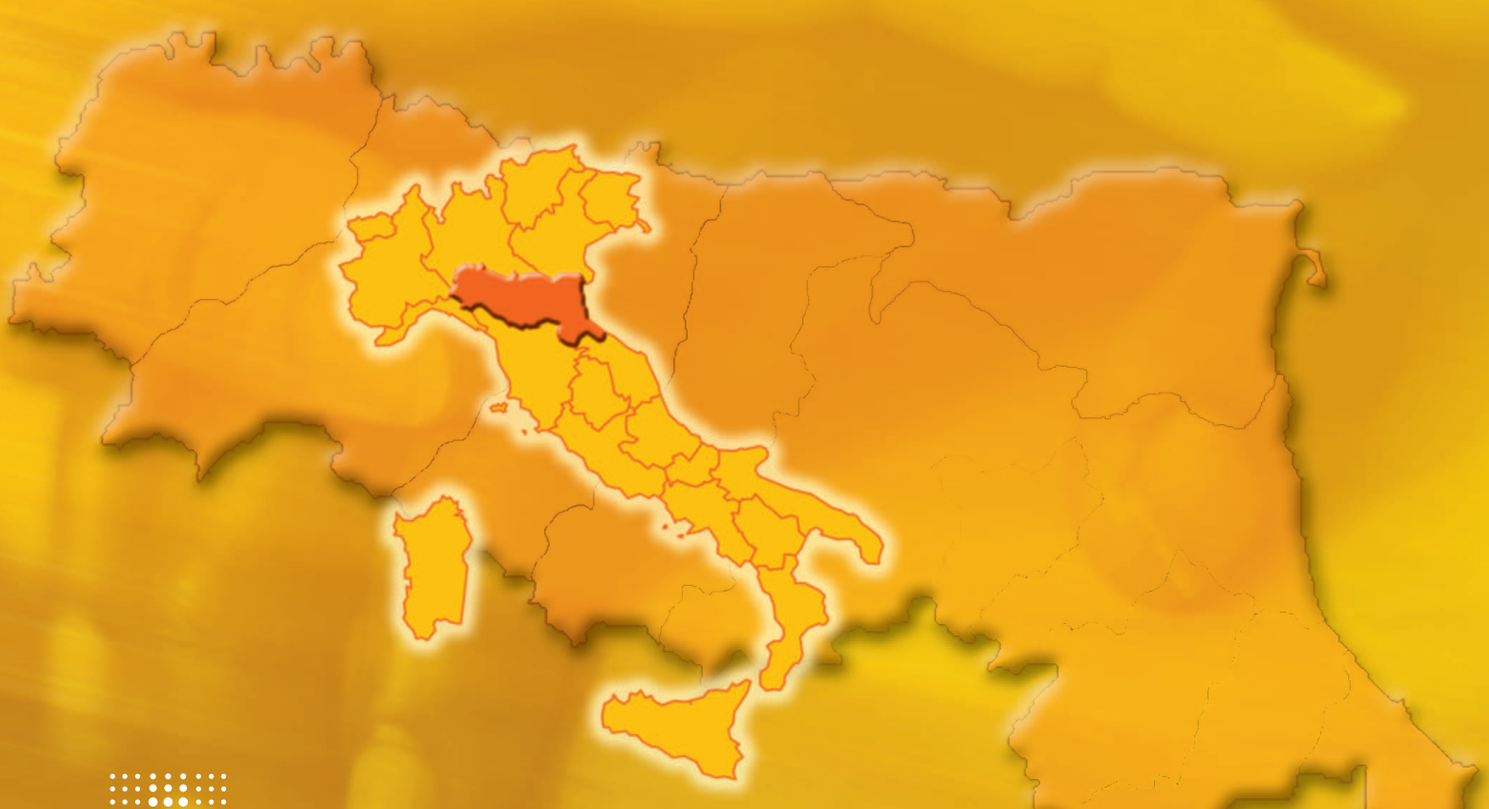
Facts and figures of the Regional Health Service of Emilia-Romagna (2007)



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA

Regione Emilia-Romagna

The Social and Healthcare Plan 2008-2010 of Emilia-Romagna Region

The first Social and Healthcare Plan of Emilia-Romagna Region was approved by the Legislative Assembly on May 22nd 2008 (regional law n. 175). It was developed through the joint effort of the regional authorities in charge for healthcare policies and social policies; it underwent the control of the so-called Control room for welfare (the seat devoted to promoting interaction between the regional government and local administrators); it was discussed and shared with all the components of the regional society and with the institutional representatives during some initiatives organized all over the region.

Vasco Errani, President of the Emilia-Romagna Region, wrote in his presentation of the Plan: "We acknowledge the need of a new project giving us the opportunity to reassemble what modern society tends to split; a project that will recreate the social cohesion that the community is no more able to spontaneously reproduce; a project that will reassure people who are facing a widespread feeling of uncertainty at both economical and cultural level due to the pressing changes in social life. These are the reasons that urged us to propose a "deal" to the regional society, aimed at assuring high quality services, supporting families, reinforcing trust and safety".

During the Plan approval by the Legislative Assembly, Giovanni Bissoni, regional Minister for Healthcare Policies, commented as follows: "It is the first Plan elaborated through a shared planning with social forces and local administrations: starting from a new reading of people's and communities' needs, it proposes a substantial innovation of policies and services, based on the integration of all the institutions and individuals involved in the welfare development: Region, Local Authorities, Non governmental organizations".

In the same occasion Annamaria Dapporto, regional Minister for Social Policies, added: "The Plan is an important result for the whole regional welfare system; now local institutions are entitled to transform the planning in concrete interventions and services for citizens".

Year 2008 is the running-in period for the Plan implementation, particularly with reference to governance mechanisms to be started in order to guarantee the real integration of policies, services and health professionals.

Specific guidelines will be approved to assure that the different planning paths will be based on common elements and that NGOs will be involved at all planning levels. General lines for policies development will be stated in the "Act for policies definition" elaborated by in Territorial Social and Healthcare Conference (organism composed by all the mayors of the Municipalities in the area corresponding to a single Local Health Trust, usually a province; the Conference plays a central role in promoting and evaluating social and health policies and programs). The Health District Plan for healthcare and social welfare worked out by the District Committee will adopt the strategic choices stated in the 2009-2011 Plan and in the first 2009 Implementation Plan. Preliminarily, Territorial Conferences will be entitled to elaborate and share the "Community outline", fundamental tool for the identification and acknowledgment of population's need for health and welfare and for the detection of priorities and criticisms.

The organizational network to support Territorial Conferences will be completed in order to make the planning process and its implementation and monitoring effective.

Synthesis of the Social and Healthcare Plan

A new community welfare for a changing society

The Social and Healthcare Plan 2008-2010 aims to complete an integrated system of social and healthcare services able to provide a new welfare system that is universalistic, fair and rooted in local communities and in the region. The process began with the Regional Laws no. 2/2003 (Outline law for social services) and no. 29/2004 (Law for the re-organization of the Regional Health Service).

The need for substantial changes is due to the occurring demographic and socio-economic transformations – ageing population, increasing immigration phenomenon, reduction of the number of family members and concurrent increase of families with slender relatives network, rising number of people with temporary work and conflict among generations on future and job opportunities. The more and more complex needs of the "changing society" do not ask for sectional answers (i.e. to illness or hard life conditions) but for organic solutions that should consider individuals in their entirety and guarantee continuity of care.

The aim is to develop a solidarity society, able to ensure fair access to rights and to consolidate the social cohesion that has always characterized the regional community and is an important growth and competitiveness factor.

The Plan is not simply a juxtaposition of planning lines; it represents a perspective transformation and the acknowledgment of the need to jointly consider healthcare and social issues so that welfare becomes a positive and substantial part of the ongoing transformation.

Integration: a new welfare need

The aim to guarantee personalized answers and fair access throughout the territory is feasible only through an integration logic at all levels. This integration logic allows the development of a welfare network formed

by different services and, at the same time, it gives the opportunity to involve - enhancing their autonomy - all the subjects (Region, Local Authorities, Health Trusts, Non governmental organizations, profit private organizations, social forces) that in various ways are called to play a role in affirming citizens' rights, thus giving a fundamental contribution to the development of a more coherent, civil and dynamic society.
For this reason the Plan focuses on integration development in planning, assessment, organization and supply of social, healthcare and social-health services, defining roles and responsibilities of the institutions involved.

Integration among institutions, services, health professionals

The institutional structure that the Region and Local Authorities created to organize the governance of the public system of regional and local welfare is founded on two basic principles: the Region's role in the governance of the Health Service and the Local Authorities' role in the governance of social services, both working in a cooperation and integration logic.
The means by which the integration is developed are:

- the Territorial Social and Healthcare Conference and the District Committee (organisms connecting Local Authorities and Health Trusts for the local governance of healthcare and social-health functions and services);
- associative forms among Local Authorities (for the governance and provision of social services);
- management agreements between Municipalities and Local Health Trusts (to create the new "Plan Offices", the technical administrative network supporting service planning and supply in the District area);
- and the "Control room for welfare", the regional seat devoted to the identification and setting up of social and healthcare policies (this organism is formed by the regional Ministers for Healthcare Policies and for Social Policies, the Mayors, the Presidents of the Territorial Conferences).

Through the Region-University Conference, Universities have been involved in this integration process for their fundamental role in research, training and services innovation.
The organizational model of the new welfare, confirming that adopted by the previous Regional Healthcare Plan, is based on territorial integrated networks among hospital services, and among hospital, healthcare, social-health and social services.
The Health District becomes the main seat for the integration between the District Committee and the District Director (supported by the new Plan Offices for the governance and planning of healthcare, social-health and social services at district level); for the integration among family practitioners (through Primary Healthcare Units), territorial healthcare and social services among themselves and with hospital services; for the predisposition of the Plan and the use of the Fund for non self-sufficient people; for the integration among Public Trusts for Personal Services (evolution of Public Institutions for Assistance and Charity); for the relationship with profit and non-profit private organizations for the provision of residential and home social and social-health services; for the connection with volunteers and associations.

Tools for integrated planning

The Plan has unified and synthesized the planning tools tested in the last years: Health Plans, Area Plans, Territorial Action Programs, Action Plan for the Elderly, Integration Program for Immigrants.
Integration is set up at regional, provincial and district level through the involvement of all subjects in the welfare system, according to their specific competence (Region, Local Authorities, public institutions, non-profit and profit private organizations, associations, volunteers, social forces).
The allocation program for the Regional Social Fund and for the Fund for non self-sufficient people, the Regional Plan for Prevention and the planning guidelines of the Health Service are defined every year at regional level.
Territorial Conferences are entitled to elaborate and share the "Community Outline", a structured and participated reading of population's need for health and welfare that allows to identify criticisms, priorities and the strategic choices that are described in the "Three-year Intervention Policies Act".
The District Committee (together with the District Director for the social-health integration interventions) will approve - in coherence with the Intervention Policies Act - the three-year District Area Plan for health and social welfare, that is articulated in annual implementation programs.

The regional Fund for non self-sufficient people

In Emilia-Romagna region people aged over 65 are 968,208 (at December 31st, 2007), nearly a quarter of the total regional population. A particular attention must be paid to population aged over 80 (291,829 people), in which the incidence of the most important problems related to non self-sufficiency and care needs is higher.
Nevertheless, the Fund for non self-sufficiency does not consider only problems of the elderly but also severe chronic disabilities or progressively degenerative disabilities requiring long term, complex and expensive treatments.
The Fund is managed by the Health Districts; it receives funds also from a heavier and more targeted taxation, and it must therefore provide a fairly developed services network and guarantee the best equality in care conditions and homogeneous access opportunities, treatments quality, citizens' fair contribution. The aims of the Fund are: to expand service network (in particular home care), to curb citizens' sharing of accommodation expenditure in residential facilities (on an income basis), to give some kind of recognition to self-organized families with specific attention to the use of foreign home assistants (duly trained) and the promotion of innovative forms of care.

Public Trusts for Personal Services

The Regional Law no. 2/2003 (Outline law on social services) regulated the transformation of Public Institutions for Assistance and Charity into Public Trusts for Personal Services: new public entities formed by the Municipalities in district or sub-district areas that will produce and provide social-health and social services for people in every age group. The Public Trusts for Personal Services guarantee the joint management and qualification of services thanks to the overcoming of interventions fragmentations and to the development of integration

with the other subjects and services that constitute the community welfare.

Innovation

The innovation process does not involve only policies and planning aimed at giving global answers to complex needs (with the new territorial governance system). It implies also the ability to introduce the technological and biomedical innovations that research makes available for healthcare services and the organizational and professional innovations to face the evolving needs of people and families, the ongoing demographic changes and the socio-economic changes.

The joint intervention fields of Universities and Regional Health Service, mainly developed in the 4 University Hospital Trusts, are: regenerative medicine, oncology, neurosciences, advanced diagnostics.

The Emilia-Romagna Research and Innovation Program (called PRI E-R) is meant for all the regional Health Trusts. The goal of the Program is to assess the impact of specific interventions and technologies, starting from those related to cardiovascular and oncological fields.

A particular attention is given to non-conventional medicine: a regional Observatory has been instituted to promote research projects aimed at verifying the opportunity of integration of acupuncture, homeopathy and phytotherapy in care pathways.

As far as the social and social-health fields are concerned, the innovation is focused on: services organization, that must be aimed at assuring a central role to the individual and his/her family in the definition of the support projects, giving an answer to complex and multidisciplinary needs; the development of professional competences and collaboration among professionals (through specific training initiatives); the qualification of the access system (through integrated information systems); the set up of a relationship network with service providers based on accreditation.

The creation of the Public Trusts for Personal Services contributes to support this plan clarifying the role of the public sector in carrying out social and social-health services. According to this perspective an important element of innovation, started with the experience of Area Plans, refers to the enhancement of active resources in society and service sector, their involvement in planning, working out and monitoring interventions.

Communication and participation

To orient citizens in the access to the new welfare services and to assure them the opportunity to have an active role in the definition of support pathways also for themselves, the Regional Social and Healthcare Plan provides for the integration of local information points and access points to services, with special attention to the "weak" population groups (elderly, immigrants, people living in social and economical disadvantaged conditions): this means that the so-called "Social helpdesks", "District unified helpdesks" and the "Offices for relations with the public" (Health Trusts' and Municipalities' offices that provide information on health services to citizens) must be in connection.

More generally speaking, the strategy proposed by the Plan aims not only at facilitating the appropriate use of services, but also at developing a regional and local communication system in order to:

- strengthen people's ability to make correct choices on health matters and to adopt healthy behaviours (i.e. food-related choices, vaccinations, screening programs, emergencies management);
- involve people in services assessment in order to implement proper improving processes;
- valorise communities' participation in health-related choices and in social and health planning.

The partnership between citizens and services is one of the fundamental tools which can improve health and life quality and can offer a universalistic social and healthcare system based on equity, free access and effectiveness principles.

The healthcare area

The National Health Service (instituted with Law no. 833/1978) represents one of the most important achievements and one of the fundamental social cohesion factors for our country with its principles of universality of access, comprehensive coverage, public financing through general taxation guaranteed by regional and national laws.

The regional health policy developed through the Third Health Plan and organized by Law no. 29/2004 aimed at setting up a system able to offer universalistic guarantees to citizens and communities and, at the same time, to satisfy local expectations. This led to: integration between regional and Health Trusts' programs and the management functions of local entities on health and social services (Territorial Conferences, District Committees); need for a wider participation of professionals in Health Trusts' strategies and services organization (Directors' Board); professionals' investment with responsibilities through the adoption of work methods aimed at improving professional practice and at promoting a correct use of available resources for diagnosis and therapies (clinical governance); progressive integration of technological innovations (Region-University Program, PRI E-R); training for health professionals (Continuing Medical Education); participation of citizens and their associations (District Area Plans for health and welfare).

The Regional Social and Healthcare Plan 2008-2010 confirms and reasserts the new role of the Health District as the seat of services planning, primary care provider and ideal context for the integration between citizens and healthcare, social-health and social public services supplied by public subjects (Local Health Trusts, Public Trusts for Personal Services, Municipalities) or by private profit and non-profit bodies. In this framework, a fundamental importance is recognised to the role of family practitioners whose associated activity through the Primary Healthcare Units will guarantee better access thanks to extended opening hours and continuity of care through connection with other services.

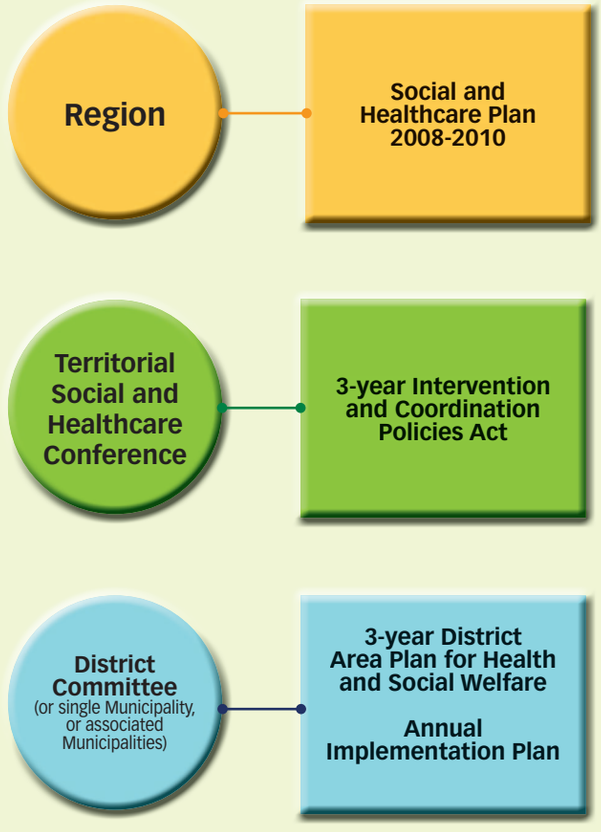
The hub and spoke model of services integrated networks was confirmed as the leading model for hospital care: the connection between highly specialized hospitals (hub) and local hospitals (spoke) to provide the best treatment for complex cases needing high professional competences and technologies. Beyond genetics, severe traumas, cardiology and heart surgery, emergency system, transplants and transfusion system (among the others),

one of the priorities of the Plan is the development of the oncological regional network.
The approach to health promotion and diseases prevention requires the involvement of different subjects (Regional Plan for Prevention); the need to develop professional competences and a more organic participation of the Public Health Departments of Local Health Trusts in public health overall objectives, through the promotion of shared interventions with the other healthcare services.
The development of Mental Health and Pathologic Addiction Departments involved all the areas engaged in offering mental health care to population of any age: mental health promotion, prevention, diagnosis, care and rehabilitation of patients affected by psychic disorders, mental problems and pathologic addictions. The strategic instruments are: health professionals' training, research and innovation promotion to be set up also through the strengthening of the collaboration with Universities, integration of Non governmental organizations in service providing.

The social area

Emilia-Romagna Region relies on a widespread and functional public and private services network, Trade Unions' large representation, cooperation, lay and religious volunteers' associations, that represent a social "richness" and an important resource against the risks of social marginalization and loneliness; however the changes occurred in the last 30 years were characterized by a pace and a depth never experienced before.
Emilia-Romagna is undoubtedly a richer region than in the past with widespread wellbeing, but inequalities and the risk of vulnerability and social marginalization for some parts of the population are potentially increasing. This is the reason why the social area is included and developed in the Regional Social and Healthcare Plan, according to Regional Law no. 2/2003.
In recent years regional policies were aimed at the creation of local welfare systems focused on needs understanding and on shared and agreed planning (Area Plans). This objective is linked with enhancing the Region's role as planning and regulatory subject; the role of Local Authorities as subjects for service planning and supply; the role of associations and volunteers as participants in providing services. Social policies and services, integrated with the healthcare and social-health ones, are devoted in particular to children, young people, families, elderly, disabled, people living in social and economical disadvantaged situations, and pursue general aims of social welfare. In particular: struggle against poverty and risks of social marginalization; support to social and working integration for immigrants and their families; support to families; promotion of children's and young people's wellbeing and self-promotion; improvement of the housing system for minors in foster care or in communities; support to non self-sufficient subjects, to home care and to family care with particular attention to women's role, development of education services for disabled and to enhance their integration and autonomy.
This services system is universalistic and financed by national and regional social funds managed by the Municipalities. It is based on an access grading in order to devote resources and services to the socially weakest situations and the strongest needs. The basic principles still remain fair access (same needs and conditions = same services) and fair expenditure based on some specific parameters (used to calculate families' economic conditions: income, properties, number of family components).
A new kind of "allowances for services use" will be tested during the three-year period of Plan implementation; as an alternative to care allowances, they will be assigned on the basis of specific requisites for access to services - beginning from homecare services, once these services are accredited.
The so-called "Social services supply charters" will be worked out and spread by associated Municipalities in order to highlight access procedures to services and quality standards. For the access to the services system, each area (local, District, where the District Plan for Health and Social Welfare is implemented) will have to create a "Social helpdesk" that is a network of information points aimed at orienting citizens on services use and on access procedures through initiatives for enhancing access addressed to people living in disadvantaged conditions such as immigrants and elderly.

Healthcare planning: subjects and tools



All the tools are integrated and include social, social-health and healthcare planning.

The Emilia-Romagna Regional Health Service: Results and commitments

With the approval of the 1st Social and Healthcare Plan 2008-2010, the Region has set up the planning and organizational instruments needed to concretely pursue the development of the new universalistic community welfare, founding its activities on integration with the aim of fairly providing specific and global answers to individuals' and families' needs in the whole territory.

The 3rd Health Plan 1999-2001 had already adopted integration as a working method for the Regional Health Service. This principle was confirmed by the Regional Law no. 29/2004 and thanks to the Social and Healthcare Plan it now involves also to the social field through the strengthening of the relationship with Local Authorities, NGOs and citizens' representatives organizations.

Important results of the development of the integration between healthcare and social policies are: the evolution of the Public Institutions for Assistance and Charity into the Public Trusts for Personal Services (50: 34 already created and 16 in the preliminary phase) and the program for using the regional Fund for non self-sufficient people (that in 2007 – start-up year – used 255 million Euros to grant services to 54,500 people, 7,200 of which were new beneficiaries).

The guidelines for drawing up the "Health Trust's Act" enable the Health Trusts to reinforce integration with Local Authorities. The Health District is still the seat for the elaboration of the "Engagement Plans", that are the expression of population needs, and it is also the elective context for the elaboration of social and healthcare policies, the use of the Fund for non self-sufficient people and the creation of the Public Trusts for Personal Services with total involvement of Local Authorities.

The process for authorization and accreditation of services is active since 2004 for healthcare services; many hospitals, hospices, public psychiatric facilities, private nursing homes and outpatient facilities have been already visited. In 2007 the same process was extended also to social-health and social services.

The activities, programs, organizational models, agreements developed within the Regional Health Service and presented in this publication are aimed at developing integration as an operational method.

Results as of December 31st, 2007

The globally positive results achieved in 2007 are synthetically commented below but widely reported through graphics, tables and comments in the following pages.

The Emilia-Romagna Regional Health Service that is founded on the distinctive principles of the National Health Service – universality and fair access, public responsibility for health protection, public financing through general taxation - is composed by 16 Health Trusts and 1 Research Hospital. Three Vast Areas were defined to optimize quality and efficiency of technical-logistic and care services provided to populations beyond the Local Health Trust's territorial competence: north Emilia, central Emilia and Romagna

On December 31st, 2007 the Regional Health Service counted 60,710 employees (+985 with respect to 2006). Contracting general practice physicians and contracting paediatricians were respectively 3,221 and 584.

On the same date the regional population showed an increase of 52,258 persons with respect to 2006: the total number of citizens was 4,275,843. The increase in the population is related to the birth rate rising (40,518 births registered in 2007, of which foreign mothers accounted for 23%) and to the growth in the number of people arriving from other countries of the world (365,720 people on December 31st, 2007, 8.6% of the population). Emilia-Romagna is still one of the "oldest" Italian regions with 968,208 persons aged over 65 years representing 22.6% of the population while the national level is 19.8%, 488,469 persons aged over 75 years representing 11.4% and 134,527 persons aged over 85 years representing 3.1% of the total regional population.

Hospital beds numbered 19,983 (19,887 in 2006); acute care beds numbered 3.83 and long-term care and rehabilitation beds numbered 0.9 per 1,000 population. Hospital admissions in 2007 totalled 851,574. The admission rate in Emilia-Romagna hospitals for patients from other regions was 15.01% (14.5% in 2006).

Beds in residential and semi-residential facilities numbered 27,126 (the 28,314 beds reported in 2006 included 1,200 beds in facilities that did not operate within the RHS). Hospice beds numbered 216 (170 in 2006).

Visits and new users of the 48 Centres for diagnosis and care of senile dementias have constantly increased, respectively from 50,784 in 2006 to 56,542 in 2007 and from 14,668 in 2006 to 16,214 in 2007.

The number of people receiving home care rose from 77,085 in 2006 to 81,123 in 2007; in the same year 20,602 persons benefited of care allowances (18,395 in 2006).

The outpatient specialist attendance is almost stable: 70,045,980 in 2007 as compared to 69,812,752 in 2006.

The network of Mental Health Services showed an increase in the number of adult patients – from 62,618 in 2006 to 66,813 in 2007 – and of minor patients – from 36,818 in 2005 to 38,296 in 2006.

People affected by drug and alcohol addiction treated at the Substance Abuse Services numbered 22,066 (4,055 coming from other regions).

Data on activities and users of the network of Family health advisory centres remained substantially stable

with respect to 2006 (920,126 interventions in 2007 vs 893,124; and 467,800 users vs 452,891).
Data on assistance to pregnant women is particularly interesting, as they registered a relevant growth: from 7,069 in 1995 to 16,405 in 2007 (from 740 to 7,811 immigrant women).

Concerning organ donations, Emilia-Romagna confirms for 2007 to rank above the national average (26.4 donors per million population as compared to 19.3 at national level). Organ transplants numbered 320 (311 in 2006), 15 from living donors.
In 2007, blood donations registered a decrease due to the interruption in the areas affected in the Summer by the Chikungunya epidemic (virus transmitted by tiger mosquito). Blood units collected were 245,173 (248,764 in 2006). The regional self-sufficiency was guaranteed but the number of blood units usually transferred to lacking regions decreased: 6,301 in 2007 vs 15,115 in 2006.

The three screening programs for prevention and early diagnosis of breast, cervical and colorectal cancer have achieved good results: screening for breast cancer registered a participation of 73.8% of invited women (60.4% at national level); 55.6% for cervical cancer (39.8% at national level), 46.7% for colorectal cancer (46% at national level).

Still maintaining high levels of coverage, the 2007-2008 regional program for influenza vaccination registered a slight decrease as compared to 2006 campaign in the population aged over 65 (707,387 in 2007 vs 715,239) and in adults and children with chronic diseases (188,232 vs 195,917). Vaccination coverage has to be improved among healthcare service personnel: 14,844 people adhered to the 2007-2008 vaccination campaign while 15,845 people adhered to the preceding one.
Good results were achieved in childhood vaccination too, with levels of coverage above the national average.
A vaccination program against HPV serotypes 16 and 18 (responsible of 70% cervical cancers) was started in March 2008.

Concerning occupational safety, from 2000 to 2007 in Emilia-Romagna the number of injuries reported to the National Insurance Institute for Occupational Accidents decreased of about 7% (from 140,766 to 130,626) and fatal accidents were reduced by 36% (from 174 to 111). Particularly in the construction sector that is registering an important increasing trend in the number of firms and workers employed, both irregularity index and accident incidence are decreasing: the first moves from 38.94 in 2001 to 32.65 in 2007 and the second from 8.97 in 2001 to 6.25 in 2007. A plan specifically aimed at identifying the causes of accidents and professional diseases in personnel working at the healthcare and social services was set up; in this field data on the Regional Health Service reported 7,827 accidents in 2006; controls on workers revealed that: 87.1% cases are safe from professional risks; 6.9% cases need limitations or prescriptions on duties performed and 0.4% cases are potentially exposed.

