European Union action in the field of Rare Diseases

Antoni Montserrat Moliner
Policy Officer for Rare Diseases
DG SANCO Health Information Unit
European Commission
Una estrategia europea para las enfermedades raras

- Adopción de planes o estrategias nacionales en enfermedades raras en todos los Estados de la Unión Europea antes de Diciembre 2013.

- Adopción de las Decisiones de Implementación de la Directiva de atención sanitaria transfronteriza en Octubre de 2013.

- Reforzar la difusión y la visibilidad de las enfermedades raras vía la base de datos ORPHANET: 6000 enfermedades descritas.

- Contribuir a la revisión de la CIE (Clasificación Internacional de Enfermedades), versión 11, en 2015/2016 clasificando y codificando el máximo de enfermedades raras.

- Crear la Plataforma Europea de Registros de Enfermedades Raras con sede en Ispra (Italia) en 2014. Más de 600 registros en la EU.

- Crear un ERIC (European Research Infrastructure Consortium) para apoyar el desarrollo europeo de las ER en 2014/2015.

- Mejorar la accesibilidad de los medicamentos heréditos en todos los Estados de la UE y el EEE.

- Continuar el apoyo de la UE a EURORDIS para reforzar el empoderamiento de los pacientes.
Una estrategia europea para las enfermedades raras

• Analizar la factibilidad de un enfoque común en el cribado neonatal de las ER.

• Creación del IRDiRC (International Rare Diseases Research Consortium) para la cooperación UE, USA, Canada, Australia, Corea del Sur, Japón, ...

Instrumentos para implementar estos objetivos

• El 3er Programa Europeo de Salud 2014-2019

• El Programa Horizon 2020

• El Comité Europeo de Expertos en Enfermedades Raras (EUCERD)
Defining and quantifying rare diseases

- In EU countries, any disease affecting fewer than 5 people in 10,000 is considered rare according to the definitions adopted in the Orphan Drugs Regulation (EC) No 141/2000 and in the Commission Communication COM (2008) 679/2 on Rare diseases: Europe’s challenges.

- That number may seem small, but it translates into approximately 246,000 people throughout the EU’s 27 member countries.

- Most patients suffer from even rarer diseases affecting 1 person in 100,000 or more.

- It is estimated that today in the EU, 6,000-8,000 distinct rare diseases affect 6-8% of the population – between 27 and 36 million people.

- In the United States, the Rare Disease Act of 2002 defines rare disease strictly according to prevalence, specifically "any disease or condition that affects less than 200,000 persons in the United States," or about 1 in 1,500 people.

- In Japan, the legal definition of a rare disease is one that affects fewer than 50,000 patients in Japan, or about 1 in 2,500 people.
Legal basis for the developments of the EU Public Health Policy

Based on new Article 168 (former 152) of the EU Treaty

- A Community action programme on Rare Diseases, including genetic diseases, was adopted for the period of 1 January 1999 to 31 December 2003 with the aim of ensuring a high level of health protection in relation to RD. As the first EU effort in this area, specific attention was given to improving knowledge and facilitating access to information about these diseases.

- Orphan Medicinal Product Regulation (Regulation (EC) No 141/2000 of the European Parliament and of the Council of 16 December 1999 on orphan medicinal products, was proposed to set up the criteria for orphan designation in the EU and describes the incentives (e.g. 10-year market exclusivity, protocol assistance, access to the Centralised Procedure for Marketing Authorisation) to encourage the research, development and marketing of medicines to treat, prevent or diagnose rare diseases.

- For the period 2008-2013 the Commission has adopted the White Paper COM(2007) 630 final “Together for Health: A Strategic Approach for the EU 2008-2013” of 23 October 2007 developing the EU Health Strategy. Actions under Objective 1 of this EU Strategy cover a Communication on European Action in the Field of Rare Diseases and in point 4.1 of this EU Strategy it is suggested to put forward EC-level structured cooperation mechanisms to advise the Commission and to promote cooperation between the Member States.
Legal basis for the developments of the EU Public Health Policy

Based on new Article 168 (former 152) of the EU Treaty

- As a consequence Rare diseases are now one of the priorities in the Second EU Health Programme 2008-2013. According to the DG SANCO Work Plans for the implementation of the Public Health Programme, main lines of action and priorities are choosed very year. Work Plan for 2012 adopted.

