+ years	General population	
К	Arterial hypertension	67.2	18.4	
Т	Lipid diseases	52.1	21.2	
L	Arthrosis	37.3	9.8	
Х	Benign prostatic hyperplasia*	35.9	6.4	
F	Cataract	29.6	4.9	
Т	Diabetes mellitus	27.1	7.4	
L	Spine syndrome	27.0	13.9	
U	Incontinence	19.5	4.0	
Р	Sleep disorder	18.5	7.8	
L	Osteoporosis	15.5	3.1	
Р	Anxiety disorder	14.4	12.6	
К	Atrial fibrillation	14.3	2.2	
Н	Deafness	13.5	4.7	
Т	Hypothyroidism	12.1	6.4	
U	Renal insufficiency	12.0	1.8	
К	Ischemic heart disease	10.2	2.2	
Р	Depression	10.0	4.6	
F	Glaucoma	9.5	2.1	
F	Blindness	9.3	4.7	
К	Heart failure	8.8	1.2	
R	COPD	8.5	2.2	
К	Cerebrovascular disease	8.3	1.6	
Ν	Dementia	8.2	0.95	
R	Asthma	6.3	7.4	
S	Chronic skin ulcer	5.2	0.93	
F	Macular degeneration	2.8	0.4	
S	Psoriasis	2.7	2.1	
L	Fractures	2.6	1.0	
Ν	Parkinson's disease	2.4	0.35	
В	Pernicious anemia	2.0	0.54	
D	Irritable bowel syndrome	1.9	1.2	
L	Rheumatoid arthritis	1.9	0.76	
В	Iron deficiency anemia	1.8	0.73	
Х	Endometriosis**	0.8	7.5	
Ν	Epilepsy		0.92	
Р	Hyperkinetic disorder		0.77	

H = hypertrophy; \* = in men; \*\* = in women

# Distribution by sex

The following table shows an outline of these health problems according to their predominance in one of the sexes. The percentage of men or women regarding the total is indicated in parentheses.

Suita ble	Man predominance	Woman predominance	Similar in both	Mixed/Other
В		Iron deficiency anemia (76.7%)		
		Pernicious anemia (64.8%)		
D		Irritable bowel syndrome (67.3%)		
F		Macular degeneration (65.0%) Glaucoma (58.9%) Blindness (57.3%) Cataract (59.8%)		
Н			Deafness	
К	Ischemic heart disease (68.0%) Cerebrovascular disease (52.0%)* Atrial fibrillation (51.9%)*			Heart failure (M 55.8%) (M < 80 years old and W $\ge$ 80 years old) Arterial hypertension (M 52.2%) (M < 75 years and W $\ge$ 75 years)
L		Spine syndrome (60.1%) Rheumatoid arthritis (69.2%) Arthrosis (66.6%) Osteoporosis (95.5%)		Fractures (W 58.1%) (M < 50 years old and W ≥ 50 years old)
N		Dementia (69.6%)	Epilepsy	Parkinson's disease (M 52.5%)**
Р	Hyperkinetic disorder (74.2%)	Anxiety disorder (66.3%) Depression (72.0%)	Sleep disorder	
R	COPD (65.0%)			Asthma (W 53.7%) (M < 30 years old and W ≥ 30 years old)
S	Psoriasis (52.3%)*	Chronic skin ulcer (62.3%)		
Т	Diabetes mellitus (54.0%)*	Hypothyroidism (81.7%)		Lipid diseases (M 53.0%) (M < 60 years old and W ≥ 60 years old)
U		Incontinence (73.4%)		Renal Insuff. (M 53.1%)**



[Benign prostatic hyperplasia]	[Endometriosis]	
	Benigh prostatic hyperplasia]	

M = man; W = woman

\* The number of people affected is similar in both sexes, but the specific rates per five-year period are higher in men.

\*\*More women are affected, but the specific rates per five-year period are higher in men.

Mixed: more frequent in men below the indicated age and more frequent in women above that age.



# Age distribution

The following table shows a summary of the distribution patterns by age. For each health problem, these patterns are similar in both sexes. The complete data can be found in the annex Table\_of\_infographics\_data.

Ар	Rather stable from 15 years of age	Increases with age*		Curve	Mixed pattern
		Earlier start	Later start	(acme)	
В			Pernicious anemia		Iron deficiency anemia**
D	Irritable bowel syndrome				
F			Macular deg Glaucoma Cataract		Blindness***
Н		Deafness			
K		Ischemic heart disease Arterial hypertension	Cerebrovascular disease Atrial fibrillation Heart failure		
L		Spine syndrome Rheumatoid arthritis Osteoporosis	Arthrosis		Fractures***
N			Dementia Epilepsy Parkinson's disease		
Р	Anxiety disorder	Depression Sleep disorder		Hyperkinetic disorder (15-19 years old)	
R	Asthma (except juvenile peak)	COPD			
S			Chronic skin ulcer	Psoriasis (70-74 years old)	
Т		Diabetes mellitus Lipid diseases		Hypothyroidis m (70-74 years	
				old)	
U			Incontinence Renal insufficiency		
XY			Benign prostatic hyperplasia	Endometriosis	

Ap: CIAP-2 Apparatus; Sd = syndrome; H = hypertrophy

Acme: highest point

\*Increases with age and decreases from 85/90+ years old.

\*\*Iron deficiency anemia (stable from 15 to 54 and increase 50+).

\*\*\*Curve with infantile/juvenile acme, then progressive increase with age.

# Age adjusted distribution by income level

The following table summarizes the findings presented in each card and in the annex Table\_of\_data\_infographs.

