Summary

Health status of the population

As of 1 January 2009 the population of Spain was 46,745,807, according to data extracted from the municipal registers of inhabitants. Of them 49.5% were men and 50.5% were women. Between 2001 and 2009 the population aged 65 and over increased by 10.6%, although the percentage of growth in the younger population was even greater and thus the weight of the older population in society as a whole diminished, although Spain's demographic structure is still one of an aged population. Natural growth – births minus deaths – has reversed its previous downward trend and moved from 1.1 per 1000 inhabitants in 2001 to 2.9 in 2008.

In Spain life expectancy at birth is 81.1 years, slightly higher than the EU average, which is 79.1. Life expectancy at birth in the EU as a whole has risen 3.9 years since the beginning of the 1990s, while in Spain the figure has risen 4.2 years. By sex, life expectancy at birth continues to be higher for women, with a difference of just over seven years.

Infant mortality in Spain has continued to fall: in 2008 the rate was 3.3 deaths of infants under one year of age per 1000 live births; in 2001 it was 4.1. Perinatal mortality, an indicator of the quality of maternal and infant care, has fallen steadily throughout the past decade: in 2001 the rate was 5.6 perinatal deaths per 1000 live births but it dropped to 4.4 in 2008. Infant and perinatal mortality rates in Spain (3.5 and 4.5 respectively per 1000 live births around 2007) were lower than those of the EU-15[1] group of countries (which were 4.0 and 5.9 respectively). Between 1990 and 2007 the drop in infant mortality in Spain was 65%, compared to the drop of 48% in the countries of the UE-15. During the same period perinatal mortality fell 24% in the EU-15 countries and 40% in Spain.

The number of deaths in Spain was 386,324 in 2008, meaning that the crude death rate was 847.3 deaths per 100,000 inhabitants. The epidemiological profile in terms of causes of death is similar to that of nearby countries: approximately 80% of the deaths were due to five large groups of causes of death: diseases of the circulatory system (34.5%), cancer (26.2%), diseases of the respiratory system (10.04%), diseases of the digestive system (5.1%), and external causes such as injuries and poisoning (4.4%). Worth noting is the reduction in the number of traffic accident victims (a 23% reduction between 2001 and 2008 in the number of victims per 100,000 inhabitants) and of workplace accidents (the frequency index fell from 42.8 to 30.8 between 2001 and 2008). Most workplace accidents took place in the sectors of construction and industry. In contrast to the case of traffic and workplace accidents, the rate of death from domestic accidents and leisure accidents has fallen very little; it is estimated that in 2007 1.7 million Spaniards were involved in an accident of this type, which means almost 4 out of every 100 individuals. The most frequent accidents are falls (44.1%) followed by crushing, cuts and wounds (22.6%) and blows and collisions (13.0%).

In Spain 71.3% of men and 64.8% of women deem their health to be good or very good, compared to 67.8% and 61.7% respectively in the EU countries as a whole. In all

[1] EU-15: The 15 states forming the European Union since before 2004.

countries the percentage of men who consider their health to be good or very good is greater than in women.

Over the past 20 years, the percentage of smokers has declined (it was 29.5% in 2006-2007 and 34.5% in 2001), while there has been a slight increase in alcohol consumption (56% in 2006-2007). Men smoke and drink more than women do. With regard to drug use, the use of psychoactive substances is decreasing, with the exception of cannabis and cocaine, which show a slight increase.

A high proportion of the adult population leads a sedentary lifestyle, especially young people and the elderly, and rates are higher among women, although a downward trend has been observed in the last few years. Finally, the population's obesity rates are rising. They are somewhat higher in men and tend to increase with age.

Institutional description and analysis

The year 2009 was characterised by the change in the organic structure and responsibilities of the Ministry of Health and Consumer Affairs, which became the Ministry of Health and Social Policy. The new ministry is responsible for health and consumer affairs and also for social policy, family matters and dependence.