- In the current Framework Programme, the FP7, the Health Theme of the "Cooperation" Specific Programme, is designed to support multinational collaborative research in different forms. The main focus of the Health theme in the rare diseases area are Europe-wide studies of natural history, pathophysiology, and the development of preventive, diagnostic and therapeutic interventions.

- Commission Communication COM (2008) 679/2 to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions on Rare diseases: Europe’s challenges creating an integrated approach for the EU action in the field of rare diseases. Adopted 11th November 2008.

- Council Recommendation on a European action in the field of rare diseases recommending actions at national level to implement the EU action (e.g. National Plans for Rare Diseases). Adopted 8th June 2009.
Legal basis for the developments of the EU Public Health Policy

Based on new Article 168 (former 152) of the EU Treaty

- Decision of the Commission creating a European Union Committee of Experts on Rare Diseases during 2009. To be composed by 51 members representing Member States, patient’s organisations, industry, FP Projects, Health Programme projects, etc. Adopted 30th November 2009.

- Directive of the European Parliament and of the Council on the application of patients' rights in cross-border healthcare (COM(2008)414) provides for the development of European reference networks (ERNs) to be facilitated by the Member States. The ERN for Rare Diseases will have a strategic role in the improvement of quality treatment for all patients throughout the European Union as called by the patients' organisations. Adopted 9th March 2011.
There is probably no other area in public health in which 27 national approaches could be considered to be so inefficient and ineffective as with rare diseases. The reduced number of patients for these diseases and the need to mobilise resources could be only efficient if done in a coordinated European way.
The Commission Communication and the Council Recommendation on rare diseases

The European Union approach

1. Plans and strategies in the field of rare diseases
2. Adequate definition, codification and inventorying of rare diseases
3. Research on rare diseases
4. Centres of expertise and European reference networks for rare diseases
5. Gathering the expertise on rare diseases at European level
6. Empowerment of patient organisations
7. Sustainability
New priorities after Commission Communication and Council Recommendation

Plans and strategies in the field of rare diseases

- The Member States are invited to establish national or regional action plans for RD before End 2013 in order to implement the actions suggested in the Commission Communication and the Council Recommendation and to provide an annual report on the progress made toward this objective.

- The Commission is providing European guidelines for the elaboration of these action plans for RD (EUROPLAN Project selected for funding for the period 2008-2011). National conferences have been organised (twelve conferences during 2010).

- A national plan/strategy (NP/NS) can be defined as the sum of integrated and comprehensive health policy actions for RD, to be developed and implemented at national level. A plan has: a) well specified objectives and b) actions that have to be supported by a budget, implemented within a time frame, evaluated with specific indicators (EUROPLAN Definition). 
New priorities after Commission Communication and Council Recommendation

Plans and strategies in the field of rare diseases

This definition includes two central concepts of the Council Recommendation on RD. ‘Integrated’ refers to the fact that strategies should be developed in a way to identify complementarities, maximize synergies and avoid duplications. ‘Comprehensive’ refers to the fact that the actions foreseen in the plan should fulfill all main patients’ needs (e.g. quality of care but also social services and centers of expertise).

Definition of common and harmonized indicators to appraise and evaluate the national plan/strategy (NP/NS) of rare diseases.

The EUROPLAN Recommendations also includes the international dimension not possible to accomplish at national level (e.g. classification and codification, reference networks, orphan drugs, research, etc.).

The Continuity of EUROPLAN 2011-2013 (under the form of a Joint Action) is scheduled prioritising technical assistance and training for Member States with precise needs. Advice to be provided to non EU countries.
New priorities after Commission Communication and Council Recommendation

Plans and strategies in the field of rare diseases
2012 REPORT ON THE STATE OF THE ART OF RARE DISEASE ACTIVITIES IN EUROPE OF THE EUROPEAN UNION COMMITTEE OF EXPERTS ON RARE DISEASES

PART I: OVERVIEW OF RARE DISEASE ACTIVITIES IN EUROPE
I. Plans and strategies in the field of rare diseases

From the side of the socioeconomic needs the Commission has selected and supported during last years three extensive surveys performed by EURORDIS

_The Voice of 12,000 Patients_”, was officially launched on March 3 2009. The book, published by EURORDIS, presents the conclusions of the EurordisCare 2 and EurordisCare 3 surveys on the experience and expectations on diagnoses and access to care of 12 000 patients representing 18 rare diseases and 24 European countries.