CIAP-2 Apparatus	Social gradient (more frequent as income level decreases)	Incomplete inverse social gradient	Other types of social differences
В	Iron deficiency anemia Pernicious anemia (M)		
D			Irritable bowel syndrome
F	Blindness Cataract		Macular degeneration Glaucoma
Н	Deafness		
К	Cerebrovascular disease Ischemic heart disease Heart failure Atrial fibrillation (M) Arterial hypertension (M)		
L	Arthrosis Spine syndrome (M)	Osteoporosis	Rheumatoid arthritis Fractures
Ν	Dementia		Parkinson's disease Epilepsy
Ρ	Anxiety disorder Depression Hyperkinetic disorder (H) Sleep disorder (M)		
R	COPD (H) Asthma (M)		
S	Chronic skin ulcer		Psoriasis
T	Diabetes mellitus Hypothyroidism Lipid diseases		
U	Urinary incontinence Renal insufficiency		
XY		Benign prostatic hyperplasia Endometriosis	

Sd = syndrome; H = hypertrophy

(W) and (M) = Higher social gradient in (M)-man or (W)-woman





# Age-adjusted distribution by municipality size

No specific pattern of distribution by municipality size is found for most of the selected health problems.

Exceptions are shown in the table:

Gradient (trend)					
Depression	Tendency to be <b>more</b> frequent with larger size				
Irritable bowel					
syndrome	Tendency to be <b>more</b> frequent with larger size				
Sleep disorder	Tendency to be <b>more</b> frequent with larger size				
Chronic skin ulcer	Tendency to be <b>less</b> frequent with larger size				
More frequent in municip	palities with a population of more than 500,000 inhabitants.				
Blindness					
Macular degeneration					
Glaucoma					
Rheumatoid arthritis					
Pernicious anemia					
More frequent in municip	palities with a population of 100,001 to 500,000 inhabitants				
Hyperkinetic disorder					
More frequent in municipalities with a population of 100,001 to 500,000 inhabitants					
Anxiety disorder					
More frequent in municip	palities with 10,000 and less inhabitants				
Osteoporosis					

# Age-adjusted distribution by country of birth

Most health problems are more frequent, after adjustment for age, in those born in Spain. In particular (more frequently than twice): Anxiety disorder, hyperkinetic disorder, asthma and endometriosis.

The following are exceptions (with similar frequencies in those born in Spain and those born outside this country): anemia, ischemic heart disease, rheumatoid arthritis and hypothyroidism.

# Time course of age-adjusted prevalence (5 years)

Observations on the time trend of prevalence are tabulated below	Observations	on	the	time	trend	of	prevalence	are	tabulated	below
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CIAP-2	Stable prevalence	Growing trend	Decreasing trend
В		Pernicious anemia	Iron deficiency
			anemia
D		Irritable bowel	
		syndrome	
F		Macular degeneration	
		Blindness	
		Cataract	
		Glaucoma	
Н		Deafness	
К	Ischemic heart disease	Atrial fibrillation	
	Cerebrovascular	Heart failure	
	disease		
	Arterial hypertension		
L	Osteoporosis	Spine syndrome	Fractures
		Rheumatoid arthritis	
		Arthrosis	
Ν	Parkinson's disease	Dementia	
		Epilepsy	
Р		Hyperkinetic disorder	
		Anxiety disorder	
		Depression	
		Sleep disorder	
R S	COPD	Asthma	
S		Chronic ulcer	
		Psoriasis	
Т	Diabetes mellitus	Hypothyroidism	
		Lipid diseases	
U		Renal insufficiency	
		U Incontinence	
XY		Benign prostatic	
		hyperplasia	
		Endometriosis	

Sd = syndrome; H = hypertrophy

# Referrals

In the card for each health problem for each health problem (and in the attached Excel table), the five most frequent specialties consulted by people affected by that problem are presented in terms of percentage of people with at least one referral in the year, and compared with the general population.

In the following table we have selected the specialty or specialties of reference for each health problem and compared, using a ratio, the percentage of people with a referral regarding the general population.

Health problem	Health problem Specialty		% people in general population with Referral (ICPG)	Ratio ICPS/ICPG
Iron deficiency anemia	Gynecology	99.2	28.5	3.5
Iron deficiency anemia	Hematology	21.07	3.36	6.3
Pernicious anemia	Hematology	11.65	7.46	1.6
Rheumatoid arthritis	Rheumatology	57.28	7.72	7.4
Arthrosis	Traumatology	97.02	37.83	2.6
Arthrosis	Rehabilitation	43.03	18.49	2.3
Asthma	Pneumology	15.73	6.58	2.4
Ischemic heart disease	Cardiology	78.34	10.73	7.3
Cataract	Ophthalmology	140.7	32.65	4.3
Blindness	Ophthalmology	142.05	32.65	4.4
Macular degeneration	Ophthalmology	108	32.65	3.3
Dementia	Neurology	109.44	26.76	4.1
Dementia	Geriatrics	20.94	3.25	6.4
Depression	Psychiatry	40.96	13.97	2.9
Diabetes mellitus	Endocrinology	23.59	6.31	3.7
Endometriosis	Gynecology	128.39	54.38	2.4
Cerebrovascular disease	Neurology	60.1	12.22	4.9
Parkinson's disease	Neurology	115.61	12.22	9.5
Epilepsy	Neurology	47.99	6.05	7.9
COPD	Pneumology	46.42	13.09	3.5
Atrial fibrillation	Cardiology	79.78	10.73	7.4
Fracture	Trauma	130.87	37.83	3.5
Glaucoma	Ophthalmology	81.21	32.65	2.5
Arterial hypertension	Cardiology	28.77	10.73	2.7
Benign prostatic hyperplasia	Urology	79.65	21.63	3.7