The Interterritorial Council of the SNS (hereinafter, CISNS) held eight plenary sessions, of which four were devoted exclusively to the situation arising from the Influenza A pandemic. Another extraordinary session was held to address the subject of the need for specialists in the SNS during the period 2008-2025. In addition, 108 meetings of commissions and working groups took place. The CISNS adopted 41 resolutions and prepared reports in regard to seven royal decrees and three ministerial orders. It also made reports regarding the COPD and rare diseases strategies and the evaluation and review of the cancer and mental health strategies.

The pluriannual health plan, which is the competency of each autonomous community's ministry or department of health, proposes health objectives and services, which are then put in practice through strategic or steering plans. The lines of strategy adopted by the autonomous communities can be grouped into three blocks: citizens' and patients' rights; clinical and quality management; plans and programmes regarding care for certain diseases and processes. Management plans or contract-programmes, which are present under different names in all autonomous communities, define the annual objectives, the budget, evaluation procedures and incentives.

The commitments laid down in the contract-programmes, or management plans, are undertaken in most cases between the autonomous community's Regional Ministry of Health and the Regional Health Services. The main issues addressed are economic aspects, clinical management, accessibility, care continuity, quality and the introduction of information systems.

As regards financing, budget allocation based on expenditure in previous years still plays a very important role, although the tendency is to correct this situation by incorporating components of capitation, complexity (in the case of specialised care) and the characteristics of the benefit basket.

Evaluation is usually performed by central bodies that use information systems with predetermined indicators, although self-evaluation procedures are also used. The most frequently used indicators are expenditure and budget compliance, the rational use of pharmaceuticals and the extent of service package implementation and coverage. Other indicators reflect the referral of patients to specialised care and the control of waiting lists. Variable productivity is a constant in primary care, while it is more unevenly

distributed in specialised care. Evaluation results have repercussions on the professionals in several autonomous communities.

Public entities such as foundations and public enterprises, are also governed by contract-programmes with features similar to the ones described above. In them there is no real transfer of risk, because in the event of budgetary non-compliance, in the form of losses, the imbalances tend to be compensated by the autonomous community's Health Services. This is not true in the case of the private sector or administrative concessions.

The total expenditure of the Spanish health system in 2008 was 97.614 million Euros, which represents 9% of Spain's gross domestic product (GDP). Of this percentage, 6.5% was financed with public resources and 2.5% with private resources. In the 2004-2007 period health expenditure grew annually by an average of 9.1%. Public sector expenditure during this period increased by 9.9% while private sector expenditure increased by 7.2%. The share of public and private expenditure in the GDP has increased by 0.8 and 0.7 percentage points respectively.

Of the public expenditure, 55.2% corresponds to hospitals, 19.1% to pharmacy and 15.7% to primary care. Remuneration of the sector's workers accounts for 43.6% of the public expenditure, intermediate consumption accounts for 20.5% of the expenditure, followed by current transfers at 20.2% and contracts with the private sector at 11.1%.

The Health Cohesion Fund compensates autonomous communities for the care they give to patients from other autonomous regions and to foreign patients who are spending a short time in Spain and have health care coverage provided by their home country. The amounts paid for these items in 2009 were 67.9 and 28.0 million Euros respectively.

In 2009 the autonomous communities received 26.7 million Euros for the funding of health strategies, patient safety, interoperability and information systems.

Resources and care activity

SNS primary care is provided through a structure of 157 Health Areas and 2714 Basic Health Zones, which have 2954 health centres and 10,207 local health facilities. Between 2007 and 2009, the number of employees working at the care-giving level of SNS primary care rose in all professional categories. This represents an increase of 3.19% all together, the growth being somewhat larger in the case of nursing staff (4.98%) than in that of family medicine (3.69%). The average number of people assigned per professional is 1,408 for each family doctor, 1064 for each paediatrician, 1624 for each nursing professional and 2937 for each administrative assistant. In 2009 the greatest frequentation was observed in family medicine (5.6 visits per inhabitant per year), followed by paediatrics (5.3) and nursing (2.9).

All autonomous communities have their own way of organising non-hospital urgent care, based on emergency coordinating centres in operation 24 hours a day, every day of the year. Also, the primary care network responds to urgent care needs during normal working hours. Outside of normal working hours, non-hospital urgent care is structured as follows: some Health Centres stay open 24 hours a day, with the Out-of-Hours Care Site (PAC) being the most frequent type; there are also dedicated facilities exclusively for urgent care, called the Urgent Primary Care Service (SUAP), Normal Urgent Care Services (SNU) or Special Urgent Care Services (SEU).

