# QUALITY PLAN FOR THE NATIONAL HEALTH SYSTEM OF SPAIN

Review of activities to date and summary of future actions

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#### Quality Plan For The National Health System of Spain 2006-2010.

Review of activities to date and summary of future actions.

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### BACKGROUND

■ The passage in 2003 of Spanish Law 16/2003 on Cohesion and Quality in the National Health System paved the way for the Quality Plans. The first Quality Plan was mentioned in the inaugural address given by the President of the Government in 2004 and formed part of the accords of the II Conference of Presidents of the Autonomous Communities of Spain, in September 2005, where it was allocated 50 million euros annually. The Quality Plan for the National Health System (NHS) is designed to benefit citizens and promote high quality health care focused on patients and their needs. It supports health care personnel in the promotion of clinical excellence and in the adoption of best practices based on the best scientific knowledge available. The plan has been in effect for three years and it is now time to present a review of activities undertaken thus far and a summary of the actions planned for 2009 and 2010.

The Quality Plan covers six large action areas that are divided into 12 strategies, 41 objectives and 189 action projects. The areas and strategies are:

- 1. Protection, health promotion and prevention.
  - -Health and lifestyle.
  - -Protecting people's health.
- 2. Working towards equity.
  - -Promoting health policies based on best practices.
  - -Analysing health policies and proposing actions to reduce health inequities, with special emphasis on gender inequality.
- 3. Support for human resource planning in the field of health.
  - -Adapting the human resources of the NHS to the needs of the health services.
- **4.** Achieving clinical excellence.
  - -Evaluating clinical and management technologies and procedures.
  - -Accrediting and auditing health care facilities and services.
  - -Improving patient safety in NHS health care facilities.
  - -Improving the care given to patients with certain pathologies.
  - -Improving clinical practice.

- **5.** Using Information Technology to improve care provided to citizens.
  - -Health Online .
- **6.** Increasing transparency.
  - -Designing a NHS Health Information System that is reliable, appropriate and accessible.

# PROTECTION, HEALTH PROMOTION AND PREVENTION



■ The Quality Plan's actions in the area of prevention and health promotion comply with the principles and criteria set forth in the Tallinn Charter, which was signed by the Government of Spain in 2008. This Charter lays down the general principles that must be followed by programmes put in place in order to reduce inequalities in health, which are within the general policies of the Ministry of Health and Social Policy in the area of cohesion and equity and are also in keeping with the National Strategy for Public Health implemented by Spain's Directorate General of Public Health and Border Health Control.

# ACTIVITIES PLANNED 2009-2010

- The amount earmarked for actions aimed at reducing inequalities in health and in determinant health factors in 2009 is 14,750,000 euros. The activities planned include actions related to tobacco use, the prevention of falls by older people, sex education, childhood accident prevention and HIV prevention. Also planned are activities related to nutrition, physical activity and the prevention of obesity.
  - Actions to prevent the onset of tobacco use in school-age children and youth will involve prevention programmes and awareness campaigns and the training of educators and youth mediators; programmes to end tobacco addiction aimed at the school population, health professionals and special risk groups; health care personnel will receive specific training and primary care attention in this area will be strengthened.
  - Actions to prevent falls in older persons will involve programmes that promote physical exercise and educational programmes aimed at making homes safer.
  - Programmes for reproductive and sexual health in teenagers and young people
    will also be put in place, with increased information, consultation services and the
    education of parents, and also of teenagers and young people, through schools and
    health care professionals.
  - Early detection of HIV will be facilitated, specifically in vulnerable groups.

- Actions to prevent childhood injuries at home and in recreational and leisure areas, such as falls, drowning and injuries resulting from diving, will take place through educational programmes aimed at both children and their parents.
- Public health surveillance of the socio-economic health determinants will be increased, by integrating sources of epidemiological information and incorporating new components to the public health surveillance system.
- The Strategy for Nutrition, Physical Activity, and Obesity Prevention (NAOS), which was initiated in 2005, has a budget of 1,170,000 euros for 2009 funding of projects related to the promotion of healthy lifestyles, good eating and exercise habits, and obesity prevention. Some of the activities to be put in place as part of this Strategy are the following:
  - Educational programmes in school settings aimed at children and youth, teachers and parents. Co-operation with the country's autonomous communities and local governments, the National Sports Council and the Spanish Federation of Municipalities and Provinces, to promote physical activity as one of the most important means for preventing obesity, cardiovascular disease and type 2 diabetes mellitus. In addition, a study will be conducted on the composition of foods, with a view to implementing food reformulation programmes, in order to better adapt food composition to the needs of the population and to make healthier foods more readily available.
    - -Other studies and programmes include the 2009-2010 WHO-Europe Programme for the compilation and evaluation of actions in Spain in the area of obesity prevention; the Report on Obesity Epidemiology and Prevention Policies; the Action Plan to reduce salt consumption; the Study on the Prevalence of Celiac Disease; the continuation of the PERSEO programme (Pilot Programme in Schools for Health, Physical Exercise and against Obesity) launched in 2006; and the Total Diet Study, which includes a National Survey on Food Consumption.

# WORKING TOWARDS EQUITY



# PROMOTING HEALTH POLICIES BASED ON BEST PRACTICES

- The diversity of actions undertaken by the autonomous communities in the NHS offers numerous opportunities for mutual learning and collaboration in the quality improvement endeavour. The following objectives have been set:
  - 1. Describing, systemising, analysing and comparing information regarding health policies, programmes and services.
  - **2.** Promoting reproductive health policies that improve the quality of health care and support best practices.
  - **3.** Promoting sexual health policies that improve the quality of health care and support best practices.

Describing, systemising, analysing and comparing information regarding health policies, programmes and services

#### **REVIEW OF 2006-2008**

As provided by the Law on Cohesion and Quality in the National Health Service, Annual Reports on the NHS have been prepared, published and disseminated during this period. Since 2007, two specific committees have participated in preparing them: the committee of experts, comprised of persons with expertise in the various aspects of planning and managing health systems (human resource management and planning, service provision, participation, innovation, equity, information systems, among others) and the institutional committee comprised of representatives of all the autonomous communities and the National Institute for Health Management (INGESA).