Inspections on food safety reported a decrease in the number of irregularities in plants for processing milk and dairy products (from 63% in 2006 to 25.8% in 2007), in fish processing plants (from 25% in 2006 to 11% in 2007), in meat processing plants and deposits (from 40% in 2006 to 29.6% in 2007), in poultry farms (from 4.3% in 2006 to 1.1% in 2007).

The program for dental, prosthetic and orthesic care for people with pathologies causing dental problems or living in disadvantaged economical conditions has risen the number of people benefiting of free of charge care and the income segments giving the right to gratuitousness or controlled prices.

All the Health Trusts and Research Hospitals are involved in the development of research and innovation programs. Training through the Continuing Medical Education has involved 61,400 professionals.

The agreement with general practice physicians aimed at their integration into the Health Trust's activities has brought significant results: 94% of them are organized in Primary Healthcare Units; significant experiences of care for patients affected by chronic diseases are spread in various Health Trusts (diabetic patients are cared for in all the Health Trusts); the telematic network Sole (connecting family physicians and paediatricians, services and professionals of the Health Trusts) involves already 2,075 family physicians and paediatricians.

In 2007, total expenditure for the Regional Health Service amounted to 7.616 billion Euros (7.285 in 2006 and 7.053 in 2005). Per capita expenditure amounted to 1,773 Euros (1,725 in 2006).
For some years Emilia-Romagna has worked to balance hospital and territorial healthcare expenditures (respectively 42.02% and 53.3% in 2007), an effort that ran parallel with the qualification of both territorial and hospital services as demonstrated by the percentage of people coming from other regions to be hospitalized in Emilia-Romagna, that in 2007 reached 15.01% (14.56% in 2006).
In 2007 the investments to modernize or build healthcare and social-health facilities were carried on: between 1998 and 2007 the funds used amount to 2.5 billion Euros.
Global pharmaceutical expenditure increased by 1.6%, but the most considerable expenditure item – local distribution of drugs by pharmacies, representing 73.7% of total expenditure – decreased by 1.4%.

In 2008 the National Healthcare Fund allowance for Emilia-Romagna regional Health Service amounts to 7.183 billion Euros (3.5% increase as compared to 2007); 150 million Euros deriving from regional budgetary measures are to be added: 100 million aimed at assuring the economical and financial balance of the RHS in 2008; 50 million assigned to the Regional Fund for non self-sufficient people, that can now rely on 353 million Euros. Moreover, the Health Trusts' own revenues and the positive balance by interregional healthcare mobility contribute to the total healthcare expenditure coverage.

Health Trusts, population, employees, general practice physicians and paediatricians

The Emilia-Romagna Regional Health Service is composed of 11 Local Health Trusts, 4 University Hospital Trusts, 1 Hospital Trust, 1 Research Hospital; the Local Health Trusts are organized in Health Districts (38 in the region).
On December 31st, 2007 hospital beds in Health Trusts numbered 16,158.
According to the regional planning, Vast Areas have been defined to optimize quality and efficiency of technical-logistic and care services provided to populations beyond the Local Health Trust's territorial competence. The Vast Areas set up and operative are three: north Emilia (including Piacenza, Parma, Reggio Emilia and Modena Health Trusts), central Emilia (including Bologna, Imola and Ferrara Health Trusts) and Romagna (including Cesena, Forlì, Ravenna and Rimini Health Trusts).
The Regional Health Service counts 60,710 employees (+985 as compared to 2006, with a considerable increase in the number of nursing personnel: +328). Contracting general practice physicians and contracting paediatricians are respectively 3,221 and 584.
The resident population amounts to 4,275,843 (+52,258 persons with respect to December 31st, 2006).

Health Trusts

Local Health Trusts	Population *	% population per Health Trust	No. of Health Districts	No. of public hospital beds **	Employees	General practice physicians	Paediatricians
Piacenza	281,613	6.6%	3	843	3,599	216	33
Parma	425,690	10.0%	4	393	2,450	305	55
Reggio Emilia	510,148	11.9%	6	735	3,926	341	79
Modena	677,672	15.8%	7	1,612	6,258	531	97
Bologna	836,511	19.6%	6	1,859	8,368	634	116
Imola	127,554	3.0%	1	577	1,706	96	20
Ferrara	355,809	8.3%	3	753	3,151	286	38
Ravenna	379,467	8.9%	3	1,220	4,795	286	49
Forlì	182,682	4.3%	1	634	2,673	153	23
Cesena	200,364	4.7%	2	652	2,708	149	30
Rimini	298,333	7.0%	2	910	3,429	224	44
Total Local Health Trusts	**4,275,843**	**100.0%**	**38**	**10,188**	**43,063**	**3,221**	**584**

Hospital Trusts, University Hospital Trusts, Research Hospitals	No. of public hospital beds **	Employees
University Hospital Trust of Parma	1,361	3,830
Hospital Trust of Reggio Emilia	904	2.645
University Hospital Trust of Modena	775	2,429
University Hospital Trust of Bologna	1,730	4,996
University Hospital Trust of Ferrara	324	2,550
"Istituti Ortopedici Rizzoli" Research Hospital of Bologna	876	1,197
Total Hospital Trusts, University Hospital Trusts, Research Hospital	**5,970**	**17,647**
Total hospital beds and employees in Emilia-Romagna Health Trusts	**16,158**	**60,710**

** Population on December 31st, 2007.*
*** Accredited private hospital beds are not included in the table (while they are included in graphs on page 20).*

Vast Areas

Vast areas	Population *	No. of people aged 65+	% of people aged 65+
North Emilia Vast Area (Piacenza, Parma, Reggio Emilia, Modena Health Trusts)	1,895,123	409,771	21.6%
Central Emilia Vast Area (Bologna, Imola, Ferrara Health Trusts)	1,319,874	320,668	24.3%
Romagna Vast Area (Ravenna, Forlì, Cesena, Rimini Health Trusts)	1,060,846	237,769	22.4%
Total	**4,275.843**	**968,208**	**22.6%**

** Population on December 31st, 2007.*

Personnel employed by the Regional Health Service, 2006-2007

	2006	2007
Physicians	8,550	8,638
Veterinarians	549	530
Other health professionals	1,122	1,131
Technical and administrative professionals	578	568
Nursing personnel	25,865	26,193
Laboratory and diagnostic personnel	3,264	3,350
Prevention personnel	914	911
Rehabilitation personnel	2,250	2,282
Social workers	415	425
Technical personnel	5,130	5,267
Assisting personnel	642	296*
Social care personnel	3,860	4,623
Specialized auxiliary personnel	762	621
Administrative personnel	5,806	5,865
Religious personnel	18	10
Total	**59,725**	**60,710**

** Dying out function.*

Population

The population of Emilia-Romagna is growing thanks to the recovery of birth rate and the increase in resident foreigners. Starting from the second half of the '90s the growth became significant, as showed in the graphs reporting the last 20 year trend.

On December 31st, 2007 the resident population amounted to 4,275,843 (2,195,877 females and 2,079,966 males), +52,258 persons as compared to 2006. In the last 10 years the increase was 8.3%, that is a total of 328,695 (4.8% at national level).

The increase in birth rate is partly due to the presence of foreign families: births registered in 2007 were 40,518, of which 23% from foreign mothers. In 2006 registered births were 39,435 (of which 21% from foreign mothers); 30,139 in 1997.

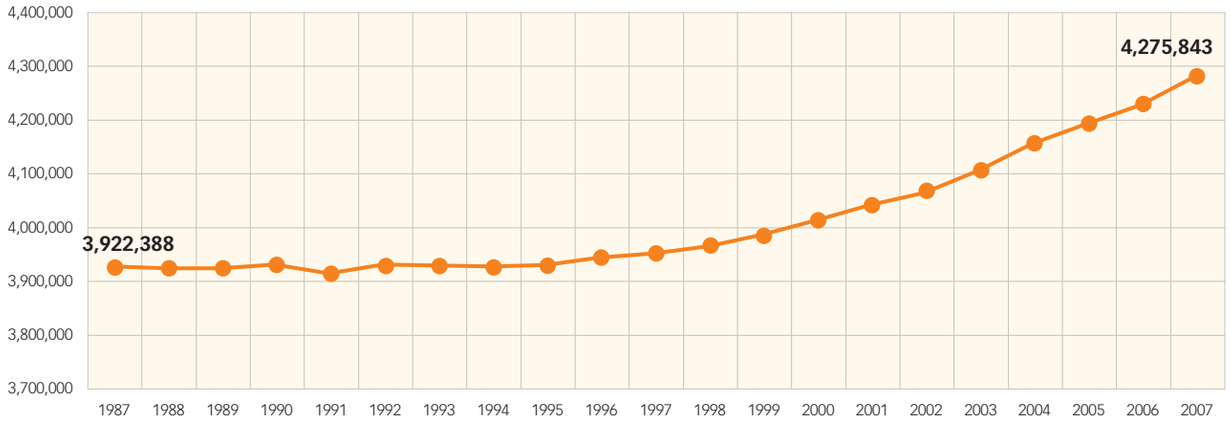
The 2007 Emilia-Romagna birth rate reaches the national one (9.5); in 1997 the regional rate was 7.6 and the national one was 9.4. The number of resident foreigners is growing (the first 5 countries of origin are Morocco, Albania, Romania, Tunisia, China): on December 31st, 2007 they were 365,720, 8.6% of the total population as compared to 5.8% nationally. In 2006 resident foreigners numbered 318,076, 7.5% of the total population (4.6% at national level). In 1997, the first year of systematic survey after the first regularization implemented by the so called "Martelli law" of 1990, foreigner population numbered 81,265. In immigrant population, males still prevail: 185,022 vs 180,698 females, even if the female component - thanks to the immigration from Eastern Europe countries - considerably increased between 1997 and 2007, from 42% to 49.4% of foreign population (males decreased form 57.6% to 50.6%).

The provinces with the largest number of resident immigrants are Reggio Emilia (10.3% of the total population), Piacenza (10.1%), Modena (9.9%) and Parma (9.2%). The province with the smallest number is Ferrara (5.3% of the total population).

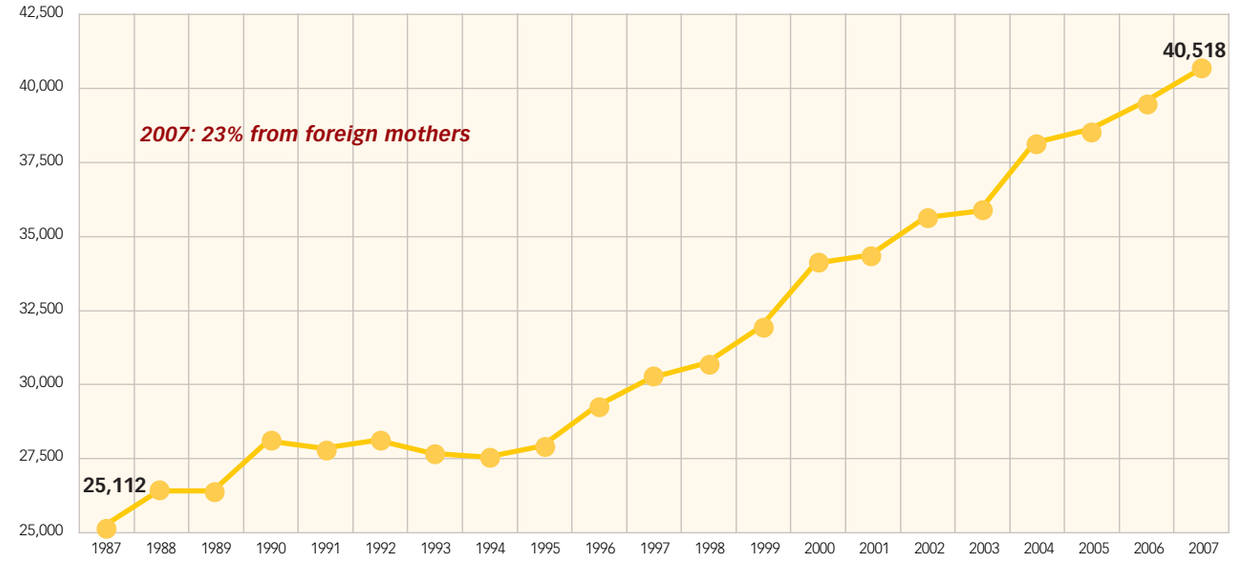
Emilia-Romagna confirms to be one of the "oldest" Italian regions with 968,208 persons aged over 65 years representing 22.6% of the total population (22.8 in 2006) while the national level is 19.8% (19.7% in 2006). The region has also a significant presence of people aged more than 75 years (48,469, representing 11.4% of the total population) and more than 85 years (134,527, representing 3.1% of the total population).

For further details:
http://www.regione.emilia-romagna.it/statistica

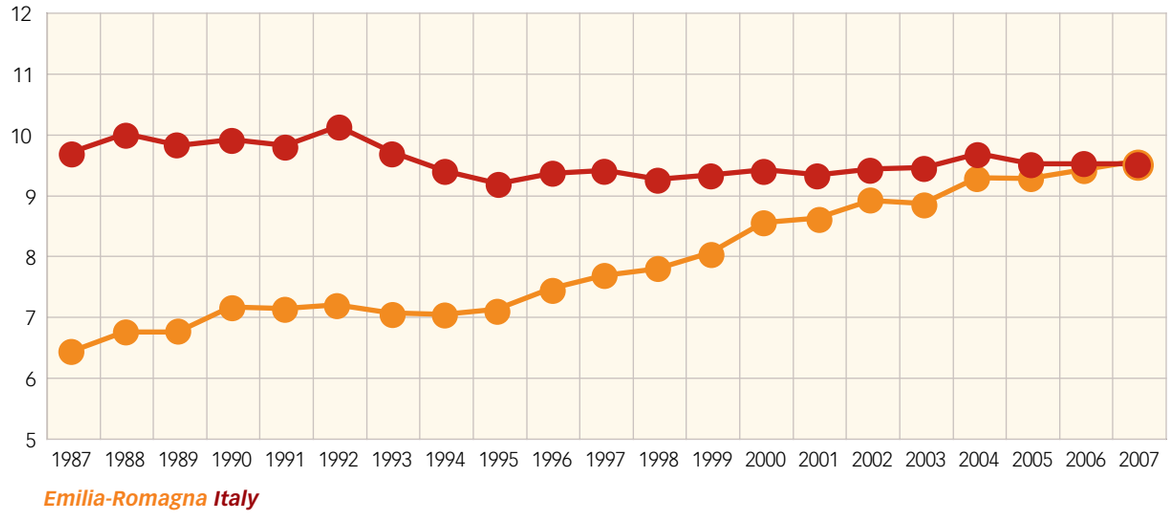
Resident population in Emilia-Romagna, 1987-2007



Residents born in Emilia-Romagna, 1987-2007



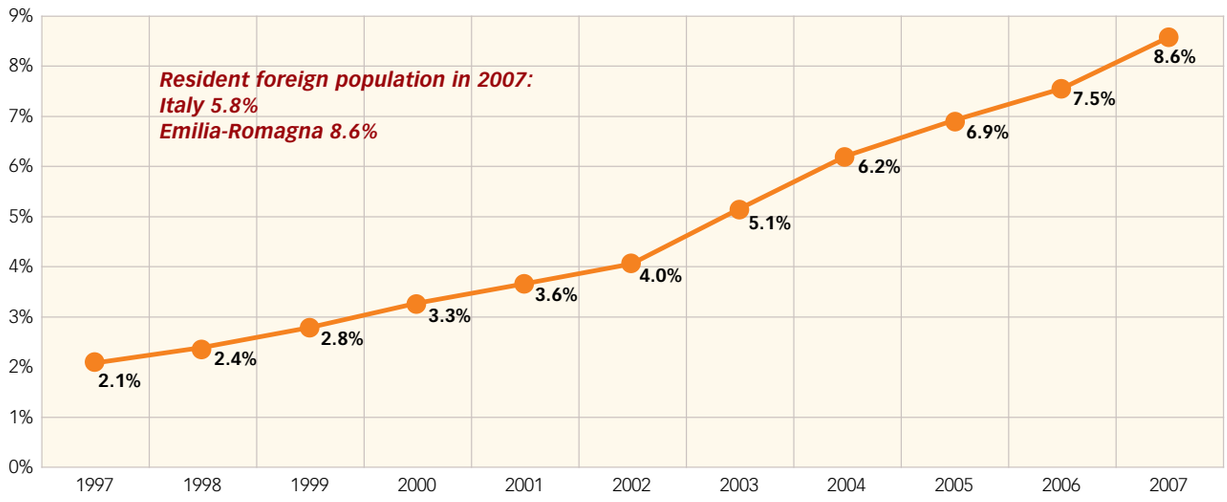
Birth rate in Emilia-Romagna/Italy, 1987-2007



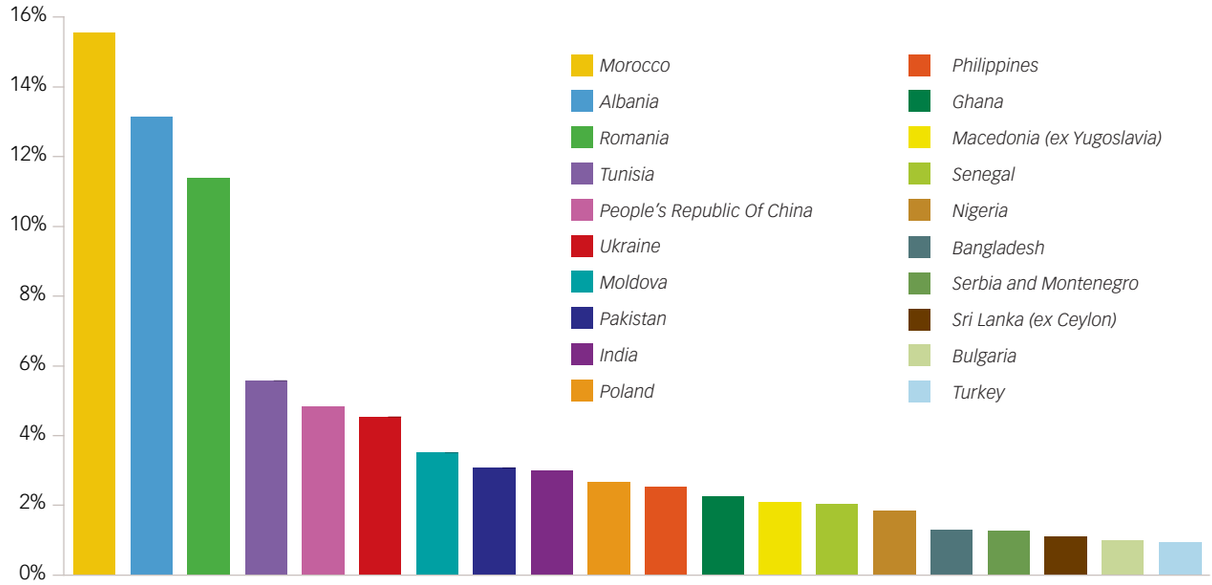
Resident foreign population by Local Health Trusts, 2007

Local Health Trusts	Total no. of resident population	Total no. of resident foreigners	% of foreigners on total population
Piacenza	281,613	28,419	10.1%
Parma	425,690	39,147	9.2%
Reggio Emilia	510,148	52,420	10.3%
Modena	677,672	67,316	9.9%
Bologna	836,511	67,113	8.0%
Imola	127,554	8,158	6.4%
Ferrara	355,809	18,858	5.3%
Ravenna	379,467	31,239	8.2%
Forlì	182,682	15,108	8.3%
Cesena	200,364	15,397	7.7%
Rimini	298,333	22,545	7.6%
Total	**4,275,843**	**365,720**	**8.6%**

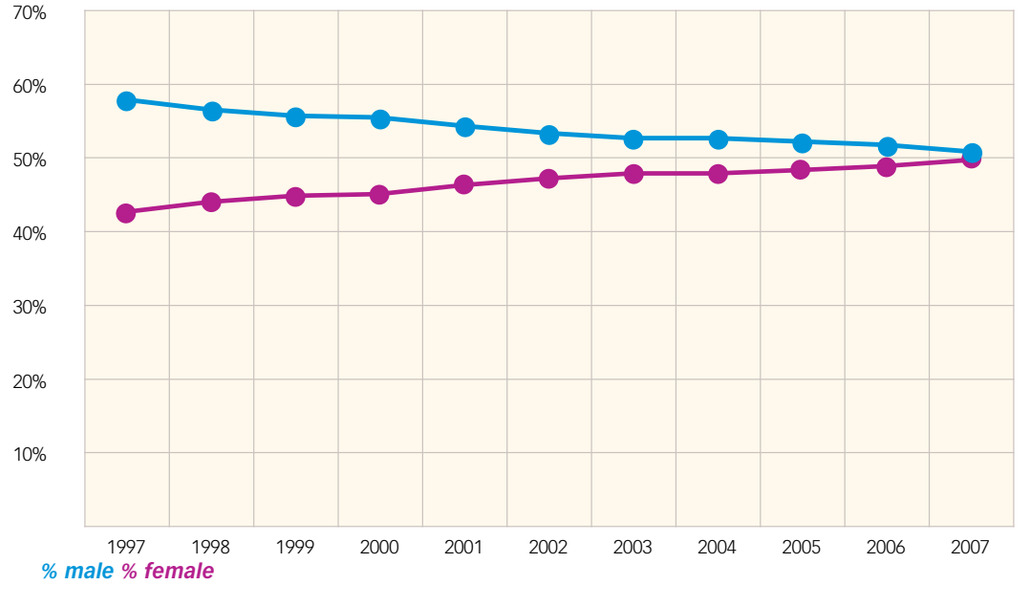
Percentage of foreign population with respect to resident population in Emilia-Romagna, 1997-2007



Resident foreign population in Emilia-Romagna by country of origin, December 31st, 2007



Foreign resident population by gender, 1997-2007



Resident elderly population by Local Health Trust, 2007

Local Health Trusts	Total population	Over 65 years	% over 65 years	Over 75 years	% over 75 years	Over 85 years	% over 85 years
Piacenza	281,613	68,412	24.3%	34,818	12.4%	9,510	3.4%
Parma	425,690	98,012	23.0%	50,268	11.8%	14,294	3.4%
Reggio Emilia	510,148	101,796	20.0%	51,532	10.1%	14,220	2.8%
Modena	677,672	141,551	20.9%	70,789	10.4%	19,524	2.9%
Bologna	836,511	200,847	24.0%	102,226	12.2%	28,643	3.4%
Imola	127,554	28,986	22.7%	14,768	11.6%	4,114	3.2%
Ferrara	355,809	90,835	25.5%	45,221	12.7%	11,730	3.3%
Ravenna	379,467	91,362	24.1%	46,639	12.3%	13,063	3.4%
Forlì	182,682	43,329	23.7%	22,188	12.1%	6,308	3.5%
Cesena	200,364	42,128	21.0%	20,300	10.1%	5,277	2.6%
Rimini	298,333	60,950	20.4%	29,720	10.0%	7,844	2.6%
Total	**4,275,843**	**968,208**	**22.6%**	**488,469**	**11.4%**	**134,527**	**3.1%**

Expenditure trend: comparison with the other Italian Regions

In 2007, total expenditure for the Regional Health Service was 7.616 billion Euros. The analysis of the five years between 2003 and 2007 shows growth indexes aligned with the national average, even though the population growth in Emilia-Romagna (4.3%) was greater than the national one (3%). To this appreciable result, the increasingly positive balance of inward healthcare mobility should also be added: 329 million Euros in 2007 as compared to 308 million Euros in 2006.

Expenditure by Region, 2003-2005-2007 (absolute figures in thousand Euros)

Regions and Autonomous Provinces	Total expenditure 2003	Total expenditure 2005	Total expenditure 2007	% difference 2005/2003	% difference 2007/2005	% difference 2007/2003
Piemonte	6,145,739	7,192,655	7,754,971	17.03%	7.82%	26.18%
Valle d'Aosta	197,592	224,758	247,401	13.75%	10.07%	25.21%
Lombardia	12,716,438	14,777,327	16,120,234	16.21%	9.09%	26.77%
Provincia autonoma Bolzano	907,932	982,400	1,067,971	8.20%	8.71%	17.63%
Provincia autonoma Trento	804,212	856,642	941,072	6.52%	9.86%	17.02%
Veneto	6,530,028	7,560,710	8,157,991	15.78%	7.90%	24.93%
Friuli Venezia Giulia	1,731,769	1,987,822	2,167,322	14.79%	9.03%	25.15%
Liguria	2,471,386	2,924,715	3,067,154	18.34%	4.87%	24.11%
Emilia-Romagna	**6,110,902**	**7,053,411**	**7,615,948**	**15.42%**	**7.98%**	**24.63%**
Toscana	5,130,930	5,927,252	6,315,076	15.52%	6.54%	23.08%
Umbria	1,276,166	1,398,837	1,492,953	9.61%	6.73%	16.99%
Marche	2,083,768	2,345,038	2,534,824	12.54%	8.09%	21.65%
Lazio	8,072,280	10,107,400	10,425,232	25.21%	3.14%	29.15%
Abruzzo	1,972,322	2,246,372	2,270,761	13.89%	1.09%	15.13%
Molise	526,421	654,418	614,769	24.31%	-6.06%	16.78%
Campania	7,788,404	9,663,536	9,577,045	24.08%	-0.90%	22.97%
Puglia	5,126,498	6,160,918	6,619,515	20.18%	7.44%	29.12%
Basilicata	769,244	897,681	963,149	16.70%	7.29%	25.21%
Calabria	2,585,899	2,858,194	3,164,400	10.53%	10.71%	22.37%
Sicilia	6,642,986	7,814,847	8,224,197	17.64%	5.24%	23.80%
Sardegna	2,272,758	2,692,359	2,660,276	18.46%	-1.19%	17.05%
Italia	81,863,675	96,327,292	102,002,261	17.67%	5.89%	24.60%

Source for 2003: General report on the national economic situation, 2006.
Source for 2005 and 2007: General report on the national economic situation, 2007.