It details the methodology, the overall results, results by country and by disease, and how the surveys have contributed to the development of policies and actions in favour of better diagnosis and care for rare disease patients.

See ‘_The Voice of 12,000 Patients_’

http://www.eurordis.org/IMG/pdf/voice_12000_patients/EURORDISCAR E_FULLBOOKr.pdf
I. Plans and strategies in the field of rare diseases

- From the side of the socioeconomic needs the Commission has selected and supported during last years three extensive surveys performed by EURORDIS

- 25% of patients reported waiting between 5 and 28 years (EDS) from the time of first symptoms to a confirmatory diagnosis of their disease.

- 41% of patients were initially misdiagnosed leading to severe consequences such as inappropriate medical interventions, including surgery and psychological treatment.

- In 33% of cases, the diagnosis was announced in unsatisfactory terms or conditions and 12% of cases, it was announced in unacceptable ones.

- The genetic nature of the disease was not communicated to the patient or family in 25% of cases. This is paradoxical, given the genetic origin of most rare diseases. Genetic counselling was only proposed in 52% of cases.

- Majority of respondents did not receive psychological support (between 60% and 80% overall).

- 25% of patients had to travel to a different region to obtain a diagnosis and 2% had to travel to a different country.
New priorities after Commission Communication and Council Recommendation

II. Adequate definition, codification and inventorying of rare diseases

The EU definition of rare disease based on a prevalence of less than 5 per 10,000 is maintained.

The EU will contribute to the ongoing process of revision of the ICD (International Classification of Diseases) in order to ensure appropriate codification and classification of rare diseases in the future ICD-11. A working group will be supported for all the period of this revision.

The EU will establish a dynamic Inventory of Rare Diseases to be periodically updated: the Orphanet classification of rare diseases.
New priorities after Commission Communication and Council Recommendation

II. How to finance national plans on rare diseases:

Thematic objectives for the CSF Funds and Common Strategic Framework, article 9(9) of the

New priorities after Commission Communication and Council Recommendation

II. How to finance national plans on rare diseases:

Health: The existence of a national or regional strategy for health ensuring access to quality health services and economic sustainability.

A national or regional strategy for health is in place that:

– Contains coordinated measures to improve access to quality health services;
– contains measures to stimulate efficiency in the health sector, including through deployment of effective innovative technologies, service delivery models and infrastructure;
– contains a monitoring and review system.
– A Member State or region has adopted a framework outlining available budgetary resources for health care.
New priorities after Commission Communication and Council Recommendation

II. Adequate definition, codification and inventorying of rare diseases

The database Orphanet is supported using appropriate financial instruments
New priorities after Commission Communication and Council Recommendation

II. Adequate definition, codification and inventorying of rare diseases

The database Orphanet is now a Joint Action between the Commission and the Member States

Comprehensive list of rare diseases: 5,838
Freely-accessible dataset in six languages
An inventory of rare diseases, cross-referenced with OMIM, ICD-10 and with genes in HGNC, OMIM, UniProtKB and Genatlas
A classification of rare diseases established by Orphanet, based on published expert classifications
Epidemiology data related to rare diseases in Europe (class of prevalence, average age of onset, average age at death) extracted from the literature
A list of signs and symptoms associated with each disease, with their frequency class within the disease
An inventory of Orphan Drugs at all stages of development, from EMA (European Medicines Agency) orphan designation to European market authorization, cross-linked with diseases.
Summary information on each rare disease in six languages (English, French, German, Italian, Spanish, Portuguese)
URLs of other websites providing information on specific rare diseases
A directory of specialised services, providing information on centers of expertise, medical laboratories, diagnostic tests, research projects, clinical trials, patient registries, mutation registries, biobanks and patient organizations in the field of rare diseases, in each of the countries in Orphanet’s network.
New priorities after Commission Communication and Council Recommendation

II. Adequate definition, codification and inventorying of rare diseases

_revisio_non the International Classification of Diseases (ICD)_

The WHO has launched the process of revision of the International Classification of Diseases (ICD) -10 to prepare the new ICD-11 which should be ready around 2015. The EC is very involved on the process from the side of the Rare Diseases.

The EU Committee of Experts on Rare Diseases cooperates with the WHO Topic Advisory Group on Rare Diseases.