The vast majority of the specialised care resources in Spain are found within the SNS, which also performs most of the activity in the sector, especially in the areas of hospitalisation, obstetrics, consultations and urgent care. Recent years have shown a confirmation of the trend towards the ageing of the population attended, the reduced use

of hospital beds and displacement of activity towards ambulatory settings. These changes respond to demographic factors, technological advances and the habits and expectations of the population. Of all the associated factors, the only one that shows an alteration with respect to the trend observed over the previous two decades is that of natality, which, following a pronounced decrease, is again on the rise, as reflected in the growing number of births attended since 2000.

In 2009, of all the hospitals in operation (804) slightly over 40% belonged to the SNS and in 2008 of all the private hospital discharges over 37% were financed by the SNS. Of the total number of beds (160,981), 71.8% are in the public network, and for the entire sector the number of beds per 1000 inhabitants is 3.53. The progressive shift towards ambulatory specialised care has led to a significant increase in the number of day hospital places, which in the public sector has grown from 4375 beds in the year 2000 to 8475 in 2008; a similar phenomenon has occurred in the private sector, where the figure has risen from 1200 to 2518 beds during the same period.

Frequentation in 2008 was 90 admissions for every 1000 inhabitants. A total of 26.2 million urgent care needs were attended by hospitals, 80% of them at public hospitals. Almost one third of the 4.5 million operations were performed in private hospitals, although more than 30% of the major outpatient surgery performed in private hospitals was paid for with public funding. In 2008, three out of four operations involving the 15 most frequent surgical procedures were performed in an ambulatory setting.

Among the causes of hospitalisation, first place is problems related to pregnancy, childbirth and puerperium, followed by circulatory system diseases, digestive system diseases, respiratory system diseases and neoplasia.

The SNS designates Reference Centres, Services and Units (CSUR) as a means to guarantee equitable access and high-quality, safe and efficient care for patients with infrequent pathologies or who need highly-specialised care or care involving advanced technology. Royal Decree 1302/2006 lays down the procedures for the designation and accreditation of the CSUR-SNS. In 2009 a total of 68 facilities received CSUR designation by the Interterritorial Council and began operating as such. They are distributed throughout ten autonomous communities. Over the course of the year the designation committee of the Interterritorial Council evaluated 88 new applications for CSUR status.

Spain's National Transplant Organisation (ONT), created in 1989, is an autonomous body of a technical nature attached to the Ministry of Health, Social Policy and Equality. Its main objective is to promote donation, for the sole purpose of giving Spanish citizens in need of a transplant the very best chances of obtaining it. Its mission is to co-ordinate and facilitate the activities of donation, extraction, preservation, distribution, exchange and transplant of organs, tissue and cells within the Spanish health system, in accordance with the principles of co-operation, efficiency and solidarity. Since the creation of ONT, Spain has moved from the average-to-low segment of European donation rates, with 14 donors per million population (PMP), to the levels of 33-35 donors PMP that have been constant in recent years.

The term *"the Spanish Model"* is used worldwide to refer to the set of measures put in place in Spain to improve organ donation by deceased donors; it comprises a basic framework that is suitable from the legal, ethical, economic, medical and political perspectives. The basic aspects defined by this model are:

— a network of co-ordinators
— a programme to improve the quality of the organ donation process

— ONT central office, which acts as a service agency in support of the entire system
— special emphasis on ongoing training
— reimbursement of hospitals for the activities of obtaining and transplanting organs
— working with the media to increase the population's level of knowledge about donation and transplants
— appropriate legislation

Since ONT's creation, 73,855 organ transplants have been performed in Spain, 4028 of them in 2009. That year in Spain the number of organ donors was 1606, which represents a rate of 34.4 donors PMP. In addition, in the 20 years that the ONT has been in existence, over 300,000 cell or tissue implants have been performed in Spain, thanks to which over 12,000 people benefit every year from the application of some type of tissue of human origin.