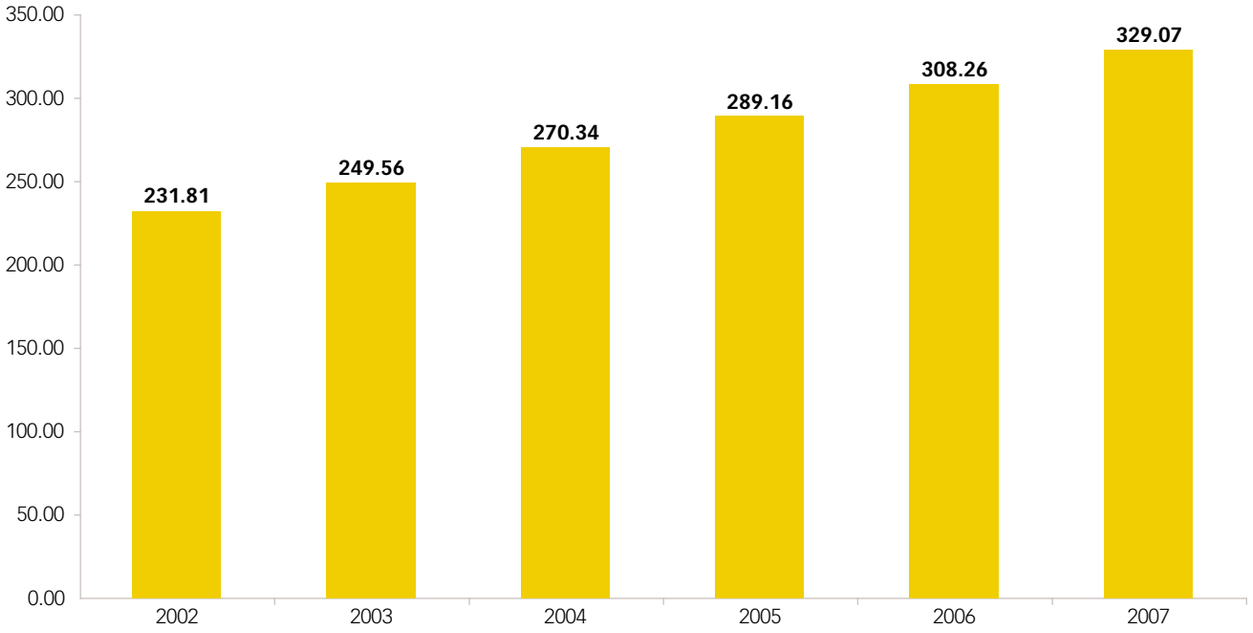
Trend of the resident population in Emilia-Romagna and Italy, 2003-2005-2007

	2003	2005	2007
Emilia-Romagna	4,101,324	4,187,544	4,275,843
Italy	57,888,245	58,751,711	59,619,290

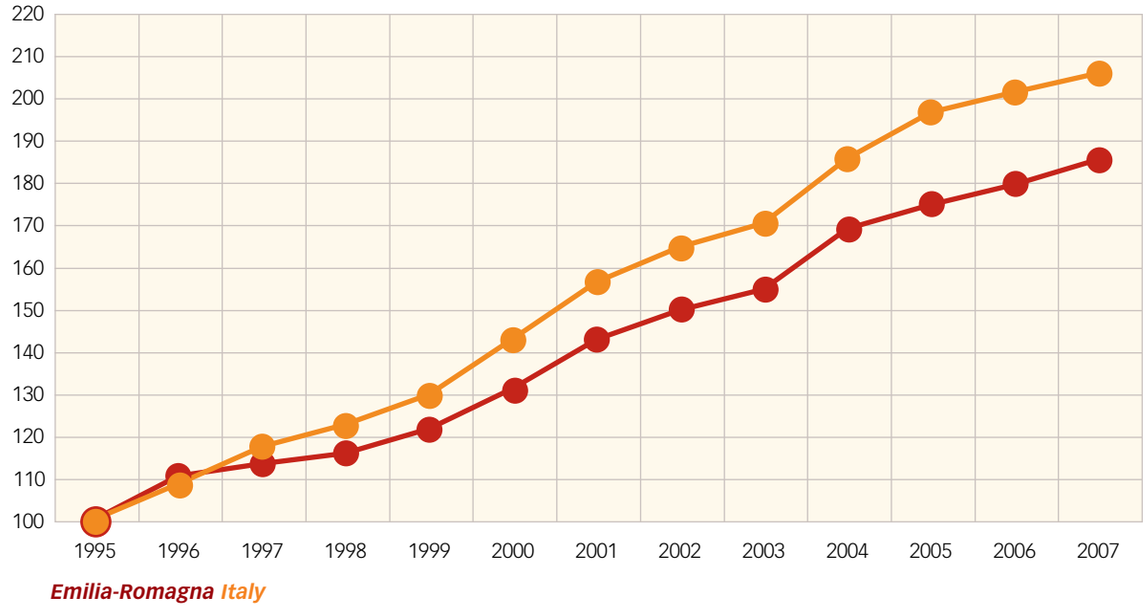
	% increase 2005/2003	% increase 2007/2005	% increase 2007/2003
Emilia-Romagna	2.10%	2.11%	4.26%
Italy	1.49%	1.48%	2.99%

Resident population as of December 31st.
Source: Emilia-Romagna Region (self-service statistics).
Source for national data: Italian National Institute of Statistics (ISTAT).

Balance of interregional mobility, 2002-2007 (in million Euros)



Total per capita expenditure in Emilia-Romagna and Italy, 1995-2007 (index number 1995 = 100)



The graph represents the annual growth of per capita expenditure in Emilia-Romagna and Italy. The starting value of 1995 is set at 100 as index number.

Health Trusts' Social accountability report

From 2007 every Health Trust and the Research Hospital "Rizzoli" issue the Social accountability report, an annual report on the results of care activities carried out according to the regional and local planning healthcare objectives. The Social accountability report (instituted by Regional Law no. 29/2004 and introduced with the Regional Government Resolution no. 213/2005) is complementary to the economic-financial balance sheet; the two reports together allow to have a global outlook of the results achieved. The Social accountability report was experimented in 2004 by 5 pilot Local Health Trusts and extended in 2005 to all Local Health Trusts; from 2007 it is issued by each Health Trust of the Regional Health Service.

For further details:
http://asr.regione.emilia-romagna.it/

Expenditure by functions and levels of health care for resident citizens, per capita expenditure

Health policy strategies in Emilia-Romagna have deeply modified the structural, organizational and planning aspects of the entire system, striving to balance the offer between hospital and territorial services. Hospitals have been assigned an increasingly more specific role to provide complex care in facilities with a high concentration of technology and professional competences. At the same time, territorial and home care services have been developed, diversified and qualified. For some years, expenditure for local care services exceeded that for hospital care and in 2007 absorbed 53.3% of total resources allocated.

In 2006 and 2007 the same data processing methodology has been used; the costs for care services covered by the regional Fund for non self-sufficient people include exclusively the 2006 consolidated expenditure share from the Regional Healthcare Fund.

Per capita expenditure increased from 1,725 Euros in 2006 to 1,773 in 2007, with a growth slightly below 3%.

Expenditure by functions and levels of healthcare, 2006-2007

Levels of care	Cost in thousand Euros in 2006	% of total	Per capita cost in Euros in 2006	Cost in thousand Euros in 2007	% of total	Per capita cost in Euros in 2007
Total public healthcare (1)	**322,961**	**4.43%**	**76.47**	**350,298**	**4.6%**	**81.92**
Primary care (contracting general practice physicians and paediatricians, continuity of care)	396,764	5.45%	93.94	417,434	5.5%	97.63
Territorial emergency services	106,724	1.4%	25.27	113,896	1.5%	26.64
Territorial pharmaceutical expenditure	1,017,909	13.9%	241.01	1,017,009	13.4%	237.85
Supplementary care and prosthesis	110,560	1.5%	26.18	110,253	1.4%	25.79
Specialist care (including emergency care not followed by admission)	1,237,655	16.9%	293.03	1,262,853	16.6%	295.35
Home care	151,483	2.0%	35.87	151,043	1.9%	35.32
Healthcare for women, families, couples (Family advisory health centres, community paediatricians)	85,137	1.1%	20.16	85,776	1.1%	20.06
Psychiatric care	315,193	4.3%	74.63	336,364	4.4%	78.67
Rehabilitation for disabled	117,479	1.6%	27.81	117,619	1.5%	27.51
Care for substance abusers	62,311	0.8%	14.75	64,700	0.8%	15.13
Care for elderly	312,172	4.2%	73.91	319,412	4.2%	74.70
Care for terminally ill	16,975	0.2%	4.02	18,587	0.2%	4.35
Care for people with HIV	4,163	0.0%	0.99	4,705	0.0%	1.10
Hydrothermal treatment	19,787	0.2%	4.68	25,662	0.3%	6.00
Total Health District care	**3,954,312**	**54.2%**	**936.25**	**4,045,313**	**53.3%**	**946.09**
Total hospital care	**3,008,422**	**41.2%**	**712.29**	**3,186,219**	**42.02%**	**745.17**
Total	**7,285,695**	**100.0%**	**1,725.00**	**7,581,830**	**100.00%**	**1,773.18**

Source: Final balance LA form 2006 and 2007. Per capita costs are calculated for the resident regional population as of December 31st (self-service statistics).
Population as of December 31st, 2006: **4,223,585**.
Population as of December 31st, 2007: **4,275,843**.

NOTES

The expenditure by levels of care includes global management costs.
For care activities financed through the regional Fund for non self-sufficient people, costs include exclusively the 2006 consolidated expenditure share from the Regional Healthcare Fund, amounting to 211 million Euros.

(1) Public healthcare total, according to an update of the guidelines for fill-in rules, does not include the expenditure for diagnostic tests for the three regional screening programs (mammographic, cervical and colorectal), estimated around 15-16 million Euros and that are allocated to specialist care.

Health care and social services facilities: projects for new facilities and for modernizing existing facilities

In 2007, the Legislative Assembly approved the 4th update of the Regional Program for Healthcare Investments and the Region signed the national Integrative Program Agreement.
By Resolution no. 1183/2007 the Regional Government approved the project planning for a total allocation of 9 million Euros divided as follows: 5.4 million Euros for the 4th update of the Regional Program for Healthcare Investments (including 2.2 million Euros from Health Trusts' funds) and 3.6 million Euros for the dentistry program. With the Integrative Program Agreement the National Government authorized 8 projects approved by the 2003 regional planning for a total expenditure of 57.239 million Euros (45.433 million Euros by National Government; 3.484 million Euros by Emilia-Romagna Region and 8.311 million Euros by Health Trusts).
Fund allocations established by the two above mentioned documents are aimed at completing the interventions started in the previous three-year periods, at improving healthcare facilities according to safety and accreditation standards and at enhancing reorganization processes in the Health Trusts.
On December 31st, 2007 the investments activated in the last eighteen years amounted globally to 2,507 million Euros.
The investments took place in three phases. The first, completed, concerned 161 projects and a total financing of about 734 million Euros. The second phase included 123 projects for a total financing of 835 million Euros: 88 interventions were completed and 33 are ongoing (two other projects were suspended because of a legal dispute with the contracting firm and because of the discovery of a wartime explosive device). The third phase refers to 523 projects (228 in the healthcare area and 295 in the social-health area) for a 938 million Euros financing.
Moreover, the Health Trusts regularly provide for modernizing interventions of their own facilities, covering the costs with Trust's funds.

Programs and financing (in Euros), 1998-2007

	State	Region	Bodies*	Total
First phase - completed	545,865,652	34,008,522	154,293,398	734,167,573
Second phase – nearly completed	467,223,579	24,592,128	342,721,127	834,536,834
Third phase - ongoing	317,947,408	208,938,234	411,479,072	938,364,714
Total	**1,331,036,640**	**267,538,884**	**908,493,597**	**2,507,069,122**

** Bodies can be Municipalities, former Public Institutions for Assistance and Charity and non-profit organizations.*

Programs

*First phase: completed **
161 projects
Investments: about 734 million Euros

The projects included:

- renovation of the Departments of Public Health in Parma and Bologna;
- construction of outpatient clinics in Zola Predosa, Imola and Borgo Tossignano (Bologna);
- construction of Health District facilities in Ferrara, Predappio and Cesenatico (Forlì-Cesena);
- construction of psychiatric residential facilities in Scandiano and Guastalla (Reggio Emilia), Modena (2), Carpi (Modena), Bologna (3) and Ferrara; and nursing homes for elderly (56) and disabled (19);
- renovation or enlargement of 24 hospitals including those in Reggio Emilia and Parma, construction of new hospital facilities in Sassuolo and Baggiovara (Modena), Cona (Ferrara) and Vecchiazzano (Forlì-Cesena).

Projects that have been completed and activated include:
infectious disease units in the hospitals in Piacenza, Parma, Reggio Emilia, Modena, Ferrara, Ravenna, Forlì, Cesena, Rimini.

** The infectious disease unit in Bologna University Hospital Trust - Polyclinic Sant'Orsola-Malpighi is near completion.*

Second phase: nearly completed
123 projects
Investments: 835 million Euros

88 projects have been completed, including:

- new hospitals in Fidenza (Parma), Baggiovara and Sassuolo (Modena), San Giovanni in Persiceto (Bologna), Lagosanto (Ferrara); enlargement of Maggiore Hospital in Parma and Santa Maria Nuova Hospital in Reggio Emilia, completion of the Rehabilitation hospital in Villanova d'Arda (Piacenza) and of the Hospital in Vignola (Modena); renovation and enlargement of the "New Pathologies" Unit of Bologna University Hospital Trust;
- Department of Public Health in Piacenza, Social assistance centre in Langhirano (Parma), Health District in Mirandola (Modena), the new building for the Regional Environmental Health Agency (ARPA) in Ravenna, purchase and installation of linear accelerator in Piacenza;
- upgrading to safety and accreditation standards of hospital and territorial facilities;
- construction of 42 nursing homes for elderly and disabled.

There are 33 ongoing projects, including:

- 1 new non-hospital facility;
- 13 nursing homes for elderly and disabled people;
- conclusion of the interventions at the hospital in Fiorenzuola (Piacenza), Polyclinic in Modena, Sant'Orsola Polyclinic, Maggiore Hospital and Bellaria Hospital in Bologna, new hospital in Porretta (Bologna) and Cona (Ferrara), modernization of Santa Maria delle Croci Hospital in Ravenna, Bufalini Hospital in Cesena and Infermi Hospital in Rimini.

As of December 31st, 2007 two projects were suspended because of a legal dispute with the contracting firm and because of the discovery of a wartime explosive device.

Third phase:
523 projects
Investments: 938 million Euros

188 projects concern the healthcare area alone, including:

- 8 projects for the metropolitan area of Bologna: technological centre of Sant'Orsola Polyclinic in Bologna (already operating), cardiology and heart surgery centres at Sant'Orsola Polyclinic (in planning phase), building renovation of Rizzoli Orthopaedic Institutes in Bologna and 4 other projects in Bellaria Hospital in Bologna (ongoing), hospitals in Bazzano (already started) and Budrio (completed) and the Roncati complex in Bologna;
- 20 facilities for palliative care: 14 completed (13 operating), 5 under construction;
- 69 projects for in-hospital private practice: 32 completed (26 operating), 35 under construction, 5 in the bidding phase;
- 11 projects included in the 2004 Regional Planning Agreement: 4 operating, 7 under construction;
- 1 ongoing project to expand the hospital in Parma (2005 Regional Planning Agreement);
- 111 other projects included in regional programs: 40 completed (36 operating), 25 ongoing, 46 in the bidding phase.

Hospital care: hospital beds, admissions and waiting lists for planned surgery

As of December 31st, 2007 public and accredited private hospital beds in Emilia-Romagna amounted to a total of 19,983 (16,158 public, 3,825 accredited private) including beds for acute care (14,336), long-term care and rehabilitation (3,821), day hospital (1,826). The total number of beds remained substantially stable as compared to the situation as of December 31st, 2006 (19,887 beds). There are 3.83 acute care beds (inpatient admissions and day hospital) and 0.9 beds for long-term care and rehabilitation per 1,000 population. The inpatient admission rate per 1,000 population is 138; the day hospital admission rate is 45.4.

The number of patients coming from other regions is still growing: in 2007 the attraction index is 15.01% (it was 14.5% in 2006 and 13.8% in 2005).

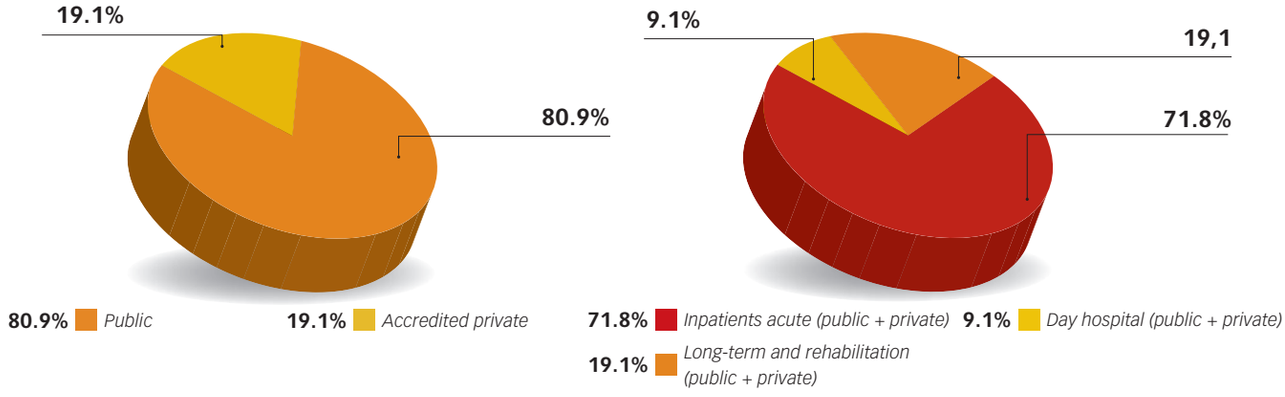
In 2007, the total number of admissions was 851,574 (797,677 in acute care beds, 22,628 for rehabilitation and 31,269 for long-term care). In the same year, planned admissions in public and accredited private hospitals covered by the Regional Health Service amounted to 296,000.

In line with national standards, the Region established specific objectives for some types of surgery: treatment of all cases of surgery for uterine, breast and colorectal cancer within 30 days; treatment of 90% cases of coronary angioplasty and aortocoronary bypass within 60 days; treatment of 90% cases of carotid endarterectomy within 90 days; treatment of 90% cases of cataract and hip replacement within 180 days.

In 2007 too, goal attainment is generally satisfactory in the cardiologic, vascular and ophthalmological areas, while for hip replacement surgery it should be improved. Data related to oncology are influenced by overall times required by pre-surgical diagnostic and therapeutic paths and by the surveying methods of waiting times that are not calculated from the date of surgery prescription but from diagnosis date (between diagnosis and surgery, time extension could actually be justified by some necessary therapies).

Public and accredited private beds, in 2007 = 19,983

Beds as of December 31st, 2007



Public and accredited private beds per 1,000 population, as of December 31st, 2007

Acute care	3.83
Long-term and rehabilitation	0.90

Hospital admission rate per 1,000 population, as of December 31st, 2007

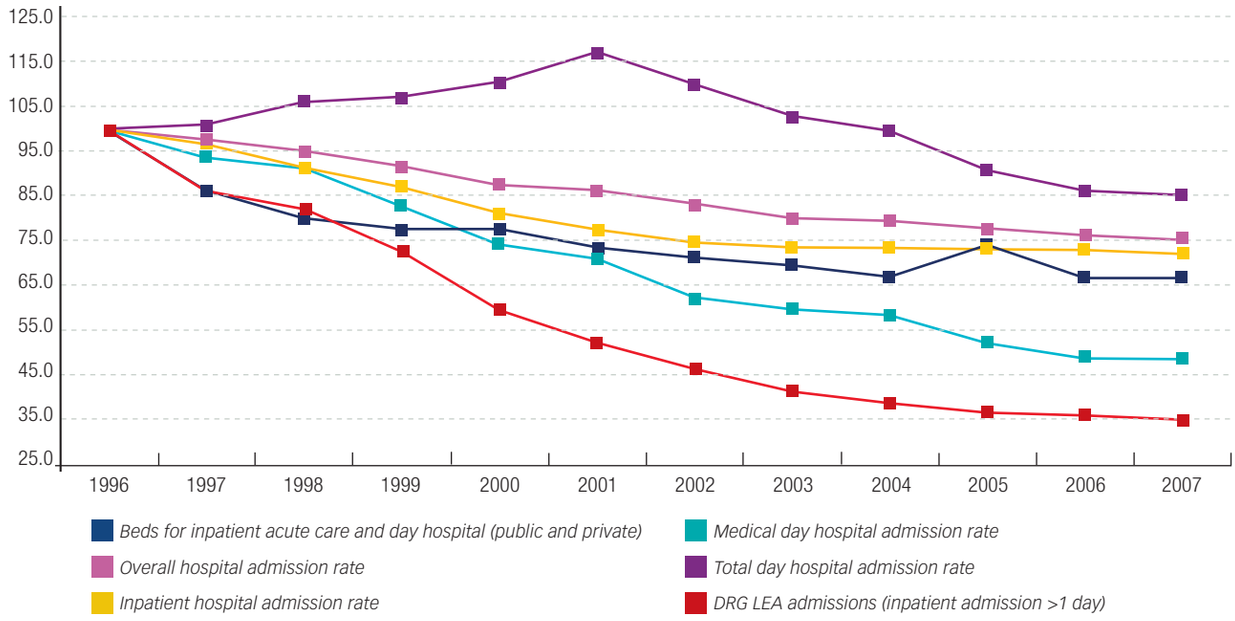
Inpatients	138.0
Day hospital	45.4

Admissions (acute care, rehabilitation and long-term), as of December 31st, 2007

Acute care	797,677
Rehabilitation	22,628
Long-term care	31,269
Total	851,574

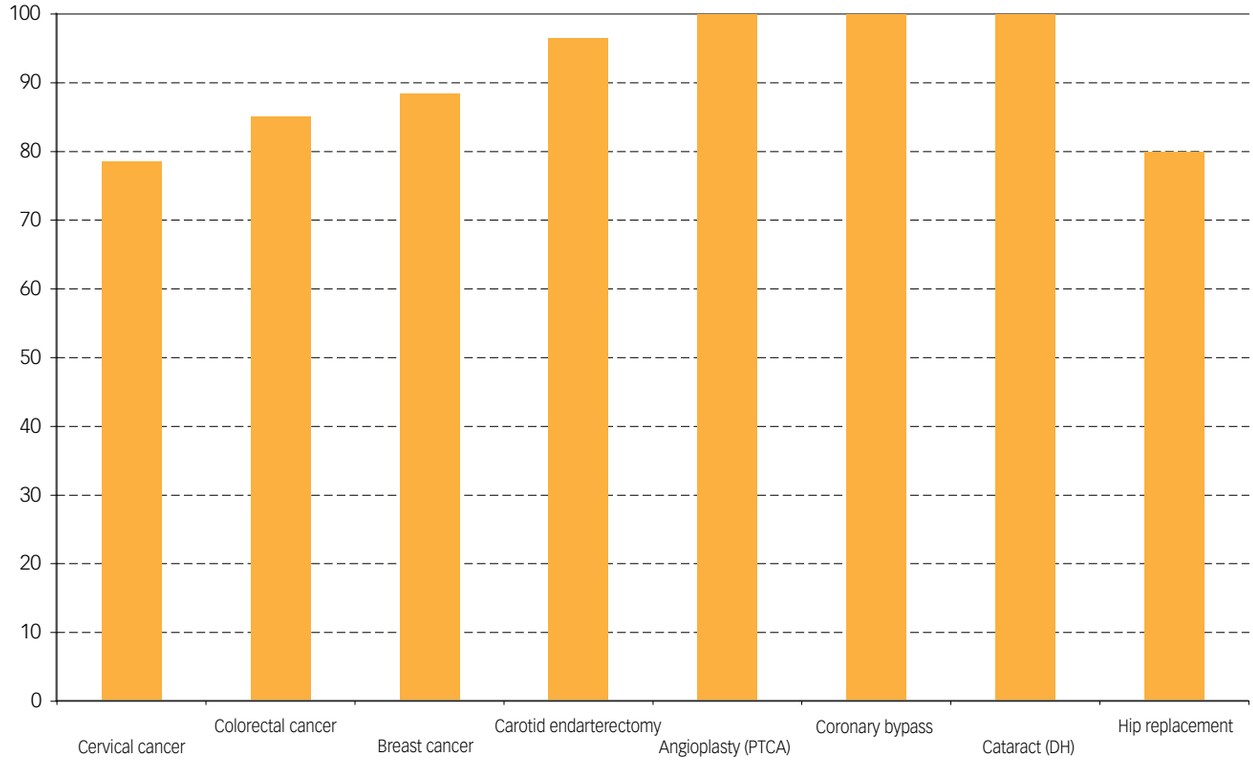
Extraregional attraction index in 2007: 15.01%

Hospital admission rates, 1996-2007 (index number 1996 = 100)



Public beds decreased from 20,657 in 1996 to 16,158 in 2007 and have been partially devoted to long-term acute care.

Percentage of planned surgery performed within time limits set by national standards, 2007

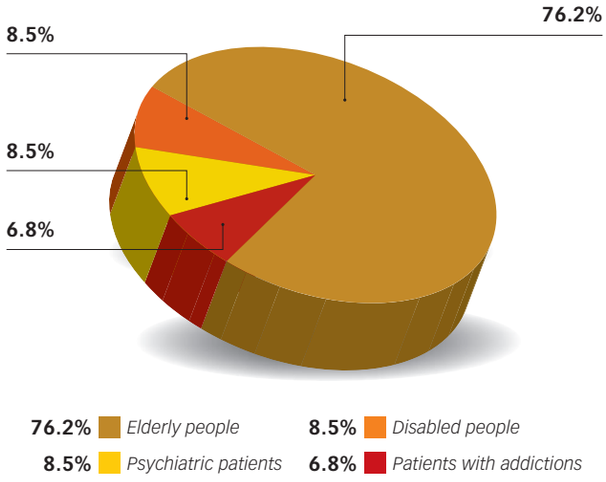


Beds in facilities for elderly, people with disabilities, mental health problems, addictions

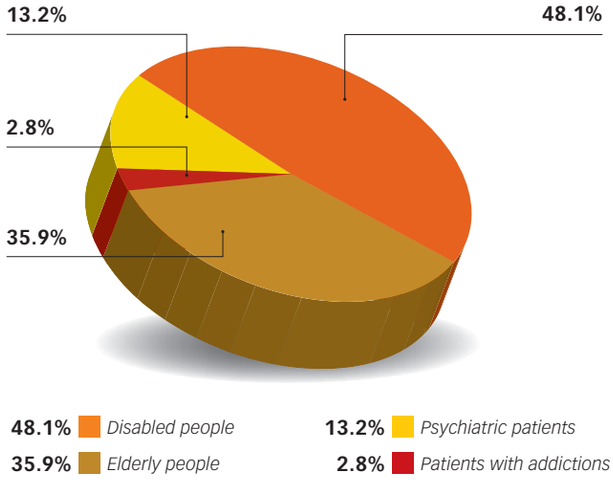
Social and healthcare services for the elderly, for people with disabilities, mental health problems or pathologic addictions include a network of residential and semi-residential facilities.
On December 31st, 2007 there were 19,650 beds in residential facilities (20,779 in 2006) and 7,476 beds in semi-residential facilities (7,533 in 2006). As far as the number of beds devoted to pathologic addictions is concerned, until last year all the beds offered by institutions registered in the Auxiliary Entities Regional Register were calculated, thus including 1,200 beds in facilities not operating within the National Health Service. Through the accreditation process started in 2007, the regional offer has been redefined taking into account only accredited facilities.
From 2007, with the start up of the three-year program for the use of the regional Fund for non self-sufficiency, also the network of residential and semi-residential facilities is involved in a process of further qualification of all the services for non self-sufficient people.

Beds in residential and semi-residential facilities, in 2007 = 27,126

Residential facilities



Semi-residential facilities



Hospice care

In Emilia-Romagna there are 18 hospices offering 216 beds. As of December 31st, 2007 they were 17 and offered 202 beds (the Guastalla Hospice - offering 14 beds – was opened on March 2008 and it is not included in the table below).
The hospice care network has grown considerably in last years: from 14 hospices with 170 beds and 2,389 admissions in 2005 to 18 hospices (including the Guastalla Hospice) with 216 beds and 3,182 admissions in 2007.
Hospices are integrated in the regional healthcare system. They guarantee personalized care including pain therapy and psychological support.
Hospices are located in hospitals or in other facilities; they can be directly managed by Health Trusts or by non-profit volunteer associations through specific agreements with the Health Trusts.

