

Country report Spain – February 2015



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Update on “**Prevention activities**”: “Declaration of Madrid 2018 for Health and the advancement of Tobacco Regulation in Spain” (see below)

I. Structure of Health care in Spain

With a population of 46.507.760 in 2013, Spain covers 505.955 km² and has the third largest surface area in Western Europe. The fertility rate is one of the lowest in the EU (1,27 in 2013). The inflow of migrant population in the last decade has had a demographic impact in rejuvenating a population that is otherwise rapidly ageing. Life expectancy in Spain is one of the highest in Europe, 85,61 years for women and 79,99 for men in 2013.

The statutory “Sistema Nacional de Salud” (National Health Service [NHS]) provides universal coverage and predominantly operates within the public sector. NHS is funded from taxes, and provision is free of charge at the point of delivery with the exception of the pharmaceuticals prescribed to people aged under 65, which entails a co-payment estimated according to the user income. Health competences were totally devolved to the regional level (Autonomous Communities) as from the end of 2002, this devolution resulted in 17 regional health ministries with primary jurisdiction over the organization and delivery of health services within their territory. The National Ministry of Health and Social Policy holds authority over certain strategic areas, such as pharmaceutical and public health legislation, and as a guarantor of the equitable functioning of health services across the country.

Everyone has equal access to these services, irrespective of the socioeconomic status. Equity is one of the best achievements of the Spanish NHS. The aim is to have a solidarity system where users pay taxes according to their incomes, in order to maintain a universal coverage system.

After the recent economic recession, Mariano Rajoy administration decided in 2012 to exclude illegal immigrants from the public health insurance, a decision that was contested by a large proportion of health professionals and other social sectors.

The Autonomous Communities financing scheme promotes regional autonomy both in expenditure and in revenue raising. Around 30-40% of the Autonomous Communities’ public budget is dedicated to health services. The typical structure of regional health systems consists of a regional ministry (Consejería de Salud) holding health policy and

health care regulations and planning responsibilities. The regional ministry of health is responsible for the territorial organization, and the design of health care areas and basic health zones. The most frequent model consists of two separate executive organizations, one for primary and one for specialist care, covering every health area. Nevertheless, regional health services are increasingly creating single-area management structures integrating primary care and specialist care. Basic health zones are the smallest units of the organizational structure of health care, and are usually organized around a single primary care team, which exercises the gatekeeper function. Access to specialist care requires referral from a general practitioner. Each health area should cover a population of no less than 200.000 inhabitants and no more than 250.000. The population served by GP is on average 1410 persons. The estimated rate of cardiologists is $47 \pm 7,7$ per 1 million inhabitants, with a decrease over the last years in the context of the economic crisis and health budget cut back.

Nutritional and smoking cessation counselling are provided for free, but with some exceptions the cost of smoking cessation pharmacotherapy is not reimbursed.

Rehabilitation services are provided for free, but the waiting lists can sometimes be long.

The non-profit-making private sector plays a key role regarding care for work injuries and professional diseases. There are a number of mutual societies covering these contingencies, which are funded by the national social insurance treasury, largely through employers' contribution. Moreover, the public system has traditionally outsourced some 15-20% of specialized care provision to private hospitals providers (profit and non-profit-making) for some high-resolution diagnostic services and some surgical procedures as part of waiting list management. During the last decade, there have been some other private finance initiative formulas in some Autonomous Communities, implementing the administrative concession of the provision of care of an entire basic health area, to a corporation or a temporary union of enterprises.

Private voluntary insurance schemes play a relatively minor role within the Spanish health system and are independent from the public system. They cover some 13% of the population, though there is considerable regional variation.

Health expenditure in Spain in 2012 was 1.577€ per capita, a 7,08% of the gross domestic product, and is still below the European average. Most of the health expenditure relies on the public sector, sourced mainly from general taxation. Public health expenditure breaks down into 54% for specialist care (inpatient and outpatient), 16% for primary health care, 19,8% on pharmaceuticals and only 1,4% on prevention and public health.

References:

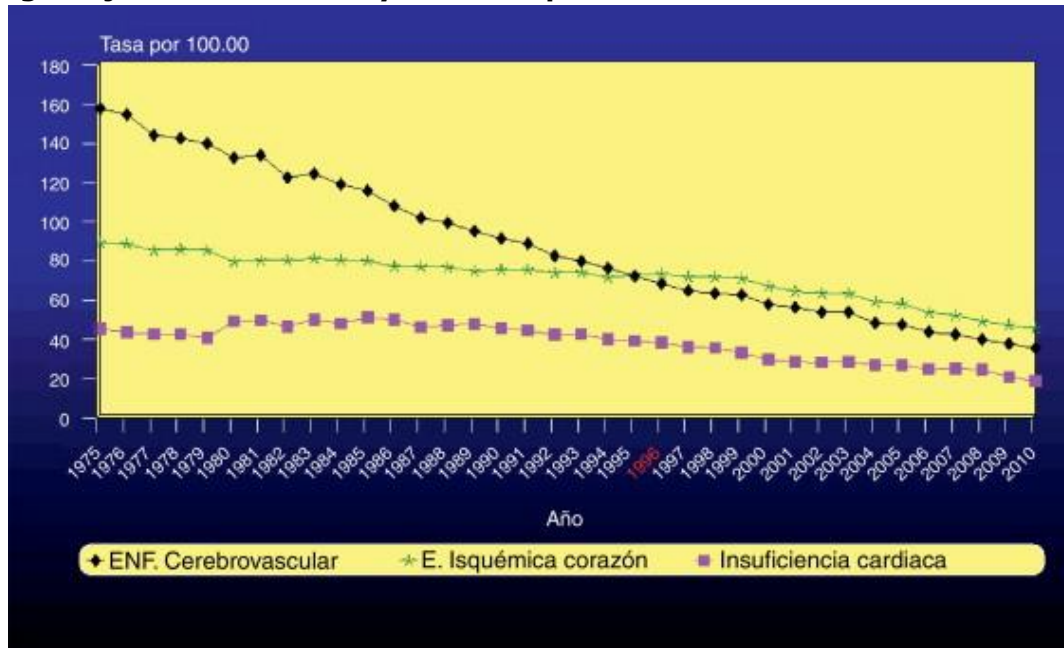
<https://www.msssi.gob.es/estadEstudios/estadisticas/sisInfSanSNS/finGastoSanit.htm>
(in Spanish)

<https://www.msssi.gob.es/organizacion/sns/planCalidadSNS/pdf/equidad/observatorioEuropeo/SpainHiT2010.pdf>

II. Risk factor statistics

Cardiovascular (CV) disease is the primary cause of death in the Spanish population, causing 31% of deaths (31% of them from coronary disease, 28% from cerebrovascular disease). CV mortality has experienced a decline (3,1% per year) since 1975.

Age-adjusted CV mortality rates in Spain from 1975 to 2010



Source:

http://www.searteriosclerosis.org/recursos/archivosbd/clinica_investigacion/4d34a5f3ab9cb226e076bb3b11abf587.pdf (in Spanish)

Mortality rates in Spain in 2012

	Both sexes	Men	Women
All cause mortality per 100.000 inhabitants	861,623	893,141	830,976
CV mortality 100.000 inhabitants	261,078	239,385	282,172

Source: National Institute of Statistics

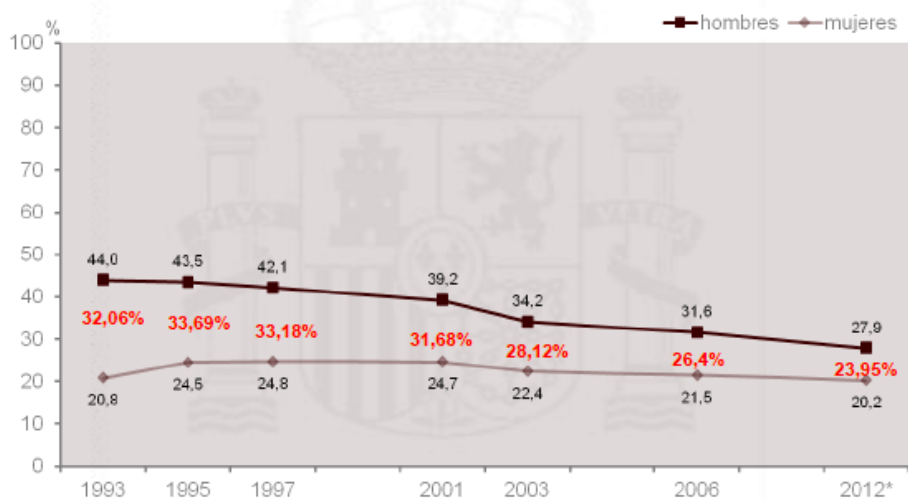
According to the [RECALCAR registry](#), 52% of Cardiac Care Units have a catheterization laboratory (1 cath-lab per 193.000 inhabitants), with important variations in the different autonomous communities.

The [Spanish National Health Survey](#) is updated every 5 years by the Spanish Ministry of Health and provides information regarding the Spanish population health status. The main conclusions of the last report, with data collected in 2011-2012, are:

- There has been a decrease in smoking prevalence over the last decade, 24% of people ≥ 15 are daily smokers (28% of men, 20% of women). The decrease in smoking prevalence is attenuated in women (figure 1) due to a variety of reasons. Smoking prevalence is higher in low-income categories.

- The Spanish smoking ban has been implemented in 2 phases (2005 with a partial smoking ban, and 2010 with a full smoking ban). Both bans have had an important impact on smoking prevalence and smoking morbidity.