5 868 rare diseases listed in Orphanet but only 240 having an explicit code in the ICD-10

High need to establish a consensus with the US National Institute of Health
New priorities after Commission Communication and Council Recommendation

**III. Research on rare diseases**

- Assess research landscape, and improve coordination of Community, national and regional programmes
- Identify needs and priorities, and promote interdisciplinary co-operative approaches
- Foster participation of national researchers in RD research projects
- Include in national plans or strategies provisions aimed at fostering research in the field of RD
- Facilitate the development of RD research cooperation with 3rd countries active in RD research, incl. exchange of information and sharing of expertise.
New priorities after Commission Communication and Council Recommendation

III. Research on rare diseases

- **FOCUS**: will be on Europe-wide studies of natural history, pathophysiology and on development of preventive, diagnostic and therapeutic interventions. This sector will include rare Mendelian phenotypes of common diseases.

- **EXPECTED IMPACT**: this area should help identifying and mobilising the critical mass of expertise in order (i) to shed light on the course and/or mechanisms of rare diseases, or (ii) to test diagnostic, preventive and/or therapeutic approaches, to alleviate the negative impact of the disease on the quality of life of the patients and their families, as appropriate depending on the level of knowledge concerning the specific (group of) disease(s) under study.
New priorities after Commission Communication and Council Recommendation

III. Research on rare diseases

- **FP5** (1998-2002): 47 projects funded, € 64 million in total
- **FP6** (2002-2006): 59 projects funded, € 230 million in total
- **FP7** (2007-2013) 66 ongoing projects: EC support around € 325 million

- Europe-wide studies of natural history and pathophysiology: development of in vitro/in vivo models, registries and biobanks, identification of biomarkers etc.
- Development of preventative, diagnostic and therapeutic interventions, including pharmacological approaches and innovative approaches such as cell and gene therapies, and regenerative medicine.
- In most diseases areas: neurology, immunology, cancer, pneumology, dermatology, uro-gynaecology, metabolism etc.

€ 108 million earmarked in 2012 for the following topics:

- Support for international rare diseases research
- Clinical utility of -omics for better diagnosis of rare diseases
- Databases, biobanks and clinical ‘bio-informatics’ hub for rare diseases
- Preclinical and/or clinical development of substances with a clear potential as orphan drugs
- Observational trials in rare diseases
- Best practice and knowledge sharing in the clinical management of rare diseases
New priorities after Commission Communication and Council Recommendation
IV. Centres of expertise and European reference networks for rare diseases

Some suggested criteria by the former EU Task Force on Rare Diseases to be fulfilled by the European reference networks are:

- Sufficient activity and capacity to provide relevant services and maintain quality of the services provided
- Capacity to provide expert advice, diagnosis or confirmation of diagnosis, to produce and adhere to good practice guidelines and to implement outcome measures and quality control
- Demonstration of a multi-disciplinary approach;
- High level of expertise and experience documented through publications, grants or honorific positions, teaching and training activities
- Strong contribution to research
- Involvement in epidemiological surveillance, such as registries
- Close links and collaboration with other expert centres at national and international level and capacity to network
- Close links and collaboration with patients associations where they exist.
- Appropriate arrangements for referrals of patients from other Member States established within a framework.
- Appropriate capacities to diagnose, to follow-up and manage patients with evidence of good outcomes so far as applicable.
New priorities after Commission Communication and Council Recommendation

IV. Centres of expertise and European reference networks for rare diseases
New priorities after Commission Communication and Council Recommendation
IV. Centres of expertise and European reference networks for rare diseases

The Work Plan 2006 for the implementation of the EU public health programme, introduced for the first time as a priority in the area of rare diseases: to develop Pilot European Networks of Centres of Reference for Rare Diseases. According to this priority 10 Projects have been selected for funding between 2006 and 2009:

- **European Centres of Reference Network for Cystic Fibrosis** with the Klinikum der Johann Wolfgang Goethe-Universität (DE) as Project Leader,
- **European Network of Centres of Reference for Dysmorphology** with The University of Manchester (UK) as Project Leader,
- **Patient Associations and Alpha1 International Registry** with the Stichting Alpha1 International Registry (NL) as Project Leader,
- **European Porphyria Network: providing better healthcare for patients and their families with the Assistance Publique - Hôpitaux de Paris (FR) as Project Leader,**
- **Establishment of a European Network of Rare Bleeding Disorders**, with the Università degli Studi di Milano (IT) as Project Leader,
- **European network of paediatric Hodgkin’s lymphoma – European-wide organisation of quality controlled treatment** with the University of Leipzig (D) as Project Leader.
- **European Network of Reference for Rare Paediatric Neurological Diseases (NEUROPED)** with the European Network for Research on Alternating Hemiplegia (AT) as Project Leader.
- **A reference network for Langerhans cell histiocytosis and associated syndrome in EU with Assistance Publique Hôpitaux de Paris (FR) as Project Leader.**
- **Improving Health Care and Social Support for Patients and Family affected by Severe Genodermatoses – TogetherAgainstGenodermatoses (TAG) with Fondation René Touraine (FR) as Project Leader.**
- **European Reference Network of expert centres in rare anaemias (ENERCA 3) with Hospital Clinic de Barcelona (ES) as Project Leader.**
New priorities after Commission Communication and Council Recommendation
IV. Centres of expertise and European reference networks for rare diseases


Article 8
1. The Member State of affiliation may provide for a system of prior authorisation for reimbursement of costs of cross-border healthcare.

Article 9
3. Member states shall set out reasonable time limits within which requests for cross-border healthcare must be dealt with and make them public in advance. When considering a request for cross-border healthcare, Member states shall take into account: (a) the specific medical condition, (b) urgency and individual circumstances.

Article 13
Rare diseases

The Commission shall support Member States in cooperating in the development of diagnosis and treatment capacity in particular by aiming to:

(a) make health professionals aware of the tools available to them at Union level to assist them in the correct diagnosis of rare diseases, in particular the Orphanet database, and the European reference networks;

(b) make patients, health professionals and payers of healthcare aware of the possibilities offered by Regulation (EC) No 883/2004 for referral of patients with rare diseases to other Member States even for diagnosis and treatments which are not available in the Member State of affiliation.
New priorities after Commission Communication and Council Recommendation
IV. Centres of expertise and European reference networks for rare diseases

Article 12
European reference networks

1. The Commission shall support Member States in the development of European reference networks between healthcare providers and centres of expertise in the Member States, in particular in the area of rare diseases. The networks shall be based on voluntary participation by its members, which shall participate and contribute to the networks’ activities in accordance with the legislation of the Member State where the members are established and shall at all times be open to new healthcare providers which might wish to join them, provided that such healthcare providers fulfil all the required conditions and criteria referred to in paragraph 4.

2. European reference networks shall have at least three of the following objectives:

(a) to help realise the potential of European cooperation regarding highly specialised healthcare for patients and for healthcare systems by exploiting innovations in medical science and health technologies; ....

(a) by connecting appropriate healthcare providers and centres of expertise throughout their national territory and ensuring the dissemination of information towards appropriate healthcare providers and centres of expertise throughout their national territory; ....

For the purposes of paragraph 1, the Commission shall:

(a) adopt a list of specific criteria and conditions that the European reference networks must fulfil and the conditions and criteria required from healthcare providers wishing to join the European reference network. These criteria and conditions shall ensure inter alia that European reference networks:
New priorities after Commission Communication and Council Recommendation

IV. Centres of expertise and European reference networks for rare diseases

On 24 October, during the third meeting of the European Union Committee of Experts on Rare Diseases (EUCERD), the Recommendations on Quality Criteria for Centres of Expertise for Rare Diseases in Member States were unanimously adopted by the EUCERD.

This is the first set of recommendations adopted by this committee. Developing Centres of Expertise and European Reference Networks in the field of rare diseases has been proposed in the Council Recommendation on an Action in the Field of Rare Diseases and more recently in the Cross-Border Healthcare Directive as a means of organising care for the thousands of heterogeneous rare conditions affecting scattered patient populations across Europe.

In order to share knowledge and expertise more efficiently, the EUCERD recommendations seek to introduce harmonious standards of quality practices by elaborating criteria for the Member States to incorporate into their process to designate Centres of Expertise.
New priorities after Commission Communication and Council Recommendation
V. Gathering the expertise on rare diseases at European level

The Health Programme and the FP7 will continue to support, in a coordinated way, registries, databases and biobanks on rare diseases with appropriate financial tools for a sustainable funding when necessary (proposals, operational grants, better coordination with FP7).