Hospices, 2005-2006-2007

			2005			2006			2007		
Health Trusts	Hospices		No. of beds	No. of patients admitted	Average length of stay (days)	No. of beds	No. of patients admitted	Average length of stay (days)	No. of beds	No. of patients admitted	Average length of stay (days)
Piacenza Local Health Trust	Borgonovo Valtidone	Public	10	7	20.1	10	149	16.6	10	159	18.9
Parma Local Health Trust	Borgotaro	Public	8	59	22.4	8	107	17.3	8	81	23.9
	Langhirano	Public	12	25	21.6	12	57	38.9	12	115	31.2
	Fidenza	Accredited private	15	152	23.1	15	193	24.2	15	202	18.8
	Piccole Figlie	Accredited private							8	24	12.0
Reggio Emilia Local Health Trust (*)	Madonna dell'Uliveto di Albinea	Accredited private	12	207	20.2	12	204	20.6	12	221	19.1
Modena Hospital Trust	Polyclinic of Modena	Public	10	286	12.7	10	297	12.5	10	282	12.9
Bologna Local Health Trust	Chiantore Seragnoli	Accredited private	30	493	19.3	30	514	20.0	30	620	15.2
	Bellaria	Public							13	143	19.2
Imola Local Health Trust	Castel S.Pietro	Public	12	148	17.9	12	217	17.0	12	197	21.0
Ferrara Local Health Trust	Ado	Accredited private	12	207	20.1	12	200	19.5	12	194	21.0
	Codigoro	Public							11	25	15.4
Ravenna Local Health Trust	Lugo	Public	8	83	23.2	8	120	19.6	8	103	24.0
Forlì Local Health Trust	Forlimpopoli	Public	11	302	12.5	11	265	14.5	11	256	14.5
	Dovadola	Public	8	12	20.5	8	108	22.9	8	134	19.7
Cesena Local Health Trust	Savignano sul Rubicone	Public	12	246	16.6	12	233	25.0	12	232	19.1
Rimini Local Health Trust	Rimini	Public	10	162	17.7	10	195	15.1	10	194	14.1
Total			**170**	**2,389**	**17.8**	**170**	**2,859**	**19.0**	**202**	**3,182**	**18.0**

** In March 2008 the Guastalla public Hospice was opened with 14 beds in Guastalla Hospital (Reggio Emilia Local Health Trust).*

Services for senile dementias

Support and care to dementia patients and their families throughout the entire course of the disease at home or in specific facilities has been organized as a network system involving Local Health Trusts, Local Authorities, associations of family members, volunteers.

In Emilia-Romagna there are 48 facilities belonging to Local Health Trusts specialized in the diagnosis and care of senile dementia: 4 in Piacenza, 4 in Parma, 7 in Reggio Emilia, 9 in Modena, 10 in Bologna, 1 in Imola, 6 in Ferrara, 4 in Ravenna, 1 in Forlì, 1 in Cesena and 1 in Rimini.

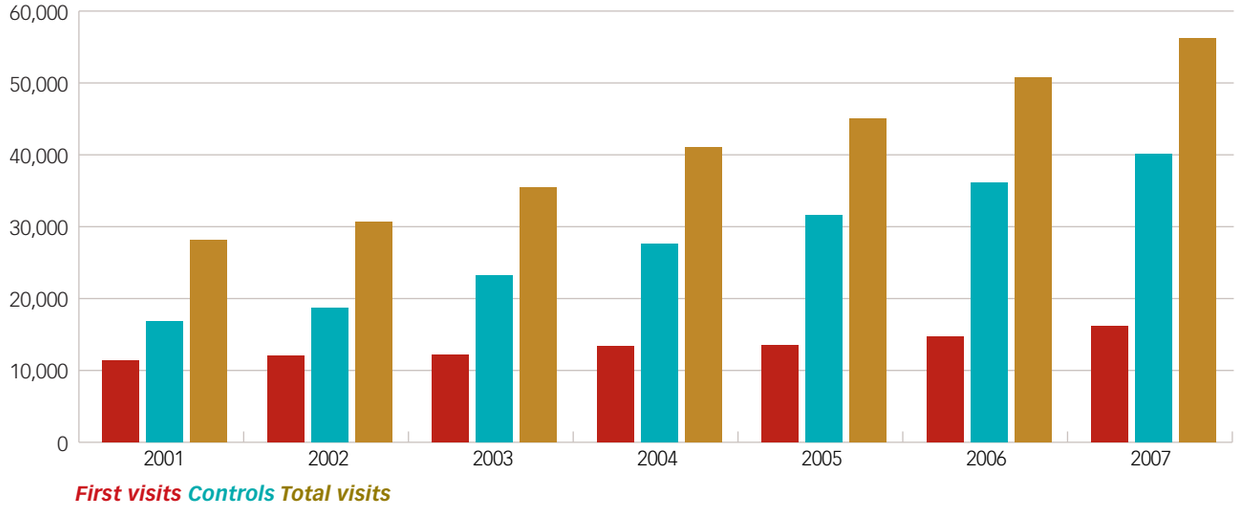
Care of Alzheimer disease (the main cause of senile dementia) requires different level of interventions: pharmacological, cognitive stimulation, psychological support and help groups for family members, training and informative courses for family members and healthcare personnel, specialist counselling.

To offer informal cognitive stimulation to Alzheimer patients and, at the same time, the opportunity to families to share their problems with people living the same experience, the so-called "Alzheimer Cafés" were created: meeting occasions promoted by some Local Health Trusts, often in collaboration with associations of family members. In 2008, Health Districts allocated a total amount of 684,000 Euros from the regional Fund for non self-sufficiency for the development of group activities, such as the "Alzheimer Cafés".

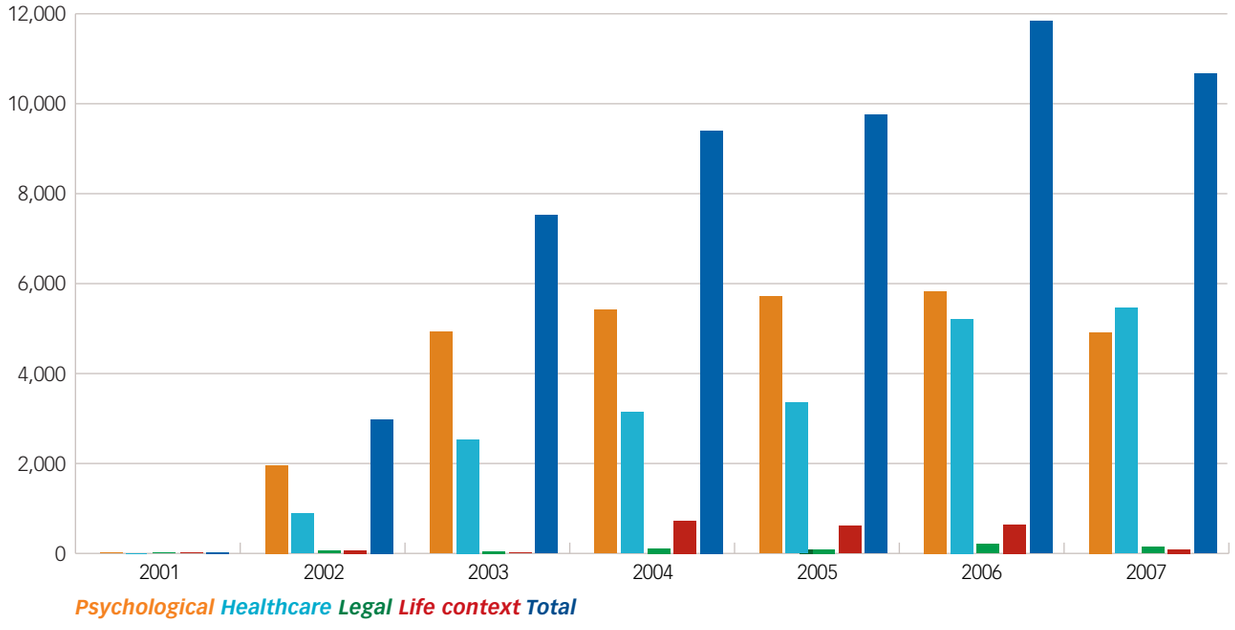
The total number of visits carried out in regional specialized centres doubled between 2007 and 2001 (56,542 vs 28,128; 50,784 in 2006).

In 2007 new patients numbered 16,214 (14,668 last year) and 10,806 specialist consultations were offered (11,893 in 2006).

Visits, 2001-2007



Specialist consultations for family members, 2001-2007



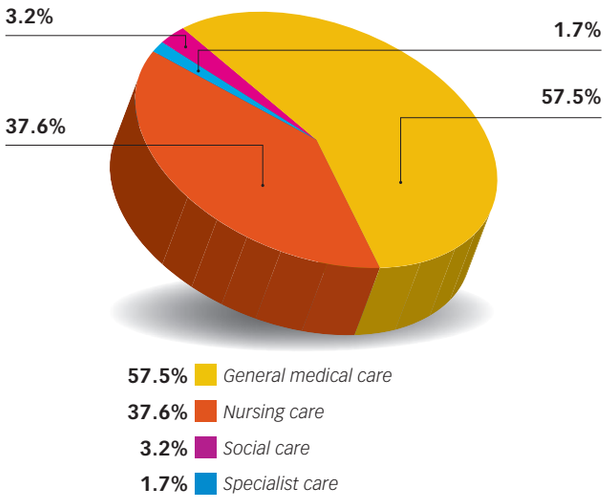
Home care

The number of home cared patients is constantly growing. In 2007 assisted people numbered 81,123 for a total of 96,258 patients handled (more treatment periods to the same patient). In 2006 and 2005, home care people amounted respectively to 77,085 and 71,237, while patients handled were respectively 90,403 and 84,001.
Also home visits by health professionals have increased: 2,252,130 as compared to 2,078,765 in 2006.
The home care system takes care of people who need help with daily activities or people at risk of non self-sufficiency, who have clinical conditions that can be treated at home, live in suitable conditions and can be supported by the family or neighbours.
This form of care aims at avoiding improper use of hospital admissions, while guaranteeing continuity of care, enhancing autonomy and relational abilities, supporting families and simplifying access to aids. To support home care is one of the priorities of the regional Fund for non self-sufficiency.

People handled, in 2007 = 96,258

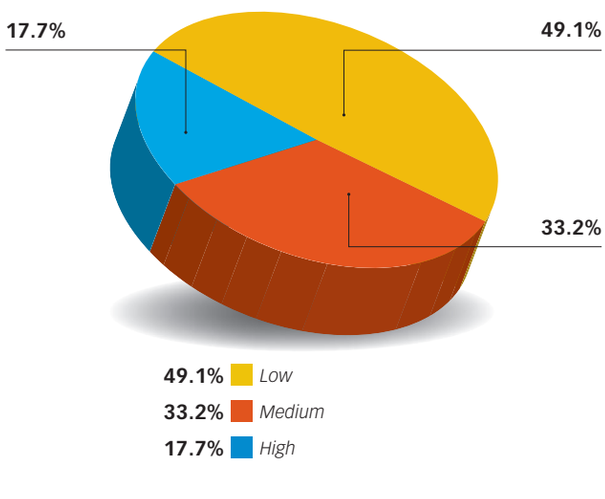
People cared for, in 2007 = 81,123

Type of home care



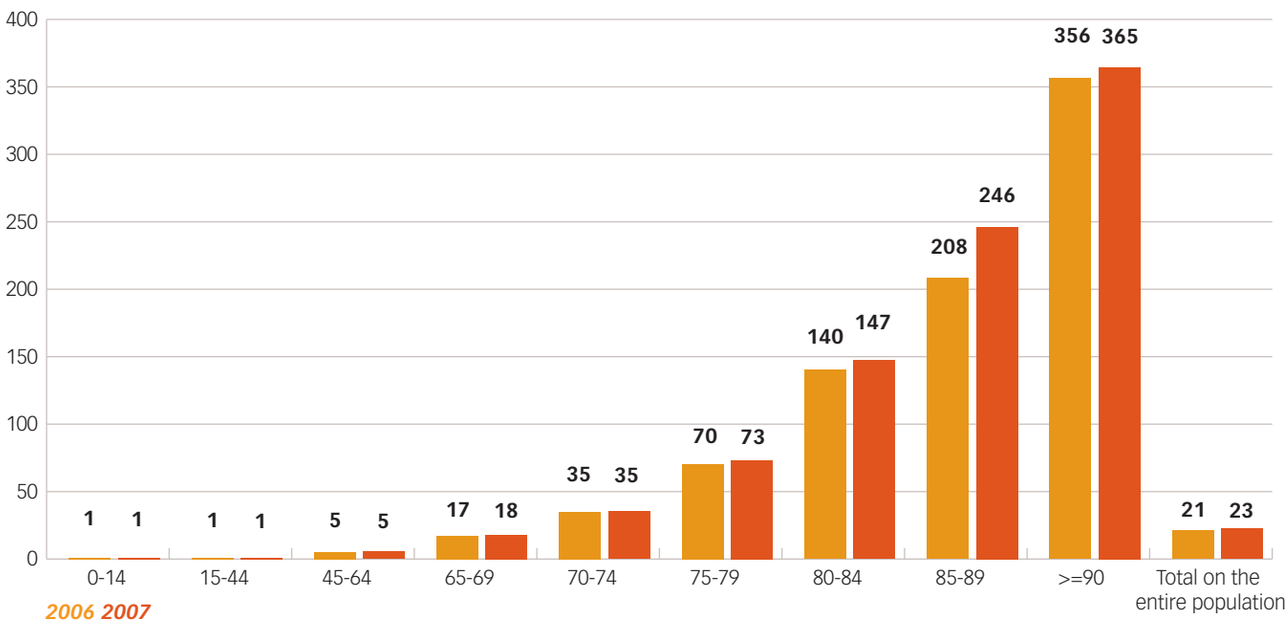
57.5% *General medical care*
37.6% *Nursing care*
3.2% *Social care*
1.7% *Specialist care*

Levels of care intensity



49.1% *Low*
33.2% *Medium*
17.7% *High*

Home cared people: specific rates by age per 1,000 population, 2006-2007

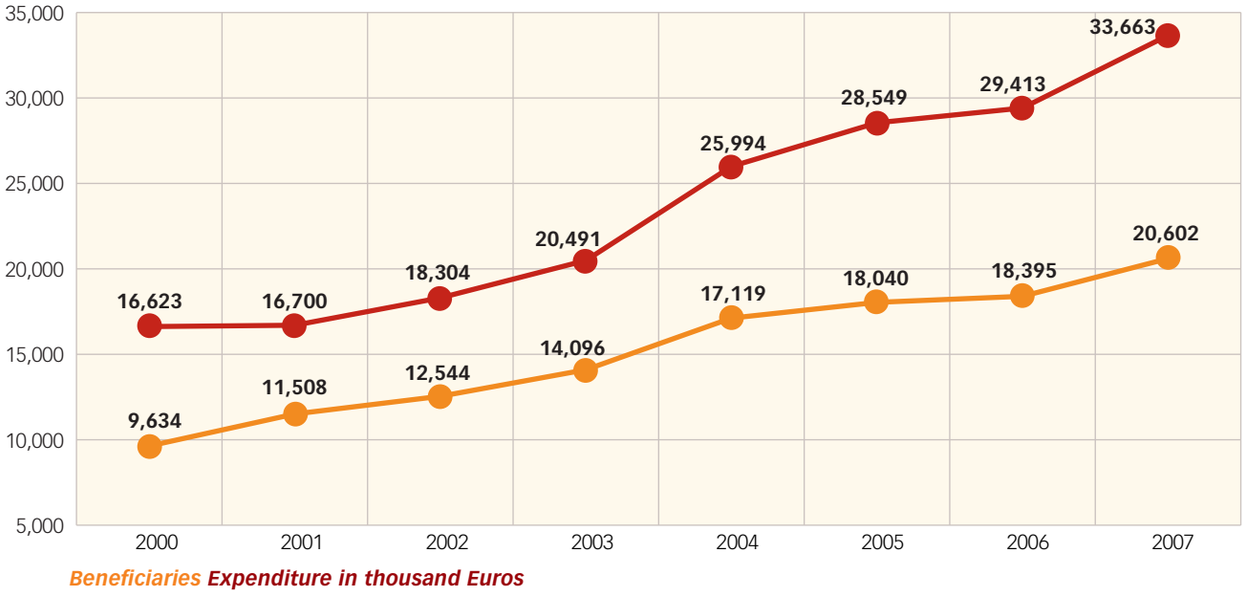


Care allowances

In 2007, the number of families benefiting from care allowances to take care of sick, disabled or non self-sufficient family members at home has significantly grown: 20,602 beneficiaries with a 10.7% increase as compared with 2006 (that showed a slight growth with respect to 2005: +1.9%).
From 2000 up to now, Emilia-Romagna families supported with care allowances have more than doubled, increasing from 9,600 in 2000 to 20,602 in 2007.
Total expenditure for care allowances has also increased, amounting in 2007 to 33.6 million Euros: 31.9 million Euros from the regional Fund for non self-sufficiency and 1.7 million Euros from Municipalities' resources.
Starting from 2007, funding for care allowances has been included in the resources for the regional Fund for non self-sufficiency and it represents 13.7% of the 2007 total funding allocation for the above mentioned Fund.
Care allowance provides also for an additional contribution aimed at the regularization of family assistants (that will be completely implemented in 2008).

People who benefited from care allowances, in 2007 = 20,602

Beneficiaries and expenditure, 2000-2007



Outpatient specialist care

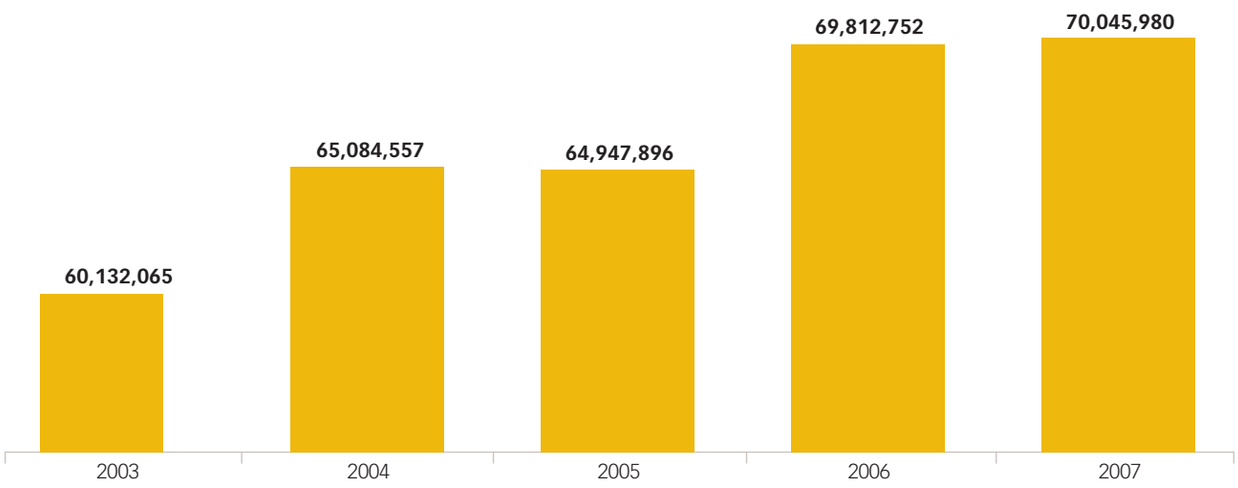
In 2007, a total of 70,045,980 outpatient specialist attendances were registered, a substantially stable figure as compared with 2006 (69,812,752). The services supplied include: 11.8% specialist visits, 10.2% diagnostics, 71.6% laboratory testing, 3% rehabilitation and 3.4% therapeutic.

As established by a national agreement of March 2006, in 2006 Emilia-Romagna approved the Regional plan for containing waiting lists for specialist care (visits and testing) and admissions (in some specific areas). For specialist care, 41 types of medical procedures were identified and grouped in the oncological, cardiovascular, mother-child and geriatric areas, and 5 types of specialist visits with significant impact: dermatology, ophthalmology, otolaryngology, orthopaedics and urology.

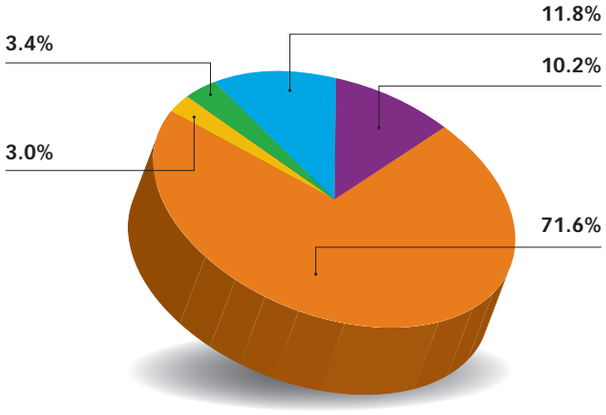
The Plan reconfirms the maximum waiting times for providing care: 24 hours for urgent cases, 7 days for deferrable urgent cases, 30 days for first visits, 60 days for first-access instrumental diagnostic acts. In particular, for the 41 types of outpatient specialist medical procedures the maximum waiting times must be respected in at least 90% cases.

In Emilia-Romagna, a systematic monitoring of waiting lists began in 1999 and, until the adoption of the new Regional Plan, it has constantly covered 25% visits and 17% diagnostic tests through the years. Since 2007, monitoring is focused on the above mentioned 41 outpatient specialist medical procedures and includes 12 specialist visits and 24 groups of diagnostic acts.

Specialist medical procedures, 2003-2007

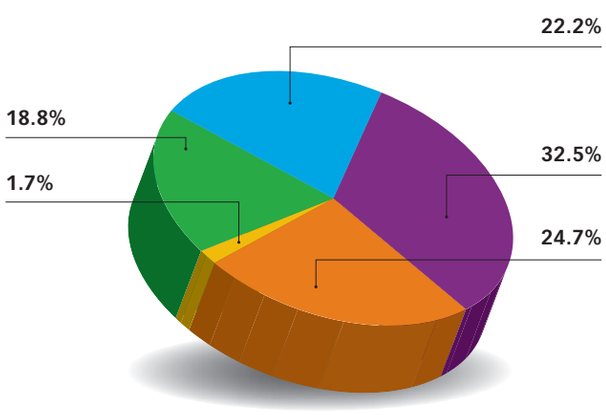


Types of outpatient specialist medical procedures, 2007



71.6% Laboratory
11.8% Visits
10.2% Diagnostics
3.4% Therapeutics
3.0% Rehabilitation

Economic values, 2007



32.5% Diagnostics
24.7% Laboratory
22.2% Visits
18.8% Therapeutics
1.7% Rehabilitation

Specialist medical procedures by type, 2007

		No.	%
Visits	First visit	5,818,798	
	Controls	2,415,564	
	Intensive short observation	56,423	
	Total Visits	**8,290,785**	**11.8%**
Diagnostics	Instrumental diagnostics with radiations	2,842,170	
	Instrumental diagnostics without radiations	3,894,967	
	Biopsy	71,080	
	Other diagnostics	319,527	
	Total Diagnostics	**7,127,744**	**10.2%**
Laboratory	Blood samplings	4,681,515	
	Clinical chemistry	35,340,801	
	Haematology/clotting	6,875,848	
	Immunohaematology and transfusion	176,089	
	Microbiology/virology	2,425,035	
	Anatomy and pathologic histology	559,154	
	Genetics/cytogenetics	121,730	
	Total Laboratory	**50,180,172**	**71.6%**
Rehabilitation	Diagnostic rehabilitation	122,917	
	Functional rehabilitation	1,320,328	
	Physical therapy	556,115	
	Other rehabilitation	100,654	
	Total rehabilitation	**2,100,014**	**3.0%**
Therapeutic treatments	Radiotherapy	298,922	
	Dialysis	449,678	
	Odontology	149,000	
	Transfusions	18,478	
	Outpatient surgery	311,483	
	Other therapeutic treatments	1,119,704	
	Total Therapeutic treatments	**2,347,265**	**3.4%**
Total		**70,045,980**	**100.0%**

Pharmaceutical expenditure

Pharmaceutical assistance is based on the integration between hospital and territorial services to ensure continuity and consistency of therapeutic treatments.
Public pharmaceutical expenditure is classified in territorial and hospital. The first one includes:

- drugs delivered to public by pharmacies contracted with the Regional Health Service;
- drugs totally covered by RHS and directly delivered by RHS services to chronic patients, elderly, patients affected by complex pathologies treated at Health Trusts' structures, home cared patients, patients treated at residential or semi-residential healthcare facilities;
- drugs delivered by pharmacies "on behalf" of RHS to chronic patients and elderly.

In 2007, territorial pharmaceutical expenditure decreased by 1.4%. The contracted pharmaceutical net expenditure decreased by 3% with respect to an increase in prescriptions by 4.7%. This restraint can be attributed to a reduction of drugs' prices established by the Italian Drugs Agency and to the direct and "on behalf" delivery at regional level.
At national level, prescription rate increased of 4.3% while expenditure decreased of 6.8% (source: National Report of the Observatory on Medicines – OSMED, 2007).
Hospital pharmaceutical expenditure – drugs delivered to inpatients in hospitals and used in outpatient care services – has grown by 11.3%. The growth is due to the commercialization of innovative high-cost drugs and the increase in drugs consumption to treat chronic degenerative diseases, in particular antineoplastics and immunosuppressants. This last class covers a significant part of drugs classified "H OSP2", that can be used also for home care and that registered an increase by 19.6% of the direct delivery expenditure.
Territorial expenditure and hospital expenditure covered respectively 73.7% and 26.3% of total pharmaceutical expenditure with a very significant decrease in the first one.
According to what established by the Regional Social and Healthcare Plan 2008-2010 the Regional Therapeutic Handbook was issued, a useful instrument to guarantee availability of drugs with documented clinical evidences, sharing of such evidences among health professionals, evidences' transferability into clinical practice and cost-effectiveness assessment.
For prevention of risks related to drug use, the Region fosters the strengthening of drug control systems, the development of computerized systems for prescriptions, the centralized preparation of antiblastic drugs, the personalized distribution through direct delivery in all the regional Health Trusts.

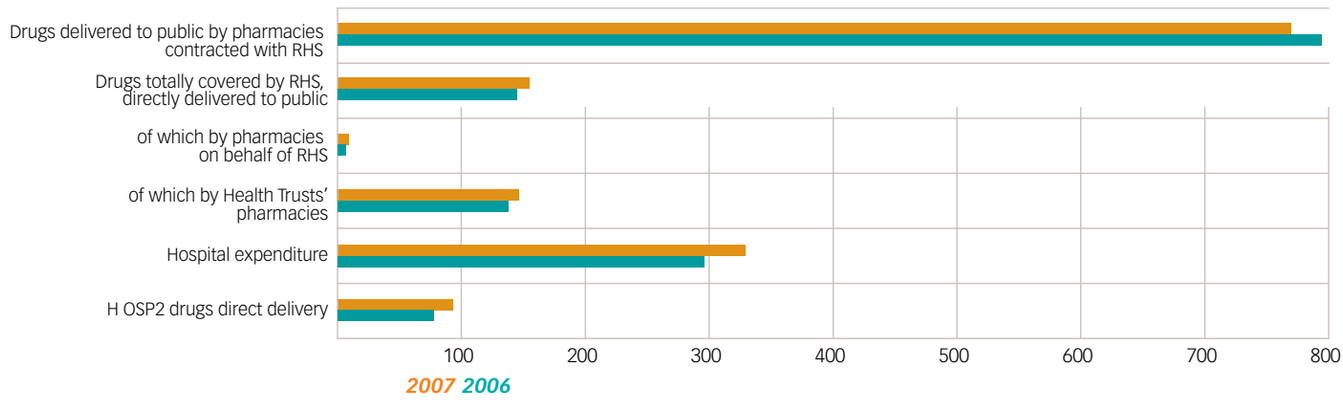
Per capita drug expenditure

Also in 2007, Emilia-Romagna had a lower per capita drug expenditure covered by agreement with the Regional Health Service with respect to the national cost: 172.1 Euros as compared to 194.4 Euros.