Figure 1: Smoking prevalence evolution

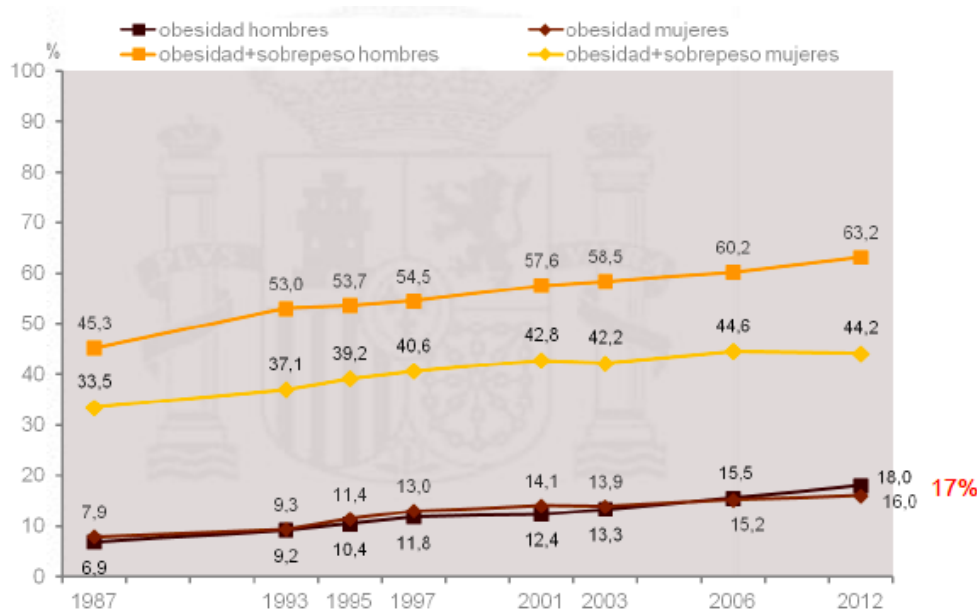


Source: Spanish National Health Survey, <http://www.msssi.gob.es/estadEstudios/estadisticas/encuestaNacional/encuesta2011.htm> (in Spanish)

It is somewhat alarming that 22,5% of men and 21,0% of women 15-24 years of age are daily smokers. Mean age of smoking initiation is 17,2.

- There has been an increment in obesity prevalence, from 7,4% to 17% among adults over the last 25 years (figure 2). 53,7% of adults are either obese or have overweight. Obesity is more prevalent in low-income categories. 20% of children (2-17 year-olds) have overweight and 10% are obese.

Figure 2: Obesity and overweight evolution



Source: Spanish National Health Survey, <http://www.msssi.gob.es/estadEstudios/estadisticas/encuestaNacional/encuesta2011.htm> (in Spanish)

- 41,3% of Spanish population is sedentary (46,6% of women, 35,9% of men).
- 61,4% of Spanish population consumes fruits on a daily basis, and 45,8% vegetables.
- A rise in chronic conditions such as hypertension (18,5%), hypercholesterolemia (16,4%) and diabetes (7%) has been reported.

Nevertheless the National Health Survey is based on a questionnaire and doesn't consider any objective measures of the prevalence of risk factors such as hypertension, hypercholesterolemia or diabetes. This information can be drawn from population-based epidemiologic studies including anthropometric measures, blood pressure data and laboratory tests.

The [DARIOS study](#) is a pooled analysis with individual data from epidemiological studies that have been conducted in Spain on the population aged 35-74 since 2000 in 10 different autonomous communities. This cohort represents approximately 70% of the Spanish population, and is therefore a good reflection of the cardiovascular health status.

The distribution of most cardiovascular risk factors presents <20% variability in the population aged 35-74 years in the Spanish autonomous communities. In this range of age, standardised prevalence of:

- high blood pressure: 43%
- dyslipidaemia (total cholesterol \geq 250 mg/dl): 41% (50,3% considering the cut-off >200mg/dl)
- smoking: 25%
- obesity: 29%
- diabetes: 13%

40% of hypertension is non-diagnosed, 20% do not receive any drug therapy, and 50% of treated patients do not reach the goals recommended in guidelines. Therefore, blood pressure is well controlled only in 1 of every 4 hypertensive patients. Hypercholesterolemia is non-diagnosed in 50% of the cases, and treated only in 41,7% of known cases. Over 75% of the population is far from the cut-off points of total cholesterol <190 mg/dl or LDL-c <115 mg/dl proposed by the main clinical practice guidelines. The prevalence of non-diagnosed diabetes is estimated in 20%, and the glycaemic control goals are reached in 69%.

The autonomous communities of the Canary Islands, Andalusia and Extremadura have a greater prevalence of risk factors, and a higher mortality for ischemic heart diseases.

References:

[Cardiovascular risk factors in Spain in the first decade of the 21st Century, a pooled analysis with individual data from 11 population-based studies: the DARIOS study].

