

THE NATIONAL HEALTH SYSTEM AND RESPIRATORY CARE IN SPAIN

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Abstract. According to the WHO Spanish public health system is among the 10 best in the world, covering virtually the entire population but it does not mean that there are no major problems to solve. Current article reviews the Spanish National Health System organization based on two levels of care: Primary care and Specialized Care. Author specify all groups who are covered by the National Health System, portfolio of services of the National Health System, available technical resources and management of respiratory diseases in Spain. Organization of the Departments of Pulmonology is given by author's own experience. The ways of prescription and control of respiratory drugs in Spain are described. A brief history of the Spanish Society of Respiratory Disease (SEPAR) and its activities is given.

Key words: Spanish, Health System organization, management of respiratory diseases.

Spain has a good public health system, classified according to the WHO among the 10 best in the world, covering virtually the entire population. Health spending accounts for 8.5% of GDP.

The Spanish Constitution of 1978 establishes the right to the protection of the health of all citizens based on several principles:

- Public, universal and free health services
- Integrated into the National Health System (NHS) but managed by each of the autonomous regions (17 in total) which fund and plan the entire health care organization.

The NHS establishes rules contained in the General Health Law that guarantee minimum quality requirements in all regions to avoid possible significant differences between them. Any residents in Spain, both domestic and foreign, may be excluded from health care. Drug laws also correspond to the NHS through the Spanish Medicines Agency which decides whether or not a drug is funded, in addition to their price indications. The Act guarantees and rational use of medicines regulates both the use of drugs such as clinical research and development, prescription and monitoring of risk-benefit ratio.

Each autonomous region has its own health service with its own funding. The citizens financed it by taxes but in return, both of general and specialized medical care is free. Hospital care is also free. Until just under 2 years ago drugs were also administered at no cost to pensioner population but at present a new law has led to health copayment and the patient have to fund a small percentage that varies depending on your income and is updated annually. For example, if the annual pension is less than 18000 euros the maximum payable will be 8.26 euros per month; if you notice between 18000 euros and 100000, you will pay up to 18.59 euros per month. The working age population should contribute up to a maximum of 40% of the value of the drug but in the case of those that are commonly used for example bronchodilators for asthma and COPD (called «with black spot») the amount payable is generally less than 10%. All approved drugs for their respective indications by the Ministry of Health are drugs under this type of financing.

To keep a similar level of performance throughout the Spanish state there is an interregional committee chaired by the Minister for Health and vice-presidents being all directors of each autonomous region, who meet at least four times a year to make agreements, which are then published in form of recommendations. This committee has different technical committees working continuously. There is also an advisory committee comprising of syndicates, health companies, medical experts... to advise, formulate

proposals, and answer questions on health issues of general interest.

Who are covered by the National Health System?

The Spanish population is made up of about 47 million. There is a significant aging of the population, with 17% of over 65 years of age. Slightly more than 5 million inhabitants do not have Spanish nationality. Spain is the third country in Europe with more residents outside the European Union. The National Health System includes all individuals with Spanish nationality and legal residents in Spain, varying the type of health care on the basis of agreements with each country. Law also includes children who are on Spanish soil, regardless of their status. This has considerable importance because Spain receives many illegal immigrants from Africa without any documents, but if they are in child age should be immediately attended by health professional.

National Health System organization

The Spanish National Health System is organized into two levels of care: Primary care (PC) and Specialized Care (SC). The PC is freely available to every citizen and includes basic services consist of family physicians, pediatricians, nurses, social workers, physical therapists and administrative staff. They work in the so-called Health Center which cannot be more than 15 minutes from the place of residence of the patient. When necessary the family doctor moves to the patient's home. The Health Center is also responsible for preventive measures including immunizations and health promotion. Each patient is assigned to a Health Center where he has free choice of doctor.

SC take place in Specialty Centers for outpatient or on the hospital setting, which is responsible for the most complex patients and in patients requiring admission. To access the SC the patient should see first your family physician who decides whether consultation with the appropriate specialist is needed. The patient may return to primary care if the specialist believes that the problem is resolved.