Public Health

In 2009 various projects related to health promotion were undertaken in conjunction with the Ministry of Education and Science, and numerous activities were co-ordinated jointly with the Spanish Network of Healthy Cities and the Spanish Network of Healthy Universities. SNS activity on the international level has centred on the permanent forums of the WHO and the EU on the subjects of violence prevention, inequality, healthy prisons and social determinants. Two documents on health education were published; one is about the quality criteria of health promotion programmes in schools and the other is a guide to improving health programmes at schools.

In 2009 the SNS continued its efforts in the EU and WHO strategies to reduce alcohol-related harm and in the modification of Law 28/2005 on health care actions to curb smoking. All autonomous communities have taken steps towards the implementation of plans to prevent the use of tobacco, alcohol and other drugs. There has also been a collaborative effort with the National Traffic Authority (DGT) to develop a new Strategic Plan on Road Safety, which will be finished in 2015.

Also this year, following the WHO's declaration of the public health emergency resulting from the influenza A (H1N1) pandemic, and in co-ordination with the autonomous communities, protocols were developed to guide action in relation to influenza A. Also, the National Plan for Influenza Preparation and Response was activated throughout the country. A co-ordination plan for the transfusion system was published in relation to the influenza A (H1N1) pandemic, along with recommendations regarding the Creutzfeldt-Jakob disease variant and Chagas disease. The vaccination programme and register in place throughout the country has made it possible to achieve primary vaccination coverage greater than 95% for the basic series and hepatitis B, and greater than 97% in the case of meningococcal group C immunisation.

The data from the last period analysed, 2008, indicate that the rate of new AIDS diagnoses in Spain is at a level similar to that of other countries in Western Europe and that HIV is currently being transmitted mostly by unprotected sexual contact. It has also been observed that more than a third of the new diagnoses are among the immigrant population, which makes it necessary to diversify prevention programmes and adapt them to the needs of this group, which is socially and culturally heterogeneous and

especially vulnerable. In 2008, all autonomous communities carried out prevention activities with their own funds and also with funds transferred from the MSPSI, for a total amount of 32,437,480 Euros. In addition, NGOs working in this field carried out a high number of actions, largely funded by the MSPSI.

The REACH regulation concerning the registration, evaluation, authorisation and restriction of chemical substances, in the area of human health, went into effect in 2009. A total of 90,161 chemical substances were pre-registered, having been presented by 2289 companies.

The SNS took part in the UNICEF research project on the indicators of child well-being in Spain and also, as part of the National Strategic Plan on Children and Adolescents, in working groups on child abuse and on social inclusion and peaceful co-existence.

In 2009 the Quality Plan for Border Health Control was further consolidated. There has been an exponential increase in import and export authorisations for biological samples to be used for research purposes (RD 65/2006). The Health Alert System of the Border Health Control department reported 274 health incidents to the International Vaccination Centres (IVCs). The Health Product Surveillance System and the Rapid Alert System for Food and Feed (RASSF) registered an increase of over 300 incident notifications with respect to the previous year.

In 2009 the Co-ordinated System for Rapid Information Exchange (SCIRI) processed a total of 3130 cases related to food products, of which 186 were alerts, 1484 were informative and 1413 were product rejections.

In addition, the third NAOS (Strategy for Nutrition, Physical Activity and the Prevention of Obesity) Convention was held this year and the NAOS Strategy Awards made its third call for submissions. This year the preparation began of preliminary reports for use in the plan to reduce salt intake, to study the nutritional quality of food served by schools and to design indicators regarding diet and physical activity. An agreement on protecting children from excessive advertising was signed with the Federation of Radio and Television Networks of the Autonomous Communities (FORTA) and the Union of Associated Commercial Television Networks (UTECA).

The data gathered at schools participating in PERSEO, the school-based Programme for Health and Exercise against Obesity (which were chosen for their high obesity rates) indicated that obesity affects 19.8% of the boys and 15% of the girls there. Also, the data regarding sedentarism revealed that 13% of the children never play sports, and almost 10% of them play sports for only one hour per week. Educational initiatives have been put in place in the academic year 2008/2009, in order to inform children and families of the importance of getting enough exercise and eating right.