Grau M *et al.*, Rev Esp Cardiol. 2011, Apr;64(4):295-304. doi:

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See also: The [DARIOS study](#)

[Laws restricting smoking in public places reduce the incidence of acute coronary syndrome in Spain]. Fernández de Bobadilla J, Dalmau R, Galve E; Legislation on Tobacco and Acute Coronary Syndrome in Spain group. Rev Esp Cardiol (Engl Ed). 2014 May;67(5):349-52. doi:10.1016/j.rec.2013.08.018. Epub 2013 Dec 17. PubMed PMID: 24774726

III. Main actors and Prevention methods

At an institutional level, the main national scientific societies with an area dedicated to cardiovascular prevention have a key role in promoting the study of cardiovascular risk factors and determining the best way to tackle them. Some examples:

- The [Spanish Society of Cardiology](#) is a non-profit scientific and professional organisation that is fully involved in cardiovascular prevention. The main activities are aimed at promoting the study of cardiovascular mortality and morbidity in Spain, and facilitating the knowledge and implementation of the cardiovascular prevention guidelines. Coordinating the cardiovascular prevention activities in a multidisciplinary approach is also a priority, placing great importance on the collaboration with Primary Care Physicians.
- Promoted by The Spanish Society of Cardiology, the [Spanish Heart Foundation](#) is a non-profit institution fully dedicated to preventing cardiovascular diseases through educational programmes so as to promote a healthy life style. The Spanish Heart Foundation provides fund-raising entities to stimulate cardiovascular investigation and to promote the rehabilitation of cardiovascular patients.
- The Spanish Society of Family and Community Medicine has a Working Group on Cardiovascular Prevention with a Program on Preventive Activities and Health Promotion ([PAPPS](#)). The main objective is to organise preventive activities in the primary care setting.
- The Spanish Interdisciplinary Committee of Cardiovascular Prevention, with representatives from 14 scientific societies implicated in cardiovascular prevention, and the Public Health Area of the Ministry of Health and the Health Institute Carlos III, have a key role in encouraging the study of cardiovascular risk factors and determining the best way to implement the CV prevention guidelines in our context.
- The [Spanish National Committee for Smoking Prevention](#) is a non-profit organisation that represents 29 scientific societies implicated in smoking prevention and treatment. The main objective of the committee is to promote the control of tobacco epidemic.

At the delivery of care level, the main actors in cardiovascular prevention are primary care physicians, playing an important role in risk factor detection and control. Secondary prevention management is tackled through a multidisciplinary approach involving primary care physicians, Cardiologists, Specialists in Internal Medicine, Nephrologists, Neurologists, Cardiovascular Surgeons, Nurses...

IV. Main Prevention activities

Important update from Dr Regina Dalmau (June 2018):

Declaration of Madrid 2018 for Health and the advancement of Tobacco Regulation in Spain

In spite of progress having been made, tobacco consumption is still a problem in Spain and one which requires appropriate measures to be taken

Tobacco consumption is responsible every year in Spain for the death of more than 50,000 people, people who for the most part began to smoke long before reaching the age of majority. As the first cause of preventable death in our country, it represents an obstacle to the right to health and life of Spaniards, a right recognized in numerous human rights treaties ratified by the Spanish Government, among others the *Convention on the Rights of the Child*, the *Convention on the Elimination of All Forms of Discrimination Against Women* and the *International Covenant on Economic, Social and Cultural Rights*, which in Article 12 states that countries must respect and protect "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health".

The coming into force in 2005 and 2010 of two Spanish laws on smoking-related health measures contributed to a progressive denormalization of its consumption and resulted in a notable improvement in the health of the Spanish population.

The two primary effects of these laws were the decrease in the general exposure of the population to environmental tobacco smoke and the disappearance of direct and indirect advertising of tobacco products.

This contributed decisively to an increase in the perception of risk associated with tobacco consumption in the general population. In the last decade, the percentage of smokers has decreased significantly which is due to the fact that many smokers multiplied their cessation attempts and that a lower percentage of adolescents has taken up smoking.

The achievements of these two laws are evident but this should not make us lose sight of the original limitations of these regulations nor the aspects pending implementation. Today we can observe that:

- there continue to be spaces where part of the population is exposed to environmental tobacco smoke;
- one in four people still smoke, a figure significantly lower than in 2004, but one excessively high for a risk factor that causes the premature death of half of its regular consumers;
- tobacco consumption is highly prevalent in people belonging to the most disadvantaged social levels, something that is seen both in the adult population as well as in the infant-juvenile population, and which is especially striking in the case of pregnant women;
- the Spanish public health system – exemplary in so many aspects – does not always offer people suffering from this addictive disorder the effective diagnostic and therapeutic possibilities available.

In a somewhat paradoxical manner, the evident improvements attained in recent years have contributed to a situation where some regulators have the perception that almost everything has already been done regarding tobacco and that now it is time to focus on other public health problems. Nevertheless, without meaning to underestimate any other health problem, whose clinical and community approach can be improved, scientific evidence unequivocally shows that:

- tobacco consumption is still the main public health problem in our country, due to the morbidity and mortality it generates as well as the reduction it causes in quality of life and life expectancy;
- there are effective tobacco control measures that have been carried out in other countries which have not yet been applied in Spain or that have been carried out in a partial or deficient manner.

The signatory organizations of this document – scientific, health and social, all of them advocating for tobacco control in Spain – **are concerned about not being able to offer our population the evidence-based strategies that have been shown to reduce tobacco harm** as well as not being able to provide them with adequate tools to face up to the direct and indirect pressures coming from transnational tobacco industries to take up and keep up tobacco consumption.