Pharmaceutical expenditure by type and percentage variation, 2005-2006

	2006	2007	% variation	% on 2007 total
Pharmaceutical net expenditure for drugs delivered to public by pharmacies contracted with RHS	793,383,348	769,734,202	-3.0%	61.4%
Pharmaceutical net expenditure for drugs totally covered by RHS, directly delivered to public	144,708,132	155,121,948	7.2%	12.4%
of which by pharmacies on behalf of RHS	6,738,808	8,641,122	28.2%	
of which by Health Trusts' pharmacies	137,969,325	146,480,825	6.2%	
Total territorial pharmaceutical expenditure	**938,091,480**	**924,856,149**	**-1.4%**	**73.7%**
Pharmaceutical expenditure for inpatients in hospitals	**296,039,821**	**329,376,906**	**11.3%**	**26.3%**
of which for drugs classified "H OSP2" and directly delivered	77,580,877	92,758,916	19.6%	
Total regional pharmaceutical expenditure	**1,234,131,301**	**1,254,233,056**	**1.6%**	

Division of pharmaceutical expenditure by type, 2006-2007 (in million Euros)



Mental Health Services

Local Health Trusts, Local Authorities, volunteers and non profit organizations are all involved in activities of prevention, care, rehabilitation and reintegration in society of people of all ages affected by mental disorders or pathologic addictions. Coordination is guaranteed by the Department of Mental Health and Pathologic Addictions, instituted in 2007 in each Local Health Trust and that now includes also the Substance Abuse Service, beyond the already present Operational Units for adult psychiatry and childhood and adolescence neuropsychiatry, in order to provide global answers to care needs.

The Second Regional Conference on Mental Health, held in 2007, dealt also with some organizational and clinical problems. Starting from the Conference outcomes, the section on mental health in the Social and Healthcare Plan 2008-2010 and the related implementation Plan 2008-2010 were elaborated.

During 2007, the definition process of the requisites requested for the accreditation of territorial and hospital childhood and adolescence neuropsychiatry facilities and services and the related care paths was concluded: Emilia-Romagna is one of the few regions having reached this result.

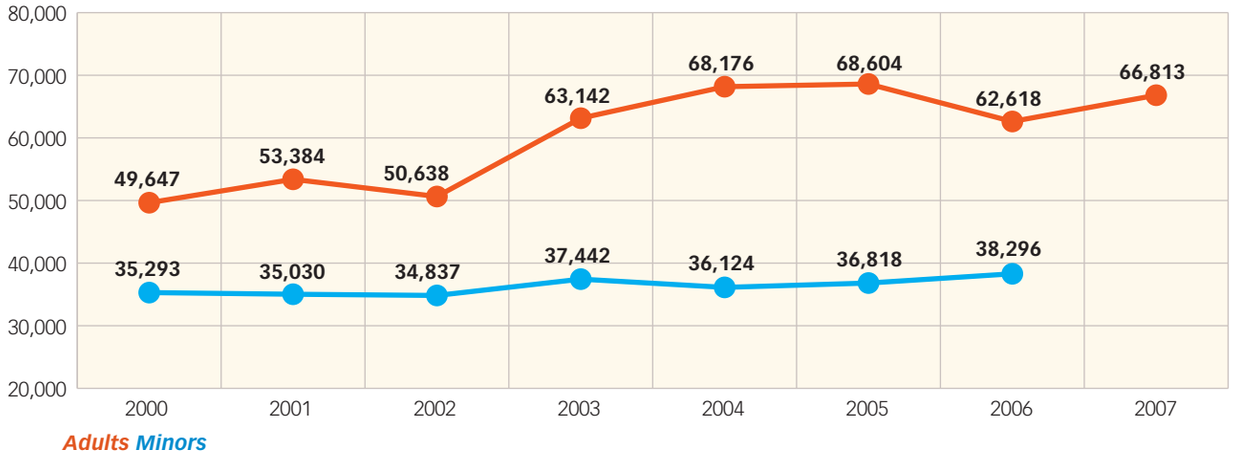
In 2007, some other initiatives were implemented: regional integrated program on autism; clinical-organizational guidelines for Local Health Trusts on the appropriate multidisciplinary approach to children with attention deficit and hyperactivity disorders (ADHD), also following the commercialization of specific drugs for this pathology; start up of the coordination of the regional network for the treatment of eating disorders.

Data show an increase in both minor and adult patients starting from 2000 (the slight drop observed for adults in 2006 is due to the new informative system that was fully operational from that year).

The number of adults cared for by public Mental Health Services has grown from 62,618 in 2006 to 66,813 in 2007, of which 58% female (49,647 in 2000); minors cared for by the Childhood and Adolescence Neuropsychiatry Operational Units increased from 35,293 in 2000 to 38,296 in 2006 (last available datum) with 643,737 care acts provided.

The care acts supplied in 2007 by territorial Mental Health Centres amounted to 1,617,000 and admissions in public and accredited private hospitals numbered 14,041, equal to 18.7% per 10,000 population.

Adult and minor patients, 2000-2007



Substance Abuse Services

Care for people who are drug and alcohol abusers and their families is ensured by an integrated system involving the Substance Abuse Services (SerTs) of the Local Health Trusts, Local Authorities, non profit organizations and volunteers. Interventions include the definition of specific pathways for care and social and job rehabilitation.

The profile of substance abusers has radically changed in the last few years: population surveys and activity data demonstrate that more and more often these people use more than one substance and that addiction is not necessarily linked to socially disadvantaged situations. In 2007, 12,512 persons were treated for drug addiction and 5,499 for alcohol addiction, to which 4,055 drug addicts coming from other regions need to be added.

The primary substance of abuse among SerTs' patients is heroin: 85.7% patients in 2007 (as compared with 91,4% in 1991). The number of cocaine addicted people referring to public services has significantly grown from 5.9% in 1991 to 39.3% in 2007.

Data from residential and semi-residential facilities confirm the change in patients' profile: out of 2,722 people treated in 2006 (last available datum), 55.9% were primarily heroin addicts, 20.7% cocaine addicts and 14.3% alcohol addicts.

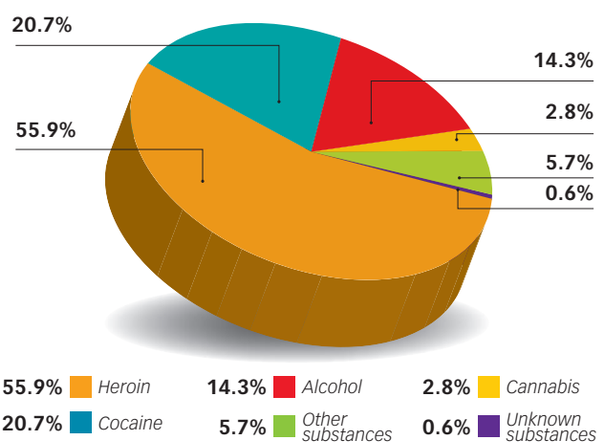
Confronted with these changes, in 2006 the Regional Government approved the guidelines to upgrade Substance Abuse Services' ability to deal with the new phenomena of drug use. The "Regional program for pathologic addictions – objectives for 2008-2010" adopted in 2008 offers concrete strategies through an accurate definition of objectives, indicators and time schedule.

Internet website: *http://www.saluter.it/dipendenze*

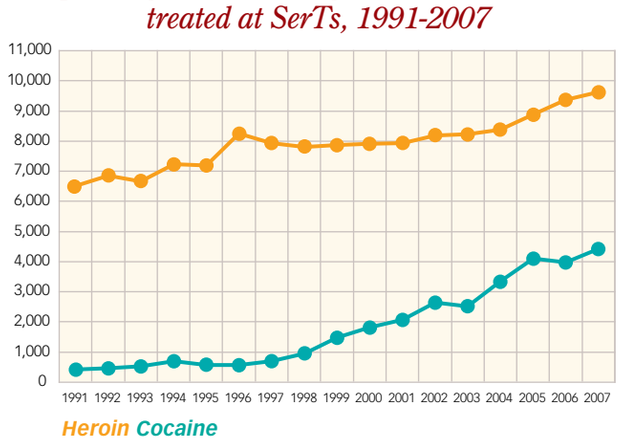
Persons with drug and alcohol addictions treated at SerTs, 2003-2007

Years	Drug addicted persons residing in Emilia-Romagna	Drug addicted persons coming from other regions	Alcohol addicted persons residing in Emilia-Romagna	Total
2003	10,774	3,759	4,176	18,709
2004	11,231	3,371	4,686	19,288
2005	12,210	3,474	5,108	20,792
2006	12,559	3,699	5,174	21,432
2007	**12,512**	**4,055**	**5,499**	**22,066**

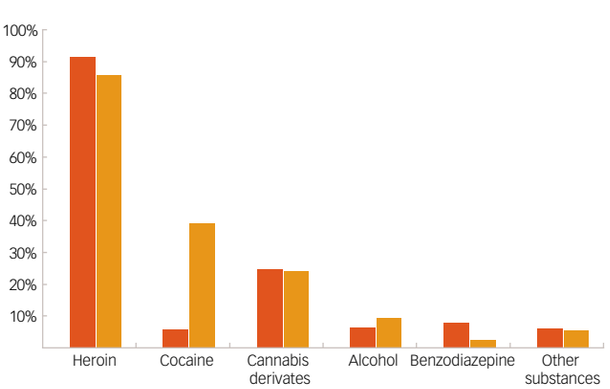
Persons with substances addiction treated at residential and semi-residential facilities, 2006



Persons with heroin and cocaine addictions (primary and secondary substance of abuse) treated at SerTs, 1991-2007



*Patients by substance of abuse. Percentage values. Comparison 1991-2007 (multiple %) **



** Each person can use more than one substance.*

Care in Family advisory health centres, Youth health centres, Health centres for immigrant women and their children

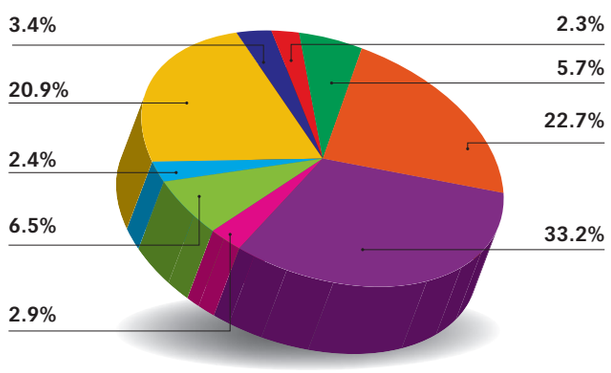
The Family advisory health centres network is formed by 214 centres, including 29 Youth centres and 16 Health centres for immigrant women and their children, where a cultural mediator is always available to ensure the connection with health personnel and other healthcare and social services. The team (obstetrician, gynaecologist and psychologist) is available on average 74 hours a week in each centre.

From 1995 to 2007, activity increased by 19% and users increased by 15%. Between 2006 and 2007, data remained mostly the same.

In 2007, 467,800 persons turned to Family advisory health centres for obstetrics-gynaecology services, pap-test screening and psychological services (452,891 in 2006). Attendances for early diagnosis of female cancers (pap-test, colposcopy and breast examination) prevailed, representing 33.2% of the total. Next was maternity care (22.7%), that in the period 1995-2007 has registered a significant growth in foreign women attendance (from 740 to 7,811; Italian women increased from 6,329 to 8,594). Gynaecological specialist care amounts to 20.9% of the total; counselling for pregnancy prevention to 6.5% (20% of which are foreign women); medical certification for voluntary abortions to 2.4%.

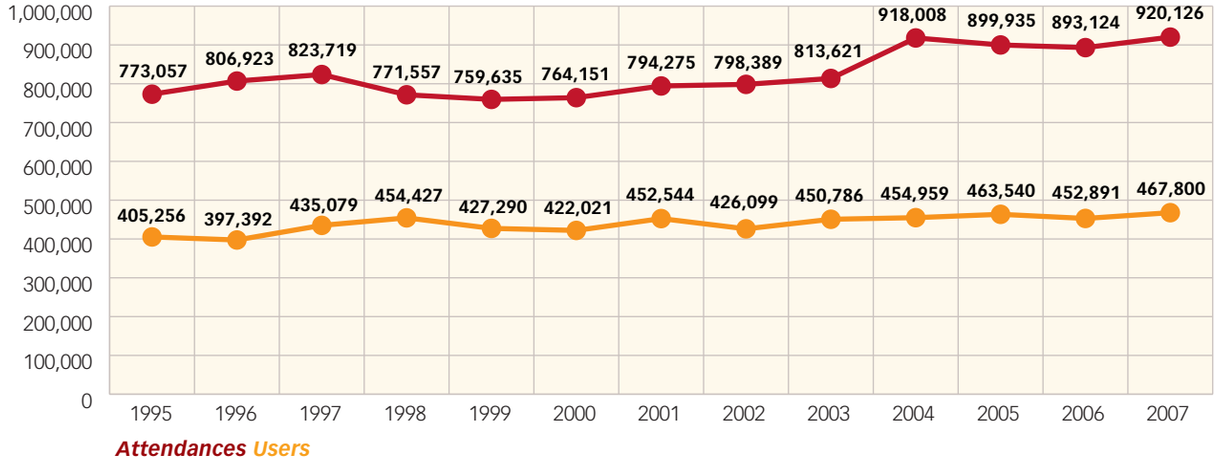
Family advisory health centres also offer health education mainly on reproduction problems (about 12,000 women/couples involved in 2007), sexual health and AIDS prevention for teenagers (about 36,000 adults and youths involved in 2007).

Areas of activity, 2007



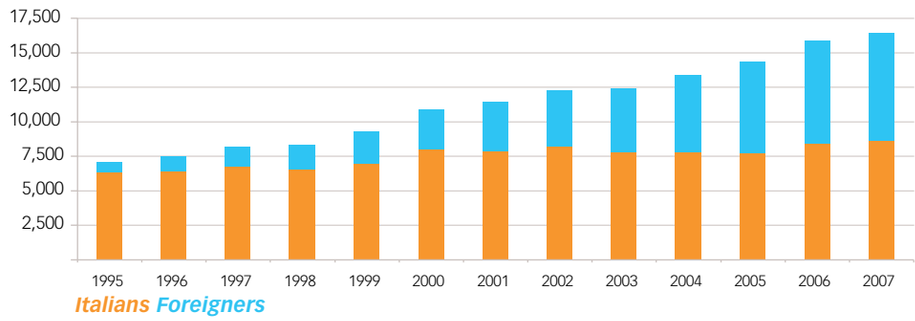
33.2% Cancer prevention (screening)
22.7% Pregnancy
20.9% Gynaecology
6.5% Pregnancy prevention
5.7% Psychological support
3.4% Post-natal care
2.9% Menopause
2.4% Voluntary abortion
2.3% Support to breast feeding

Patients and attendances, 1995-2007



Attendances Users

Maternity care, 1995-2007



Italians Foreigners

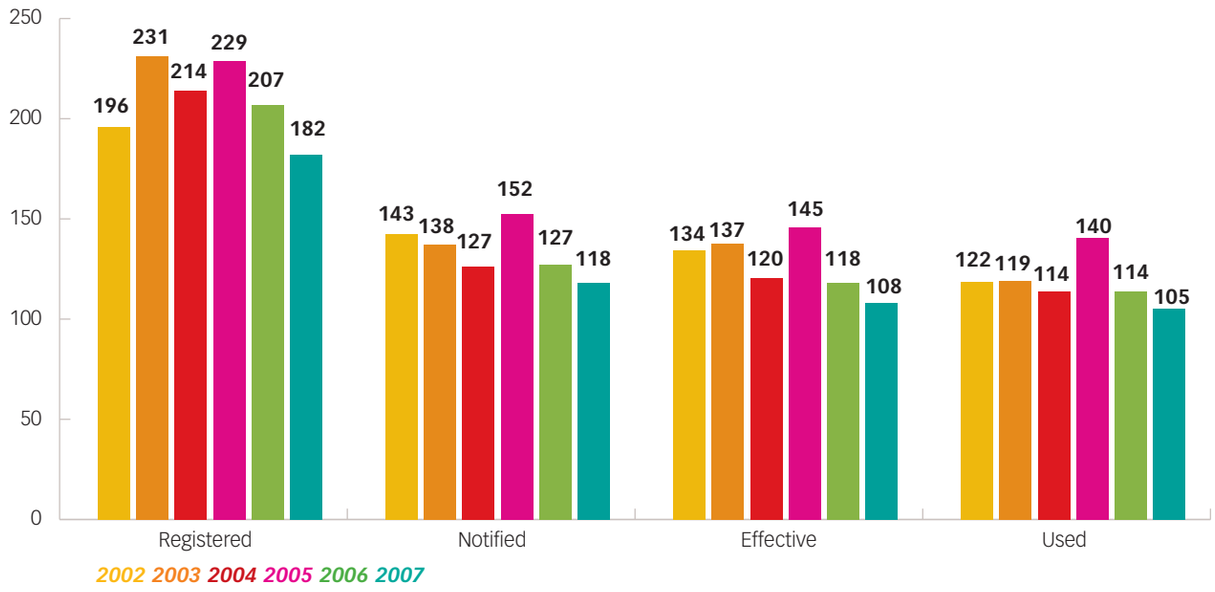
Donations and transplants of organs, tissues and cells

Donations

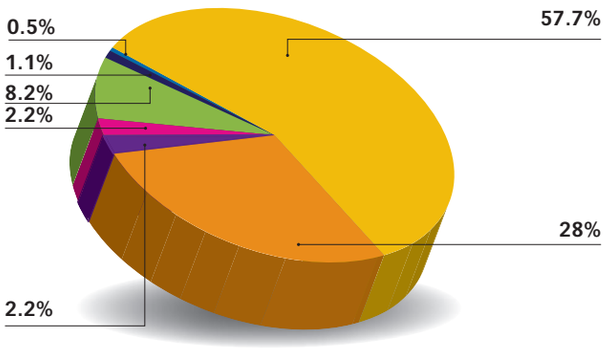
In 2007, in Emilia-Romagna the number of effective donors were 26.4 per million population, confirming the region as above the Italian average (19.3).
Data analysis now includes also "notified donors", a new category introduced at national level to count also potential donors whose organs could not be used for reasons independent from the donation-transplant network (opposition by Public Prosecutor's office, unavailability of compatible recipient in Italy or Europe, donor's or organ's ineligibility). On a total of 182 potential donors, 51 (28%) oppositions were registered, below the national average (31.2%).

Within the territory of the Interregional Transplant Association (AIRT) directed till 2009 by the Emilia-Romagna Region, used donors numbered 23.9 per million population; this datum is above the values registered by the two other interregional associations: 23.6 by the Northern Italy Transplant Program and 12.4 by the Central-Southern Transplant Organization.
Activities to make citizens aware of the importance of donations are carried out also through regional campaigns as "A conscious choice" with the participation of regional volunteers' and patients' associations.

Donors (registered, notified, effective, used in Emilia-Romagna), 2002-2007



Potential donors registered in Emilia-Romagna, 2007



57.7% Used
28% Oppositions
8.2% Ineligible
2.2% Opposition by Public Prosecutor's office
2.2% Cardiac arrest
1.1% Effective donors not used because of their pre-transplant ineligibility
0.5% Effective donors not used because of ineligibility of the organ

Transplants

In 2007, 320 organ transplants were performed in Emilia-Romagna (15 from living donors), with an increase of 10 interventions as compared with 2006. Liver transplants (138 performed in Bologna and Modena, with a value of 34.6 transplants per million population) were still above the national average and always reaching levels of world excellence. Kidney transplants (146, equal to 32.9 transplants per million population) and heart transplants (33, equal to 8.3 transplants per million population) were also above the national average.

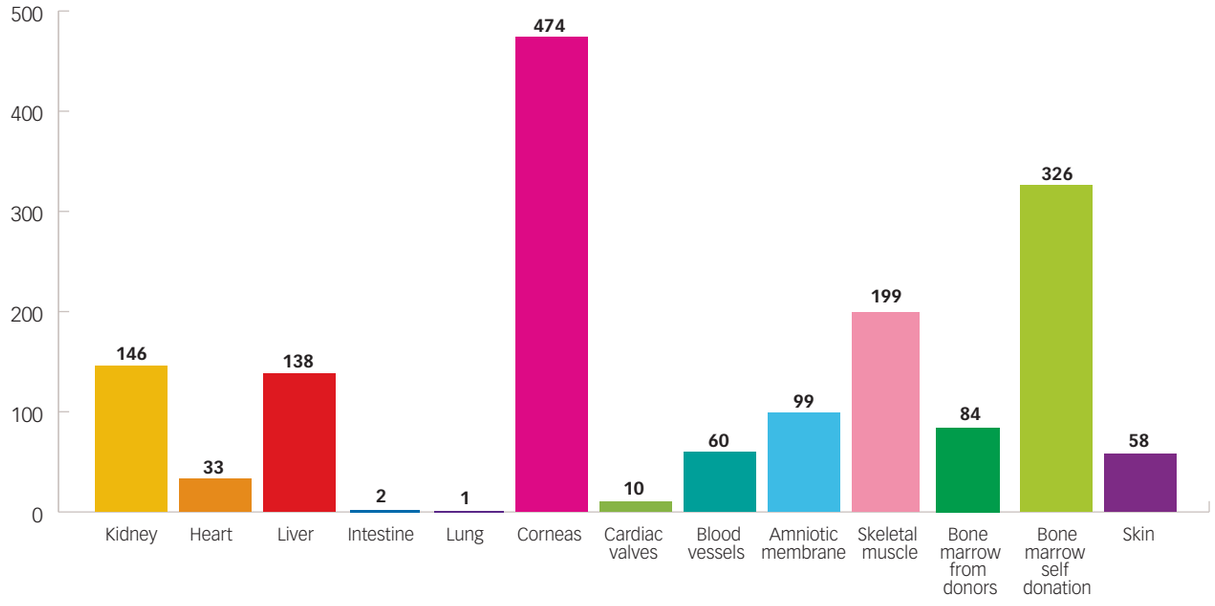
As for heart transplants, although nearly covering the hypothetical regional need, activity is conditioned by donors' average age; yet, through the regional program "Adonhers", that evaluates the eligibility of hearts from donors aged up to 65, in 2007 two donors aged 58 and 66 were used.

In 2007 at the University Hospital Trust of Bologna (Polyclinic Sant'Orsola-Malpighi), a bilateral lung transplant combined with heart transplant was performed, thanks to the merging of the transplant programs for the two organs, thus fostering the integration among cardiologists, lung specialists, thoracic surgeons and anaesthetists.

The transplants performed in 2007 in Emilia-Romagna concerned: 474 corneas, 10 cardiac valves, 60 blood vessels, 99 amniotic membrane, 199 skeletal muscle, 84 bone marrow from donors, 326 bone marrow self donation, 58 skin.

The regional system of donations and organs and tissues transplants has its own Internet website: *http://www.saluter.it/trapianti*

Transplants of organs, cells and tissues in Emilia-Romagna, 2007



Patients in the waiting list as of December 31st, 2007

On December 31st, 2007 patients in the waiting list numbered 1,724 for kidney transplant, 63 for heart transplant, 470 for liver transplant, 18 for intestine multivisceral transplant and 12 for lung transplant.

In Emilia-Romagna, single lists for kidney transplant and liver transplant have been implemented.

In 2007 waiting times for transplant were: 2.8 years for kidney transplant (national average: 3 years), 2.5 years for heart transplant (as at national level), 0.4 years for lung transplant (national average: 2.2 years). Also for liver transplant the 2007 datum is below the national one (1.7 years in Emilia-Romagna vs 1.8 years of national average).

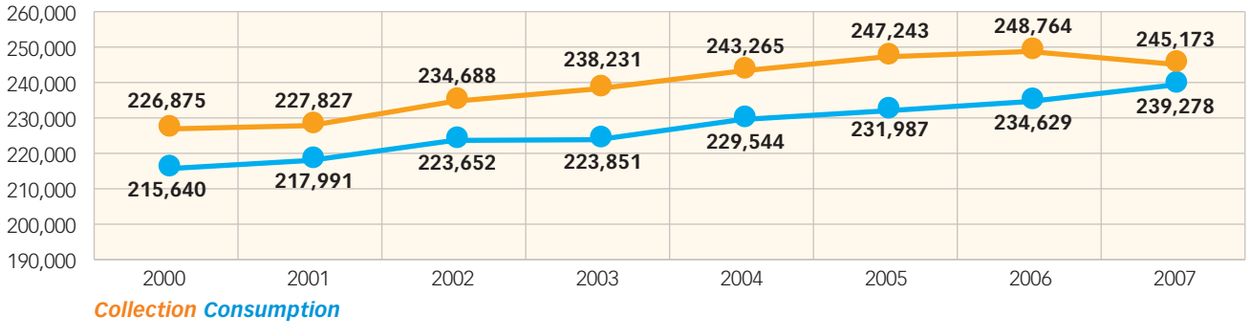
Blood collection and consumption

In 2007, Emilia-Romagna confirmed regional self-sufficiency with 245,173 units of whole blood collected and 239,278 units of blood consumed (+4,649 blood units with respect to 2006).
Collection activity has registered a slight drop if compared with the previous year (-1.4%), that has interrupted the growth trend started in 2000 (in 2006, 248,764 blood units had been collected); this decrease is due to prevention measures adopted in the 2007 Summer because of the Chikungunya fever epidemic (virus transmitted by the tiger mosquito) that affected some Emilia-Romagna areas. In particular, blood donation was suspended in the areas where centres of infection were located, and blood collection from donors who had stayed, even for a very short time, in the affected areas was interrupted for 20 days. These measures provoked a decrease of 4,000 donations in September 2007 alone. Nevertheless, the regional transfusion system guaranteed self-sufficiency and all health activities requiring blood and plasma use. But, as a consequence of the drop in collection, Emilia-Romagna had to reduce blood transfer to needy regions (from 15,115 blood units transferred in 2006 to 6,301 units in 2007).
Starting from 2008, the "blood system" has modified its institutional framework according to 2005 national indications.
The Blood and Plasma Plan for the three-year period 2008-2010 was approved in April 2007; the Plan is aimed at accrediting transfusion facilities, spreading promotional initiatives to involve donors, further developing transfusion safety processes, with particular reference to traceability methods of donors, blood and blood components and to prevention from infectious risks.
The Emilia Romagna blood system Internet website is:
http://www.donaresangue.it

Blood collection and consumption (red units). Comparison 2007-2006

	2007 collection	2006 collection	% difference 2007-2006	Goals for 2007 collection	2007 consumption	2006 consumption	% difference 2007-2006	Goals for 2007 consumption
Programs								
Piacenza	14,682	14,931	-1.7	15,000	13,770	15,334	-10.2	15,100
Parma	28,564	28,218	1.2	28,248	25,896	24,010	7.9	22,134
Reggio Emilia	23,241	23,690	-1.9	22,800	17,892	17,815	0.4	18,500
Modena	35,337	36,045	-2.0	38,200	31,666	31,389	0.9	29,000
Bologna	63,140	63,335	-0.3	60,000	72,607	72,470	0.2	72,350
Ferrara	22,109	21,547	2.6	20,500	22,685	22,832	-0.6	21,800
Ravenna	27,602	29,404	-6.1	29,762	25,502	23,679	7.7	22,303
Forlì, Cesena, Rimini Unified Department	30,498	31,594	-3.5	30,000	29,260	27,100	8.0	29,000
Total	**245,173**	**248,764**	**-1.4**	**244,510**	**239,278**	**234,629**	**2.0**	**230,187**

Blood collection and consumption (red units), 2000-2007



Transfer of blood (red units) to other regions, in 2007 = 6,301

Screening programs for prevention and early diagnosis of breast, cervical and colorectal cancer

Emilia-Romagna has three active oncological screening programs for prevention and early diagnosis of breast cancer (women aged 50-69, for a total of 540,000), cervical cancer (women aged 25-64, for a total of 1,200,000) and colorectal cancer (men and women aged 50-69, for a total of 1,050,000).
The tests offered – mammography, pap-test, faecal blood – are free of charge, as any required additional testing and care, which are immediately offered if necessary.