The Spanish NHS also collaborates with the European Observatory on Health Systems and Policies in revising and proposing lines of joint action in the area of publications and technical collaboration.

# ACTIVITIES PLANNED 2009-2010

- The Annual Report on the NHS will be prepared, with the collaboration of the committee of experts and the institutional committee created for this purpose. The committee of experts has incorporated representatives of different units of the Ministry of Health and Social Policy that are related to the various sections of the report. The study greatly benefits from the collaboration and authorship of these units in the content areas within their field of expertise.
- Existing collaboration with the European Observatory on Health Systems and Policies will continue.

### Describing, systemising, analysing and comparing information regarding health policies, programmes and services

- -Preparation of NHS Annual Report.
- -Incorporation of units of the Ministry of Health and Social Policy related to the various sections of the Report.
- -Collaboration with the European Observatory on Health Systems and Policies.

Promoting reproductive health policies that improve the quality of health care and support best practices

#### **REVIEW 2006-2008**

■ In 2007 the Interterritorial Council of the National Health System approved the Strategy for Attending Normal Births, which had been drawn up on a consensus basis by the health care administrations of the autonomous communities, scientific associations and women's organisations. The Quality Plan has made it possible to further its implementation considerably by allocating to the autonomous communities 8 million euros annually with which to fund innovative practices aimed at improving the care given during delivery and the

perinatal period, especially in the areas of: the promotion of breastfeeding, multicultural care, participation of fathers in childrearing, training of professionals and research.

A document on Standards and Recommendations for Hospital Maternity Wards has been drawn up and high-level training activities are underway for professionals designated by each autonomous community, who make the commitment to later replicate the training activities in their own services.

## ACTIVITIES PLANNED 2009-2010

■ The actions described above will continue and will undergo evaluation. In addition, a Clinical Practice Guide on attending births, currently in the preparation phase, will be published and disseminated.

Existing scientific knowledge and health care practices regarding care during pregnancy, puerperium and the neonatal period will be revised with a view to broadening the current strategy to cover all reproductive issues and present it to the Interterritorial Council.

#### Reproductive health

- -Funding and evaluation of best practices in the autonomous communities.
- -Evaluation of the Strategy for Attending Normal Births and extension to reproductive health.
- -Publication and dissemination of the Clinical Practice Guide on attending births.

Promoting sexual health policies that improve the quality of health care and support best practices

#### **REVIEW 2006-2008**

■ The first population-wide survey on sexual health has been conducted in Spain,

and it is one of the first surveys of this type in all of Europe.

With the objective of preparing a strategy on sexual health, work has begun with the autonomous communities, scientific associations and social organisations, and information regarding existing services is being gathered.

A distance training programme on sexual health has been taught, with the participation of 500 professionals each year.

# ACTIVITIES PLANNED 2009-2010

■ Training activities will continue and expand with a view to reaching a greater number of professionals.

The results of the Sexual Health Survey will be published and disseminated at the national and international levels. The WHO-Europe has expressed interest in presenting it as a model for other countries.

Work is underway on the contents in the area of sexual health that are to be included in the NHS Strategy for Sexual and Reproductive Health, which will be presented to the Interterritorial Council.

#### Sexual Health

- -Publication and dissemination of the results of the first Sexual Health Survey.
- -Presentation of the NHS Strategy for Sexual and Reproductive Health.

# ANALYSING HEALTH POLICIES AND PROPOSING ACTIONS TO REDUCE HEALTH INEQUITIES, WITH SPECIAL EMPHASIS ON GENDER INEQUALITY

■ Equity in health is a priority for the NHS. However, although the relationship between social inequality and health outcomes has been demonstrated, there is little information on how to address this issue from within health systems.

The following objectives have been set:

- 1. To promote knowledge regarding gender inequalities in health and to strengthen the gender perspective in policies related to the actions of health care personnel.
- 2. To promote knowledge regarding health inequalities and to stimulate best practices in promoting equity in health care and in the reduction of inequalities from within the NHS.

#### **REVIEW 2006-2008**

■ An event called the Women, Health and Gender Forum has been organised every year as a place to meet and reflect on gender inequalities in health and to discuss the best ways to address them in the health care services context. Around 400 people have participated each year.

A Health and Gender Report has been prepared and disseminated each year, as part of the effort to update existing knowledge regarding gender as a determinant factor in health. Experts from universities and research institutions have been involved in its preparation.

The Quality Plan has brought about the creation and funding of specific lines of research into health and gender equality among the projects funded by the Carlos III Health Institute. To ensure gender mainstreaming in all health policies and strategies, two lines of action have been undertaken: the preparation and dissemination of methodological tools and the training of health care personnel. Among the most important tools are the Guidebook for the Inclusion of the Gender Perspective in Health Programmes

Working Towards Equity 2

and the translation into Spanish, in collaboration with the WHO, of the Gender Tool of the European Strategy for Child and Adolescent Health and Development document. Training activities have mainly been aimed at persons in positions of responsibility in the areas of health and gender in the autonomous communities and at the personnel of the Ministry of Health and Social Policy.

The Quality Plan has made it possible to fund the implementation of the Common Protocol for a Health Care Response to Gender-Based Violence, the core set of indicators and the quality criteria for the training of health care personnel, in compliance with the provisions in the area of health set forth in Law 1/2004 on Comprehensive Protection against Gender-Based Violence. To provide incentives and support the implementation of these measures in the health services of the autonomous communities, agreements have been signed with the autonomous communities and the National Institute for Health Management (INGESA), for an amount of 4 million euros annually. Every year a report is presented to the Interterritorial Council on the response within the NHS to gender-based violence. The report is prepared in collaboration with the autonomous communities.