We are concerned about failing in particular those people who belong to the most disadvantaged segments of the population, in which a relative lack of various social, psycho-affective or economic resources means that they have more problems in dealing adequately with this disorder and that their prevalence of consumption is much higher than the rest of the population. This higher prevalence is a factor that contributes - and will continue contributing - to increasing social inequalities in health.

For all these reasons we consider it urgent that a series of measures be taken in our country and that we return to acquiring the social leadership we achieved in Europe in this field in the first years of this century.

According to the scientific evidence available, **these are the main measures that the public authorities should adopt in Spain:**

1) related to article 6 of the World Health Organization Framework Convention on Tobacco Control 2003 (FCTC):

- harmonise upwards taxation of all tobacco products;
- also harmonise taxation of products related to nicotine delivery and novel tobacco products;
- increase the fiscal pressure on all tobacco products, bringing them into line with most developed countries, in order to reduce their accessibility to the most vulnerable populations, above all minors;

2) related to Article 8 of the FCTC:

- demand compliance with current legislation on consumption in enclosed or semi-open public places (such as terraces, patios or transit areas in shopping centers);
- apply the current regulation on smoke-free spaces to all related products (electronic cigarettes and herbal products for smoking). All this with the double objective of, on the one hand, avoiding the passive toxicity that these products can cause, and on the other hand, achieving denormalization of their consumption in public places;
- prohibit smoking in any type of vehicle to avoid smoke exposure for all passengers, especially minors, for reasons of health and road safety;
- Extend the current legislation in accordance with the normative recommendations and guidelines of the World Health Organization on the protection of environmental tobacco smoke by means of: 1) the elimination of ambiguities (definition and delimitation of outdoor spaces, exceptions in enclosed spaces, etc.); 2) the expansion of smoke-free environments in some open air spaces (sports and entertainment facilities, platforms and stops for means of transport, beaches and other natural spaces, communal swimming pools); and 3) the explicit involvement of the different security forces involved in the control of enforcement of the Law;
- promote smoke-free homes and raise awareness among the general population regarding passive smoking, as the home is currently the main place of exposure to environmental tobacco smoke, responsible for morbidity and mortality in adults and children

3) related to Article 11 of the FCTC:

- introduce plain packaging, as several countries have done, in order to reduce the attractiveness of the product to minors and increase the perception of risk;

4) related to Article 12 of the FCTC:

- Carry out targeted campaigns on diverse segments of the population that allow them to acquire an adequate perception of risk regarding tobacco consumption. In this regard, campaigns such as the 'Every cigarette is doing you damage' one are recommended, an initiative that has proven its effectiveness in multiple countries of varying characteristics;

5) related to article 14 of the FCTC:

- facilitate access of the smoking population to health professionals trained in the approach to tackling tobacco consumption and in the treatment of smoking;
- finance those clinical, behavioral and pharmacological interventions which have demonstrated effectiveness and safety in smoking treatment;

6) related to other FCTC articles:

- reinforce and harmonise the regulation on advertising, promotion and sponsorship of tobacco products to related products, in addition including devices used for their consumption (such as pipes, water pipes, HNBs, etc.) (Article 13 FCTC);
- eliminate advertising of tobacco and related products at points of sale (Article 13 FCTC);
- reinforce the ban on sales to minors, also addressing issues related to tobacco or nicotine delivery products distributed on the internet (Article 16 FCTC).

This set of measures is not intended to be exhaustive.

Scientific evidence from various countries (who have already applied such measures) shows that their application will contribute decisively to ensuring that those who do not want to start consumption do not do so and that those who want to quit have more chances of quitting.

Most of these measures can be applied with hardly any cost, and some of them imply a highly cost-effective investment when compared with other health measures that our health system has adopted and considers irrevocable.

We ask the public authorities to prioritize the right to health and act. Smoking remains the main public health problem in our country, a problem that is avoidable and directly affects a quarter of the adult population. There is an urgent need for public authorities to establish an action plan or roadmap with the aim of reducing tobacco consumption in Spain.

To do so they can count on all our social as well as professional support.