Pharmaceuticals and health products

In 2009 the Spanish Agency of Medicines and Health Products (hereinafter AEMPS, for its acronym in Spanish) carried out the following interventions in relation to pharmaceuticals for human use: a total of 1165 new pharmaceuticals were evaluated and authorised, 15,557 variations of already-authorised pharmaceuticals were evaluated, 738 pharmaceuticals were temporarily suspended or had their authorisation withdrawn, 15,099 suspicions of adverse reactions were notified.

With regard to AEMPS activity in the area of health products, in 2009, 138 authorisations were granted to new companies and 364 certificates of European approval

of health products were issued. In terms of market monitoring, 109 cases of non-conformity were detected, out of a total of 283 interventions.

Spain is one of the OECD countries in which pharmaceutical expenditure (not including that of hospitals) represents a large proportion of the health expenditure, with a figure of 20.5% in 2008. Other countries with high figures, similar to that of Spain, include: Portugal (21.8% in 2006), Greece (24.8% in 2007), Poland (22.6% in 2008) and Japan (20.1% in 2007).

In contrast, in Norway pharmaceutical expenditure was just 7.6% of the total health expenditure in 2008, making it the country where this item has the lowest specific weight in the health expenditure as a whole. A similar pattern is shown by countries such as Denmark (8.6% in 2007), United Kingdom (11.8% in 2007) and the United States (11.9% in 2008). In an intermediate position are countries such as Sweden (13.2% in 2008), France (16.4% in 2008) or Canada (17.1% in 2009).

While pharmaceutical expenditure through SNS-funded prescriptions still constitutes a large part of the total health expenditure, the figure has decreased in recent years. In 2008 it was 17.96% (this does not coincide with the figure cited in the paragraph above because the OECD data includes the costs of long-term units and the expense of prescriptions funded by civil servants' mutual funds). Pharmaceutical expenditure experienced rapid growth up through 2003, but since 2004 its growth has been more moderate, with the lowest increase being recorded in 2009, when the figure was 4.47%. One of the measures contributing to this containment of pharmaceutical expenditure is reference-based pricing, since this system promotes the use of generic medicines (which have a considerably lower price than brand-name medicines) and tends to keep pharmaceutical prices down. In 2009 consumption of generic packs was 24% of total pharmaceutical consumption.

Antiulcerants: proton pump inhibitors were the most widely used subgroup in 2009, with a DDD/1000/day of 106.07, due to the prevalence of disorders that respond positively to these medicines. It is worth noting that this group has experienced significant containment in its daily treatment cost, the 2005 figure of 0.58 Euros fell to 0.35 Euros in 2009. Hypolipidemic agents: HMG CoA reductase inhibitors, used to treat hypercholesterolaemia, also have a high DDI, 64.93. This is the sub-group on which the most money was spent in 2009.

In terms of consumption by active ingredient in 2009, Omeprazole is the most widely-used active ingredient, with a DDI of 84.42. Atorvastatin is the active ingredient on which the most money was spent and it represented almost 5% of the total retail value of all pharmaceuticals.

In 2009, 22% of the consumption in packs was marketed by just five pharmaceutical laboratories and in terms of cost, these five laboratories invoiced 28% of all the pharmaceutical sales through SNS medical prescriptions. The total number of dispensing pharmacies collaborating in the provision of pharmaceutical benefits was 21,153. Dispensing pharmacies had average monthly sales of 54,566 Euros from medical prescription invoices financed by the SNS.

In 2009 the number of pharmaceuticals incorporated into the public financing system, for inclusion in the SNS pharmaceutical benefits package, was 1618, of which 73% were generic medicines. As of 31 December 2009, the total number of pharmaceuticals included in SNS public financing was 19,820. Of these pharmaceuticals. 14,964 are on the positive list of products that can be invoiced to the SNS and are the ones that can be prescribed with SNS medical prescriptions.

Quality

In 2009 the SNS took stock of the activities undertaken in connection with the SNS Quality Plan 2006-2010, including the proposals for 2009 and 2010. For the Quality Plan 2009 a total of 43,915,130 Euros were allocated, earmarking 14,750,000 Euros for actions aimed at reducing health inequalities and 1,170,000 Euros for projects related to increasing healthy lifestyles, obesity prevention and the promotion of physical exercise, among others.