The Commission will establish publicly accessible platform for Rare Diseases patient registers, databases and biobanks maybe defining criteria for register accreditation and qualification and the access to data or samples.
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

An evaluation of possible population screening (including neonatal screening) strategies for Rare Diseases launched in 2010

Call for Tender launched in June 2009 concerning evaluation of population newborn screening practices for rare disorders in Member States of the European Union (18 months)

- Deliverable 1: "Report on the practices of NBS for rare diseases implemented in all the Member States including number of centres, estimation of the number of infants screened and the number of disorders included in the NBS as well as reasons for the selection of these disorders". The study includes the necessary tables which list all screening requirements and outputs useful to adopt future decisions in a comparative basis.

- Deliverable 2: "Expert opinion on the development of European policies in the field of newborn screening for rare diseases". This expert opinion will also discuss the existing barriers and propose solutions to be implemented, if feasible, at the EU level.

- Deliverable 3: "Set up of a European Union Network of experts on Newborn Screening and organization of a Final European Experts Consensus Workshop on Newborn Screening"

- A consortium leaded by the Istituto Superiore di Sanità (Italy) has produced an initial set of recommendations to be analysed and endorsed by the EUCERD.
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Preventive measures

Joint Action between the Commission and the Member States concerning the support to the EUROCAT (European Congenital Anomalies Surveillance Network).

There are very few rare diseases for which a primary prevention is possible. Still, primary preventive measures for rare diseases will be taken when possible (e.g. prevention of neural tube defects by Folic Acid supplementation). Action in this field should be the topic for a debate at EU level led by the Commission aiming to determine for which rare diseases primary preventive measures may be successful.
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Actions to ensure equal access to all EU patients to orphan drugs

Between April 2000 and April 2010 a total of 1 113 applications were submitted for designation as orphan medicinal products and the Committee for Orphan Medicinal Products (COMP) adopted 724 positive opinions and 16 negative opinions representing 62 marketing authorisations.

Cancer treatment was the most-represented therapeutic area for which the COMP adopted positive orphan-designation opinions (46%).

Almost two-thirds of designated orphan medicinal products were for conditions affecting children and the COMP took on average 66 days to evaluate applications— the same as in the previous year.

To explore additional incentives at national or European level to strengthen research into rare diseases and development of orphan medicinal products, and Member State familiarity with these products.

The Commission should present, a report to the Council and the Parliament identifying bottlenecks on orphan drugs access (delays, marketing, access, reimbursement, prices, etc.) proposing the necessary legislative modifications in order to guarantee equal access to orphan drugs throughout the EU on the basis of a COMP/EUCERD European collaborative scientific assessment (Commission, EMEA)
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Actions to ensure equal access to all EU patients to orphan drugs

A method for the assessment of the Clinical Added Value of Orphan Medicinal Products should perform a common scientific assessment of the CAV for each Orphan Drug and deliver an opinion document.

Call for Tender tender EAHC/Health/2010/05 concerning the creation of a mechanism for the exchange of knowledge between Member States and European authorities on the scientific assessment of the clinical added value for orphan medicines (Launched in March 2010).

The aim of these common assessment reports for CAVOD should be to provide a well-informed opinion on the place of the product with the authorised therapeutic indication in the therapeutic strategy of the rare condition, to the best of current knowledge. For this purpose detailed discussions with the Member States and interested parties, particularly the EMA and the COMP, on the best way to establish such mechanism are necessary.
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Diagnostic tests are part of quality healthcare

Orphanet and EuroGentest provide information on available tests in Europe and surrounding countries

- 38 countries
- > 17,000 diagnostic tests
- > 1,800 diseases screened
- Genetic tests concerning > 1,200 genes
- > 1,300 medical laboratories
- Quality assurance follow-up over a 5 year period
- > 2,500 experts
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Figure 4: Number of genes tested in laboratories located in each country (Orphanet data extraction September 2011)
New priorities after Commission Communication and Council Recommendation

V. Gathering the expertise on rare diseases at European level

Figure 5: Number of rare diseases tested in laboratories located in each country (Orphanet data extraction September 2011)
New priorities after Commission Communication and Council Recommendation
Rare diseases registers

Patient registries and databases constitute key instruments to develop clinical research in the field of rare diseases, to improve patient care and healthcare planning. They are the only way to pool data in order to achieve a sufficient sample size for epidemiological and/or clinical research. They are vital to assess the feasibility of clinical trials, to facilitate the planning of appropriate clinical trials and to support the enrollment of patients.

Figure 10: Geographical coverage of rare disease registries registered in the Orphanet database (May 2012)

According to the data in the Orphanet database\textsuperscript{110}, there are 597 disease registries in Europe (59 European, 40 International, 417 national, 77 regional, 4 undefined).