Madrid 16th June 2018

- [The Prevention and Health Promotion Strategy of the Spanish NHS](#) proposes the progressive development of interventions aimed at improving health and preventing diseases, injuries and disability. This initiative approved in December 2013 tries to facilitate a common framework for health promotion and primary prevention in the course of life, harmonising its integration in the portfolio of services of the National Health System and getting other sectors of society actively involved, promoting participation of individuals and population in order to raise their autonomy and capacity to have a greater control over their own health.
- [The Observatory for the Study of Nutrition and Obesity](#) is a strategy of the Spanish NHS approved in February 2013 in order to promote the policy development and decision-making needed to avoid obesity and to improve children's dietary situation. Dr Valentin Fuster is the Chair Person of the Observatory.
- The Spanish Society of Family and Community Medicine has a Working Group on Cardiovascular Prevention with a Program on Preventive Activities and Health Promotion ([PAPPS](#)). The main objective is to promote preventive activities in the primary care setting. Every 2 years and after analysing the cardiovascular morbidity and mortality in our country, a document is published setting the evidence-based priorities in cardiovascular prevention in the main areas: hypertension, diabetes, dyslipidaemia and smoking (1).
The screening for hypertension and diabetes mellitus has been encouraged leading to a drop in the prevalence of non-diagnosed diabetes and hypertension. The Working Group recommends the use of the [SCORE risk charts](#) in order to determine the individual cardiovascular risk and set the risk factor management.
- The Spanish Society of Cardiology and the Spanish Heart Foundation are fully involved in cardiovascular prevention activities. Some examples of their cardiovascular prevention programmes are:
 - [Mimocardio](#): coordinated by Dr Almudena Castro, the current President of the Cardiovascular Risk and Cardiac Rehabilitation working group. This on-going project tries to emphasise the role of the cardiac patient in improving his cardiovascular prognosis, by understanding the key points in lifestyle correction and risk factor control. Firstly, the project tries to raise

awareness among Spanish cardiologists of the need to optimise the level of communication with the patient, in order to facilitate the adherence to lifestyle and drug recommendations. Secondly, the project focuses the patient by providing different kinds of training materials in order to facilitate his knowledge of cardiovascular disease and prevention (brochures, web sites, social network...).

- [R-EURECa](#) (Spanish Registry of Cardiac Rehabilitation Units): coordinated by Dr Carmen de Pablo, the main objective is to clarify the real implementation of cardiac rehabilitation in our country, to determine the staff qualification and performance of the existing units, and to analyse whether these programs cover the care demands of cardiac rehabilitation, and fulfill the minimum quality requirements.

Unfortunately anti-smoking campaigns are presently not a priority on the national level. The last National Tobacco Prevention Campaign took place in 2005. The economic recession has thoroughly caused budget cuts for prevention activities and this has even had a negative impact on anti-smoking activities.

Much can still be done: to claim for a continuous effort, supervise the implementation of our smoking ban, urge the health professionals to play an active role in smoking prevention and treatment, raise awareness throughout public opinion about tobacco harms, promote other legislation initiatives (plain packaging, electronic cigarettes use banned in public places...), promote smoking cessation drugs reimbursement...

References:

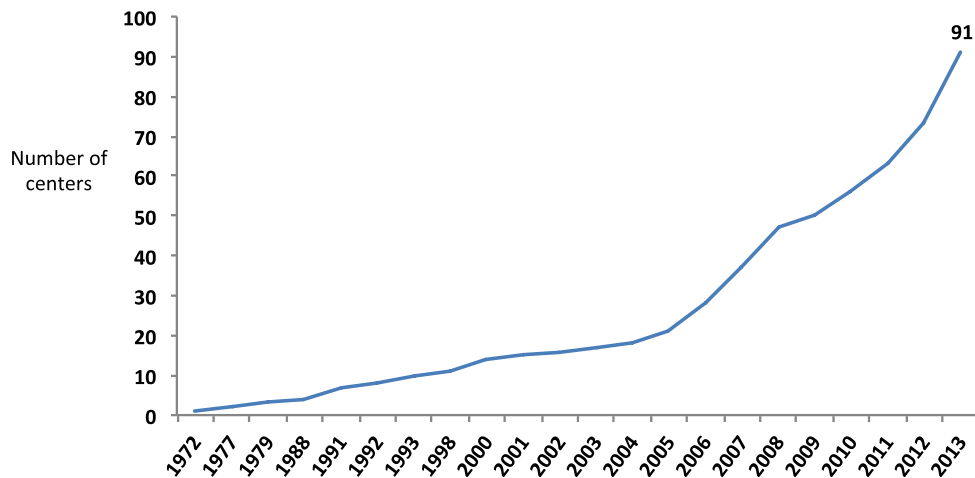
(1) Recomendaciones preventivas cardiovasculares
Aten Primaria. 2014;**46** (Supl 4):3-15. PMID: 24950627, doi: 10.1016/S0212-6567(14)70047-2.

V. Cardiac rehabilitation

Despite the high level of recommendation in guidelines for Cardiac Rehabilitation Programs (CRP), the implementation of such programs has risen slowly in Spain. Only over the last few years has an important increment been noted.