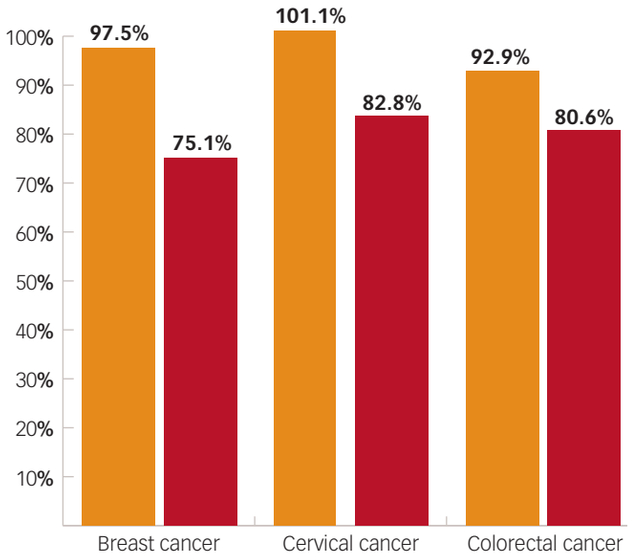
Screening programs for breast and cervical cancer

These programs have been active since 1996. Throughout 2007, the women involved were invited for the fourth time to have a pap-test and for the fifth time to have a mammography.
Participation was high: 73.8% for mammography and 55.6% for pap-test. The outcomes are largely above the national average, as shown by the National Screening Observatory's data that reported 60.4% attendance for mammography and 40.2% attendance for cervical screening.
Women's attention to prevention is demonstrated also by their habit to undergo these tests: a national surveillance system on lifestyles ("PASSI"), based on telephone interviews, reveals that in 2007 in Emilia-Romagna 84.3% women aged between 25 and 64 years report having had a pap-test in the last 3 years, while 80.6% women aged between 50 and 69 years report having had a mammography in the last 2 years.
Internet website: *http://www.saluter.it/screening*

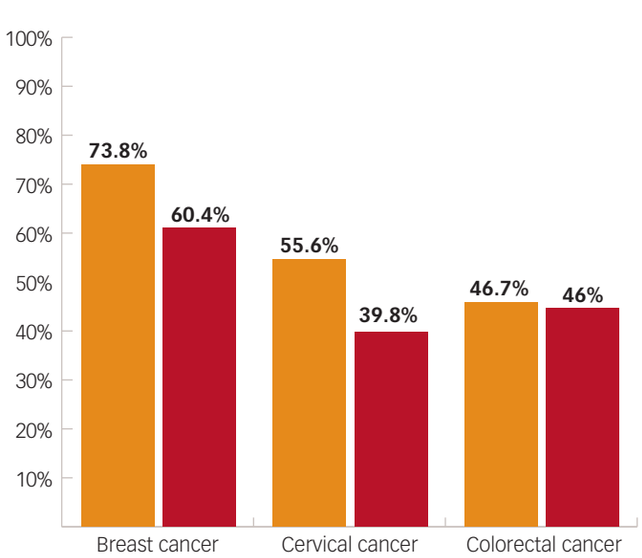
Screening program for colorectal cancer

As planned, during 2007 the first round was concluded and the second one was started.
With respect to the calls planned for 2007 (536,580 women and men, half of the reference population), 92.9% people were actually contacted while participation percentage is 46.7%, slightly higher among women (49.6%) than men (45.9%), and aligned with national rates reported by the National Screening Observatory (46%).
It is however important to point out that in Italy only 48.4% people aged 50-69 are involved in an organized screening program for colorectal cancer.
The surveillance system PASSI documentates that in 2007 53% persons between 50 and 69 years of age reported having undergone faecal blood test or colonoscopy in the last 2 years.
Internet website: *http://www.saluter.it/colon*

Screening programs: invited population as of December 31st, 2007, comparison between Emilia-Romagna and Italy



Screening programs: participation, comparison between Emilia-Romagna and Italy, 2007

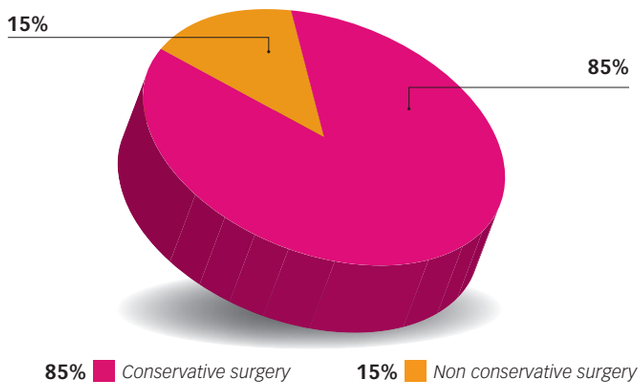


Emilia-Romagna
National Screening Observatory

Conservative surgery for breast cancer

When surgery is needed, particular attention is given to suggesting and adopting appropriate breast conservative treatments. The last available data (2006) show that conservative surgery has reached 85% of total surgery.

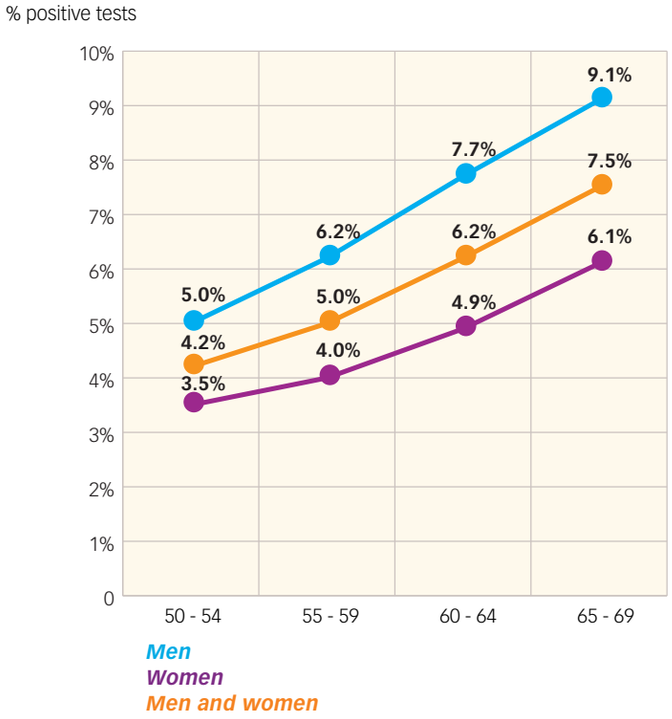
Breast cancer surgery



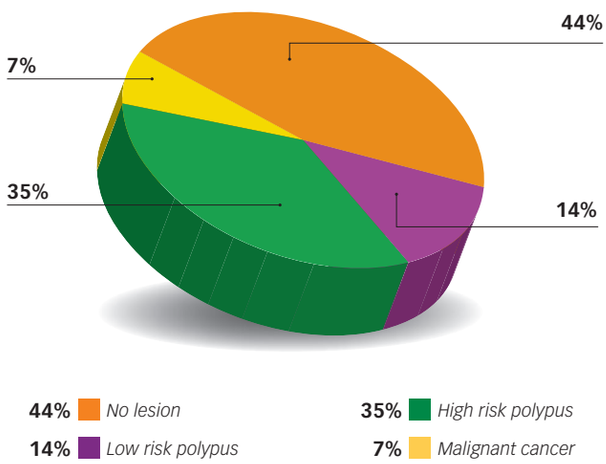
Screening program for colorectal cancer: first outcomes

From March 21st, 2005 to December 31st, 2006, screening program's data show that positive result of faecal blood test increases by age (from 4.2% in the age group between 50 and 54 to 7.5% in the age group between 65 and 69) and is more frequent in men in every age group. The program provides for a colonoscopy examination in case of positive result from faecal blood test. In the considered period, 18,338 colonoscopy tests were performed: in 44% cases no lesion was detected, in 49% cases the endoscopic test found benign or precancerous lesions, while in 7% cases a malignant cancer was discovered.

Percentage of positive results from faecal blood test, by age groups and gender



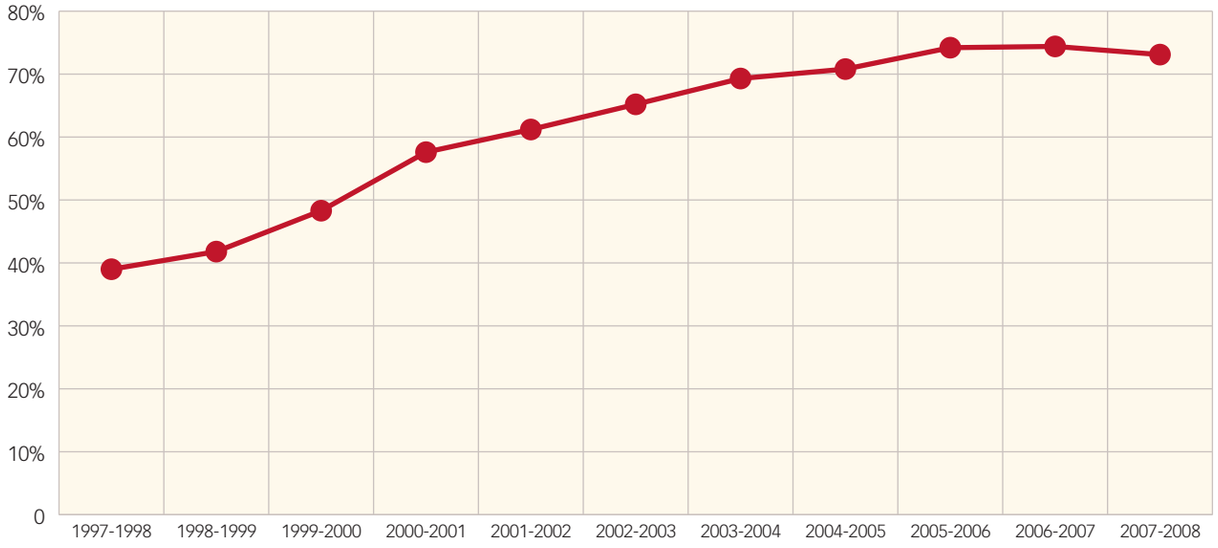
Colonoscopy outcomes in patients tested (from March 21st, 2005 to December 31st, 2006), % values



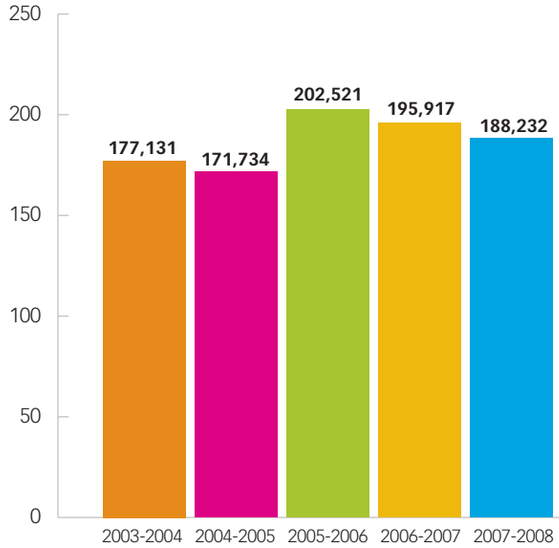
Influenza vaccination

The regional program for influenza vaccination is directed - free of charge - to people aged over 65, adults and children with chronic diseases and people that need protection against the influenza virus infection because of their professional activity (healthcare personnel, people working with the public, blood donors).
The 2005-2006 campaign registered an adhesion peak probably due to the large mass media interest for avian influenza.
The vaccination campaign 2007-2008 has registered a slight decrease in the coverage for people over 65 as compared to the previous campaign, even if the levels are still high: 707,387 persons aged over 65 were vaccinated with a 73.1% coverage rate (in the 2006-2007 campaign they amounted to 715,239 with a 74.4% coverage rate). A little decrease in adhesion to this vaccination campaign by adults and children with chronic diseases was also registered (188,232 vs 195,917 in the 2006-2007 campaign). Vaccine coverage is still low among healthcare personnel: 14.844 vaccinated people in the 2007-2008 campaign (28.5% of the total) vs 15,845 in the previous one.

Influenza vaccination in population over 65 (% of coverage)
Campaigns from 1997-1998 to 2007-2008



Influenza vaccination in adults and children with chronic diseases (in thousands)
Campaigns from 2003-2004 to 2007-2008



*Influenza vaccination in healthcare personnel (in thousands) **
Campaigns from 2003-2004 to 2007-2008

** Coverage was calculated considering as denominator the number of healthcare personnel employed in the Regional Health Service in healthcare roles, general practice physicians and contracting paediatricians as of December 31st, 2004; December 31st, 2005; December 31st, 2006.*

Childhood vaccinations

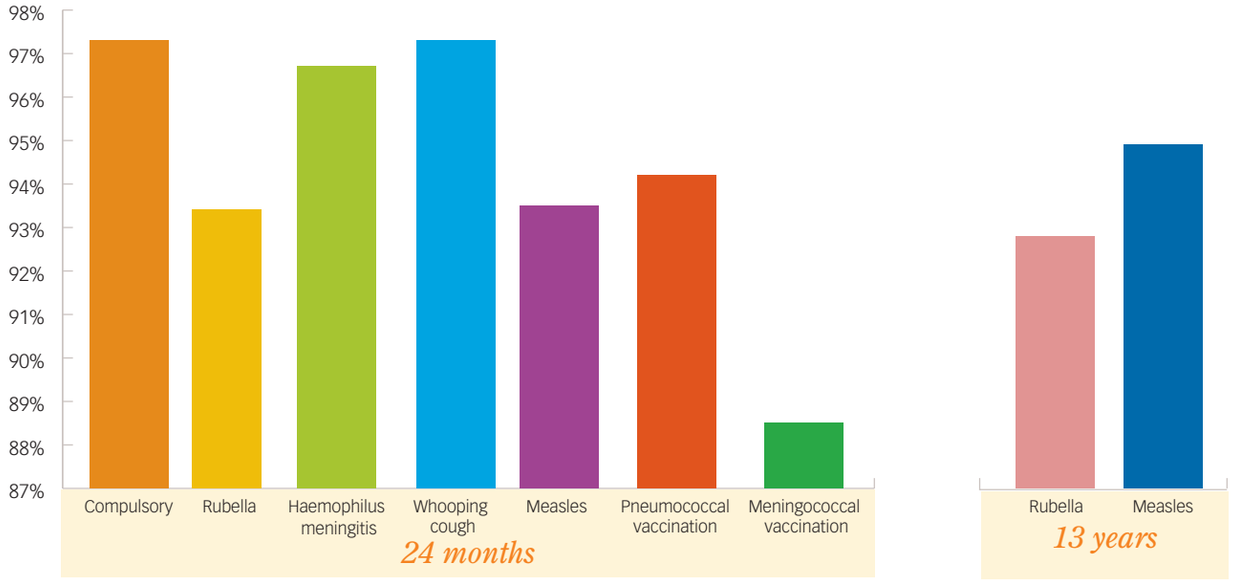
The goal of childhood vaccination programs at national level is to reach levels of coverage of 95% children. Emilia-Romagna has for many years constantly exceeded this target for compulsory vaccinations in children aged 2 years (polio, diphtheria, tetanus, hepatitis B), with a 97.3% coverage in 2007.

As for vaccinations strongly recommended in children aged 2 years, coverage rate for whooping cough and haemophilus meningitis are respectively 97.3% and 96.7% that is above the national average, while coverage for rubella, measles and parotitis is over 93%.

Starting in 2006, Emilia-Romagna promoted two new vaccinations for newborn children; coverage rates are now 94.2% for pneumococcal vaccination and 88.5% for meningococcal vaccination, that represent very satisfactory results considering that it was the start up phase. In children at increased risk because of predisposing chronic diseases, the pneumococcal vaccination - which is offered since 2001 - showed in 2007 good coverage levels especially in children with cochlear implants (93.5%) and asplenic ones (90.5%).

In March 2008 Emilia-Romagna, as all other Italian Regions, activated the vaccination program against serotypes 16 and 18 of Human Papilloma Virus (HPV), addressed to girls in their twelfth year. During 2008 girls born in 1977 (for a total of 16,611) were invited to undergo the vaccination. The vaccine is offered free of charge upon parents' request also to girls born in 1996. All the vaccinations above mentioned are offered free of charge.

Childhood vaccinations, 2007 (% of coverage)



Compulsory vaccinations, 24 months
Polio Diphtheria Tetanus Hepatitis B % coverage: 97.3

Recommended vaccinations, within 24 months - % coverage
Rubella 93.4% Haemophilus meningitis 96.7% Whooping cough 97.3% Measles 93.5% Pneumococcal vaccination 94.2% Meningococcal vaccination 88.5%

Recommended vaccinations, 13 years - % coverage
Rubella 92.8% Measles 94.9%

Vaccinations: 2008 objectives

Emilia-Romagna is not only committed to promoting vaccination against HPV but also to the more general objective of spreading education and reliance on vaccinations. The campaign to promote measles-parotitis-rubella vaccination is going on (last measles and rubella epidemic started in the 2007 Winter and crossed Europe affecting also Emilia-Romagna Region) and is addressed in particular to boys and girls who have not yet been involved and to healthcare personnel. The commitment to promote the diffusion of rubella vaccination in women in child-bearing age to prevent spontaneous abortion or severe damages to the child (congenital rubella) is still going on.

Occupational health and safety

In Emilia-Romagna in 2007 130,626 occupational accidents were reported to the National Insurance Institute for Occupational Accidents (INAIL). On average 5/100 workers reported accidents. In the eight-year period from 2000 to 2007 the number of accidents reported decreased by 7%, from 140,766 to 130,626; fatal accidents decreased by 36%, from 174 to 111.

In 2007, the Services for occupational health and safety at the Local Health Trusts inspected 10,004 firms.

In the same year, within the Special inspection plan for the construction sector 3,161 sites were inspected, and a penal procedure was started in 32.6% cases. In the period between 2001 and 2007, this sector registered a significant growth trend: the number of firms increased by 34.9% (from 57,537 to 77,632) and the number of employed workers increased by 25.6% (from 132,521 to 165,385). In the same period, however, the number of accidents decreased, also thanks to inspection activities, both as absolute figure (-7%) and as compared to the number of employed workers (-26.1%). The accident incidence index (ratio between the number of accidents and the number of workers) shifted from 8.9 in 2001 to 6.3 in 2007.

In 2007, an agreement was signed in Ravenna by the Region, the Public Prosecutor's office, the Province, the Municipality, port authorities, Trade Unions and the firms working in the port, to guarantee and increase in the period 2007-2009 the levels of safety above law standard, through the improvement of work quality and inspection activities.

A similar agreement was signed for the ceramic sector (Emilia-Romagna manufacturing leading district) by the Region, the National Insurance Institute for Occupational Accidents, the ceramic producers' associations and Trade Unions.

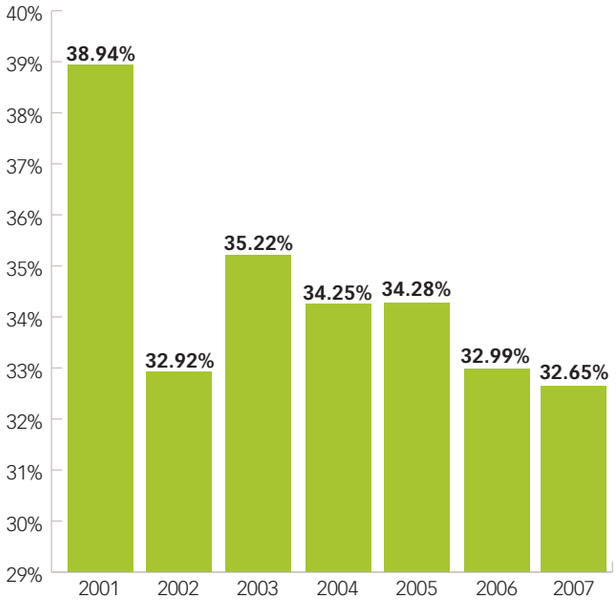
A specific plan was implemented to detect the causes of accidents and occupational diseases in the healthcare and social activities sector. The last available data on the Regional Health Service, referred to 2006, report 7,827 accidents (employees numbered 59,725); inspection activity involved 81% workers exposed to specific risks, of which 87.1% were considered safe, 6.9% needed restrictions against risks and 0.4% were considered completely unprotected.

Number of firms inspected in Emilia-Romagna and irregularity index, 2007

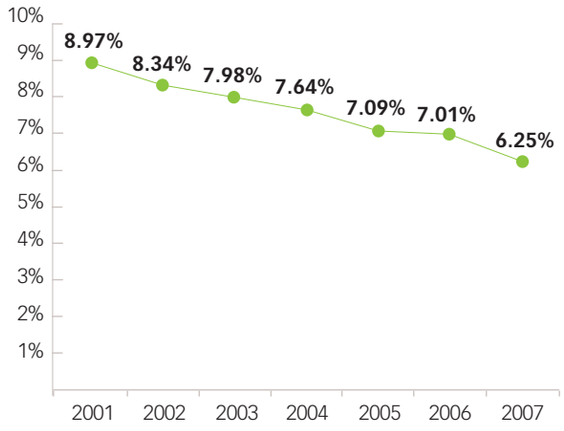
Activity sector	Irregularity index	Fined firms	Inspected firms
Agriculture	13%	48	384
Hotel/catering	10%	19	196
Food	20%	81	398
Other	10%	25	252
Dockyards	20%	9	44
Ceramics	20%	25	122
Chemical	22%	68	314
Trading	13%	94	747
Credit	5%	2	40
Construction	32.6%	1,032 (*)	3,161 (*)
Publishing	19%	17	88
Energy, water, gas	18%	2	11
Wood industry	20%	42	208
Metal and mechanical	23%	443	1,902
Public	8%	10	120
Health	7%	32	427
School	4%	5	142
Services	17%	151	877
Textile/clothing	23%	51	221
Transportation	18%	51	276
Zootechnical	16%	12	74
Total Region	**22.2%**	**2,219**	**10,004**

(*) Sites.

Construction sector – irregularity index (no. of fined firms/100 inspected), 2001-2007



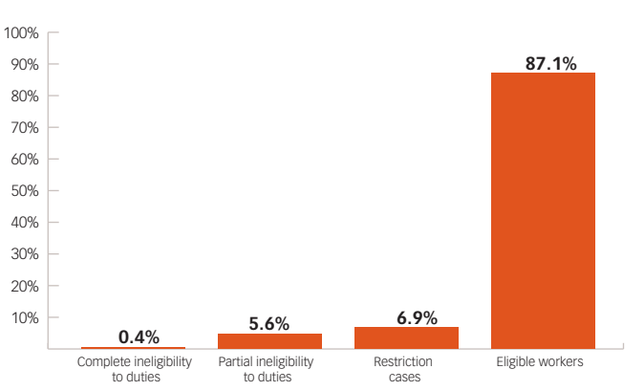
Construction sector – accidents incidence index (no. of workers/no. of accidents), 2001-2007



Regional Health Service – accidents, 2006

Health Trusts' employees	59,725
Accidents with prognosis > 4 days (reported to INAIL)	3,096
Accidents with prognosis < 3 days (not reported to INAIL)	2,165
Accidents due to biological causes (contact with blood or other biologic liquids)	2,556
Total accidents	7,827
Total days of absence from work due to accidents	**86,745**

Regional Health Service – inspections on employees exposed to professional risks, 2006 (% values)



Occupational safety in major projects: the Bologna railway junction

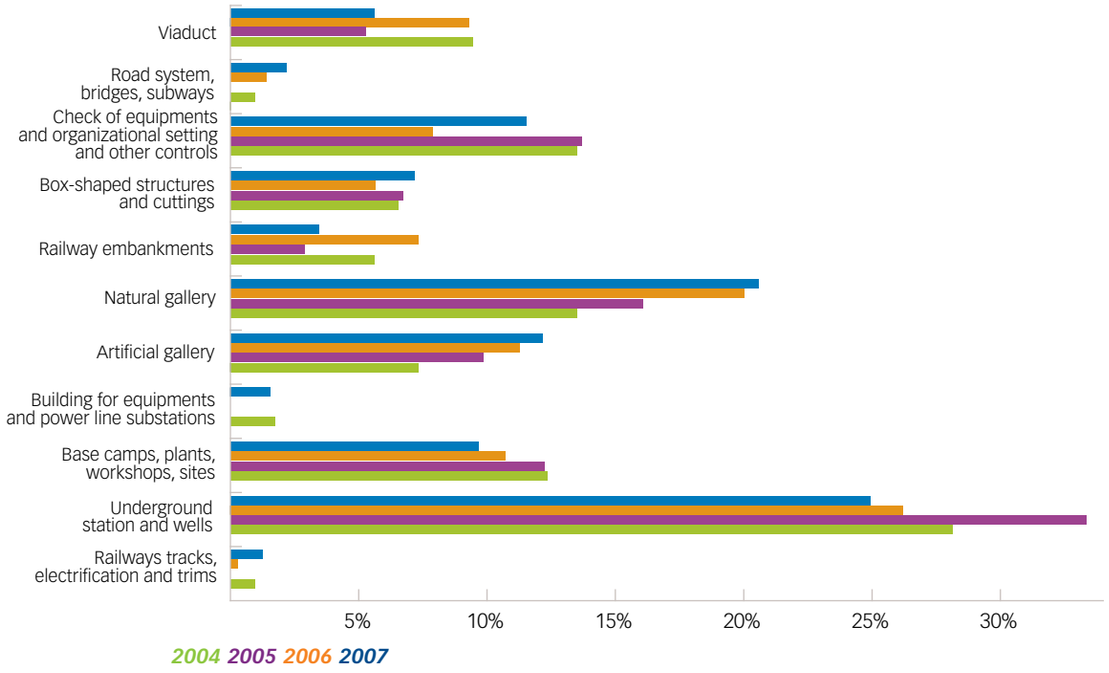
The Bologna junction is a major project in the high-speed/high-capacity railway lines, characterized by the wide range of interventions activated, the city context where the sites are located and the several lots in which the project is divided.

The junction area includes: 3 natural gallery sections, artificial galleries, wells for access to galleries, embankments, viaducts, a new underground station for this railway line. To integrate the new railway line within the territorial context, existing railway lines renovation and interventions on the urban road system are also necessary.

From 2002 to 2007 2,697 inspections (about 450 per year) were carried out, in particular in higher risks areas: in 2007, 1 inspection out of 4 (24.9%) was in the underground station. In the last two years more attention was paid to the gallery sites (more than 20% of total inspections both in 2006 and 2007).

In the period 2003-2006 the accidents incidence index (no. of workers/no. of accidents) was largely above 20% (with a 39.3% peak in 2004). Many of these accidents occurred during excavations with the milling cutter and were due to sliding, falls, lifting stress in galleries. When the excavation work using the milling cutter ended - first half of 2006 - accident index in natural galleries decreased by more than half (from 21.68% in 2006 to 9.32% in 2007).