Especially worth noting among the actions of the Quality Plan 2009 are the first population-wide survey on sexual health in Spain, the *Health and Gender Report 2007-2008* on men and women in the health care professions and the *SNS Annual Report 2008*, a collaborative project with the autonomous communities and INGESA.

Numerous courses were held to train professionals in the matters of patient safety and risk management, and also in a prototype of an adverse event notification system, so that assessment of its suitability and functioning can take place in 2010. Also, the Citizen Network of Trainers in Patient Safety was created, to serve as a training and information tool. Nine million Euros were allocated to promote safe practices related to the hand hygiene programme and the bacteriemia zero programme, among others.

To promote clinical excellence a metasearcher was developed and the *"Guía-Salud"* project was consolidated. In addition, continued funding was allocated to ensure access in Spanish to the Cochrane Library and the Joanna Briggs Institute Library, and also for health technology assessment in research projects made possible by the Carlos III Health Institute. Support was also given to the Platform of Health Technology Assessment Agencies and Units.

Four documents on quality and safety standards and recommendations were prepared and 48 SNS Reference Centres, Services and Units (CSUR, for their acronym in Spanish) were accredited. In addition, 183 audits were performed on teaching centres and units, as part of the annual Auditing Plan 2009.

The SNS Diabetes and Mental Health Strategies were evaluated and the first steps towards evaluation of the Palliative Care Strategy were taken. A total of 10,715,750 Euros were allocated to fund actions by the autonomous communities in relation to the SNS strategies on ischaemic heart disease, cancer, mental health, palliative care, COPD, stroke and rare diseases. Also subsidies in the amount of four million Euros were granted to the autonomous communities to fund the implementation of the SNS Palliative Care Strategy. Preliminary work began on the SNS Sexual and Reproductive Health Strategy.

A new framework agreement was signed with the Ministry of Industry, Tourism and Trade and with the public enterprise Red.es, for the amount of 101.6 million Euros, which will be used to develop the on-line health project during the 2009-2012 period. The MSPSI contributed 46.6 million Euros and the project involves agreements between each autonomous community, the MSPSI and Red.es. In addition, interoperability projects in the autonomous communities were funded, in the amount of 13.9 million Euros, by the Cohesion Fund, with the funds it has earmarked for health strategies.

The SNS Key Indicators were selected and defined, with improvements to the information subsystems related to health status, the health care system and citizen satisfaction. In addition, the electronic information and on-line consultation tools have been reinforced, through e-bulletins for professionals containing news, patient safety items and information about impact.

To gather information about the best practices being used throughout Spain, each autonomous community was asked to report on a maximum of three best practices that it has implemented. The autonomous communities highlighted 23 best practices in the area of care-related projects, eight in the area of ICT, six in the area of prevention and health promotion, five in the area of quality, three in health care management and two in the management of social health care services. All of them are described in this SNS Annual Report.

In 2009, the Third Annual SNS Quality Awards were also presented. Awards went to 11 projects, selected from a total of 164 that had been submitted for consideration. Each of them received a monetary prize of 38,741.58 Euros. In addition, special recognition, but no monetary prize, was given to Dr. Alfonso Castro Beiras, in gratitude for his career dedicated to care quality improvement.

Equality initiatives

In 2009 the WHO final report on social inequalities in health ("*Closing the Gap in a Generation*" by the Commission on Social Determinants of Health) was presented in the event hall of the MSPSI. Also that year the first draft of a proposal for interventions to reduce social inequality in Spain was drawn up by the national commission of experts on this topic. In addition, work began on the project *"Innovation in public health, monitoring social determinants of health and reducing health inequalities."* The project report served as support for the conclusions drawn during the Spanish Presidency of the EU 2010 on this priority issue. All of the autonomous communities are taking action to reduce social inequalities in health, especially those affecting disabled persons, immigrants and the Roma community. At the municipal level, the Spanish Network of Healthy Cities now has 150 member cities, all of which have their own municipal health plan. Forty-nine Spanish cities have 53 specific projects on disadvantaged groups.