R- EURECa

Date of start of the cardiac rehabilitation activities

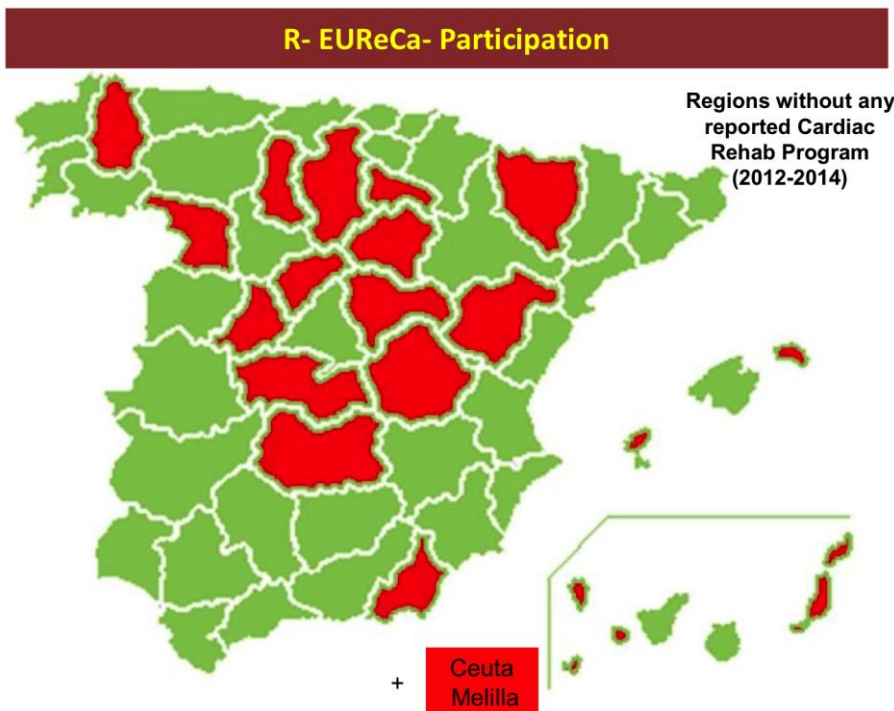
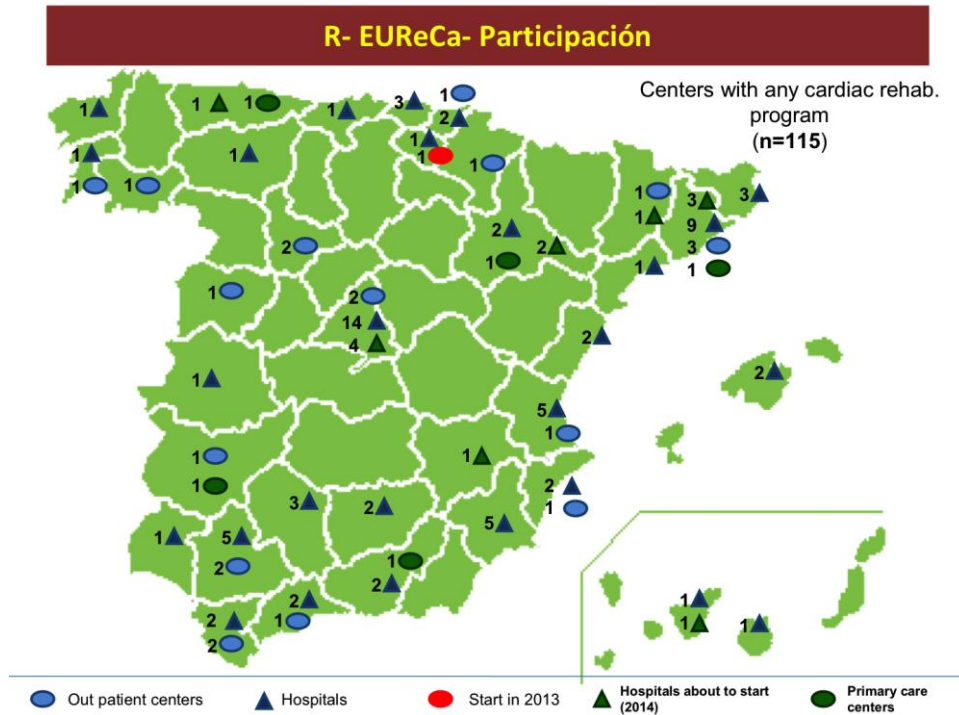


Source: [R-EURECa](#) (registro Español de Unidades de Rehabilitación Cardíaca, Spanish Registry of Cardiac Rehabilitation Units), <http://es.slideshare.net/casadelcorazon/registro-nacional-de-unidades-de-rehabilitacin> (in Spanish)

According to a recent registry run by the Spanish Society of Cardiology ([RECALCAR registry](#)), only 36% of the cardiac care units have their own CRP, with important geographical variations. In order to clarify the real implementation of cardiac rehabilitation in our country, the Cardiac Rehabilitation working group of the Spanish Society of Cardiology has performed a registry called [R-EURECa](#) (registro Español de Unidades de Rehabilitación Cardíaca, Spanish Registry of Cardiac Rehabilitation Units), whose main results have been recently presented by its main investigator, Dr Carmen de Pablo, at the Spanish National Congress of Cardiology (Santiago de Compostela October 2014). The main objectives of the project are:

1. To determine the number and location of the Cardiac Rehabilitation Units in Spain, their characteristics and resources.
2. To determine the staff qualification and performance in those units.
3. To analyse the number and type of patients seen.
4. To analyse whether these programs cover the care demands of cardiac rehabilitation.