Hypothyroidism	Endocrinology	21.42	6.31	3.4
Urinary incontinence	Urology	36.22	13.7	2.6
Urinary incontinence	Gynecology	38.69	28.5	1.4
Heart failure	Cardiology	82.46	11.47	7.2
Chronic renal insufficiency	Nephrology	43.79	1.91	22.9
Osteoporosis	Trauma	74.91	37.83	2.0
Osteoporosis	Rheumatology	33.28	7.72	4.3
Psoriasis	Dermatology	71.25	28.93	2.5
Irritable bowel syndrome	Digestive	62.44	15.65	4.0
Spine syndrome	Traumatology	90.71	37.83	2.4
Spine syndrome	Rehabilitation	41.94	18.49	2.3
Deafness	ENT	84.36	18.85	4.5
Anxiety disorder	Psychiatry	40.96	13.97	2.9
Hyperkinetic disorder	Psychiatry	87.37	16.77	5.2
Lipid metabolism disorder	Endocrinology	10.11	6.31	1.6
Sleep disorder	Psychiatry	26.91	13.97	1.9
Chronic skin ulcer	Dermatology	45.81	41.49	1.1

Sd = syndrome; H = hypertrophy

# Procedures

For each health problem, some recommended procedures have been selected. For example, spirometry in COPD or electrocardiogram in people with arterial hypertension. These procedures are recommended to be performed during diagnosis and/or follow-up, but, in general, it is not recommended to perform them annually. For reasons of inadequate recording in an appropriate format and the difficulty in processing year-on-year data, only the percentage of people who have undergone this procedure during the year is presented in the cards for each health problem and in the attached table, as an illustration, knowing that no conclusions can be drawn from this data regarding the follow-up of recommendations.

# Parameters

The degree of control of the parameters related to each health problem is shown in each card and in the appendix. These results are presented in some detail in the summary of this document and in the graphical summary.

series

BDCA


### Hospital admissions and hospital emergency room visits

The number of hospitalizations and emergency room visits during the year for individuals with each of the health problems studied, regardless of the reason, was studied using BDCAP and CMBD data integration and compared with the respective data for the general population.

In both cases, two approaches are used: the percentage of people with at least one hospital admission or visit with hospital emergency rooms during the year, regardless of the reason, and the "frequentation" or number of admissions/visits per person per year.

These data are presented in the data sheet for each health problem and in the attached appendix. The following graphs show the data for all health problems, ordered, in each case, from most to least frequent.

The percentage of people is shown on the left and "frequentation" on the right. First regarding hospitalizations and then with respect to visits with hospital emergency departments.

In summary: 33.4% of people with heart failure have had at least one episode of hospitalization during the year (for any reason); the total number of hospitalizations is 7.1 times that of the general population. The respective figures for other health problems are: fractures 27.4% and 4.6 times more hospitalizations; atrial fibrillation (24.1% and 4.9 times more), chronic renal failure (20.3% and 4.5 times more), hypothyroidism (17.5% and 4.8 times more), epilepsy in children under 20 years of age (10% and 6.5 times more).

Emergency department visits are more numerous than hospitalizations, but are more similar to visits in the general population. Thus, 63.6% of people with fractures have had at least one visit with the emergency department, and the total number of visits is 2.9 times higher than that of the general population. In the case of heart failure, the respective figures are 44.1% and 2 times more. Between 25% and 39% of people with atrial fibrillation, Parkinson's disease, iron deficiency anemia or ischemic heart disease have had at least one visit, and the total number of visits is 1.7 times higher than in the general population.



#### Hospital admissions per person per year



General population (GP) Heart Failure Atrial fibrillation Hypothyroidism Cerebrovascular disease Fracture Chronic renal insufficiency Ischemic heart disease Parkinson's disease

Urinary incontinency Iron deficiency anemia Benign prostatic hypertrophy Macular degeneration Diabetes mellitus Cataract Pernicious anemia Glaucoma Arterial hypertension Osteoporosis Arthrosis Sleep disorders Rheumatoid arthritis Depression Deafness Disorders of lipid metabolism Spine syndromes Psoriasis

> Irritable bowel syndrome Anxiety state disorder Endometriosis Asthma

GP <19 Epilepsy Hyperkinetic disorder

GP65+ Chronic skin ulcer Dementia



0 5 10 15 20 25 30 35 40

General population (GP) Heart Failure Fracture Atrial fibrillation Cerebrovascular disease Chronic renal insufficiency Ischemic heart disease Parkinson's disease

#### COPD

Urinary incontinency Iron deficiency anemia Hypothyroidism

Benign prostatic hypertrophy Macular degeneration Cataract Diabetes mellitus Pernicious anemia Arterial hypertension Glaucoma Arthrosis Osteoporosis Sleep disorders Rheumatoid arthritis Depression Deafness Disorders of lipid metabolism Spine syndromes Psoriasis Irritable bowel syndrome

> Endometriosis Blindness Anxiety state disorder Asthma

GP <19 Epilepsy Hyperkinetic disorder

> GP65+ Chronic skin ulcer Dementia

•



🔍 Man 🔺 Woman

#### Visits with hospital emergencies per person and year



#### Persons with at least one hospital emergency visit (%)





The above graphs also show the differences between men and women. In general, for the same health problem, men have more hospitalizations than women and women have more emergency room visits. In hospitalizations, the most significant differences in favor of men are in people diagnosed with iron deficiency anemia, osteoporosis, urinary tract infection, COPD, chronic skin ulcer and dementia. Women with asthma, hypothyroidism, fractures and epilepsy are admitted more than men with the same pathologies. Regarding emergency department visits, the difference in favor of women is greater in ischemic heart disease, asthma and irritable bowel disease. And in men, iron deficiency anemia, osteoporosis, urinary incontinence, chronic skin ulcer and dementia.



#### Drugs

21.7% of women and 14.6% of men with irritable colon use some specific medication for functional gastrointestinal disorders. On the other hand, laxatives were used by 2.9% and 2%, respectively.



The antiglaucomatous drugs with the highest consumption are beta-blockers (51% of total DHD) and prostaglandin analogues (36%).