# ACTIVITIES PLANNED 2009-2010

■ The activities currently underway will continue, with reinforced evaluation of the interventions made in the area of gender violence.

A Health and Gender Strategy for the NHS is now being prepared. Its purpose is to encompass actions aimed at ensuring gender mainstreaming in health policies and programmes and in the care of illnesses or health situations with gender implications in their diagnosis or treatment (endometriosis, fibromyalgia and menopause, among others).

#### Reducing gender inequalities in health

- -Preparation of reports on health and gender and on the response to gender violence.
- -Creation of the NHS Health and Gender Strategy and its presentation to the Interterritorial Council.
- -Identification and dissemination of best practices aimed at reducing gender inequalities in health.
- -Evaluation of the implementation of the Common Protocol for a Healthcare Response to Gender-Based Violence.

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# ADAPTING THE HUMAN RESOURCES OF THE NATIONAL HEALTH SYSTEM TO THE NEEDS OF THE HEALTH SERVICES



■ The planning and development of human resources in the area of health is a crucial instrument in enhancing the quality of the care provided. Good planning is related to, among other things, improving the way information systems deal with human resources, understanding the medium- and long-term needs of specialists and supporting the teaching units that are in charge of training specialists in the health sciences and planning ongoing training programmes for health professionals.

Today's demographic changes, the new services offered to citizens, the increasing complexity of diagnosis and treatment technologies and the effects of the movement of professionals in ever broader spheres mean that it is difficult to maintain the balance between supply and demand without continual assessment of needs. All of this makes it necessary to study, in each speciality, the availability, at present and in the foreseeable future, of human resources with which to respond to these new challenges.

#### PROJECTS 2009-2010

- To strengthen the common information system in the area of human resources in the NHS so that data processing can take place in real time.
- To continue promoting, together with the autonomous communities, the implementation of the Register of Health Professionals, which makes it possible to know the distribution of all the professionals in the health sciences, at both public and private facilities.
- To update on a bi-annual basis the supply and demand of medical specialists and to conduct a study of needs in terms of nurses and nurse auxiliaries (2009-2030) to enable various potential scenarios to be assessed and to plan human resources accordingly.
- To promote a basic common training pathway for the various specialities as an instrument with which to obtain pluridisciplinary teams better able to ensure quality care and patient safety, as well as improved management of available human resources.
- To modernise procedures for the recognition of university degrees held by professionals from non-EU countries who wish to become part of the National Health System of Spain, guaranteeing that the required quality criteria are met.

- To adopt the Royal Decree on the recognition for professional purposes of degrees obtained by non-EU specialists, as provided by Art. 18 of Law 44/2003 on the Organisation of Health Care Professions.
- To create an Office of Return for professionals from Spain who are currently working abroad.

# ACHIEVING CLINICAL EXCELLENCE



# ACCREDITING AND AUDITING HEALTH CARE FACILITIES AND SERVICES

#### **REVIEW 2006-2008**

As part of the endeavour to improve the quality of the NHS and within the Ministry of Health and Social Policy's sphere of responsibility, the processes for accrediting and auditing health care facilities and services are considered to be of fundamental importance. These processes are believed to be very useful in ensuring fulfilment by the facilities and services of their duty to provide specialised training in the health sciences, and also in the accreditation of NHS Reference Facilities, Services and Units, as provided by Royal Decree 1302/2006. Specific auditing plans and auditor training programmes have been developed in both cases.

With the participation of scientific societies and experts in the fields, documents on Standards and Recommendations in Quality and Safety are being prepared. The standards for the areas of Major Outpatient Surgery, Day Hospitals, Pluripathology Units, and Maternity Wards have been published during this period.

# ACTIVITIES PLANNED 2009-2010

■ The activities currently underway will continue, with improvements being made to the processes used in evaluating, auditing and accrediting teaching units and NHS reference facilities. Specifically, the Manual for the Evaluation of Teaching Units will be updated to reflect the new legislation (Royal Decree 183/2008, on the specialities of the health sciences and certain aspects of specialised health care training), as will be the Manuals for the Accreditation and Evaluation of Teaching Units that require updating due to changes in the corresponding training programme. The auditor training

programme will also be consolidated. The Auditing Plan for Teaching Units and Reference Facilities will be drawn up, by virtue of which audits will be performed in over 100 hospitals, for purposes of their accreditation or designation.

Reports will be prepared on standards and recommendations for new hospital units, such as; urgent care services, the intensive care unit, the hospital nursing unit and the palliative care unit.

#### Accrediting and auditing health care facilities and services

- -Preparation of documents on standards and recommendations in quality and safety for five units and health services.
- -Audits for the accreditation of NHS Reference Facilities, Services and Units.
- -Plan for teaching audits together with the autonomous communities, plan for the management of teaching quality, updates of evaluation and auditing manuals and consolidation of auditor training programme.

# IMPROVING PATIENT SAFETY IN THE HEALTH CARE FACILITIES OF THE NATIONAL HEALTH SYSTEM

■ Patient safety, or the minimisation of the risk of causing unnecessary harm as a result of health care, has been included in the Quality Plan for the NHS, as one of the priority strategies of the Ministry of Health and Social Policy, since 2005. The key element of this strategy is ensuring the collaboration of the autonomous communities and the explicit support of professionals and patients (more than 140 scientific societies and 22 patient and consumer associations signed the principles of Patient Safety) and other involved organisations.

#### **REVIEW 2006-2008**

Improving the culture of safety among professionals and patients at all care levels is vital for changing the behaviour of organisations. For this reason a training programme is being offered, in which over 5000 professionals have taken part so far, in collaboration with various Spanish universities, in order to improve their skills in the prevention, identification and minimisation of adverse events related to health care. Also, special emphasis has been given to the dissemination of actions and reports using Information Technology (IT), through the Patient Safety website and by participating in different national and international forums (WHO, OECD, European Commission, among others) as an opportunity to exchange experiences.