Inspections by area of intervention, 2004-2007



Accidents frequency index, 2003-2007

	All sites			Open air sites			Natural galleries sites		
Year	Employed workers	Accidents	% incidence index	Employed workers	Accidents	% incidence index	Employed workers	Accidents	% incidence index
2003	341	56	16.42%	190	20	10.53%	151	36	23.84%
2004	603	124	20.56%	346	24	6.94%	257	100	39.30%
2005	701	128	18.26%	323	25	7.74%	378	103	27.25%
2006	731	118	16.14%	442	51	11.54%	309	67	21.68%
2007	**599**	**48**	**8.01%**	**320**	**22**	**6.87%**	**279**	**26**	**9.32%**

Food safety

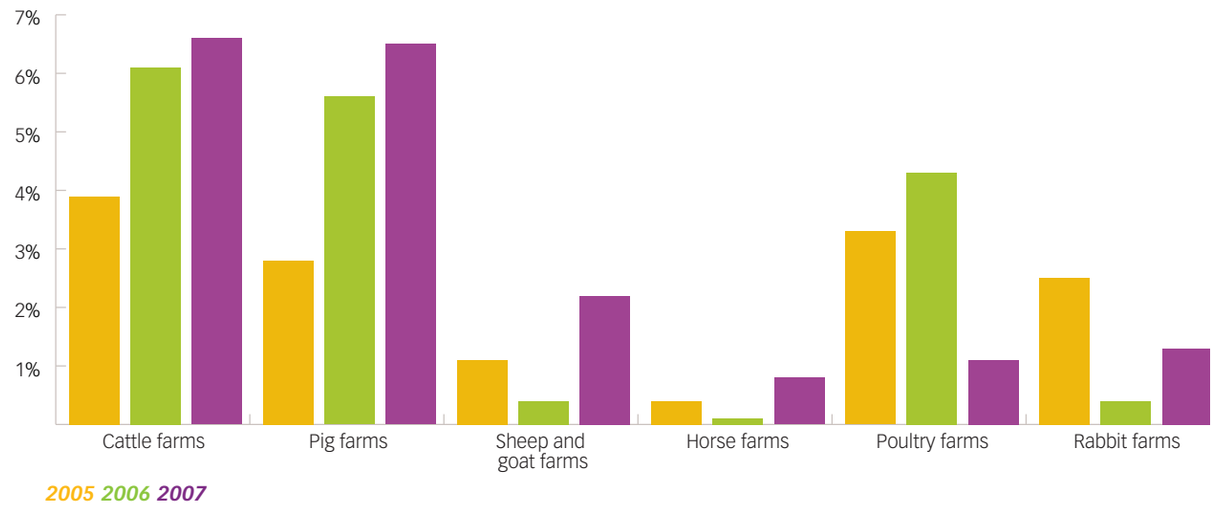
Local Health Trusts control food safety over the entire pathway: from primary zootechnical and agricultural production to transformation plants and food retail companies, in order to safeguard citizens health.
Data on controls on cattle and pig farms evidence a progressive increase of irregularities starting from 2003: this phenomenon is due also to the intensification of inspections on animal health according to new European regulations.
In 2007 irregularities in plants for processing milk and dairy products have significantly decreased, from 63% in 2006 to 25.8% in 2007, thanks to the implementation of permanent surveillance plans in 2003 to face the emergency caused by aflatoxins that affected cattle feed and milk.
Irregularities decreased also in fish processing plants (from 25% in 2006 to 11% in 2007); in plants for meat processing and deposit (from 40% in 2006 to 29.6% in 2007) and in poultry farms (from 4.3% in 2006 to 1.1% in 2007).
The website *http://www.saluter.it/ambientiesalute* is addressed in particular to health professionals and to those working in food pathway.

Food pathway: facilities, inspections and irregularities

Inspections in animal farms, 2007

	Facilities	Inspections	Irregularities
Cattle	9,191	63,250	611
Pigs	3,923	26,927	254
Sheep and goats	3,266	4,452	71
Horse	6,358	8,037	49
Poultry	7,161	11,698	77
Rabbit	523	1,462	7

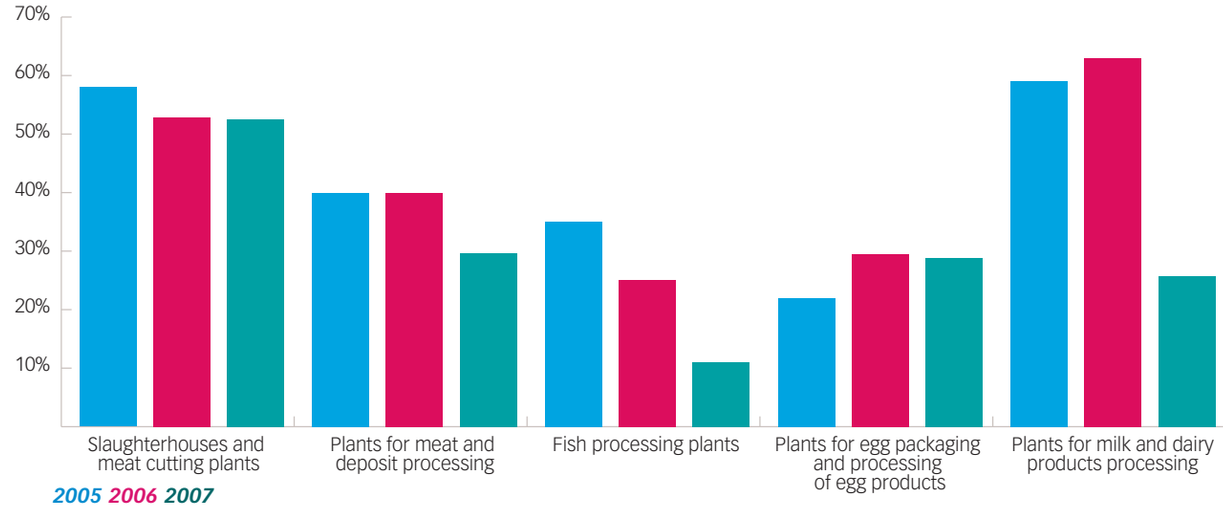
Irregularities found in animal farms, 2005-2007



Inspections in production plants of food of animal origin, 2007

	facilities	inspections	irregularities
Slaughterhouses and meat cutting plants	451	38,565	237
Plants for meat and deposit processing	1,062	19,727	314
Fish processing plants	210	4,249	23
Plants for egg packaging and processing of egg products	45	250	13
Plants for milk and dairy products processing	854	6,111	220

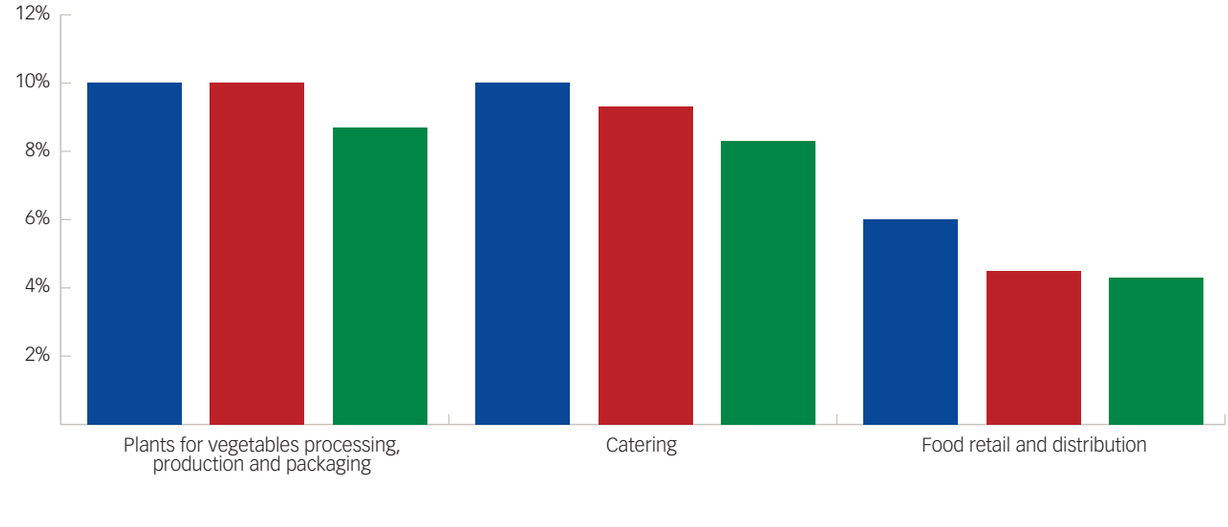
Irregularities found in production plants of food of animal origin, 2005-2007



Inspections in plants for vegetables processing, production, catering and distribution, 2007

	facilities	inspections	irregularities
Plants for vegetables processing, production and packaging	10,574	4,361	925
Catering	36,962	15,100	3,076
Food retail and distribution	14,542	5,837	623

Irregularities found in plants for vegetables processing, production, catering and distribution, 2005-2007



Research and Innovation Programs

Region-University Research Program

According to Regional Law no. 29/2004 and to the Region-University Agreement Protocol of February 2005, the Region-University Research Program was activated at the beginning of 2007 to develop scientific innovations and new management, organizational and educational methods through the collaboration and integration with Universities and University Hospital Trusts (representing the hub of synergies) and all Health Trusts. The Program aims at developing centres of excellence and professional networks.
The Region is investing (through specific tenders) a total amount of 30 million Euros for the 3-year period 2007-2009, divided in 3 main areas:

1) **innovative research** (70% of total resources): this area is aimed at the development of centres/groups of excellence capable of designing and producing technologies/instruments useful for healthcare activity, in particular on transplants, oncology, advanced diagnostics, neurosciences, regenerative medicine;

2) **research for clinical governance** (25% of total resources): the goal is to enlarge knowledge on benefit-risk profile of technologies and interventions in their entry stage, or already used in clinical practice, for which information on appropriate use is still missing;

3) **training** (5% of total resources): the aim of this area is to encourage the development of professional networks able to do research and to transform the most relevant organizational and healthcare issues into research projects (both controlled evaluation and monitoring).

In the proposal phase of the project an important role is played by the Board of Directors and by the integrated Departments of the University Hospital Trusts and of the Research Hospital "Rizzoli". In particular, the Board of Directors are entitled to select the projects to be submitted for further evaluation and financing. Project selection follows different stages depending on the complexity of the proposals, and is supported by Italian and foreign referees. They can intervene in the initial phase to help in adjusting project proposals as well as in the evaluation of complete proposals.
The evaluation process of projects for the innovative research area has been completed, while for the areas of clinical governance research and training annual tenders are issued also for 2008 and 2009.
The Regional Healthcare and Social Agency, which has the role of scientific and operational coordinator of this program, together with the General Direction for Health and Social Policies of the Regional Government is responsible for activating and monitoring projects, with the supervision of a special Steering Committee.

Research and Innovation Program (PRI E-R)

The PRI E-R Program was activated in 2004 with the participation of all the regional Health Trusts. The main purpose is to promote priority research for the timely transfer of clinical-organizational innovations to RHS structures, with the intention of transforming organizations and personnel from participants to protagonists in a process in which research and innovation are an integral part of the healthcare system.
PRI E-R organizes its activities by themes in specific multidisciplinary workgroups. The Regional Healthcare and Social Agency guarantees the coordination with the involvement of the Local ethics committees (to compare and discuss operational models and to identify critical points in safeguarding aspects that are ethical and significant for research).
PRI E-R is financed by a special Fund for innovation established with regional resources and with the contribution of other public and private subjects that subscribe to the general objectives. The projects included in PRI E-R cover different areas:

- **oncology**: innovation in oncological radiotherapy; appropriate use of oncological drugs, follow-up of patients;
- **cardiology**: use of drug eluting stents (DES) and bypasses in patients with multivessel coronary disease;
- **cerebrovascular area**: integrated care for stroke patients;
- **high-cost diagnostics**: use of PET in oncology, use of multislice computed tomography in coronary disease;
- **infection transmission risk**: reduction of mortality for severe sepsis;
- **humanization in Intensive Care Units**: adoption of organizational and care models assuring attention to relational aspects and to the needs of patients and their families.

Many of these projects are developed in collaboration with other Regions within national programs financed by the Ministry of Labour, Health and Welfare (National Research Programs for Health; 2007-2009 Special tender for Research in Oncology; tenders for Independent Research by the Italian Drug Agency).
The project areas of research-intervention will be extended to additional important themes for health services and patients, such as mental health and primary care.
More information is available on the website of the Regional Healthcare and Social Agency:
http://asr.regione.emilia-romagna.it/

Programs for prevention, surveillance and risk management in healthcare

Programs for prevention, surveillance and risk management in healthcare

Patients incur risks when they come in contact with the environment where care is provided. These risks pertain to the facility (for example, a fall) as well as are linked to care (for example, an organizational misunderstanding, equipment malfunctioning or human error).

Since 1999, Emilia-Romagna has included attention to patient safety among the priorities of the Regional Healthcare Plan, also re-stated in the first Social and Healthcare Plan 2008-2010.

In latest years, many initiatives for health professionals' training, surveillance and improvement have been worked out. The most important one was the request to Health Trusts to grade the potential risks linked to their specific clinical activities and to elaborate appropriate measures for patients' and health professionals' safety. The actual existence and the contents of the Health Trust's "Safety Plan" (that includes also issues related to communication policies and to damages refund) is checked for the accreditation process of the facility.

Every Health Trust improves global safety in its structures through:

- a regional system for gathering reports and complaints from the public;
- a system of incident reporting: voluntary reporting of dangerous situations or accidents by workers, regardless of the severity of the outcome, in order to activate protective or preventive measures;
- techniques that analyze critical points of care processes or study the dynamics of adverse events to evidence aspects to be reviewed;
- introduction of practices and procedures that have proven effective to reduce known risks, such as the implementation of systems for the reliable identification of patients that need surgical operations or transfusions, antibiotics before surgery, selection of patients at risk of falling;
- increased attention to relations with patients, in the effort of becoming able to solve conflicts and to manage administrative aspects in case of damaged people in a more respectful way;
- professionals' training on matters related to facilities, equipments and behaviours safety.

The developed initiatives, together with guidelines prepared and spread in 2006 and currently under verification for their implementation, make it possible to deal with the problem, involving the various structures in the Health Trusts that are engaged in safety, care delivery, communication with the public, training, and management of the economic aspects of damage.

Program for surveillance and control of infections correlated with care

The prevention of complications due to infections correlated with care practices is part of the risk management activity in health organizations, even if for its characteristics (complexity of determinants and of prevention and control measures, variety of clinical outcomes) it requires specific interventions and professional competences within the Health Trusts. In latest years, with the aim to improve prevention and control abilities in health organizations, tools and methodologies have been developed for risk detection and grading (surveillance based on laboratories data, surveillance of epidemics and sentinel events, surveillance of surgical infections at regional level, surveillance of infections in intensive care units) and to promote care measures of proven effectiveness for risk reduction (definition, spreading and implementation of guidelines and audit programs in high-risk areas).

The program regards not only public and private hospitals but also residential facilities, and is based on a network system coordinated at regional level. As indicated in the regional guidelines, all Health Trusts have instituted an Infection Control Committee and have identified physicians and nurses to coordinate these activities. The Committees are connected in a regional network and meet periodically to compare experiences and problems and to find solutions.

According to the Social and Healthcare Plan 2008-2010, prevention and control of infections related to healthcare in hospitals, in territorial healthcare and social-health services and in home care, should be considered as a specific task for Health Trusts to be achieved through the development of a plan defining short/medium period objectives, tools needed to reach these objectives and resources specifically assigned.

The priority areas of intervention are:

- surveillance and control of epidemics and sentinel events;
- spreading and adoption of good practice procedures for infection prevention (in particular in surgery and intensive care units);
- prevention of the selection and diffusion of micro-organisms and antibiotic multiresistant organisms;
- elaboration and development of surveillance and control programs for infections in residential facilities and home care.

The programs are coordinated by the Regional Healthcare and Social Agency: *http://asr.regione.emilia-romagna.it/*

Plan to reduce waiting lists for outpatient specialist care and planned hospital admissions

A Regional Plan to reduce waiting lists for outpatient specialist care (visits and diagnostic) and admissions (in specific areas) was approved by the Regional Government (Resolutions no. 1532/2006 and no. 73/2007), thus implementing national standards.
As required by the Regional Plan, Local Health Trusts, together with University Hospital Trusts or Research Hospitals, presented the local implementation plan which had previously been submitted to the respective Health District Committees and to the Territorial Social and Healthcare Conferences. They are also committed to creating a stable relationship with citizens and their representatives, not only to supply correct information on the decisions taken, but above all to create a firm and systematic relationship for analyzing results and simplifying access.

Areas of intervention for outpatient specialist care

The areas of intervention of the Plan on outpatient specialist care concern 41 types of procedures grouped in oncology, cardiovascular area, mother-child health and geriatrics, and 5 types of specialist visits of great impact: dermatology, ophthalmology, otolaryngology, orthopaedics, urology.

Areas of intervention for planned hospital admissions

For inpatient and day hospital/day surgery admissions, the areas of intervention are focused on oncology (surgery, chemotherapy), cardiology (aortocoronary bypass, coronary angioplasty, carotid endarterectomy, coronarography) and geriatrics (hip replacement and cataracts). They also concern specific medical procedures: lung surgery, colon surgery, tonsillectomy, percutaneous liver biopsy, vein ligation and stripping, haemorrhoidectomy, repair of inguinal hernia and decompression of carpal tunnel.

Objectives on waiting lists for outpatient specialist care

In Emilia-Romagna, monitoring of waiting lists for outpatient specialist care began in 1999 and covered – constantly through the years – 25% visits and 17% diagnostic tests. Care was delivered within the prescribed waiting times in 80% cases.
The Plan reconfirms maximum waiting times for delivering care: 24 hours for urgent care, 7 days for deferrable urgent care, 30 days for first specialist visits, 60 days for first-access instrumental diagnostics.
In particular, for the targeted 41 types of outpatient specialist care, the Regional Plan specifies that maximum waiting times must be respected in at least 90% cases.
In their implementation plans, Health Trusts identify the territorial context within which such waiting times must be respected. The implementation plans also contain specific pathways for "complex specialist care" or care that is delivered in centres of excellence, and the related procedures for access.

Objectives on waiting lists for planned hospital admissions

The Plan identifies the areas that group together the healthcare services - to be delivered within maximum waiting times in at least 90% cases - as objects of monitoring: oncology (including surgery for breast, prostate, colorectal and cervical cancer and chemotherapy), cardiovascular area (including aortocoronary bypass, coronary angioplasty, carotid endarterectomy, coronarography) and geriatrics (including surgery for cataracts and hip replacement).
The Plan extends to admissions the monitoring system that was already active since 2000 in Emilia-Romagna.

The system for booking outpatient specialist care

The offer of outpatient specialist care is made available in each Health Trust through a computerized central booking system called "CUP" (unified booking centre). CUP provides citizens with information about availability of appointments for care and guarantees a system based on transparency and efficiency.

Program for the regional Fund for non self-sufficient people

The first three-year Program (2007-2009) for the regional Fund for non self-sufficient people (people requiring help for their daily activities) was approved by the Regional Government (Resolution no. 509/2007). The Resolution no. 1206/2007 provided for implementation guidelines for the program management and in particular for the services and innovative initiatives to support home care.

The regional Fund for non self-sufficient people (FNA)

With the Regional Law no. 2/2003 (outline law for social services) and the Regional Financial Act for 2005 (Regional Law no. 27/2004), the Region has created FNA to finance health and social services devoted to non self-sufficient people and to people who take care of them.

Emilia-Romagna is one of the oldest Italian regions: at December 31, 2007 people aged over 65 numbered 968,208 (22.6% of the population vs 19.8% at national level). A particular attention must be paid to population aged over 80 (291,829 people), in which the incidence of non self-sufficiency related problems is higher.

Nevertheless, the Fund for non self-sufficiency does not consider only problems of the elderly; it is addressed also to anyone affected by severe disabilities.

FNA receives funds through heavier and more targeted taxation, and it must therefore provide a fairly developed services network and guarantee the best equality in care and homogeneous access opportunities, treatments quality, citizens' fair contribution.

The Fund refers to the strategic guidelines established by the Social and Healthcare Plan 2008-2010 and it represents an important aspect of the creation process of a regional and local welfare: the Region, Local Authorities, Local Health Trusts, volunteers' associations and non-profit organizations, Trade Unions, are all engaged in the implementation of an integrated system of services for non self-sufficient people and their families.

The Fund can also count on extra funds; these resources are used to assure the coverage for social expenditures and health-related social charges, while health costs and expenditures related to the development of services for non self-sufficient people are covered by Local Health Trusts.

Objectives

The resources are set aside for the development, qualification and innovation of the service network: strengthening home care services, giving some kind of recognition to self-organized families with specific attention to the use of foreign home assistants; promoting innovative forms of assistance, and curbing citizens' sharing of accommodation expenditure in residential facilities.

The planning

The regional program for Fund planning is elaborated with the Control Room for welfare (the regional seat devoted to the interaction between the Region and Local Authorities), it is discussed and shared with the regional representatives of the Trade Unions, volunteers' associations, non-profit organizations, and it is finally approved by the Regional Government.

The Annual Plan of activities is issued by the District Committee and by the Director of the District, on the basis of the indications of the Territorial Social and Healthcare Conference and the Region, and social institutions, non-profit organizations and all the services providers can contribute to its formulation.

Resources are fixed to the development and qualification - also through the accreditation process - of an integrated network of flexible services, evenly distributed throughout the region. The allocation is guaranteed by Territorial Social and Healthcare Conferences to District Committees on the basis of resident population aged over 75 years and of the number of persons affected by severe acquired disabilities.

Priorities for 2007-2008

The priorities for 2007 and 2008 are: development of integrated home care; increase of care allowances for non self-sufficient elderly; qualification of family assistants (through training and counselling centres); implementation of services of telephone emergency and assistance managed also with volunteers; temporary "relief" admissions in residential homes; support to informal networks of social solidarity (from "doorman" to social "custodian"); interventions to guarantee more equity and the reduction of the individual contribution to the costs of social residential services (safe homes, assisted living residences, day centres).

Achievements in 2007

The results achieved in the Program's first year are significant: 311 million Euros assigned to the Program (of which 255 million - 84% - used); the remaining resources allocated in the 2008 budget (thus amounting to 353,8 million Euros); 54,000 people assisted, of which 7,200 new beneficiaries (6,750 non-sufficient elderly and 450 disabled).

Education and training in the Regional Health Service

Collaboration with the Universities

The healthcare system, with its own facilities and personnel, plays an important role in University education of physicians and other healthcare professionals.

In recent years, the collaboration with the Universities in the region (Bologna, Ferrara, Modena and Reggio Emilia, and Parma) has been significantly developed, in particular through an Agreement Protocol (Regional Resolution no. 297/2005) and the institution of the Observatory for Post-graduate Specialist Medical Training (Resolution no. 340/2004) and the Observatory for Nursing, Technical, Rehabilitative and Preventive Healthcare Professions (Resolution no. 733/2006), that were created to monitor and promote the quality of training and the contribution of the Regional Health Service, starting from University Hospital Trusts.

Thanks to the Agreement Protocol on post-graduate medical specialization training (Regional Resolution no. 1546/2006), 140 schools will be accredited and professionalizing opportunities will be offered to more than 3,000 physicians.

The collaboration on training initiatives for health professionals is increasing too: in the Academic Year 2007-2008, 65 three-year University courses were activated for a total of about 2.200 participants.

Continuing medical education (CME)

The first Italian Program for continuing medical education, started in 2002, is now ended. The layout of the first regional Program (Resolutions no. 1072/2002 and no. 1217/2004) – with the implementation of the accreditation system for the initiatives proposed by the Health Trusts and the activity of a regional Commission of experts and of the regional Council of professional bodies – has given good results. Between 2002 and 2007 more than 51,000 training initiatives have been accredited, mainly "residential" training events (courses, seminars, conferences), but also on-the-job training activities (training, participation in commissions, clinical audits, improvement projects, research projects) and some experimental programs in e-learning.

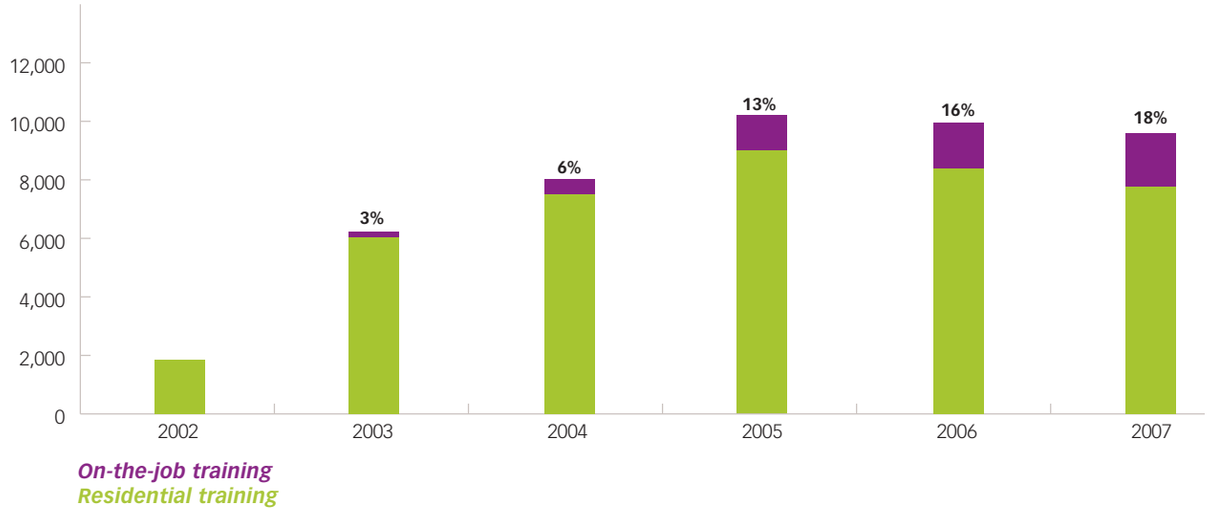
The rules of the regional Program do not permit the accreditation of training events directly financed (even partially) by organizations with commercial interests, profit or non-profit bearing, in the healthcare field. Sponsorship of Health Trusts' training plans or regional programs such as PRI E-R is permitted.

At present, some innovations established in August 2007 at national level are being introduced, while CME activities are going on according to the rules of the first Program. One of the innovations concern the regional accreditation of providers (public and private Health Trusts, professional bodies, …).

The healthcare personnel involved in Emilia-Romagna in 2007 numbered about 61,400, including 43,000 employees of the Health Trusts and Research Hospital "Rizzoli", about 3,800 general practice physicians and paediatricians, medical specialists, employees of contracting private facilities, pharmacists and others.

Internet website: *http://ecm.regione.emilia-romagna.it*

Number of on-the-job training and residential training events accredited for CME by Emilia-Romagna Region, 2002-2007



Program for the odontological, prosthetic and orthesic care

The regional Program for odontological, prosthetic and orthesic care offered by the Regional Health Service to people affected by pathologies causing dental problems or living in disadvantaged economical conditions started on June 1, 2005 (Regional Resolution no. 2678/2004) and became effective on January 1, 2006.
In the first phase the Program was addressed to about 20,000 people with dental problems and to about 300,000 persons in disadvantaged conditions.

The program expansion

In 2008 the Emilia-Romagna Region has revised the program to increase the number of people and the income segments that allow to have free of charge assistance or access to services at controlled prices.
The Program now includes also some severe psychophysical disabilities that – associated with severe handicap conditions or with an inability degree higher than 66% – could prevent from a correct prevention of dental diseases, thus leading to lack or reduction of communication abilities and to severe behaviour disturbs.
As for income, the segment of population entitled to benefit of free of charge care has been enlarged to include people with an ISEE income up to 8,000 Euros/year, while in the first phase the limit was 7,000 Euros (ISEE parameters are used to calculate familiar - and not personal - income).
Also the number of people that can access care with a reduced expenditure contribution has been widened: the new ISEE income limit has been raised from 15,000 Euros to 22,500 Euros/year.
One of the main objectives of the Program was the development of a service network able to guarantee conservative, prosthetic and orthodontic care at all the Local Health Trusts.