Men with ischemic heart disease receive specific medication more often than women. At least 81.1% of the M and 70.6% of the W were prescribed at least one package of statins. Men and women received, respectively: anticoagulants, 71.6% and 60.6%; angiotensin-converting enzyme inhibitor/angiotensin II receptor antagonist (ACE inhibitor/ARRAII) 63.5% and 61.0%; beta-blockers 62.8 and 56.5. Exceptions are nitrates, 25% of M or W and calcium antagonists, 24.8% of women and 21.2% of men.

72.2% of people with heart failure take diuretics, 62.8% ACEI/ARAII and 53.7%  $\beta$ -blockers. 83% of the diuretic DHDs consumed correspond to high-ceiling diuretics (furosemide type).

77.6% of individuals with atrial fibrillation are given at least one package of anticoagulant, 71.6% some antiarrhythmic and 12.6% an antiplatelet. Eighty-two percent of antiarrhythmic DHDs consumed are class II ( $\beta$ -blockers, 45%) or class IV (calcium antagonists, 37%).

Among those with arterial hypertension, 72.2% have used at least one package of ACEI/ARAII, diuretics 24.9% of M and 16.9% of W; beta-blockers 20.7% and calcium antagonists 18.6%. Of the total DHD of antihypertensive drugs consumed, 64% are ACE inhibitors/ARBs, 14% are calcium antagonists, 12% are diuretics and 7% are beta-blockers.

Antihypertensive drugs were taken by 70.4% of individuals with cerebrovascular disease, antiplatelet drugs by 57.9% of men and 50.1% of women, anticoagulants by 23.6%, and statins by 56.6% of men and 50.1% of women.



In pathologies susceptible to chronic analgesia such as osteoarthritis or painful spinal syndromes, it is found that around 30-40% more women receive at least one annual package of non-opioid or weak opioid analgesics or NSAIDs, especially cyclooxygenase-2 inhibitors (COXIB), than men. And almost twice as many women with osteoarthritis and 60% more women with spinal syndromes use potent opioids (at least one pack per year) than men with the same health problems. For acute problems such as fractures, the proportion of women getting at least one package of strong opioids is 2.3 times higher than that of men, 1.6 times more weak opioids and 1.4 times more non-opioid analgesics. In painful spine syndromes, 5.0% of people have used muscle relaxants and 12.6% some adjuvant such as gabapentin or amitriptyline.

Regarding the consumption of non-steroidal anti-inflammatory drugs and analgesics in these health problems, in terms of DHD, it is higher in people with osteoarthritis (301.4 DHD) than in people with spinal syndromes (234.6 DHD). The proportion of opioids is similar (26% of DHD), although more analgesics are used in osteoarthritis (42% of DHD, compared to 32%) and more NSAIDs in spinal syndromes (38% rather than 36%). In fractures, 24% of the total DHD of analgesics and NSAIDs consumed correspond to opiates (weak or potent).

24.8% of women with rheumatoid arthritis and 18.5% of men have used at least one package of immunosuppressants. Methotrexate constitutes 76% of the consumed DHDs of immunosuppressants, and the rest are selective.

60.2% of women with osteoporosis are prescribed at least one package of calcium, vitamin D or associations, 16.2% of bisphosphonates and 11.5% of denosumab.



66.5% of people with Parkinson's disease receive some type of specific drug. Levodopa constitutes 48% of the DHDs of antiparkinsonian drugs consumed in people with Parkinson's disease/parkinsonism, while 29% correspond to MAOIs and 22% to other dopaminergics. 1% are of the anticholinergic type (biperidene).

38.5% of children under 20 years of age with epilepsy are given some form of antiepileptic drug. The most commonly used antiepileptic drugs (N03A) are levetiracetam (57% of DHD) and valproate (23%) or carbamazepine (18%). /// boys more levetiracetam and girls more valproate. 21.7% of women and 14.7% of men with sleep disorder have received at least one package of hypnotics and sedatives (N05C). Lormetazepam and analogues accounted for 71% of the DHD consumed and zolpidem and analogues for 28%. In addition, 43.5% of women and 28.0% of men with insomnia have been prescribed at least one package of benzodiazepine-type anxiolytics.

39.7% of people with dementia receive some antidementia drug and 39.8% some antipsychotic. 71% of the DHDs of antidementia drugs are of the anticholesterinase type while 29% are memantine.

43.6% of women and 33.3% of men with anxiety disorder are given at least one package of anxiolytics (N05B) and antidepressant with more anxiolytic effect (paroxetine, sertraline, venlafaxine) 9.9% and 6.9% respectively. Practically all the anxiolytics consumed are of the benzodiazepine type (N05BA); three active ingredients account for 90% of the DHD: alprazolam (35%), lorazepam (34%) and diazepam (20%).

Of the women, 57.4% and 45.3% of the depressed men were prescribed at least one package of an antidepressant, and 49.9% and 37.3% were prescribed an anxiolytic, respectively. Most of the DHD consumed of antidepressants correspond to the SSRI type 54% (sertraline, escitalopram, paroxetine), while 41% correspond to second-line antidepressants (venlafaxine, duloxetine, desvenlafaxine). 15 9 8 // 12 8 8.

32.5% of people under 20 years of age with hyperkinetic disorder receive some form of psychostimulant. Methylphenidate accounted for 79% of the total DHD consumed, 14.6% lisamphetamine and 6.3% atomoxetine (with 5% guanfacine, the distribution percentages would become 74%, 18% and 3%, respectively).

54.1% of people with COPD have used long-acting inhalers, 30.0% have used short-acting inhalers and 6.5% have used some inhaled corticosteroid. At least 22.7% of the patients are given at least one annual package of systemic drugs, mainly prednisone.

33.1% of women and 23.8% of men with asthma use long-acting inhalers; 28.2% and 24.4% respectively use short-acting inhalers and 7.3% use some inhaled corticosteroid alone (17.8% if corticosteroids alone or in association are considered). 15.0% of women and 10.55% of men receive at least one package of systemic drugs annually, mainly prednisone.