Almost all of these registries concern diseases or groups of diseases for which there is an innovative treatment either in development or already on the market. This is not surprising as registries of patients treated with orphan medicinal products are particularly relevant: they allow the gathering of evidence on the effectiveness of the treatment and on its possible side effects, keeping in mind that marketing authorisation is usually granted at a time when evidence is still limited although already somewhat convincing.

Most of the registries are established in academic institutions. A minority of them are managed by pharmaceutical or biotech companies, with others being run by patient organisations.
New priorities after Commission Communication and Council Recommendation
Rare diseases registers

<table>
<thead>
<tr>
<th>60 International Patient Registries around a medicinal product</th>
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<tr>
<td>Cystic fibrosis, Alpha 1 anti-trypsin, Bleeding disorders, Langerhans cell histiocytosis, Severe chronic neutropenia, Biliary atresia, Neuromuscular diseases, Wilson disease, Fanconi anemia, Pulmonary hypertension, Metabolic diseases: Gaucher, Fabry, Pompe, MPS1..., Ondine syndrome, Primary immunodeficiencies, Retinal dystrophies, Huntington disease</td>
</tr>
</tbody>
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www.orpha.net
New priorities after Commission Communication and Council Recommendation
Rare diseases registers

- The action in the field of supporting RD registries started in the framework of the FP5 (1998-2002) and the first Community Rare Diseases Programme (1999-2003).

- A total of 597 rare diseases registries have been created during this period in the EU by several stakeholders from which 49 registers are financed by the Health Programmes or the FP5, FP6 or FP7. List available under http://www.orpha.net/orphacom/cahiers/docs/GB/Registries.pdf.

- The former Task Force on RD had their own Working Group on RD Registers and the new EUCERD will have a similar group, the EMA/EUCERD Workshop on Rare Diseases Registers (meeting in London next 4th October 2011) because RD registers constitutes an essential element in the Orphan Drugs designation and are a priority for EMA.

- EPIRARE (European Platform for Rare Diseases Registries) Project selected for funding in 2010 in order to build consensus and synergies to address regulatory, ethical and technical issues associated with the registration of RD patients and to elaborate possible policy scenarios as well as to evaluate the experience of the 514 registries in place and the most appropriate criterion to use EU funding.

- The USA/EU International Rare Disease Research Consortium (IRDiRC) has considered transatlantic RD registers as one of the privileged fields of the common agenda.
New priorities after Commission Communication and Council Recommendation

VI. Empowerment of patient organisations

The Health Programme will continue to integrate the support to the patient’s organisations as a priority for action.


The Council Recommendation suggests to Member States to do the same.
New priorities after Commission Communication and Council Recommendation

**Sustainability**

The Third Health Programme ‘Health and Growth’ 2014-2020 will integrate rare diseases as a priority.

The Member States should use facilities provided to health infrastructures in the Structural Funds (2007-2013) regulations.

Continuity of efforts on rare diseases research in the Horizon 2020 research programme (2014-2020) integrating a sustainable dimension.

**Sustainability** in the National Plans/Strategies for Rare Diseases.
New priorities after Commission Communication and Council Recommendation
Actions to develop the international cooperation on rare diseases

The European Commission (EC) and the USA’s National Institutes of Health (NIH) held a first joint workshop in Reykjavik, Iceland, on 27-28 October, and a second in Washington, on 7-8 April 2011, to discuss ways in which to foster transatlantic cooperation on research into rare diseases. This workshop was the first step of a process through which the EC and the NIH hope to establish an ambitious international research programme to speed up the development of diagnostic and therapeutic solutions for patients.

Both funding agencies decided to launch an International Rare Disease Research Consortium (IRDiRC). It will team up funding agencies and researchers around the world with the goals to deliver, by 2020, 200 new therapies for rare diseases and diagnostic tests for all rare diseases. This programme is intended to be open to other countries, in order to be truly International and not simply bilateral.

Third meeting in Montreal (8-9 October 2011).
New priorities after Commission Communication and Council Recommendation

Actions to develop the international cooperation on rare diseases

- The IRDiRC will be headed by an Executive Committee formed of representatives of funding bodies, and representatives for groups of funders as well as the chairs of the Scientific Committees.