To coordinate the best possible PC and SC have been established health areas based on geographic and demographic criteria. These areas include the entire population resident them and Health Centers, Specialty Centers and Hospitals included in them, with the same management team for the entire area. Hospitals are divided into three levels depending on the services they can offer:

• *First level:* local hospital of small size, generally less than 200 beds, including central services, internal medicine, surgery, orthopedics, pediatrics and occasionally some other specialties

• *Second level:* all medical specialties and some surgical specialties are included. It has full Critical Care Unit and increased technological equipment

• *Third level:* there are all specialties

For some rare or special technical conditions are set referral hospitals. For example, treatment of pulmonary hypertension or organ transplants. In Spain there are eight accredited hospitals for lung transplants, which the year 2013 performed 285 transplants.

Portfolio of services of the National Health System

The set of services offered by the NHS including prevention, diagnosis, treatment and health promotion activities. At the level of PC is dispensed most of the activities involved in health education. Health care can be scheduled, during business hours, or urgent 24 hour provided by emergency services in the Health Center itself or in the patient's home if necessary. A helpline (061) addresses the patient visits and assesses whether it is necessary to move to the patient's home or to transfer him or her to the hospital. Health Units also provide mental health services including treatment of alcoholism and drug addiction and teenage problems.

The SC provides imaging, laboratory tests, endoscopy, medical and surgical specialties, oncology treatments, radiotherapy, radiosurgery, transplants and any medical or surgical activity. There is the possibility to access drugs without indication approved in special circumstances, when it comes to serious illness and there are grounds for use. All hospital care is free. The NHS also funds the medical transport when the displacement of the patient is for clinical reasons (eg radiotherapy) or patient conditions prevent transfer in ordinary vehicles.

Available technical resources

Overall Spain has a reasonable network of hospitals. The number of Spanish hospitals is over 800 with about

170 thousand beds available. Of these some 110,000 belonging to the NHS, distributed in 315 hospitals. The rest are private or have some sort of consultation services. The number of doctors is about 215 thousand and nursing staff exceeds 250 thousand. The technological equipment is in the average of the most developed countries of the European Union. For example for every million inhabitants, there are 15.5 CT scan and 10 resonances.

Although there are some differences between the autonomous regions, most hospitals have computerized medical record. In Galicia, northwestern region of Spain with a population of about 3 million, where I'm working computerization is complete. All health structure of both PC and SC is connected to the same computer system that includes both text and images making available to all physicians complete medical history of the patient at any time. This greatly facilitates patient care. Drug prescription is electronic, may include long periods for chronic patients, thus avoiding the need to see a doctor, and facilitates the control of adherence to treatment.

Management of respiratory diseases in Spain

The management of respiratory diseases is similar to any other pathology. The patient cannot go directly to the pulmonologist. It is initially evaluated by your family doctor to assess the appropriateness of sending a query to a pulmonologist. After the studies available in the Health Center (laboratory, radiology, spirometry) if deemed necessary, it will send the request to the hospital through the computer system and within a reasonable period (in our case about 4 weeks) will be assessed. Depending on the type of disease will continue in pulmonology or after evaluation is returned to the family doctor with a report. There are special cases such as lung cancer. When the possibility of lung cancer is suspected the patient enters the so-called «fast track lung cancer» that means to be valued at a maximum of 48 hours. Usually, the family doctor has direct communication with the Department of Pulmonology of his local hospital. Although there is free choice of specialist in theory, in real life is rarely the case. However, there is a law that allows a second opinion if



First steering committee of SEPAR in 1967

the patient does not agree with the diagnosis or treatment received. For urgent conditions, the Emergency Room is open and free at all times.

Organization of the Departments of Pneumology

Pulmonology Services are integrated in a health area. They are located in the hospital but may have outpatient visits in Specialty Centers. Usually consist of 5 sections: inpatient, outpatient, respiratory function laboratory, respiratory endoscopy room and sleep unit. Larger services also often have an Intermediate Care Unit, dedicated to patients requiring non-invasive ventilation, and a Day Hospital for intravenous treatments. Depending on the population served and the structure of the hospital, it may have more units, specialist consultations (interstitial diseases, difficult-to-treat asthma), Respiratory Intensive Care Unit, transplant unit, etc. The average number of pulmonologists in Spain is 4/100000 inhabitants, although the distribution is highly variable between different regions

Thoracic Surgery departments are restricted to tertiary care hospitals comprising a larger area of population. Currently in Spain, there are 52 units of thoracic surgery with an average of 4.5 surgeons per unit. The patient required surgical evaluation is sent to the reference unit. Although by law could apply to be sent to a different hospital, does not always succeed.

