Summary

The contribution of the health system to the welfare state

The Spanish economy with a Gross Domestic Product (GDP) of 1,063,591 € millions in 2010, takes the fifth place on the ranking of European Union Countries (EU) and the eighth one of the OECD countries. The average GDP per person is 23,100 Euros, which means a 94% of the mean of the EU countries and the 87% of the average of the OECD countries.

The public sector in Spain represented in 2010 the 45% of the overall economy and has recorded a rising evolution during the preceding years as a consequence of the GDP shrinkage and of the stabilizer role of the State faced with the recessive period which started in 2007. Our country allocates a 66% of the public expenditure to the benefits of the Welfare State, the 27.3% of the GDP. This GDP percentage means 4.1 percentage points below the European average, from which 3.6 are due to the expenditure differential in social protection and the 0.5 to the expenditure differential in education.

The healthcare given in the frame of the social protection to maintain, restore or improve people's health, means the 31% of the public expenditure in social protection, which is similar to the percentage expended by the whole of EU countries.

The health sector represents in Spain a 9.5% of the GDP: the public expenditure is a 7% of the PIB and the private one is placed in a 2.5% of it. The effort done by Spain in public health care since the year 2004, follows a rising tendency. From a level of the 5.8% of the GDP in 2004, it has reached to the 6.1% in 2007 and to the 7% in 2009.

The National Health System (NHS) represents the 3.2% of the overall turnover of employment in the Spanish economy and the 63.2% of the total employment of the health sector, which in a whole employs the 4.9% of the working population in Spain.

The annual mean growth of health expenditure in the period 2005-2009, has been a 7.4%. The public expenditure has a rate of 8.6% and the private one the 4.5%.

Share of the public health expenditure over the total numbers, during this five year period, has passed from the 70.6%, in 2005, to the 73.6% in 2009. In the public sector the expenditure in hospitals is more than 2.5 times than that of the providers of outpatient healthcare, whereas in the private sector the relation is just the opposite because the private expenses in hospitals is only one fifth of the out-patient services. A 65.5% of the hospital-related services in the private sector are funded by the public sector through agreements.

In the scope of the public sector the 55.9% of the expenditure is directed to specialized services, the 19.2% to pharmacy and the 14.9% to primary care. In 2009, a 44.3% of the expenses were to personnel payments, a 20.9% to current transfers and a 10.5% to agreements.

The year 2010 has been the first one in which autonomous regions were compensated for the matters of healthcare to resident patients in Spain, derived from the autonomous regions in order to being looked after in centres, services and reference units (CSUR)of the NHS and by health care in guided use of the surgical procedure for facial lipoatrophy associated with the HIV-AIDS, through the Fund for the cohesion of health. The distributed amount for Fund in payment for these matters and for the care to out of place patients with charge to other estates, summed up nearly 114 € millions.

Compared health indicators of Spain

Spain presents the highest life expectancy of the EU-15, reaching 84.9 years in women and the

78.6 years in men, in 2009. Infant mortality is one of the lowest in Europe (3.3 deceased for 1,000 live births), and it was kept in decline for the last decade. The general decease rate is one of the lowest in Europe, with 520.1 deceased per 100,000 inhabitants. Cancer is the first cause of death (153.2 deaths per 100,000 inhabitants, in 2009), followed by cardiovascular diseases (149.9 / 100,000 inhabitants).

The health status perceived by Spanish people is, in general, positive and shows an intermediate value in the European context. In the same position is placed the degree of physical limitation in daily activities, where approx. 1 of 5 Spaniards have suffered moderated limitations and around the 5% have suffered severe limitations.

Related to contagious illnesses, Spain is one of the countries with a higher prevalence due to HIV infection. However, this matter also shows one of the biggest decreases in the impact of new HIV diagnosis (from 7.7 to 2.3 / 100,000 inhabitants, from 1999 to 2009), while showing incidence rates comparatively high. As the prevalence as the incidence of tuberculosis have descended in the last decade. Despite this, Spain is the second country in prevalent cases (19 / 100,000 inhabitants) and incidents (17 / 100,000 inhabitants).

Regarding non communicable diseases should be noted that, as in the whole of Europe, the incidence of cancer is rising in Spain, being colon cancer the most frequent in both sexes (30.4 new cases / 100,000 inhabitants), breast cancer (61 cases per 100,000 women) the most common in women, and prostate cancer (57.2 cases per 100,000 men) the most common in men. The prevalence of diabetes is intermediate (6.6% of the population), but the incidence of type 1 diabetes in children aged 0 to 14 is one of the lowest in Europe (13 per 100,000 inhabitants, in 2010).