Research has been carried out to discover the frequency of adverse events associated with health care, both at the hospital level, with the National Study on Adverse Events linked to Hospitalisation (ENEAS 2005), and at the primary care level, with the Study on Patient Safety in Primary Care (APEAS 2008). Studies on the appropriate use of medicines and on indicators of best practices in NHS hospitals, among other topics, have also been performed. In addition, 6 million euros have been allocated to the National Plan for Scientific Research, Development and Innovation, with which to fund projects related to strategies in health and patient safety in research conducted through the Carlos III Health Institute in the area of the Evaluation of Health Care Technologies.

Of crucial importance is the development of systems for the reporting of adverse incidents and events, as such systems can turn mistakes into learning experiences. Three legal reports have been prepared in which national and international legislation is analysed and a series of proposals set forth, with the aim of modifying Spain's current legislation in order to allow for a system of non-punitive reporting. Also, a reporting system model is currently being piloted in the NHS in order to analyse its viability.

Through specific agreements with the autonomous communities, approximately 38 million euros have been allocated to funding the implementation of safe practices, including: unequivocal identification of patients, hand hygiene, appropriate use of medicines, prevention of Health Care Associated Infections (HCAI) and the prevention

of adverse events associated with surgical procedures, among others. Efforts underway since 2006 with patients and citizens have led to a Citizen Network of Trainers in Patient Safety and to a virtual classroom offering training and information resources.

## ACTIVITIES PLANNED 2009-2010

■ In the context of Spain's presidency of the European Union, the 5th International Conference on Patient Safety will be held in this country. Continued emphasis will be given to improving the information and training available to professionals and patients regarding patient safety.

A document will be drawn up to propose legislative modifications that would allow non-punitive reporting in Spain, and a prototype for an adverse event notification and reporting system for the NHS will be presented. Work will continue in the validation of the indicators proposed by the OECD and in the identification of key indicators that allow for evaluation of the patient safety strategy at the NHS level.

Efforts towards increasing knowledge about the frequency of Adverse Effects and their characteristics in health care facilities will be aimed especially at long-term care centres and at primary care services during this period.

More steps will be taken to promote projects, both with the autonomous communities and with scientific societies and other bodies (national and international), that encourage and evaluate safe clinical practices, especially those related to the prevention of Health Care Associated Infections (HCAI). In this respect, the results of the project "Bacteraemia Zero: the prevention of bacteraemias associated with central vein catheters in Spain's Intensive Care Units" and of the Hand Hygiene Campaign will be presented. Both projects were undertaken with the collaboration of the WHO's World Alliance for Patient Safety, with the participation of all the autonomous communities.

Participation of patients and citizens in the Patient Safety Strategy will be consolidated by means of the existing Citizen Network of Trainers in Patient Safety.

#### Improving patient safety

- -Improving information and the training of professionals in Patient Safety.
- -Proposing changes in the existing legislation to allow for non-punitive reporting of adverse events.
- -Designing and piloting a system for the reporting and notification of adverse incidents and events.
- -Identifying and validating a series of key indicators in patient safety, recommended by international organisations, by which to evaluate the strategy in place.
- -Promoting projects that encourage and evaluate safe practices in the NHS, at all levels of care, in conjunction with the autonomous communities and scientific societies.
- -Improving knowledge about adverse events in long-term care centres.
- -Consolidating the participation of patients and citizens in the Patient Safety Strategy.



### IMPROVING CARE GIVEN TO PATIENTS WITH CERTAIN PATHOLOGIES

#### **REVIEW 2006-2008**

Strategies have been prepared, and approved by the Interterritorial Council, on Cancer (29 March 2006), Ischaemic Heart Disease (28 June 2006), Diabetes (11 October 2006), Mental Health (11 December 2006), Palliative Care (14 March 2007) and Stroke (26 December 2008). The preparation, dissemination and implementation of all of them, and the evaluation of the ones approved two years ago, have taken place in a structured and systemised manner, with the participation of representatives of scientific societies, patient associations, all of the autonomous communities and the National Institute for Health Management (INGESA).

To promote the implementation of the strategies, multiple actions have been undertaken, with specific funding, by means of calls for applications for subsidies, given to scientific societies and patient associations (2.5 million euros); funding of projects presented by the autonomous communities through the funds for strategies [17.7 million euros]; special funding of the Evaluation of Health Care Technologies projects of the Carlos III Health Institute (2.3 million euros); and agreements with the Agencies for the Evaluation of Health Technologies for the preparation of reports, examination of evidence and the preparation of 20 Clinical Practice Guides (30 million euros), along with other activities that are directly related to or funded by the Quality Plan.

The NHS of Spain has collaborated with the work and the initiatives of the European Alliance against Cancer and with programmes organised by the WHO. It has also participated in the work undertaken in the area of Mental Health by the European Commission (Green Book on Mental Health), the WHO-Europe (Mental Health Declaration and Action Plan), the Council of Europe (Working Group on Human Rights and Mental Health) and the OECD (Quality Indicators in Mental Health Care).

### ACTIVITIES PLANNED 2009-2010

■ Preparation of the Strategies on Chronic Obstructive Lung Disease (COLD) and on Rare Diseases began in 2008 and they were adopted by the Interterritorial Council on 3 June 2009. They will be presented publicly in conferences to take place in the last quarter of 2009. Also, the Spanish NHS is participating in the European Commission's efforts regarding European Action in the Field of Rare Diseases.

The contents of the Cancer and Ischaemic Heart Disease Strategies will be updated in keeping with the results of the Evaluation Report and available evidence, and a conference on Chronic Cardiovascular Diseases will take place during the first half of 2010, coinciding with Spain's presidency of the European Union.

The Evaluation Reports concerning the Strategies on Diabetes, Palliative Care and Mental Health will be presented to the Interterritorial Council and a conference on Mental Health and Old Age will take place in 2010, in the context of the Spanish presidency of the European Union.