23.5% of people with psoriasis are prescribed at least one annual package of dermatologic corticosteroids, 20.3% of topical antipsoriatics and 1.0% of systemic

antipsoriatics.

Levothyroxine was used by 60.2% of women with hypothyroidism and 44.9% of men, and 28.9% used a lipid-lowering drug (C10), with statins alone accounting for 83% of the total DHD consumed of lipid-lowering drugs in people with this health problem.

65.7% of type 2 diabetics receive at least one annual package of metformin alone or in association (77.9% an ADO) and 20.0% insulin. Of the total ADOS (A10B), 30% are associations (based on metformin with gliptins, 20%, or with glycocin, 8%), 27% biguanides (mainly metformin), 12% "gliptins" alone, 11% sulfonylureas and 10% "glycocins" alone.

Among people diagnosed with lipid metabolism disorders, 51.5% are prescribed at least one package of a lipid-lowering drug (C10), with statins alone accounting for 81% of the total number of DHD in this group of drugs.

At least one annual package of absorbents is prescribed to 42% of people with urinary incontinence, of antispasmodics to 12.4% and of duloxetine to 3.3%.

In chronic renal failure, 63.7% of the patients are prescribed at least one annual package of ACEI/ARA2, 57.0% of lipid-lowering drugs, 32.8% of high-ceiling diuretics and 16.0% of calcitriol.

At least one annual package of contraceptive hormones is prescribed to 13.0% of women with endometriosis and 1.1% of gonadotrophin analogues.

53.7% of men with benign prostatic hypertrophy use a specific medication (G04C) or an alpha blocker (C02CA) throughout the year. Forty-two percent of the total DHD of both groups of drugs corresponded to the tamsulosin type, 6% to the dutasteride type and 35% to associations of both. 9% are alpha blockers and 8% are phytotherapeutics.

# **Final remarks**

As noted in the presentation, the approach of this report can be considered exploratory and systematic. It aims to be a general description of the status of a set of non-communicable health problems, based on clinical records from routine activity in primary care.

In this way, it can be considered as a preliminary vision allowing further selection of these or other health problems, as well as of the most relevant indicators for their follow-up. It may also help in the evaluation of health interventions and describe the extent, severity, vulnerability and local impact of these problems, as well as opportunities for improvement in the approach to this major axis of health care.

Among the main contributions of this report are the well-known results of the BDCAP studies: the recorded prevalence of health problems and their distribution by age, sex and socioeconomic variables (a possibly unprecedented knowledge due to the breadth of both the health problems and the classification variables), and the control of the usual clinical parameters (blood pressure, HbA1c, etc. However, it is also worth highlighting two other aspects which we believe to be unique: the description of the use/consumption of specific medication used in each health problem and the knowledge, still very basic, about the complications and evolution of people with these health problems, in terms of hospital admissions and emergency hospital visits, based on the integration of the two main clinical databases of the SNS, BDCAP and CMBD.

The main limitation of the BDCAP, which is at the same time its greatest strength, refers to the use of clinical records in primary care clinical histories. This registry, although it has a fundamentally clinical and not epidemiological objective, being by nature linked to actual care, as well as being a longitudinal registry in time, and being carried out in a context of integrity of care provided (both health problems and interventions carried out at any level of care are ultimately reflected in the family physician), provides information which, despite its limitations, many of which are known, fundamentally under-registration, or to the lack of coverage of certain data in certain Autonomous Communities, has enormous potential as a source of knowledge of what is really happening, in relation to health and disease, in the populations to which care is provided.



# Annexes

Health problem sheets (continued)

Graphical summary (pdf)

Infographic data table (Excel)

ATC Table (Excel)



## Drugs

Clinically relevant pharmaceuticals for each health problem have been selected for

study. Two types of graphs are included on each problem card:



Distribution of the total consumption of a pharmacological group significant for that health problem in its subgroups.



Example of interpretation:

The most commonly used type of oral antidiabetic (OAD) is OAD associations\*, which account for 30% of OAD doses. A total of 222.1 DHD of these associations are consumed. \*(in general, metformin with "glitazone", "gliptin" or "glycophycin")

## Iron deficiency anemia [B80]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care





#### Autonomous Community

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





#### Income level (euros/year) Male - Female

Prevalence per 1,000 individuals in patient lists\*

#### Municipality size (inhabitants) Country of birth



## Iron deficiency anemia [B80]





**Use of drugs** 

#### Consumption of **iron preparations (B03A)**. DDD(s)/1000 Inhabitants/day and % of total DDD



Source: BDCAP. Data: 2021.

## Pernicious anemia/folate deficiency anemia [B81]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care Man



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



## Time evolution (trend line)

Woman

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*





People with at least one hospital admission/emergency

## Pernicious anemia/folate deficiency anemia [B81]

#### Hospital admissions and emergency room visits

Hospitalization/Emergency visit per person per year



#### Referrals

% of people with at least one referral (5 most frequent specialties)



#### Procedures % of people with procedures



#### **Parameters**

% of people wellcontrolled by gender



#### Use of drugs

Vitamin B12 and folic acid (B03B) consumption DDD(s)/1000 Inhabitants/day and % of total DDD





## Irritable bowel syndrome [D93]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care Man 🔺 Woman



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*







**Referrals** % of people with at least one referral (5 most frequent specialties)



**Procedures** % of people with procedure



**Parameters** 

% of people wellcontrolled by gender



Use of drugs





Consumption of medications for functional gastrointestinal disorders (A03)

DDD(s)/1000 Inhabitants/day and % of total DDD



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## Blindness [F28, F94]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care Man 🔺 Woman