In the framework of the National Strategy on Equity in Health, which targets the Roma community, a study that compared the national health surveys conducted on the general population and those that specifically study the Roma ethnicity was presented. It concludes that health inequalities affect the Roma community and that the source of many of them are the group's social determinants.

The health area of the Strategic Plan on the Citizenry and Immigration published three reports: *"Report on infectious diseases imported by immigrants residing in Spain who travel for a short time to their countries of origin," "Report on Chagas disease in Latin Americans residing in Spain,"* and *"Report on basic strategies for addressing infectious diseases in immigrants, travellers and travelling immigrants."*

The aim of prison health services is to protect the health of those who are serving custodial sentences, to ensure that incarceration does not have a detrimental effect on their health. The prison health services must follow the same quality standards as the SNS uses for the general population, and to do so they have signed collaboration agreements with various health services. The prison population has the following specific characteristics: most inmates come from socially disadvantaged groups, with low levels of education and few job skills. In 2008 there were a total of 8187 admissions to penitentiary hospital beds, with an average stay of 79 days. The number of admissions to public hospitals was 4797, with an average stay of 7.0 days. As regards specialised care consultations in public health care facilities, 52,711 visits of this type took place. The most significant public health problem in prison health is caring for inmates with mental health disorders: up to 40% of the prison population suffers from some type of mental

health disorder, half of these cases are related to the use of psychoactive substances, and as many as 4% have a serious mental illness.

In 2009 the *Annual Report on Gender Violence* for the year 2008 was presented. The report reveals that rates of death caused by gender violence vary both by province and by autonomous community. In terms of age groups, the greatest risk is faced by women between 21 and 50 years of age. A total of 5766 health care workers attended training activities on this subject during 2009. Most of them were professionals in the primary care sector. Furthermore, all of the autonomous communities have implemented protocols for action in response to gender violence.

In 2009 the national survey on sexual health was carried out, in collaboration with Spain's sociological research centre (Centro de Investigaciones Sociológicas - CIS), with sampling points in 789 municipalities and 52 provinces.

The institutional and expert committees of the Strategy for Attending Normal Births created working groups to focus on the following issues: pregnancy, neonate and puerperium; indicators and registry systems; professional training; labour and delivery; and dissemination and implementation. In addition, the Clinical Practice Guide for Attending Normal Births and the Standards and Recommendations for Childbirth Care in Hospitals were published.

Clinical information management

The early results of the project known as Electronic Health Records in the SNS (EHR-SNS) include the effective incorporation of Comunidad Valenciana, Baleares and Rioja into the pilot stage already underway, and Spain's joining the International Health Terminology Standards Development Organization (IHTSDO).

In 2009 the main achievements of the project working groups were the following:

- The working group on standards and technical requirements prepared a consensus document on the area of standards policy and the technical proposal for the pilot testing.
- The advisory group on semantic interoperability issued a recommendation in favour of using SNOMED Clinical Terms®, and the Ministry assumed the role of national reference centre for SNOMED and the free distribution in Spain of the international version.
- The group of autonomous communities that will be participating in the pilot testing approved the method developed for evaluating both the use of the system by professionals and the perception of the system by its users.

The epSOS project, which is financed by the European Commission, focuses on achieving interoperability through the services of electronic prescription and patient summaries. In 2009 two autonomous communities, Comunidad Valenciana and Baleares, became part of the project, joining the ones already participating: Cataluña, Castilla-la Mancha and Andalucía.

The SNS Data Centre, or central node, is the hardware and software infrastructure that facilitates the exchange of information, both administrative and clinical, among the different agents of the SNS: MSPSI, autonomous communities, insurance mutuals and other stakeholders, such as the Social Security Treasury Office and the Ministry of Justice. The Data Centre is also connected to the institutions of the other states participating in epSOS. The MSPSI is responsible for maintaining network capacity,

availability and security. Communications take place through the Health Intranet, which has been in operation since 2003 and provides a private network capable of meeting the high levels of security, availability and service quality that are required. In 2009 an average of 350,000 messages were exchanged every day. The services performed are the following:

- Health card user database.
- Programmed referral of patients to reference hospitals.
- Living will registry.
- Registry of health professionals.
- Processing of invoices from dispensing pharmacies and pharmaceutical monitoring.
- Incorporation of new services related to electronic prescription EHR-SNS and the epSOS project is foreseen.