The prescription of respiratory drugs in Spain

Pharmaceutical expenditure in Spain, as in most developed countries, is one of the most important components of total health expenditure. In 2013, it was an average of 270 euros inhabitant per year with an average cost of prescription slightly below 11 euros, of which almost 60% were funded by the public health system. In recent years, these values show a tendency to grow more slowly due to the intense campaign of control by the public authorities and the increased use of generic drugs, which currently represents 35% of the total. The Ministry of Health sets the maximum price of a drug once the patent has ended, therefore since then the cost of a brand name drug and the generic is usually similar. Overall, drug spending last year was equivalent to 1.31% of GDP, more than 17.4 billion euros (Russia spent about 12 billion euros).

There are two modes of drug delivery: the most common by prescription expended by the physician collected by the patient in the pharmacy, and hospital dispensing reserved for highly expensive drugs, rare diseases or intravenous administration. In these cases, the drug is delivered to the patient in the hospital pharmacy. There are special situations such as AIDS or Cystic Fibrosis in which all the medication is delivered at the hospital for free.

The drugs for respiratory diseases in Spain represent 9.7% of total pharmaceutical expenditure, the fourth therapeutic group, with a rising trend. Among the different respiratory drugs, bronchodilators and inhaled corticosteroids are the most prescribed with a clear reduction of inhaled corticosteroids in the last 3 years. The association Fluticasone-Salmeterol (Seretide) is the most prescribed although in the last 3 years its sales have fallen more than 25%. Its initial price of 90 euros in the highest dose has also dropped to 81 euros. Budesonide-Formoterol is the second most prescribed combination (price 52 euros). The third most prescribed drug is Tiotropium (52

euros). Three years ago, the Ultra-long action betamimetics came to the market and they are rapidly increasing their sales, especially since the advent of the association of Indacaterol-Glycopyrronium (Ultibro) with a price of 83 euros. Far behind in the number of prescriptions are other combinations as Beclomethasone-Formoterol (52 euros). At the end of this year Fluticasone furoate-Vilanterol will be marketed

The Spanish Society of Respiratory Disease (SEPAR)

The SEPAR is the scientific society that brings together most of pulmonologists and thoracic surgeons. Currently has more than 3700 members, including a number of foreigners. It was created in 1967 and since then has not stopped growing. It has a very important influence on all topics related to respiratory diseases, having published 62 guides on various topics, 29 manuals and several journals, the most important Archivos de Bronconeumología, official organ of both SEPAR and ALT (Latin American Thoracic Society). It participate in all government programs related to respiratory disease and COPD is one of the 12 diseases considered strategic by the ministry of health because the strong influence of SEPAR. An important part of Spanish research in respiratory medicine is sponsored by SEPAR, who in 2013 handed over 60 scholarships with an investment close to one million euros. It has a special partnership with ALT, American College of Chest Physicians, and European Respiratory Society. One of the last guidelines coordinated from SEPAR has been the innovative Spanish Guide of COPD (GesEPOC) which has had a significant international impact.

Conclusions

Respiratory care in Spain is reasonably well structured but it does not mean that there are no major problems to solve. It should further enhance the relationship between primary care and pulmonology because there are still many health centers who for various reasons do not performed something as basic as spirometry. The number of pulmonologists in some hospitals is clearly insufficient and need to increase. The same applies to thoracic surgeons, where there are regions with an excess of staff and others in which the number is not enough. Spanish hospitals continue favoring clinical work and too little research, which often has to be done after hours.

Surely, there is no perfect health system and each country must adapt to their potential and situation but in my opinion to have a universal health care system sustainable and free should be a priority for any government

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Поступила 10.09.2014