115 centres have been identified as having some kind of CRP in Spain, 96 of them were active in 2013, and 18 of them were about to start their activity in 2014. 96% of the centres have answered the study questionnaire, 59% are public centres, 32% private, 9% belong to mutual insurance societies. The geographical distribution is not uniform, with many CRP available in some regions, whereas some other regions are totally lacking in these programs.



Source: [R-EURECa](http://es.slideshare.net/casadelcorazon/registro-nacional-de-unidades-de-rehabilitacin) (registro Español de Unidades de Rehabilitación Cardíaca, Spanish Registry of Cardiac Rehabilitation Units), <http://es.slideshare.net/casadelcorazon/registro-nacional-de-unidades-de-rehabilitacin> (in Spanish)

A cardiologist is the coordinator in 80% of the CRP, but only 27% of coordinators are fully dedicated to the CRP. Phase II is performed in all the centres, phase I in 35,2% and phase III in 42,9%. 68% of the centres are hospital-based. The different CRP have important differences in resources, 52,7% have their own ergometer, 29,7% have an ergo-spirometer, 34,1% have their own echocardiographer, 72,5% have access to a conference room with audio-visual facilities. In 96,7% of the centres a gymnasium is available. In contrast 4,5% of the centres lack defibrillator, and 12,5% electrocardiographer. As cardiac rehabilitation requires a multidisciplinary approach, most of the CRP (75%) have at least a cardiologist, a nurse and a physiotherapist.

Main indications for cardiac rehabilitation are ischemic heart disease, mostly after Acute Coronary Syndrome (ACS), and a growing number of other indications such as heart failure, congenital heart diseases, or valve surgery. In general, no age-limit is considered, and referral rates for well-established indications may vary from 80% to 0%.

Main indications of cardiac rehabilitation

n=91	%
Acute coronary syndrome (STEMI or NSTEMI)	64,25
CABG	10,24
Staged PCI	6,57
Heart failure	6,34
Chronic stable coronary disease	4,33
Valvular surgery	4,03
Patients at high CV risk	1,53
After ICD implantation	0,48
After heart transplant	0,43
After pacemaker implantation	0,34
Peripheral vascular disease	0,21
Congenital Heart disease	0,12
Other	1,10

Source: [R-EURCa](#) (registro Español de Unidades de Rehabilitación Cardíaca, Spanish Registry of Cardiac Rehabilitation Units), <http://es.slideshare.net/casadelcorazon/registro-nacional-de-unidades-de-rehabilitacin> (in Spanish)

Despite the fact that most patients are given a final report with recommendations on lifestyle and drug treatment, in most cases Phase III of cardiac rehabilitation is not supervised, nor coordinated with other centres.

Cardiac rehabilitation has formed part of the training program for residents in cardiology since 2007, nevertheless not all the university hospitals have a CRP, and only 23% of the centres carrying out cardiac rehabilitation are certified for teaching activities.

The Spanish Society of Cardiology is making a special effort focused on quality programs ([Incardio](#)), in order to establish the minimal quality standards for every clinical area in cardiac care, including cardiac rehabilitation.

VI. The Future

Spain has achieved one of the highest life expectancy rates in the world (82.1 years) however other countries in the region are ahead in terms of healthy life expectancy (in Spain, 61.5 years old among men and 59.4 years old among women). Cardiovascular prevention is a key point in facilitating a healthy life expectancy. Unfortunately, the economic recession has put serious constraints on the financing of CV prevention activities and campaigns. Scientific societies need to make our health authorities and other government representatives understand that cardiovascular prevention deserves a continuous effort, which in turn will have an impact on the quality of life and the healthy life expectancy.

The principal aims for the future are:

- To implement a common agreed cardiovascular prevention guide in the primary care setting, and to encourage physicians to implement CV risk in electronic clinical history.
- To include CV risk assessment and control as quality indicators in the professional incentive systems, focusing on lifestyle management.
- To reinforce the collaboration between primary care physicians, cardiologists and other specialists in order to reach the goals defined in guidelines for CV prevention and to improve patients' adherence.
- In Spain there is still a lack of cardiac rehabilitation programs in many regions, a situation that needs to be solved in order to preserve the equity of cardiac care in our NHS. Moreover, the Spanish Society of Cardiology needs to set the minimum quality standards of a cardiac rehabilitation program and to audit the existing units.
- The main obstacle in CV prevention is the deterioration of life-style, with a loss of traditional dietary patterns, a growing consumption of junk food, and a growing tendency to sedentarism, leading to a growing prevalence of obesity and diabetes. To overcome this barrier, we need to understand cardiovascular prevention from an educational point of view, and set the basis of a healthy lifestyle from childhood to adulthood. Scientific Societies have a key role in making our health authorities understand that we need to switch the focus to primordial prevention, aimed not to reduce the current risk but to inhibit the future risk. To achieve this purpose, we need to shift the efforts from preventing disease to promoting health.
- Health authorities need to advocate for policies with an impact on cardiovascular health (trans fatty acids and salt content).
- The Spanish Smoking Ban has had an important impact on public health and CV morbidity, but its achievements shouldn't be an excuse for not progressing in the control of tobacco epidemic.