Professional regulation and training of health care personnel

In 2009 further attention was devoted to human resource planning in relation to specialist needs, as this is one of the biggest challenges in ensuring the continued availability of quality health care. The report on the supply and demand of medical specialists in Spain between 2008-2025 was published ("Oferta y Necesidad de especialistas médicos en España 2008-2025[2]"). In addition, the Ministry assumed responsibility for recognising professional qualifications obtained in other European Union member states.

As regards training, seven programmes that provide training in the specialties of the health sciences were updated (programas formativos de especialidades en Ciencias de la Salud[3]) and new programmes were approved for the specialties of Occupational Health Nursing and Geriatric Nursing.

The number of places in the 2009-2010 call for participation in the selective exams to access specialised training programmes indicates that the upward trend continues, especially in specialties with greater needs for professionals. Another novelty was the accreditation of Multiprofessional Teaching Units (Unidades Docentes Multiprofesionales – UDM) and the beginning of the application process. These centres will train specialists who, although they have completed different degree programmes, choose to pursue related care-giving fields.

Similarly, participation in the selective exams to access the specialised health care training places (corresponding to the 2008-2009 call for participation), confirmed the trend observed in recent years: stable growth in the number of candidates who registered for and took the exam in relation to the number of places available, in the degree of feminisation and in the number of candidates from non-EU countries.

The Commission of Ongoing Training in the Health Professions continued to works towards the application of the accreditation system, with 36,520 accredited training activities. Worthy of special note among such activities is the course on *Radiological protection for professionals who perform interventional radiological procedures*, which 469 professionals have successfully completed.

[2] Specialist training programmes. [http://www.msc.es/profesionales/formacion/guiaFormacion.htm]
[3] See footnote 2.

Research in the SNS

The Spanish System of Science and Technology has three planning instruments: the National Science and Technology Strategy; the National Plan for Research, Development and Innovation; and the Annual Work Plan. Within the 6th Annual Work Plan, the Strategic Action in Health (AES, for its Spanish acronym) is a comprehensive and horizontal group of actions aimed at generating knowledge with which to protect the health and well-being of the citizenry and to further develop the preventive, diagnostic, curative, rehabilitative and palliative aspects of ill health. At the same time it is designed to enhance competitiveness and RD&I capacity in the SNS and in companies associated with the sector.

One of the functions of the Carlos III Health Institute is to plan and manage the biomedical and health sciences research programmes included in the Strategic Action in Health. Its instrumental lines of action and subprogrammes are as follows:

1. Action in the area of human resources
   - Training and mobility
   - Hiring and incorporation
2. Action in the area of projects
   - Health research projects
   - Research projects in health technology assessment and health services
3. Action in science and technology infrastructures

The training and mobility subprogramme includes predoctoral grants for health research training. In 2009 a total of 62 grants were given, for a total of 967,200 Euros. In addition, 10 applications seeking predoctoral grants for training in health research management were approved, for a total of 156,000 Euros, along with 37 grants for study visits, for a total amount of 389,300 Euros. Within the hiring and incorporation subprogramme 51 postdoctoral contracts "Sara Borrell" were funded, totalling 1.8 million Euros, as were 34 SNS research contracts "Miguel Servet," for a total of 2.5 million Euros. This subprogramme also financed the hiring of research support technicians in the SNS, for a total of 963,500 Euros.

The subprogramme for health research projects has provided subsidies to 656 R&D projects, in the amount of 70.4 million Euros, and 15 INTRASALUD projects were also funded. These funds (6.7 million Euros) went to consolidated groups carrying out transnational health research. Also in 2009, 6.9 million Euros were used to fund 144 projects devoted to health technology assessment.

In 2009 the line of action focused on infrastructure awarded 35 grants for the acquisition of science and technology infrastructure, for a total value of 8.4 million Euros.