Smoking, alcohol and obesity are risk factors prevalent in the Spanish population. Although the percentage of smokers increased from 33.2% in 1999 to 28.1% in 2009, Spain remains one of the countries with the highest number of smokers in the European context. With regard to drinking, Spain has an average consumption of 10 liters per person per year, down significantly over the last decade, in contrast to the trend toward moderation in the whole of Europe. In Spain, 48.5% of the population has a weight inappropriately high (35.4% show overweight and 13.1% can be considered obese), reaching an intermediate value in the context of the EU-15. However, Spain is at the top of the prevalence of childhood obesity.

Health expenditure in Spain is in the lower range of European spectrum (9.5% of GDP in 2009, 73% public funding), although the proportion of public expenditure per capita has doubled in the last decade (of $ 1,044 in 1999 to $ 2,259 in 2009). The allocation is in line doctors with that of other European countries (3.6 / 1,000 population), but lower in other health care professions.

By concentrating one of the lowest ratios of beds per 10,000 inhabitants (3.2) and an average stay in acute processes (6.4 days), Spain has the lowest number of

discharges (10.411 / 100,000 inhabitants) of the EU-15 together with a comparatively low attendance.

Regarding the performance of the NHS, avoidable mortality with health media in Spain is one of the lowest in Europe (74 deaths per 100,000 population) and shows a decreasing trend in recent years. However, mortality is high in acute processes (6.1% mortality post-MI) in relation to the lower European values (2.9%). In relation to the EU-15, Spain has a high rate of exacerbations of Congestive Heart Failure (233 admittances per 100,000 population), but low in the case of COPD (139.3 / 100,000), asthma (43.9 / 100,000) or complications of diabetes (18.1 / 100,000).

Finally, 81% of the Spanish rate their care positively and 70% consider comparable or higher quality than the rest of the member states.

Although Spain is located in the lower range in terms of health expenditure and resources of the entire EU-15, its position in the European context is remarkable in terms of life expectancy and mortality susceptible health care. With regard to performance, the indicators place Spain within acceptable ranges in the context of the EU-15. Spanish citizens are satisfied with their health care system positively valuing the European environment.

The main challenges in health focus on some risk factors (smoking, alcohol consumption and childhood obesity, among others), whose recent trends pose a challenge as to the health of the population as to the control of health spending.

Relevant information in the field of public health

During 2010, international coordination in the prevention and control of damage associated with the consumption of alcohol, injuries from external causes and violence has focused on the permanent forums of the WHO (63rd WHO's World Health Assembly) and the EU.

A significant fact is that traffic accidents are no longer the first external cause of death, going suicide to first position. The hospital-related morbidity caused by alcohol consumption in people aged 15 to 64 years has relevantly declined under the Minimum Data Set of Hospital Discharge (CMBDAH). In Spain injuries from external causes

were the sixth leading cause of mortality with 14,495 deaths. The deceased from traffic accidents have been reduced by 50% over the past 5 years.

Related with the information system on transfusion security it should be noted that in 2010, donation rate was of 39.3 donations per 1,000 inhabitants, which allows self-sufficiency for the nation.

The coverage of influenza vaccination in the elderly has fallen to 56.9% in the whole country, a significant decrease since in recent years the average rate was 65%. In recent years there has been a significant increase in the number of international travelers using the services of the International Vaccination centers, however over 80% of travelers on a trip to countries with health risk don't go to these centers.

The infant immunization coverage reaches 95% in the whole country, for at least 10 years, in the primary series of vaccination which includes vaccinated children from 0 to 1 years old with three doses of polio, diphtheria, tetanus, pertussis, Haemophilus influenzae b and hepatitis B.

In 2010, it was approved the new "Act on sexual and reproductive health and voluntary pregnancy termination" (VPT). The available data (year 2009) on the number of VPT in women under 20 years, shows a decrease from the previous two years (2007 and 2008).

In environmental health the work to implement EU legislation aimed at protecting environmental health risks has continued. According SINAC (Water Consumption Information System) the quality of drinking water was suitable in 99.5 of the notified analysis reports. Last year autonomous regions reported data to the National Plan for Preventive Actions against the effects of excess temperatures (15 deaths attributable to heat stroke).