# Age (five-year periods) and

#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

90.94 19

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*







#### Hospital admissions and emergency room visits

Total population

Woman

#### Referrals

% of people with at least one referral (5 most frequent specialties)



## **Degeneration of the macula [F84]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care 💿 Man 🔺 Woman



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



#### Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman





#### Hospital admissions and emergency room visits

People with at least one hospital admission/emergency visit (%)

Hospitalization/Emergency visit per person per year



#### **Referrals**

% of people with at least one referral (5 most frequent specialties)



#### Parameters

% of people wellcontrolled by gender



TC, total cholesterol; DBP, diastolic blood pressure; SBP, systolic blood pressure

## Cataract [F92]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care Man



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

🔺 Woman

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman

#### Municipality size (inhabitants) Country of birth



Persons with at least one hospital

#### Hospital admissions and emergency room visits

Hospitalization/Emergency visit per person per year



#### Referrals

% of people with at least one referral (5 most frequent specialties)



## Glaucoma [F93]





#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman







#### Hospital admissions and emergency room visits

Hospitalization/Emergency visit per person per year



#### Referrals

0

% of people with at least one referral (5 most frequent specialties)

Hospitalization



#### Parameters

% of people wellcontrolled by gender



TC, total cholesterol; DBP, diastolic blood pressure; SBP, systolic blood pressure

#### Use of drugs

Consumption of **antiglaucomatous (S01E)** DDD(s)/1000 Inhabitants/day and % over total DDD



## **Deafness** [H86]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Man

🔺 Woman

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*









#### **Referrals**

% people with at least one referral (5 most frequent specialties)



## Ischemic heart disease [K74, K75, K76]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*

#### Municipality size (inhabitants) Country of birth

Prevalence per 1,000 individuals in patient lists\*

Prevalence per 1,000 individuals in patient lists\*



Ischemic heart disease [K74, K75, K76]

#### Hospital admissions and emergency room visits

People with at least one hospital admission/emergency visit (%)

Woman

Hospitalization/Emergency visit per person per year





Hospitalization

**Parameters** 

#### **Referrals**

% of people with at least one referral (5 most frequent specialties)



**Procedures** 

#### % of people with procedures



% people well-controlled by sex



systolic blood pressure, BMI, body mass index

#### **Use of drugs**



Source: BDCAP. Data: 2021

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## Heart failure [K77]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





People with at least one hospital admission/emergency visit (%)

Total population

Woman

Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)



% of persons using drugs by gender

Procedures

% of people with procedures



Parameters

% people well-controlled by sex

Heart failure [K77]



TC, total cholesterol. DBP, diastolic blood pressure. SBP, systolic blood pressure. BMI: body mass index

Use of drugs

Consumption of diuretics (CO3)

DDD(s)/1000 Inhabitants/day and % over total DDD



(1) Includes sacubitrile association

Source: BDCAP. Data: 2021

## **Atrial fibrillation/atrial flutter [K78]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care Man Woman



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



**Municipality size (inhabitants)** 

\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

**Country of birth** 





Hospitalisation/Emergency visit per person per year

Referrals

% people with at least one referral (5 most frequent specialties)



**Procedures** % of people with procedures

Hospital admissions and emergency visits

**Parameters** 

% people well-controlled by sex



INR, International Normalized Ratio

Use of drugs

Electrocardiogram

0



Consumption of antiarrhythmic drugs

Chest X.raj

## **Arterial hypertension [K86-K87]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



#### Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*





**Parameters** 

% people well-controlled



Hospitalisation/Emergency visit per person per year





Consumption of antihypertensive drugs

**Referrals** 

% people with at least one referral (5 most frequent specialties)

% of people using drugs by gender



**Procedures** 

% of people with procedure

Use of drugs



Source: BDCAP. Data: 2021
# Cerebrovascular disease [K89, K90, K91]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



**Autonomous Community** 

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





Prevalence per 1,000 individuals in patient lists\*



**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals

\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

**Country of birth** 

# Cerebrovascular disease [K89, K90, K91]

#### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

#### Hospitalisation/Emergency visit per person per year





Emergencies

**Referrals** 

% people with at least one referral (5 most frequent specialties)



**Procedures** % of people with procedure

**Parameters** % people well-controlled by sex



TC, total cholesterol. DBP, diastolic blood pressure. SBP, systolic blood pressure

## **Use of drugs**



Source: BDCAP. Data: 2021

# Fractures [L72-L76]



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



15

10

**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals

Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*





#### Referrals

% people with at least one referral (5 most frequent specialties)

Total population

Woman



% of people with procedure



**Use of drugs** 



# Hospital admissions and emergency visits

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# Spinal syndromes [L83-4.6]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



# Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\*



#### **Municipality size (inhabitants)**

Prevalence per 1,000 individuals in patient lists\*



#### **Country of birth**

Prevalence per 1,000 individuals In patient lists\*







### Referrals

% people with at least one referral (5 mo frequent specialties)





### **Use of drugs**



ugs

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# **Rheumatoid arthritis [L88]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care





Time evolution (trend line)



Income level (euros/year) Man - Woman **Municipality size (inhabitants)** Prevalence per 1,000 individuals in patient lists\* Prevalence per 1,000 individuals in patient lists\* 4 6 8 10 12 0 2 4 6 8 10 12 0 2 6 8 10 12 0 2 4 7.1 ≥ 10,000 ≥ 100,000 ≥ 100,000 5.1 10,001-50,000 18,-99,999 18,-99,999 6.2 50,001-100,000 8.3 < 18,000 < 18,000 5.9 100,001-500,000 8.0 Very low Very low 6.3 < 500,000 10.9

#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*



\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

People with at least one hospital admission/emergency visit (%)



#### Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)



# Procedures

% of people with procedure



## Use of drugs

0.9 1% 24.84 Immunosuppressants 18.54 31.6 23% Hydroxychloroquine 2.79 1.86 Sulfasalazine 2.81 0 5 10 15 20 25 30