#### Improving care given to patients with certain pathologies

- -Actions in support of the dissemination, implementation, evaluation and update of strategies in collaboration with the autonomous communities, scientific societies and patient associations involved in each of them.
- -Funding provided to the autonomous communities for innovative projects aimed at furthering the implementation of the strategies.
- -Preparation of clinical practice guides.
- -Conference on Chronic Cardiovascular Diseases in 2010, in the context of Spain's presidency of the EU.
- -Conference on Mental Health in 2010, in the context of Spain's presidency of the EU.

#### IMPROVING CLINICAL PRACTICE

#### **REVIEW 2006-2008**

■ To improve clinical practice, it is important to promote research applied to health services and to facilitate access by professionals to the best possible scientific information. The Quality Plan has worked in both of these directions. As for the first direction, funds have been allocated to research projects pertaining to the evaluation of health care technologies through the Carlos III Health Institute and priority has been given to the development of agencies devoted to the evaluation of health care technologies. In terms of the second direction, the dissemination of scientific information has been promoted through the signing of contracts with the Cochrane Library and the Joanna Briggs Institute Library, to ensure that these two sources of information are freely accessible in Spain. Both libraries contain the best scientific information available, one for medicine and the other for nursing, and have versions in Spanish.

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Another element of the effort to improve the dissemination of information has been the creation of specific tools like the Electronic News Bulletins from the NHS Quality Agency, the Agency Blog<sup>[1]</sup> which offers news and documents and also the clinical evidence Metasearcher<sup>[2]</sup> in Spanish and English.

Another line of activity has been to promote the preparation and use of Clinical Practice Guides associated with the Health Strategies, reinforcing and extending the Guía Salud Project<sup>(3)</sup> and training professionals in these methodologies. So far 8 Clinical Practice Guides have been published and officially presented, and progress has been made in designing and defining other products based on scientific evidence.

<sup>[1]</sup> http://blog.plandecalidadsns.es/

<sup>[2]</sup> www.excelenciaclinica.net

<sup>[3]</sup> Guía Salud is a National Health System body in which all 17 autonomous communities participate in an effort to promote the preparation and use of Clinical Practice Guides and other tools and products based on scientific evidence <a href="http://www.guiasalud.es/home.asp">http://www.guiasalud.es/home.asp</a>

### ACTIVITIES PLANNED 2009-2010

■ The areas of work already underway will continue, evaluating and improving their impact on clinical practice and promoting citizen access to quality health information.

#### Improving clinical practice

- -Extending and evaluating access to scientific information for decision-making in management and clinical practice.
- -Promoting the preparation and use of the Clinical Practice Guide associated with the health strategies and broadening the Guía Salud Project.
- -Promoting the use of IT as a tool by which to transmit health information to professionals and citizens in general.

# USING INFORMATION TECHNOLOGY TO IMPROVE CARE GIVEN TO CITIZENS



#### **HEALTH ONLINE**

- One of the Quality Plan's main priorities is to promote the use of Information Technology (IT) within the NHS as a way to improve the care provided to citizens. To this effect, the Plan includes the functional and technological elements required for interoperability between the systems of each autonomous community:
  - A reliable system for user identification: the NHS Health Card.
  - The computerisation of the clinical records of each user or patient: Electronic Medical Records.
  - An electronic prescription system, or e-prescribing, which is an electronic means of performing all the procedures necessary to provide pharmaceutical services to patients and users (prescription, authorisation, dispensation).
  - Mechanisms that improve the accessibility of the health services, such as centralised appointment-making by phone (Teleappointments), and methods for distance diagnosis and treatment, to reduce unnecessary visits to health care facilities (Telemedicine).

The Plan Avanza, managed by the Ministry of Industry, Tourism and Trade through its public company Red.es has led to a Framework Collaboration Agreement funded with 141 million euros for the 2006-2009 period. All the autonomous communities have benefited from these funds through bilateral agreements signed with Red.es, in coordination with the Ministry of Health and Social Policy.

In addition, the Ministry of Health and Social Policy has, during this same period, allocated another 4.9 million euros of its own funds for territorial cohesion policies, such as the development of IT infrastructures put in place by the autonomous communities to improve health information and to further efforts towards Electronic Medical Records in the NHS.

#### **REVIEW 2006-2008**

■ The Electronic Medical Records for the NHS project was formally adopted by the Interterritorial Council on 10 October 2007. The pilot phase has already begun in two

autonomous communities (Balearic Islands and Valencia) and in the coming months it is expected that eight more will become a part of it. The evaluation of the pilot is set to take place at the end of 2009 and, save unexpected difficulties, its deployment in the NHS will begin in 2010. The commencement of the pilot and its extension to the rest of the autonomous communities have been possible thanks to the attainment of the following objectives:

- An NHS Health Card database common to all the autonomous communities, which gives an exclusive ID code to each citizen. This database is managed by the Ministry of Health and Social Policy, by the autonomous communities themselves (Catalonia and the Basque Country are currently in the incorporation phase) and by the National Institute for Health Management (INGESA).
- Approval by the Interterritorial Council of an agreement regarding the basic information that must appear in all clinical reports within the NHS. The agreement is based on the proposal prepared by 30 scientific societies specialised in the field of health.
- The agreement regarding functionality and the conditions of access and use of the clinical data in the NHS, also approved by the Interterritorial Council. This agreement is based on a proposal prepared by the 30 aforementioned societies, plus others from the field of health law and bioethics, and also by citizen associations. In addition, the proposal was debated by a group of experts from the autonomous communities before submitting it to the Interterritorial Council for approval.
- A Health Intranet that the Ministry has put at the service of the Electronic Medical Records project and that allows for information exchange between the autonomous communities through the Data Centre used for the exchange of NHS services. This system has the appropriate security measures, because a Back-up Data Centre supports the Data Centre and because this infrastructure has received ISO 27001 certification on information security.