The Centre for Coordination of Health-related Alerts and Emergencies (CCAES) intervened in 32 alerts, 16 national and 16 international. Foremost among these is the measles outbreak in Bulgaria and related cases detected in Spain, the equine fever outbreak due to Western Nile virus and two human cases: the first indigenous case of malaria and the outbreak cases of virus infection for hepatitis C in Scottish patients treated at a haemodialysis centre.

In the Spanish Food Safety Agency (AESAN), the year 2010 was marked by the Presidency of Spain in the Council of the European Union, during the first half of the year. Spain has been for these months the head of the trio formed by the Presidencies in charge of Belgium and Hungary. This has influenced the development of a series of activities falling within a two-pronged program, strategic and operational, which is set with the other two presidencies. In food security terms, during the six-month presidency, the priorities of the Spanish government have focused mainly on further developing the regulatory framework in this area, specifically in terms of consumer information, new foods, dietary products and hygiene of foodstuffs. Another one of the priority strategies in this period, given the impact that obesity has on health and the growing escalation of it in recent years, was to continue and give fresh impetus to plans to combat obesity as set out in the White Book on Nutrition, Overweight and Obesity of the European Commission. It is also noteworthy the approval with the initiative of Spain of the Council Conclusions on Action to reduce salt intake in the population and improve their health.

One of the major achievements last year was the preparation of the National Plan for Official Control of the Food Chain (2011-2015), as established by Community legislation, as a basic tool for planning and security coordination in the food chain in collaboration with the Ministry of Environment, Rural and Marine Affairs (MARM), Ministry of Health, Social Policy and Equality, and the autonomous regions and cities with autonomous status, as well as the later approval both in the Sectorial Conference of the MARM and in the AESAN Institutional Commission, and also its subsequent submission to the FVO (Food Veterinary Office). Progress was also made in a key objective of the Agency, the Council of Ministers approved in September 2010 the draft Law on Food Safety and Nutrition, which unifies the law on food and nutrition matters with the aim of strengthening the security of citizens in relation to food. Thus, Government fulfils a commitment made with the citizens and included in the objectives of the Food Safety Strategy 2008-2012.

In 2010, the AESAN Scientific Committee has been renewed. This Committee under Article 4.4.a) of Law 11/2001, dated July 5, by which the AESAN is created, is the organ of the Agency that assumes the functions of that body to provide scientific advice on food security issues, define the scope of the research works necessary for its

functions and coordinate the work of the expert groups that carry out risk assessment in the framework of the activities of the Agency.

Quality in the National health System

In 2010, 198 projects aiming the autonomous regions were financed for the implantation of the strategies on health matters of the NHS, with an amount of 10,725,599 Euros. Besides, for the development of palliative care related projects 3,069,988 Euros were destined. Palliative Care-related strategy was evaluated, being updated for the period 2010 – 2013. This strategy was also introduced and approved by the Inter-territorial Board among the autonomous regions of the NHS, the update of the Strategy on Mental Health 2009 – 2013 and the Cancer strategy was edited in online format.

For the promotion of clinical excellence the project Health Guide has been enhanced, extending the consultancy on elaboration, use, assessment and implantation of Clinical Practice Guides (GPC), funding the making of 8 new GPC. Also, the financial support of the access in Spanish to the libraries Cochrane and Joanna Brigg continues, as well as the broadcast and evaluation of the impact of the metasearch engine Clinical Excellence developed by the NHS Quality Plan. Agreements with the Agency for Evaluation of Health-related Technologies of the Carlos III Health Institute and with the evaluation units in the regions were maintained, financing 41 projects with a value of 3,543,000 Euros.

With regard to patient safety, has been developed the project “Bacteraemia Zero” in collaboration with the World Health Organization (WHO) and the Spanish Society of Intensive and Critical Care Medicine (SEMICYUS). After 18 months of implementation, results have shown a decline in the incidence density rate of 3.07 infections per 1000 catheter days to 1.12, representing a decreased risk by more than 50%. The project has involved all the regions, participating 197 ICUs (65%) and training more than 14,000 health professionals. In relation to NHS hand hygiene program, should be noted the celebration of World Day of Hand Hygiene promoted by WHO, registering 339 centres, 43% more than last year. As well, the project has also continued, as in previous years, holding numerous training courses for health professionals in patient safety and risk management, in addition to training through the

citizen Network of patient trainers, with 160 trainers at regional level. Economical aids have also been granted, worthing almost 300,000 Euros under the R + D + I National Plan (2008 - 2011) of projects related to patient safety and error prevention, the variability of clinical practice and perception, satisfaction and quality of life.