Consumption of **immunosuppressants (L04A)** DDD(s)/1000 Inhabitants/day and % over total DDD



% of people using drugs by gender

# Arthrosis [L89, L90, L91]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



Income level (euros/year) Man - Woman **Municipality size (inhabitants)** Prevalence per 1,000 individuals Prevalence per 1,000 individuals in patient lists\* in patient lists\* 0 50 100 150 0 50 100 150 0 40 80 120 90.9 ≥ 10,000 ≥ 100,000 ≥ 100,000 10,001-50,000 102.6 18,-99,999 18,-99,999 63.0 50,001-100,000 87.9 < 18,000 < 18,000 100,001-500,000 87.9 Very low 79.2 Very low < 500,000 93.1

#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*



People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)





100

80

60

40

20

0

### Parameters

% people well-controlled by sex





### Use of drugs



Source: BDCAP. Data: 2021

# **Osteoporosis** [L95]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



**Municipality size (inhabitants)** Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\* Prevalence per 1,000 individuals in patient lists\* 3 0 20 40 60 80 0 2 4 80 1 0 20 40 60 ≥ 10,000 62.0 ≥ 100,000 ≥ 100,000 10,001-50,000 26.9 18,-99,999 18,-99,999 50,001-100,000 26.9 < 18,000 < 18,000 3.0 100,001-500,000 30.3 3.4 Very low Very low < 500,000 41.4

#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*





# **Osteoporosis** [L95]

### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year

**Procedures** 

Consumption of specific anti-osteoporosis drugs

% of people with procedures



#### Referrals

% people with at least one referral (5 most frequent specialties)

% of people using medication by gender







# Parkinson's disease/parkinsonism [N87]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care 💿 Man 🔺 Woman



#### Autonomous Community

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals in patient lists\*



Country of birth

Prevalence per 1,000 individuals in patient lists\*







# Use of drugs

#### % of people using drugs by gender

Some type of antiparkinsonian (N04): M-70.5% and W-62.8%



Consumption of antiparkinsonians drugs (NO4) DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021.

(1) Dopaminergics



People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



## Referrals



Use of drugs



# **Sleep disorders [P06]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care





Time evolution (trend line)



**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals

Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists  $\!\!\!*$ 



#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*



\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

90

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



#### **Referrals**

% people with at least one referral (5 most frequent specialties)



% of people with procedure

#### **Parameters**

% people well-controlled by sex





pressure.

Use of drugs



Source: BDCAP. Data: 2021

# Dementia [P70] > 65 years

Prevalence recorded per 1,000 individuals in patient lists in Primary Care





# **Country of birth**

in patient lists\*



\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

60

90

Total population

# Dementia [P70] > 65 years

## Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



## Referrals

% people with at least one referral (5 most frequent specialties)



# **Procedures** % of people with procedures

2

1

0

**Syphilis** 

#### Parameters

% people with TSH value within range and Barthel > 90 by sex



### Use of drugs

50

% of people using medication by gender







Source: BDCAP. Data: 2021

# Anxiety disorders/anxiety state [P74]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



**Municipality size (inhabitants)** 



#### Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\*



#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*

Abroad



# Anxiety disorders/anxiety state [P74]

#### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



### Referrals

% people with at least one referral (5 most frequent specialties)

#### **Parameters**

% people with TSH value within range by sex



#### Use of drugs





(1) SSRIs-Selective serotonin reuptake inhibitors with anxiolytic use (paroxetine, sertraline) and SNRIs-Selective serotonin and norepinephrine reuptake inhibitors (venlafaxine) Consumption of **benzodiazepine anxiolytics (N05BA)** DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021

# **Depression/Depressive disorders [P76]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

18,-99,999

< 18,000

Very low

26.9

32.5

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



20

38.7

43.0

48.5

48.2

50,001-100,000

100,001-500,000

< 500,000

40

60





18,-99,999

< 18,000

Very low

#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*





# Depression/Depressive disorders [P76]

#### Hospital admissions and emergency visits



Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)



#### **Parameters**

% people with TSH value within range by sex



### **Use of drugs**

% of people using drugs by gender



(1) SSRI-Selective serotonin reuptake inhibitors (2) Second-line antidepressants

- (2) Second-line antidepressant(3) Bupropion, mianserin, etc.
- (4) Includes tricyclics

Source: BDCAP. Data: 2021





# Hyperkinetic disorders [P81] < 20 years old

Prevalence recorded per 1,000 individuals in patient lists in Primary Care

Man 🔥 Woman



### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)





#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*



People with at least one hospital admission/emergency

### Hospital admissions and emergency visits

Hospitalisation/Emergency visit per person per year



#### **Referrals**

% people with at least one referral (5 most frequent specialties)



### **Parameters**

% people with TSH value within range by sex



TSH, thyroid-stimulating hormone

# Use of drugs



Consumption of **psychostimulants and others** DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021

# Chronic obstructive pulmonary disease [COPD] [R95]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



**Autonomous Community** 

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Man

Woman

Prevalence per 1,000 individuals in patient lists\*



## Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



### **Municipality size (inhabitants)**

Prevalence per 1,000 individuals



## **Country of birth**

Prevalence per 1,000 individuals in patient lists\*







Hospitalisation/Emergency visit per person per year







% people with at least one referral (5 most frequent specialties)





**Parameters** 

% people in each interval or grade by sex



## Use of drugs

% of people using drugs by gender



Consumption of bronchodilators (R03 and H02A) DDD(s)/1000 Inhabitants/day and % over total DDD



# Asthma [R96]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



## Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



#### **Municipality size (inhabitants)**

**Country of birth** Prevalence per 1,000 individuals in patient lists\*



People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



#### % of people with procedure % people with at least one referral (5 most frequent specialties) 10 100 8 80 6 60 4 40 2 20 Obstetrics Ology and 0 0 0 Otorhinolaryngology Ophthalmology Dermatology Traumatology Influenza vaccination Chest X-ray