The Health Online project has provided the autonomous communities and the Ministry with infrastructures and related services:

• 60,000 computers supplied to over 6,000 health care facilities, where more than 33 million citizens receive care and 250,000 professionals work.

- Provisioning and configuration of servers, data storage, radiology displays and equipment, integration services, networking equipment, deployment of WiFi services and access points, telemedical equipment and cabling for medical consultation offices.
- Implementation support for e-prescribing in two autonomous communities (Cantabria and Murcia), with interoperability features.
- Capacity of the NHS Data Centre increased and a Back-up Data Centre put in place. Also, an Information Security Management System has been implemented and has recently received ISO 27001 certification, awarded by the Spanish Association for Standardization and Certification (AENOR).

As part of the e-Health initiative of the European Commission, Spain is participating, along with 12 other Member States, in a European project on the exchange of clinical information (epSOS project). The Ministry of Health and Social Policy and the autonomous communities of Andalusia, Castile-La Mancha and Catalonia are participating as beneficiaries and are at the helm of some of the essential project definition activities.

### ACTIVITIES PLANNED 2009-2010

- The rate of progress made in this strategy to date needs to be maintained, by strengthening the achievements of recent years and working towards the extension of the services mentioned to the NHS as a whole. For this purpose, the Ministry of Health and Social Policy has signed a new framework agreement with the Ministry of Industry, Tourism and Trade and its public company Red.es. The agreement involves economic support for the autonomous communities in the amount of 101 million euros during the 2009-2012 period. Collaboration agreements with the autonomous communities will be signed to address in greater detail the actions of the projects covered by this strategy. The objectives are as follows:
  - To guarantee the unequivocal identification of each citizen anywhere in the National Health System.

- To have a clinical information access and interchange system available, to be used by different professionals, health care facilities and autonomous communities.
- To promote e-prescribing, with a view to extending it to the entire NHS.
- To guarantee the information's accessibility, interoperability and appropriate use from anywhere in the system.

In order to guarantee the unequivocal identification of citizens throughout the NHS, by means of the NHS Health Card and the database on the population served by the NHS, the following actions are envisaged:

- Working with the autonomous communities to increase accessibility to the shared Health Card database from all the care facilities in the NHS.
- Identifying, together with the autonomous communities, areas in need of functional improvement in the application that manages the Health Card database, and beginning to work on them.
- Designing, with the administrations in charge of the health protection system, the statistical analysis to be performed on the health card database.

To make progress in the area of Electronic Medical Records and to facilitate clinical information interchange between different professionals, health care facilities and autonomous communities, the following actions are planned:

- Concluding and evaluating the pilot study among autonomous communities, designed to test everything defined in the Electronic Medical Records project, making any modifications that may be called for, and beginning its extension to the NHS as a whole.
- Incorporation of Spain into the International Health Terminology Standards Development Organisation (IHTSDO) and creation of a technical development platform aimed at implementing SNOMED (Systematised Nomenclature of Medicine-Clinical Terms), to achieve semantic interoperability in the NHS through the use of a standardised clinical terminology.
- Participating actively in the interoperability project within the European initiative e-Health (epSOS project), playing a leading role in different phases of the project.

To promote the electronic prescription system in the NHS, the following actions are to be undertaken:

- Establishing the criteria and technologies that will make it easier for users to benefit from the pharmaceutical service, simplifying as much as possible the steps necessary to ensure the continuity of treatments throughout the NHS.
- Defining the basic functional specifications that any electronic prescription system must have in the context of the NHS.
- Defining the functional requirements that the electronic prescription system will need to have in order to make it operational between autonomous communities.
- Deciding on a technical design for the electronic prescription system in the NHS.

To guarantee the information's accessibility from anywhere in the system, as well as its interoperability and appropriate use, the following actions are to be undertaken:

#### Communication networks:

- Improving electronic communications with the necessary bandwidth, to ensure successful completion of all transactions within the information systems.
- Implementing services by which to monitor, maintain and analyse the use of the network.
- Implementing security and contingency plans that guarantee maximum stability for these systems, depending on the type of function supported.
- Installing and upgrading networking equipment used by the agents participating in the system.

#### Interoperability:

- Developing the catalogue of online services, bearing in mind the needs of the autonomous communities.
- Defining the functional and technological standards as well as the exchange formats.
- Assisting in the adaptation of the systems to the standards defined by the NHS and by the standardisation bodies in which Spain participates.
- Developing and maintaining the information systems that enable interoperability between the autonomous communities through the Data Centre.
- Setting up a common area devoted to best practices, by which to share applications and elements used in the autonomous communities.

#### Use of data:

- Developing and implementing specifications for tools used to access the NHS Health Information System.
- Implementing systems for the display, publication and distribution of data and indicators.
- Maintaining the data storage system, acquiring the elements necessary to ensure data availability and security, and complying with the requirements of the Spanish Law on Data Protection.
- Guaranteeing compliance with existing legislation on the protection of personal data in systems that include this type of data.

#### Health Online

Plan Avanza funded by the Ministry of Health and Social Policy and Red.es, in the amount of 145.9 million euros for the 2006-2009 period and 101 M euros in 2009-2012.

Enhancing the NHS Health Card database and improving its accessibility Electronic Medical Records of the NHS.

- Project approved by the Interterritorial Council on 10 October 2007:
- -Basic information common to clinical reports, agreed by 30 scientific societies and the autonomous communities
- -Functionality, conditions of access and use of the clinical data, agreed by 30 scientific societies, citizen associations and the autonomous communities
- NHS Health Card database in the Ministry of Health and Social Policy, common to all the autonomous communities, which assigns an identification code to each citizen.
- Ministry of Health and Social Policy Health Intranet at the service of the project.
- Finalise and evaluate the pilot of the electronic medical records project and extend it to the rest of the NHS
- Create within the Ministry of Health and Social Policy the technical development platform with which to implement SNOMED.

Promoting e-prescribing in the NHS.

Continue advancing towards interoperability in the NHS.