Along 2010, a total of 168 audits have been done, 86 for purposes of centres and teaching unit's accreditation for specialized training in health sciences and 82 other audits for NHS centres and reference unit's accreditation (CSUR-SNS) located in 34 hospitals. Making the docs for quality and safety standards and recommendations of 5 hospital units (sterilization central, renal replacement therapy, pain management, sleep and care assistance in the area of the heart).

Professional management and continuing education

Through 2010, concerning the planning of human resources for health have been published relevant documents, as internationally (WHO's Global Code of Practice on the international recruitment of health staff and Works and Conclusions of the European Counsel on investment in the health personnel of the future) as nationally (Study Paper on human resources needs in the NHS of the Committee on Health, Social Policy and Equality of the Senate and the non-legislative proposal on human resource planning in the health system, of the Committee of Health and Consumer Affairs of the House of Commons). These documents match with at the point where the planning of basic elements require counting on reliable and updated data of health professionals (record), health-related human resources training must be enhanced as well as to make better the work conditions of these professionals, as a strategy of loyalty and retention.

As well in Professional Management issues it was approved the Royal Decree 459/2010, of 16th April, by which conditions for the recognition for professional purposes of foreign degrees of specialists in Health Sciences are regulated, having being these degrees obtained in non-member states of the European Union.

As to Specialized Health Training, continued the Works for the development of the core training with work groups of the Human Resources Committee of the NHS and the National Council of Specialties in Health Sciences.

The official announcement for supply of places of specialized health training 2010/11, increased a 2%, reaching 8,421 places for training. Among the supplied places stands out the incorporation, for the first time, to the supply of specialized health training of specialties of family and community care nursing, geriatric nursing and pediatric nursing, through the accreditation of Multiprofessional Teaching Units, in which professionals of distinct degrees are trained, but whose activity fall upon care related fields.

Regarding to the development of the trials of access and award of training places kept in 2010 (corresponding to the Announcement 2009/10), there was a participation of 22,638 applicants and nearly the total seats available were awarded (8,089 allocated places of 8,094 convened).

During 2010, the NHS had 23,372 residents in training, of which the 88% were doctors. 5,694 new specialists complete their training, among them 1,379 specialists in family and community-related medicine, 279 specialists in anesthesiology and resuscitation and 326 specialists in pediatrics and its specific areas.

Actions on matters of continuous training of health professionals were captured in the clearance of 33,068 training activities, of which the 57.31% were aimed to health professionals with university degree.

Analysis of the pharmaceutical services

In the year 2004, the expenditure for pharmaceutical care in the NHS reached the 20.53% of the public healthcare expenses. In 2009, this percentage has held up to the 17.80%, reaching this number to 12,506 million Euros. The hard economical situation of our country forced to adopt in 2010 various provisions in order to guarantee a decrease of the state deficit and contribute to the sustainability of the public health system. These measures were carried out from the agreement of the Inter-territorial Counsel of the National Health System of 18th March 2010 and were made real in various legal provisions.

In summary, changes which took place in 2010 affected, among others, to the next aspects of pharmaceutical services:

— Generic medicines prices founded by the NHS were lowered.

— A more precise regulation of the discounts of the distributors for pharmacies offices was established.

— Setting and review system for medicine prices as well as the calculation method for the price of pharmaceutical products were modified.

— Reference prices system was enhanced.

— Dispensing margins of pharmacies offices as well as the scale of deductions for sales volume were updated. This scale will be a joint one including recipes from State Friendly Societies.

— Deductions on precise medicines given by the chemists offices and through purchase by the health services of the NHS were set.

— Prices of health products were reduced.

— Dispensation of unit doses and the procedure for centralized purchase of medicines and health products was regulated.

The whole set of these dispositions, attached to the actions suitable for each health service, had as a consequence that, for the first time since the establishment of the pharmaceutical services, happened a effective reduction of the pharmaceutical expenditure through medical prescriptions of the NHS, with a descent in 2010 of 2.38% over the preceding year.