- There will be 3 Scientific Committees composed each of 15 members with a balanced representation of scientists, patients, industry etc., for sequencing, characterization and diagnostics, “horizontal” issues, and therapies.

- A number of working groups, made up of representatives of funding projects will work below the Scientific Committees on the topics of sequencing, ontologies, model systems, clinical issues, registries, natural history, biomarkers, etc.

- The Executive committee will adopt the IRDiRC policies and guidelines, coordinate research funding strategies and decide on the composition of the Scientific Committees. The Scientific Committees will propose research priorities for consideration by the Executive Committee, will assess progress made by funded research and will agree on standard operating procedures and standards. The working groups will ensure that synergies are maintained amongst funded research, will develop and propose standards supporting and enabling the maximum use of data/research results generated by the Consortium.

- The next steps are to set up the Scientific Committee: the nomination period will be open from 1 November to 15 December 2011, with a decision on composition by the Executive Committee adopted in February 2012.
Current 25 committed members

**Europe**
- European Commission
- German Federal Ministry of Education and research
- Italian Higher Institute of Health Research
- Italian Telethon Foundation
- French Association against Myopathies
- French National Research Agency
- Netherlands Organisation for Health Research and Development
- Lysogene (FR)
- Prosensa (NL)
- Spanish Carlos III Health Institute
- UK National Institute for Health Research
- Shire (IE)

**North America**
- Canadian Institutes for Health Research (CA)
- Genome Canada (CA)
- Sanford Research (US)
- Mendelian Disorders Genome Centres (US)
- National Centre for Translational Therapeutics (US)
- National Cancer Institute (US)
- National Institute of Neurological Disorders and Stroke (US)
- National Institute of Arthritis and Musculoskeletal and Skin Diseases (US)
- National Institute of Child Health and Human Development (US)
- National Eye Institute (US)
- Office of Rare Diseases (US)
- Food and Drug Administration (US)

**Australia**
- Western Australian Department of Health
Executive Committee
- Representatives from funding bodies
- Chairs of the Scientific Committees
- Patients representatives

Scientific Committees

Diagnostics
Interdisciplinary
Therapies

Working Groups
Sequencing
Ontologies
Model systems
Clinical
Registries
Natural history
Biomarkers
Etc.

15 top-level experts with balanced representation of scientists, patients, industry, etc.

Representatives of funded projects

Names and biographies of appointed members on IRDiRC website:
http://ec.europa.eu/research/health/  >> click on to rare diseases research
**IRDiRC timeline**

**YEAR**

**2012**
- Launch of IRDiRC
- Scientific Committees
- Working Groups

**2015**
- 3000 diagnostics
- 50 new applications for market authorisation

**2020**
- 6000 diagnostics
- 200 new applications for market authorisation
New priorities after Commission Communication and Council Recommendation

Governance and monitoring

- The Commission is assisted by an EU Committee of Experts on Rare Diseases (EUCERD) to advise on implementation of the Communication and the Recommendation.

- The Committee is chaired by Ségolène Aymée (INSERM, FR) and assisted by a Scientific Secretariat, supported through the Health Programme.

- Composed by 51 members representing Member States (27+EFTA+ Candidates), patient’s organisations, Pharmaceutical industry, FP Projects, Health Programme projects and ECDC + 12 Commission and EU agencies representatives (SANCO, RTD, ENTR, EMA, COMP, EAHC).

- This committee will replace the existing EU Rare Diseases Task Force.

- The EUCERD adopted a Road Map 2011-2013 submitted by the European Commission. An specific Working Plan for the EUCERD is also adopted.
New priorities after Commission Communication and Council Recommendation

Governance and monitoring

The EUCERD is a World Reference in the participation of all stakeholders in the definition and collaboration in Rare Diseases Policy.

Applications to cooperate with the EUCERD received from non EU countries (Japan, Russia, others). US is creating a similar committee following EU model.

The EUCERD newsletter ‘Orphanews’ is disseminated two times per month.

Workshops from EUCERD:

- Initiatives and incentives
- Registers
- Accessibility to orphan drugs
- Specialised social services
- Standards of care
- Newborn screening
- Classification and codification
- E-health and rare diseases (tbc)
DG SANCO priorities on rare diseases
Web site

Public health actions

Contact points at DG SANCO
antoni.montserrat@ec.europa.eu
jaroslaw.waligora@ec.europa.eu

Research actions

Contact point at DG RTD
Iiro.eerola@ec.europa.eu