Use of drugs



Source: BDCAP. Data: 2021

\*Corticosteroids alone or associated with inhaled adrenergic drugs: 19.9% women and 15.5% men

# **Psoriasis [S91]**



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



#### Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\*



**Municipality size (inhabitants)** 

\*Prevalence recorded age-adjusted per 1000 individuals in patient lists in Primary Care. BDCAP, 2021

**Country of birth** 



Hospitalisation/Emergency visit per person per year



#### **Referrals**

% people with at least one referral (5 most frequent specialties)

% of people using drugs by gender



# **Parameters**

% people well-controlled by sex 100 80 60 57.8 40 20 0 BMI < 30 kg/m2 BMI: body mass index

### Use of drugs



#### Consumption of antipsoriatics (D05) DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021

# Chronic skin ulcer [S97] > 65 years of age

Prevalence recorded per 1,000 individuals in patient lists in Primary Care 💿 Man 💧 Woman



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals

#### Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\*



#### Country of birth

Prevalence per 1,000 individuals in patient lists\*



People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



### Referrals

% people with at least one referral (5 most frequent specialties)



### **Parameters**

% people well-controlled by sex > 65 and over



# Hypothyroidism/myxedema [T86]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care 

Man
Woman



### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



# Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*

**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals



#### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*





**Procedures** 

% of people with procedure

Emergencies

Emergencies

by sex

**Parameters** 

% people well-controlled

**Referrals** 

10

8

6

4

2

0

% people with at least one referral

Hospitalization

(5 most frequent specialties)



95.2 51.8 TC < 250 mg/dl LDL < 130 TSH 0.4-4.0 mg/dl mlU/l

TC, total cholesterol. TSH, thyroid-stimulating hormone

# Use of drugs



Traumatology

Consumption of lipid modifiers (C10) DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021
# Diabetes mellitus [T89, T90]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

🔺 Woman

Man

Prevalence per 1,000 individuals in patient lists\*





Total population Woman

# Diabetes mellitus [T89, T90]

### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)







% people with at least one referral (5 most frequent specialties)



# Procedures

% of people with procedures



## Parameters

% people well-controlled by sex



### Use of drugs

#### (non-insulin-dependent diabetes mellitus -type II-)

% of persons using drugs by gender

Consumption of **oral antidiabetic drugs (A10B)** DDD(s)/1000 Inhabitants/day and % over total DDD



Source: BDCAP. Data: 2021

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# **Disorders of lipid metabolism [T93]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



## Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\* 400 300 200 100 0 2018 2019 2020 2021 2017

### Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



#### **Municipality size (inhabitants)**

Prevalence per 1,000 individuals I n patient lists\*



#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*



## Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)



#### Parameters

% people well-controlled by sex



#### Use of drugs

% of people using drugs by gender Consumption of lipid modifiers (C10) DDD(s)/1000 Inhabitants/day and % over total DDD 17.94 11.09 0.26 3% \_0% 23.52 4% Statins 6% Hypolipidemic agents Statin + Ezetimibe/Fenofibrate alone 51.1 25.7 Fibrates Hypolipidemic agents in 4.4 6.7 association Ezetimibe + Omega3 + Other O 10 20 30 40 50 60 Statin + ASA/Antihypertensives 340.01 (1) 81% Bile acid sequestrants



(1) Fibrates, ramipril, amlodipine, ASA

# **Urinary incontinence [U04]**

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



#### Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*



# Income level (euros/year) Man - Woman

Prevalence per 1,000 individuals in patient lists\*



#### Municipality size (inhabitants)

Prevalence per 1,000 individuals



#### **Country of birth**

Prevalence per 1,000 individuals in patient lists\*





# **Urinary incontinence [U04]**

### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year





**Procedures** 

% of people with procedure

#### Referrals

% people with at least one referral (5 most frequent specialties)



## Use of drugs

% of people using drugs/health products by gender



(1) Mirabegron, solifenacin, oxybutynin ...

# Chronic renal failure [U99.01]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care



#### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)

Prevalence per 1,000 individuals in patient lists\*

**Municipality size (inhabitants)** 

Prevalence per 1,000 individuals

in patient lists\*



Income level (euros/year) Man - Woman Prevalence per 1,000 individuals in patient lists\*



**Country of birth** Prevalence per 1,000 individuals in patient lists\*



## Hospital admissions and emergency visits

Total population

Woman





100%

80%

60%

40%

20%

0%

Hospitalisation/Emergency visit per person per year









% of people using drugs by gender



% of people with procedure



**Parameters** % people well-controlled by sex



GFR, glomerular filtration rate (ml/min/m2)





Source: BDCAP. Data: 2021.

# Endometriosis [X99.01]

Prevalence recorded per 1,000 individuals in patient lists in Primary Care

A Woman



### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)



10



Income level (euros/year) Women

Prevalence per 1,000 individuals in patient lists\*











Prevalence per 1,000 individuals in patient lists\*



Total population Mujer



#### Hospital admissions and emergency visits

Referrals

% people with at least one referral (5 most frequent specialties)



% people well-controlled by sex





### Use of drugs

% of people using drugs by gender





### **Autonomous Community**

Prevalence per 1,000 individuals in patient lists\*



Time evolution (trend line)







0

Population with Y85	Total population
Man	

# Benign prostatic hypertrophy [Y85]

### Hospital admissions and emergency visits

People with at least one hospital admission/emergency visit (%)

Hospitalisation/Emergency visit per person per year



#### Referrals

% people with at least one referral (5 most frequent specialties)



# Procedures

% of people with procedure



### **Use of drugs**

% of people using drugs by gender

Consumption of drugs used for benign prostatic hypertrophy (G04C and C02CA) DDD(s)/1000 Inhabitants/day and % over total DDD