Research in the National Health System

The General State Administration, covered by article 44.2 of Spanish Constitution, by agreement of the Cabinet Council of 14th of September 2007, approved the National Plan for Scientific Research, Development and Technological Innovation 2008-2011.

This Plan is the programming instrument which has the Spanish Science and Technology System and in which medium-term objectives and priorities of research and innovation are established. Into the field of strategic actions it can be found the Strategic

Action in Health (AES), whose target is preserving the health and the welfare of population.

Carlos III Health Institute (ISCIII) is one of the public organisations for research which manage this Strategic Action in Health and coordinates the study of the National Health System. The Institute has a twofold in the promotion of investigation, as executive agent of research in the same centres (Intramural Research) and as funding Agency of the whole State (Extramural Research).

The ISCIII obtained funding for 43 projects in calls for competitive bidding. Furthermore, ISCIII researchers participate in the 7 Cooperative Research Thematic Networks (RETIC) of the 22 existing ones. They also participate in four Consortia of Biomedical Research Network (CIBER): CIBER of Respiratory Diseases, CIBER of Epidemiology and Public Health, CIBER of Neurodegenerative Diseases and CIBERER, of Rare Diseases.

Extramural research has two distinct sections: owned extramural research and competitive extramural research.

Owned extramural research is the one funded not on a competitive tendering basis, but on strategic and structural decisions, providing pay for a range of institutions with legal personality, in which the Carlos III Health Institute co-directs and co-manages these projects. Among these actions we can highlight the Foundations Carlos III, the Centres for Biomedical Research Network (CIBER), the Consortium of Biomedical Research Support Network (CAIBER) and the agreements carried out with communities to establish Programs for stabilization of researchers and intensification of investigation-related activity in the National Health System. Currently there are 9 CIBER, with the participation of 397 research groups. The investment in this National Plan has been 134.05 million Euros. In the last three years, the contribution these CAIBER have received was 30 million Euros, and they have been equipped with 204 jobs.

Competitive extramural research is organized through the Strategic Health Action, which proposes the following lines of action: human resources, research projects, infrastructures, system coordination, institutional strengthening and

complementary reinforcing actions of the above. Each line is divided across different sub-programs and, where appropriate, modalities.

In the line of action of human resources have been funded 896 grants for the training of young researchers, with a total investment of 81 million Euros. The annual amount has been 27 million Euros, which corresponds approximately to 299 annual payments, with a gender distribution of 67.41% of women.

The number of Research Projects in Health has been increasing over the period 2008-2010, starting from 643 projects in 2008, to the 702 projects in 2010. If this amount is added to those projects funded in the call of Research Projects for Health Technology Assessment and Health Services in calls 2008 and 2009, the result is a total funding of 2,353 projects funded with an amount of 230.50 million Euros.

The NHS has been given 109 infrastructures by a value of 22.29 million Euros, through the Action Line of Aids for the acquisition of Scientific-Technological Infrastructures. Action Line of Joint System has a total budget for the triennium of 112.19 million Euros, distributed among the 22 existing Networks.

The line for institutional strengthening has promoted funding for those Institutes of Health Research (IIS) that have achieved excellence in their results, to promote their conversion or consolidate their position as international reference centres in the field of biomedical research, by granting these aids in a competitive basis regime.

Enhancement of the quality, efficiency and sustainability of the National Health System

The situation of economic crisis has forced a modification of the strategy for maintaining the same services with fewer resources. Summarising, health services have carried out actions in order to reduce expenses in all the subjects of the budget, but also measures aimed to improve the efficiency of the services, based on the upgrading of productivity. The latter require reshaping and enhancement of the quality. Adaptation to the new state of affairs has arisen in several aspects:

— Actions to sustain the quality of the services and improve shared responsibility of the citizens in the access to services. For instance, the

creation of high resolution centres, the integration of Primary and Specialized Care and the schools for patients.

— Changes on organization designed to develop efficiency. Some examples are the unified management offices of Primary and Specialized Care, the plans for the attention to specific diseases and the non attendance consultations among Primary and Specialized Care doctors.

— Improvements in the management of human resources. The salary reduction for all state employees have been complemented with the restrictions to new coalescences, amortization of vacancies and reduced overtime days.

— Upgrades in the management of goods and services, for reducing the current expenditure. For example, with centralized purchasing, improving logistics and contract renegotiation.

— Activities for boosting the rational use of medicines. Health services have boost electronic prescription, assisted prescription and prescription by active substance, among others.