European project on cross-border interchange of clinical information (epSOS project)

• Spain is participating, along with 12 other Member States, in a European Project on the exchange of clinical information. The Ministry of Health and Social Policy and three autonomous communities are involved as beneficiaries.

### INCREASING TRANSPARENCY



### DESIGNING A NHS HEALTH INFORMATION SYSTEM THAT IS RELIABLE, APPROPRIATE AND ACCESSIBLE

The NHS Health Information System is a vital element in our response to the challenges arising from the new organisational situation within the NHS and from the increasing demands that citizens, patients, professionals and the health administrations themselves are making of the public health services, for more and better information.

The NHS Health Information System must be based on unquestionable technical credibility and neutrality within the NHS, as it will earn the recognition of those who use its services only through a high degree of participation by the generators and users of the information and through a permanent effort towards transparency. To develop it, a policy of continuous improvement and innovation will be applied and the process towards its consolidation will be based on the following:

- Using explicit methodologies that are technically rigorous.
- Producing an annual report on its development, to be presented to the Interterritorial Council.
- Collaborating permanently with NHS agents.
- Disseminating reliable, appropriate, up-to-date information suited to the needs of the different users.

#### **REVIEW 2006-2008**

■ The three years that the Quality Plan has been in effect have been characterised, as regards the Health Information System, by a high degree of participation by the autonomous communities in the construction of a common information system. Under the co-ordination of the Ministry of Health and Social Policy, the Key Indicators of the NHS have been selected and defined, and actions aimed at creating an NHS data bank

have also been carried out. Similarly, improvements have been made to the existing subsystems of information related to the large health areas (state of health, health care system, citizen satisfaction).

- Key Indicators of the NHS. These indicators are a prioritised set of information covering aspects considered relevant to health and the Spanish health system. Once they have been established and presented to the Interterritorial Council and the Board of Ministers, they will be made known to the public. For this purpose, a Statistics Portal is currently in development. The Portal, along with the Key Indicators, will provide different types of statistical information regarding health and the health system in a speedy and innovative manner. This tool will be at the service of health care authorities, managers, health professionals, researchers and the general public.
- NHS Data Bank. There is now public access, free of charge, to anonymised microdata and time series metadata from the statistical and information systems of the Health Information Institute, about: health (Spain's National Health Survey, series 1987 2006), health care centres (Catalogue of Primary Care Centres, series 2007 and National Catalogue of Hospitals, series 1995 2007), activity (Statistical Study on Inpatient Medical Facilities, series 1996-2005) and citizen opinion (Health Barometer, series 1996 2007). Also, the National Register of Deaths database has been set up to allow for consultation by researchers.
- Furthermore, applications have been developed and can be used through the website to obtain data from the Minimum Basic Data Set-Hospital Discharge (MBDS-HD).
  - -Which includes the Register of NHS Hospital Admissions, mortality, the National Health Survey and population figures.
- Among the improved information subsystems, the following advances must be mentioned:
  - -The revised version of the National Health Survey, which was presented in May of 2008 and has brought about significant improvement in the detection and measurement of health inequalities (especially in relation to gender and social class, mental health and the health determinants related to the physical and social environment).

- -The newly-created Primary Care Information System (PCIS), which serves to fill a transcendental information gap that existed in the NHS.
- -The General Register of Health Centres, Services and Facilities, which gathers and updates the list of health care providers authorised by the autonomous communities (in development phase).
- -The new plan for the use of indicators from the Statistical Study on Inpatient Medical Facilities, which contains the main data concerning the structure, activity and expenditure of Spain's hospitals.
- -The innovation project regarding the model of analysis of the MBDS-HD, the main source of information about morbidity attended and the care process in hospitals, which enables in-depth analyses to be made on the characteristics of hospital care given to patients in the NHS.
- -Extending the MBDS-HD to the field of hospitalisation without overnight stay (Major Outpatient Surgery and Day Hospital).
- -Enabling access, for research purposes, to the National Register of Deaths, through the Ministry's website.

Finally, actions have been undertaken to increase the transmission and transparency of information. Such actions include reducing the lag time between the production and the dissemination of data, through both the improvement of production processes and the publication of provisional information in the form of "previews". Similarly, the development of contents related to the Health Information System that are available on the Ministry of Health and Social Policy's website, as well as the holding of Annual Forums on the NHS Health Information System, have also contributed to increased transparency.

### ACTIVITIES PLANNED 2009-2010

■ To maintain the rate of progress attained in the NHS Health Information System,

consolidating the achievements of previous years and taking further steps in improvement and innovation, the following actions are to be undertaken.

#### Key Indicators of the NHS

- Disseminate the Key Indicators of the NHS and continually update the information available.
- Complete the information covered by the indicators by progressively incorporating additional data (pharmaceutical service, dietary health, environmental health and other aspects of health and the health care system).

#### NHS Data Bank

• Consolidate and broaden the bank by incorporating new databases and updating the ones already present.

Improving and integrating existing information subsystems.

#### Standardisation:

- Improvements in coding
  - -Action plan for the transition to and implementation of ICD 10.
  - -Strengthening the existing Technical Coding Unit by adopting the International Classification of Primary Care (ICPC-version II).
- Creation of a system for NHS recognition of the validity of health registers that already exist in professional and scientific spheres.

#### Developments in integration and improvement:

- Consolidation of the data concerning primary care activity and continuing the project for the construction of the Clinical Primary Care Database.
- Continuation of work begun with the autonomous communities to revise the Statistical Study on Inpatient Medical Facilities.
- Implementation of the model of indicators and analytical themes pertaining to hospitalisation, based on the use of the MBDS-HD, and implementation of webbased supporting tools with which to examine results, adjustment measures, comparative analyses and time series analyses.
- Finalizing construction of the National Register of Health Centres, Services and Facilities.

- Finishing construction of the Information System on NHS Waiting Lists for specialist consultations and diagnostic tests.
- Improving information processing, integrating the data from different perspectives (organisational, functional, territorial or any other that may be deemed relevant).
- Maintaining and developing the Ministry of Health and Social Policy's statistical planning and coordination activities, enhancing the dynamism of the Interministerial Statistics Commission and the works undertaken in relation to the National Plan on Statistics and its corresponding Annual Programmes.

Further develop the plan to improve data accessibility and the dissemination of information

- Improving the content structure of the website and increasing data accessibility by using a variety of formats and including bilingual summaries of information (Spanish-English) for the main statistics.
- Publishing and planning the dissemination of the items published by the Information System of the NHS in the various formats (paper, CD and online publications) included in the Ministry's Publishing Programme.
- Broadening the variety of microdata and metadata that can be downloaded directly from the Ministry's website, with complete confidentiality guaranteed at all times.
- Opening the Statistics Portal of the Ministry of Health and Social Policy to the public and consolidating its access system and functioning. The Portal will allow for interactive consultation and generation of reports based on the following information systems:
  - -Basic data and statistics from the MBDS-HD
  - -Statistical Study on Inpatient Medical Facilities.
  - -Mortality Statistics.
  - -The National Health Survey.
  - -The Health Barometer.
  - -Database of the Key Indicators of the NHS.
  - -Basic data from the Primary Care Information System (PCIS).

- Ensuring that a proper response is given to all requests for general information received through the e-mail informacionsanitaria@msc.es and also any to requests made by citizens and more specialised users for the right to use data.
- Reinforcing the relationship of the Ministry of Health and Social Policy with international organisations such as DG SANCO, Eurostat, WHO and OECD, through active participation in the different forums and compliance with the commitments made regarding the sending of data.

#### **Greater transparency**

#### NHS Health Information System

- Developed in collaboration with the autonomous communities.
- Construction and approval by the Interterritorial Council of the NHS Key Indicators
- NHS Data Bank available to the public.
- Statistics Portal: interactive applications for queries regarding health and health determinants, hospitalisation and mortality, available to bodies and researchers.
- Forthcoming dissemination of the NHS Key Indicators and implementation of permanent update procedure.
- Consolidation and extension of the NHS Data Bank
- Continual improvement of the content structure and dissemination of information
- Opening the Ministry of Health and Social Policy Statistics Portal to the public.

#### Improving and integrating health statistics

- Numerous interventions designed to improve and offer greater coverage of subject areas.
- Clinical Primary Care Database under construction.
- Strengthening the extension of the MBDS to the ambulatory and private levels and implementing and improving the model of indicators and analysis of the MBDS-HD.
- The National Register of Health Centres, Services and Facilities under construction.
- Need to improve the Health Information System on NHS Waiting Lists for specialist consultations and diagnostic tests.
- Strengthening relationships with DG SANCO, Eurostat, OECD and WHO.

### SUMMARY AND CONCLUSIONS

■ During the first three years of the Quality Plan efforts have been focused on the promotion of health, equity, clinical excellence, electronic medical records and information systems. The approach used in all of these areas has been to work in conjunction with experts, the autonomous communities, scientific societies, associations of patients and social organisations, constantly seeking the agreement and active involvement of all parties.

This method has made it possible to reinforce the yearly Reports on the National Health System, on Health and Gender and on Gender-Based Violence, and to implement the Strategy for Attending Normal Births, and also strategies for the diseases of higher prevalence or greater disability burden. Actions have also been undertaken to prevent the onset of these diseases, along with projects aimed at improving eating habits, promoting physical exercise and preventing domestic accidents. Patient safety and excellence in clinical practice have also been areas of priority for the Quality Plan.

To prepare these strategies a number of studies, research projects and evaluations of health technology have been necessary, to ensure that the information used was as accurate as possible. Clinical Practice Guides have been written and online resources with the best scientific evidence available have been set up for use by professionals. All the strategies propose actions aimed at facilitating their implementation, such as dissemination, training and project funding. All the strategies also contain provisions for evaluation and updating, and in some of them such processes have already taken place.

Fruit of an agreement reached with over 30 scientific societies, patient associations and experts from the autonomous communities and also of the investments of the Health Online programme, is the project that seeks to establish Electronic Medical Records in the National Health System. The project is already operating in two autonomous communities and is expected to be extended to the rest of them next year.

The first three years of the Quality Plan have brought with them an information system common to all of the autonomous communities as well as improvements to the existing

information subsystems, which pertain to the large areas in the field of health: state of health, the health care system and citizen satisfaction.

The Quality Plan has also led to the participation, and in some cases the leadership, of the Spanish National Health System in forums, working groups, projects and meetings held at the international level.

## ANNEX: ACRONYMS AND ABBREVIATIONS

AHRQ	Agency for Healthcare Research and Quality
APEAS	Spanish Study on Patient Safety in Primary Care
COLD	Chronic Obstructive Lung Disease
CPG	Clinical Practice Guide
DG SANCO	Directorate General for Health and Consumers
ENEAS	Spanish National Study on Adverse Events linked to Hospitalisation
EU	European Union
EUROSTAT	Statistical Office of the European Commission
HCAI	Healthcare Associated Infections
ICD 10	International Classification of Diseases 10 <sup>th</sup> Edition
ICD 9 CM	International Classification of Diseases 9 <sup>th</sup> Edition, Clinical Modification
ICPC	International Classification of Primary Care
IHTSD0	International Health Terminology Standards Development Organisation
INGESA	Spain's National Institute of Health Management
IT	Information Technology
MBDS-HD	Minimum Basic Data Set of clinical records-Hospital Dischange
NA0S	Strategy for Nutrition, Physical Activity, and Obesity Prevention
NHS	National Health System of Spain
OECD	Organisation for Economic Co-operation and Development
PCIS	Primary Care Information System
PERSE0	Pilot Programme in Schools for Health, Physical Exercise and against Obesity
SNOMED	Systematised Nomenclature of Medicine-Clinical Terms
WH0	World Health Organisation