Outcomes

On June 30, 2007 working facilities numbered 103 (of which 2 private accredited structures) with a 5% increase with respect to the program start-up in 2005. In 2007 conservative and prosthetic care interventions were guaranteed in all 38 Districts of the Local Health Trusts (with a 18% growth rate in prosthetic care). Orthodontic assistance for children aged under 14 is guaranteed in 67% of the Districts (59% in 2005); however, being a specialist branch that can be provided only by specialists, this supply is considered sufficient for the whole Local Health Trust area.
At regional level the number of assisted people shifted from 42,733 in the second half of 2005 to 64,906 in the first half of 2007, with an increase rate of 52%.
In the first phase of the Program 1,651,650 Euros were allocated; for technological and facilities upgrade, in 2007 the Region provided for a financing of 3.6 million Euros.
Among the most significant data related to the 2-year development period of the program, the coverage guaranteed to people in disadvantaged conditions (with an ISEE income lower than 7,500 Euros) increased from 44% to 73%. During the first half of 2007, children (aged up to 14 years and belonging to families with an ISEE income lower than 15,000 Euros) undergoing orthodontic treatments numbered 7,579, 41% more than in 2005. In the same period 3,539 prosthesis were supplied (3,728 devices distributed) with a 59% increase with respect to 2005.
In this context, the Special Social and Healthcare Program was developed to guarantee total expense coverage for prosthesis supplied to people with an ISEE income lower than 7,500 Euros: in 2007, 68% devices provided by the regional program were fully covered by the Regional Health Service (36% in 2005).
As for waiting times for visits to be provided within 30 days, data show a progressive settling-down: for conservative-prosthetic visits, waiting times were respected in 82% cases (regional average); in the orthodontic field (braces for children) the average regional value is 74%.

The Human Papilloma Virus (HPV) vaccination

With the Regional Government Resolution no. 236/2008 – implementing the national agreement of December 20, 2007 on the "strategy for active supply of the vaccine against HPV infection in Italy" – Emilia-Romagna has activated the program of free of charge supply for vaccination against HPV serotypes 16 and 18 in girls in their twelfth throughout the region.

HPV causes the most common sexually transmitted infection, highly widespread especially among young women around 25 years of age. In most cases (90%) HPV provokes transitory, asymptomatic infections that heal spontaneously, but some kinds of papilloma virus – and the serotypes 16 and 18 are the most dangerous – can seldom cause cervical cells alterations that can evolve in cancer if not promptly treated. According to World Health Organization's data, 70% cervical cancer cases are caused by persistent HPV 16/18 infections. The availability of a vaccine against these two serotypes is a great opportunity for prevention.

Vaccination effectiveness is highest (90-100%) in girls who are not yet affected by the virus (that is before the onset of sexual activity), while it decreases to 40% in girls who already had sex.

The Italian State-Regions Conference has therefore established to offer free of charge vaccination to girls in their twelfth (that is girls turned 11), and Emilia-Romagna Region has conformed to these indications.

March 2008: the start-up

The vaccination campaign started in March 2008: girls born in 1997 received an invitation from their Local Health Trust to undergo the vaccination free of charge. In next years every girl turning 12 will receive the same invitation. Vaccination is available, upon parents' request, also for girls born in 1996, who were 11 in 2007.

The Emilia-Romagna vaccination campaign also offers the opportunity for girls aged between 12 and 18 to be vaccinated at Vaccination Divisions of the Local Health Trusts at a special price.

After the age of 18, girls willing to be vaccinated must refer to their general practice physician for the prescription of the vaccine, that can then be bought in pharmacies, and for vaccination.

Importance of pap-test and screening

For the vaccination program against HPV 16 and 18 serotypes, the Region will allocate in 2008 about 4 million Euros; the program is part of the global strategy activated time ago for the prevention of cervical cancer.

The vaccine against HPV 16 and 18 does not protect from every kind of cervical cancer but only from those caused by HPV 16/18 persistent infections.

For prevention and early diagnosis of all cervical lesions (included those related to HPV 16 and 18), it is necessary to regularly undergo a simple examination: the pap-test.

Since 1996, in Emilia-Romagna a free of charge screening program proposes to all women aged between 25 and 64 (totally amounting to 1,200,000, age group in which the incidence of this kind of cancer is higher) the execution of the pap-test every 3 years, assuring also further diagnostic in-depth analysis and care treatments, if needed.

Also women vaccinated against HPV 16 and 18 need to regularly undergo the pap-test.

Care program for people with autism spectrum disorders

Autism and the autism spectrum disorders represent an important challenge for the improvement of the social and healthcare system both for clinical, organizational and integrated collaboration aspects and for the needed and competent support to families.

The regional information system on childhood and adolescence neuropsychiatry shows that territorial health facilities deal yearly with 1,166 autism related disorders in people under 18 years of age. From the epidemiological point of view, the expected prevalence is estimated around 3‰ in this age group (it is higher according to recent surveys).

Starting from 2000 the Regional Department for Healthcare Policies has deeply studied autism issue in order to improve services through the contribution of technical panels; in 2004 the "Guidelines for health promotion in people affected by autism and other development disorders" addressed to the Health Trusts were issued, and in March 2008 the "Regional integrated program for assistance to people affected by autism spectrum disorders" was approved.

Objectives and organizational model

The general goal of the program is to assure fair, timely and appropriate diagnosis, assistance and care to persons affected by autism disorders in different age groups.

The organizational model adopted is that implemented for high specialties: the hub & spoke model. Every Local Health Trust/Province will set up spoke centres that will act as reference points for all those involved in structuring the integrated path, while specialist reference and clinical governance hubs will be located in the three Vast Areas of Emilia-Romagna, at the Local Health Trusts of Reggio Emilia, Bologna and Rimini.

The complete implementation of the Program will be defined in the 3-year period 2008-2010: medium and long-term shared objectives will lead, through the complex designing of the hub & spoke network, to the implementation of uniform clinical and organizational protocols and to the definition and upgrade of specific requisites for accreditation, particularly related to diagnosis and care in early childhood.

The 11 Local Health Trusts are engaged in the creation/strengthening of spoke-teams on autism spectrum disorders formed by different health professionals, skilled in appropriate diagnoses and in the psycho-educational, cognitive and behavioural approaches for the habilitation of people with autism disorders.

The Program is supported by a Local Committee for the coordination of clinical-organizational functions of each team and by a regional Scientific Committee formed also by national experts that, according to recent scientific literature, gives hints for care path appropriateness, provides clinical and epidemiological assessment of monitoring results and supports the accreditation process of the Program activities. The Scientific Committee also proposes research and innovation initiatives, paying particular attention to prospective new clinical-therapeutic approaches (i.e. in the gastroenterological, neurometabolic, genetic fields).

A specific regional 3-year period funding will guarantee the support to the implementation of the hub & spoke network and to the achievement of the general and specific objectives, from the timely diagnosis to the revision of care paths for autistic adolescents and adults.

Regional Plan against Asian tiger mosquito and for prevention of Chikungunya and Dengue diseases

In 2007 Summer, the first European autochthonous case of Chikungunya epidemic outbreak was registered in Romagna. Chikungunya is a viral disease with a benign course transmitted by the tiger mosquito (an insect native to South-East Asia that is widespread in Italy since the '90s). In August and September, 217 persons were verified to have got the infection.

As a consequence of this epidemic, Emilia-Romagna Region adopted an intervention plan aimed at preventing the spread of new Chikungunya infection outbreaks or the diffusion of other diseases transmitted by tiger mosquitoes, such as Dengue.

Objectives

The fight against the vector insect is the main element of the strategy adopted to prevent and control this kind of diseases, unknown in Italy.

The Plan is based on coordinated and synergic interventions of Emilia-Romagna institutions and it results from the collaboration with regional scientific bodies and with national (Ministry of Health, National Health Institute) and international health organizations (European Centre for Disease Prevention and Control, World Health Organization, French Ministry of Health).

Started April 1, 2008 the Plan has two main goals:

1. to decrease as much as possible tiger mosquito population in the whole regional territory, increasing disinfestation interventions;
2. to strengthen the health surveillance system in order to precociously detect suspect cases and to timely adopt pest control measures.

At organizational level, the Plan points out a double institutional responsibility: on one side Local Authorities, in particular Municipalities, are directly responsible for disinfestation management; on the other side the Regional Health Service is charged with health surveillance, diagnostic activities and implementation of measures aimed at disease control and diffusion.

The Plan also schedules a large information campaign to promote and stimulate public participation.

The fight against tiger mosquito

Every Municipality in which tiger mosquito is present (except the hills area where no insect has been located) has carried out ordinary disinfestation plans. In the areas where the Chikungunya epidemic outbreaks were detected in 2007, extraordinary disinfestation interventions in private areas will be conducted.

The Plan also provides for the increase in the diffusion of ovitraps throughout the territory and it suggests the ideal number in each Province. The 2008 objective of the monitoring network is to estimate the infestation level in every province and in the main towns.

Moreover, surveillance activities will be elaborated to detect newly introduced insects (i.e. the Aedes Aegypti, that can transmit yellow fever).

The surveillance system

The system is aimed at the precocious identification of cases - even only suspect ones – in order to timely activate the interventions needed to avoid disease transmission.

Notification adopts the same procedures as the "quick warning system".

For their role in early detection of possible cases, general practice physicians, community paediatricians, Emergency Room physicians and professionals in services for continuity of care have been involved in the active surveillance system through periodic contacts with Local Health Trusts.

Diagnostic tests

The Microbiology Department at Bologna University Hospital Trust has been identified as the reference point for the execution of diagnostic tests.

This laboratory, already recognized as the regional reference centre for microbiological emergencies, has been strengthened with facilities and equipments to deal with possible request peaks.

Internet website: *http://www.zanzaratigreonline.it*

Birth path

The first Regional Social and Healthcare Plan 2008-2010 reinforces care quality in the birth path as one of its strategic objectives. The Plan indicates - among the highly integrated care paths - the mother-child area and - among the interventions to be developed - the activities promoted by the Family Advisory Centres focused on procreation protection, assistance during pregnancy, birth, puerperium, and counselling activity on sexuality and responsible procreation.

As far as the Plan objectives are concerned, the Regional Government Resolution no. 533/2008 provided Health Trusts with the guidelines for the whole birth path elaborated by a specifically set up regional technical and scientific Commission. The guidelines on pain control during delivery, worked out by the same Commission, were approved with Resolution no. 1921/2007.

The main guidelines issued by the Commission and approved by the Regional Government are listed below.

- ***Prenatal early diagnosis of the most recurrent chromosome anomalies***
  The aim of these guidelines is to define a diagnostic and counselling path enabling women to make responsible choices, also concerning the risks for both mother and child in undergoing tests for anomalies identification, that sometimes are particularly invasive.
- ***Obstetric assistance to pregnancy, delivery and puerperium***
  The obstetrician figure within the care team is revised and is now recognized as a qualified health professional with a privileged relationship with the woman and her family, from conception to post-delivery period.
- ***Control of fetal wellbeing during labour and delivery***
  The guidelines provide indications on how to promote humanization and demedicalization during birth.
- ***Woman's emotional troubles during pregnancy and during child's first year of life***
  These guidelines give indications on path organization aimed at handling women's emotional troubles through the enhancement of a multidisciplinary approach and the promotion of health professionals' specific training, thus completing care path to women during pregnancy and during child's first year of life.
- ***Mortality reduction at birth***
  The guidelines provide for a program of analysis and monitoring of events in order to decrease the number of stillborn children through changes in diagnostic and care practice. The guidelines suggest a review of literature where mortality is linked to its possible causes, and the introduction of a medical record for stillborn children and of a protocol for diagnostic surveys.
- ***Labour assistance to physiological birth in non-hospital settings***
  The guidelines give indications for a qualified assistance during delivery at home or at private facilities and promotes uniform protocols and procedures throughout the regional territory; they also set up a regional Observatory for care monitoring and assessment in these situations.
- ***Birth path and quality perception***
  It is a bibliographical review for healthcare professionals to promote counselling services to women and analyses of their perception of care quality.
- ***Delivery pain control***
  According to these guidelines, within the end of 2008 at least one Birth Department in each regional Province will guarantee the opportunity to deliver in analgesia (free of charge, 24 hours a day, all year long) upon request, and all these Birth Departments will assure the adoption of non-pharmacological methods to control delivery pain.

Guidelines for editing the Health Trust's Deed

The Regional Government has issued guidelines for the Health Trusts for the editing of their Deed, that is the document outlining the Health Trust's organization and governance policies and its relations with the Region, Local Authorities, citizens' representatives, as indicated by the Regional Law of re-organization of the Regional Health Service (no. 29/2004) and according to the 1st Regional Social and Healthcare Plan. In February 2006 the Region established the general lines for trust organization, enhancing clinical governance function and providing methodological indications for health professionals' participation in Trust's strategic choices; for research and innovations functions and Health Districts' and Departments' organization (with specific reference to hospital Departments' organization). In December 2007 the guidelines for the organization of territorial Departments of the Local Health Trusts were issued, with particular attention to the necessary organizational and professional integration that is one of the principles stated in the Social and Healthcare Plan 2008-2010.

Healthcare professionals' participation in Health Trust's strategic choices

Indications are addressed to the Trust's Management and to the Board of Directors (new organism set up by Law no. 29/2004).

For Trust's Management, policies aim to strengthen the coherence of the governance function, of the Health Trust (as collegial organism), in order to guarantee that all technical and professional competences will take part in the elaboration and verification phases of development and organization programs.

As for the Board of Directors, it is meant to become the elective seat where health professionals can participate. As a matter of fact, the Board of Directors is composed not only by managers of the Regional Health Service but also by representatives of contracted professionals (general practice physicians, paediatricians and outpatient specialists).

Research and innovation functions

The Regional Health Service has identified research as a fundamental institutional function, like care. Research, innovation and education must therefore be included in the management policies of all Health Trusts.

The Board of Directors has to plan and implement the development of these functions that have to be transversal to all Health Trusts, with some differences only in the "intensity" of the activities developed in University Hospital Trusts, Research Hospitals and other hospitals of the Regional Health Service.

The organizational model: Health Districts and Departments

Policies confirm that Local Health Trusts are divided in Health Districts and organized in Departments.

The District represents the Health Trust's governance territorial partition, where commitment plans are prepared on the basis of needs and demands of healthcare services by the reference population; it is the privileged context for the relationship between Local Health Trusts and Local Authorities, particularly with respect to primary healthcare and to the integration among social and healthcare services.

The Departments are organizational structures and are divided in operational units/services committed to guarantee entirety in care and clinical governance.

Territorial Departments

- **Primary Care Department**

  The Department carries out the functions of the Primary Healthcare Unit (first of all general practice physicians and paediatricians), of the Paediatric Primary Healthcare Unit (contracting and community paediatricians), of Family Advisory Health Centres and of care services devoted to elderly people.

  The Primary Healthcare Unit has to promote and reach a complete integration of general practitioners in the healthcare system, in order to guarantee shared diagnostic-therapeutic paths and continuity of care. The integration with health professionals is aimed at chronicity management, waiting lists reduction for outpatient specialist care, improvement of pharmaceutical care.

- **Mental Health and Pathologic Addictions Department**

  This Department manages a care system that connects the traditional disciplines for mental healthcare (adults psychiatry and children neuropsychiatry) with those related to drug addiction in an integration and reciprocal enrichment perspective.

  The activity of the Mental Health and Pathologic Addictions Department is well integrated with Municipalities, volunteers' associations and accredited private facilities. Some Integrated Care Departments will be created at the Local Health Trusts of Bologna, Modena, Parma and Ferrara, involving Universities.

- **Public Health Department**

  The Public Health Department guarantees a global approach, that involves different specialties professionals to provide unitary and timely answers to health problems of individuals and the community. It also interacts with other institutions and social forces that can contribute to health safeguard and promotion. It is aimed at supporting Trust's Healthcare Direction on programs beyond the Public Health Department's plans and on interdepartmental programs such as screenings, infective diseases control, fight against social inequalities' effects on health.

Authorization and accreditation of healthcare, social-health and social services

Authorization and accreditation of healthcare services

The standards for authorization and institutional accreditation of healthcare facilities and professionals were defined by Emilia-Romagna Regional Government with Resolution no. 327/2004.
The basic criteria is to concretely apply the national Law no. 229/1999, according to which authorization and accreditation procedures are to be linked and temporarily sequential.
Authorization is meant to guarantee the respect of structural and safety requirements for patients and workers in any public or private health facility in Emilia-Romagna.
Accreditation guarantees the respect of quality requirements concerning health structures and professionals working for the Regional Health Service.

In particular, the regional Resolution:

- defines authorization and accreditation requirements for health facilities and workers; these requirements are the result of a lengthy confrontation and sharing among professionals and experts working in public and private facilities;
- defines authorization and accreditation procedures, establishing modes and times;
- underlines the need of authorization also for dental surgeries and other professional offices used for diagnostic and/or therapeutic procedures that are particularly complex or potentially dangerous for patients' safety;
- authorizes the start up of institutional accreditation.

The verification process is active since September 1, 2004; many hospitals, hospices, public psychiatric facilities, nursing homes and private outpatient care facilities have already been visited.

Authorization and accreditation of social-health and social services

The accreditation of social-health and social services started in 2007.
The requirements and procedures for the authorization of these services were fully defined in 1991 and then updated with the regional Resolution no. 564/2000.
In 2007, the Regional Government (Resolution no. 772/2007) definitely approved reference criteria for the accreditation process of social-health and social services.
The Regional Law no. 4/2004 defined a transition period for the accreditation of social-health services, ending in 2010.
Social-health services and interventions financed also through the regional Fund for non self-sufficiency - nursing home care, residential facilities and day care centres for non self-sufficient elderly people; residential socio-rehabilitative centres and day care centres for disabled adults – can be transitorily accredited if responding to some minimal requisites; the process to possess all the needed requirements and to obtain final accreditation will then be started.
One of the minimal requisites necessary to benefit of the temporary accreditation is the predisposition of a plan of organizational and management transformation that assigns full responsibility for care procedures to the facility managers.
The Regional Government is defining procedures, costs and implementation ways of temporary accreditation.
Once these indications are approved, accreditation will be compulsory for the creation of any new service.

The Social accountability report

As established by the Regional Law no. 29/2004 on Regional Health Service organization and functioning, every Health Trust has to issue every year a Social accountability report together with the annual financial balance. This report is meant to link economical results to healthcare outcomes in a coherent way, and to allow a periodic control on the accomplishment level of the objectives assigned by the Region and Local Authorities to each Health Trust.

The Regional Government Resolution no. 213/2005 provided guidelines and a reference model for editing the document.

The project started in the second half of 2004 with an experimental phase involving 5 pilot Local Health Trusts. In 2005 it was extended to all the Local Health Trusts and since 2007 it involves also the Hospital Trusts and the Research Hospital "Rizzoli". All the methodological choices during this experimental period were shared by the Region and the Health Trusts, so the result can be considered as a common tool. It is now possible to examine the outcomes of every Health Trust and to elaborate a syntheses of regional interest and first in depth evaluations.

The Social accountability report is a yearly, compulsory, public, technical document, corresponding to a regional shared model, organized in 7 chapters:

1. context of reference
2. Health Trust's profile
3. institutional targets and trust strategies
4. work conditions, competencies and efficiency of work organizational model
5. relational network system and communication tools in the Health Trust
6. research and innovation
7. specific objectives of institutional relevance

The document presents a wide range of information including a set of indicators that are common for all Health Trusts. The quantitative indicators are contextualized and accompanied by detailed narrative descriptions of choices and actions implemented: the Health Trust talks of itself explaining its role in the regional and local policies context.

If compared to the trust balance sheet, the Social accountability report has wider and more targeted goals: it illustrates the outcomes of actions performed by the Health Trust and it supports in an active way the relationship between the Health Trust and its main institutional interlocutors (the Region and Local Authorities, in particular Territorial Social and Healthcare Conferences).

In this way, these institutional subjects can verify the attainment of pre-defined goals and – if necessary – reactivate internal and external planning processes. On their side, Health Trusts use the Social accountability report also to communicate with other internal and external subjects (Non governmental organizations, Trade Unions, professionals, citizens), reporting on quality of provided care and thus emphasizing healthcare systems accountability.

More information on the Emilia-Romagna Health Trusts' Social accountability reports is available in the Dossiers no. 107/2005, no. 148/2007 and no. 163/2008 edited by the Regional Healthcare and Social Agency (*http://asr.regione.emilia-romagna.it/wcm/asr/collana_dossier/archivio_dossier_1.htm*) and on the Agency's website (*http://www.regione.emilia-romagna.it/agenziasan/bilmissione/index.htm*).

Organization of the Health District

The Health District guarantor for care needs identification and for Essential Levels of Care delivery

Regional Health Service reorganization, as defined by Law no. 29/2004 and by the subsequent regional guidelines on the Health Trust's Deed, gives to Health Districts the role of full guarantor for the Essential Levels of Care delivery.
This means that Districts are responsible for:

- survey and analysis for resident population's care needs;
- planning of healthcare assistance needed by reference population;
- provision of health and social-health services;
- assessment of interventions outcomes.

Planning and evaluation are peculiarities of the new role of the Health District, not only in terms of service delivering, but also of ensuring high-quality healthcare. The new organizational model, thanks to the clear distinction between subjects responsible for identifying needs (District Direction and Local Health Authorities) and subjects responsible for organizing health services provision (territorial and hospital Departments), allows to better clarify the assigned functions and to efficaciously manage the available resources. In this context the District Director becomes the guarantor of supply and demand matching, through the promotion of care modalities that enhance also the integration among health professionals.
The District Director assigns duties to the different Departments of the Regional Health Service, both territorial and hospital ones, to facilitate patients' handling at different care levels (hospital, territory).

Reorganization of territorial Departments

Together with the new role of the Health District, also territorial Departments undergo reorganization.

- The **Department of Primary Care** redefines its structure by hinging on the **Primary Healthcare Unit**; this Unit gathers services provided by general practitioners, paediatricians, nursing personnel, obstetricians and other professionals working in the territory, in order to ensure healthcare planning as regards chronic pathologies and access to specialised healthcare provided by the other Departments of the Regional Health Service.
  This reorganization aims at integrating professionals operating within the Regional Health Service in trust organization; their integration occurs:
  - by identifying opportunities for their participation in defining healthcare policies affecting patients;
  - by harmonizing their professional approach with regional healthcare orientations.

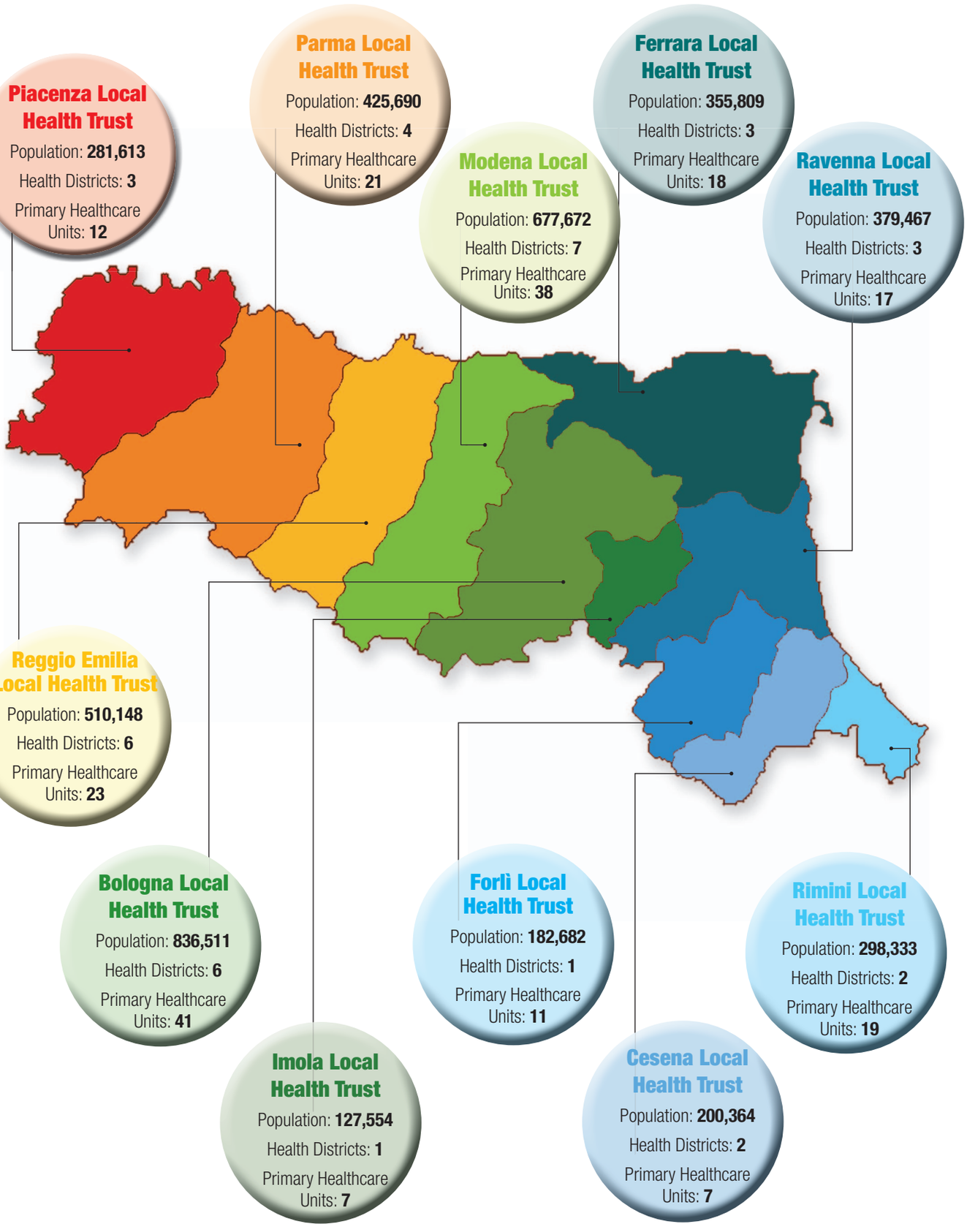
  These are known objectives; the new rules give operative instruments to put them into practice.
- The **Mental Health and Pathologic Addictions Department** has revised its objectives by expanding its areas of interest from the traditional one focused on psychiatry to pathologic addictions, and by enhancing external integration (support to general practitioners in handling minor disorders – "Leggieri Program"; involvement of Local Authorities and volunteers' associations).
  Prevention, care, re-habilitation and social reintegration activities are addressed to people of every age affected by mental disorders or pathologic addictions.
- The **Department of Public Health** was reorganized to provide health care in collaboration with other Departments. The new role played in the screening field, the support to the Health District planning function, the integrated management of infective emergencies in cooperation with clinical competences at hospital level, are all examples of this reorganization. The integration between the Department of Public Health and the Department of Primary Care for the development of trends for the Plan for Prevention, in particular for cardio-vascular risk prevention, is particularly important.

Health District as planning field for social-health activities and for the Fund for non self-sufficiency

The Health District is not only committed to guarantee appropriate healthcare to citizens, but also to develop both the social planning and social-health interventions and activities related to non self-sufficiency. In 2008 this third multi-year planning cycle has started; it is characterized by an integration purpose stronger than in the past, in which the unification of social, health and social-health planning activities is clearly presented.
Also the regional Fund for non self-sufficiency is negotiated and discussed within the District governance framework, involving all the entitled subjects or those willing to participate (Municipalities, Local Health Trusts, Public Trusts for Personal Services, non profit organizations, etc.) to settle appropriate interventions on the basis of the specific territorial needs and peculiarities.
In Emilia-Romagna there are 38 Health Districts and 214 Primary Healthcare Units.

Health Districts, Primary Healthcare Units, reference population

2007: 38 Health Districts, 214 Primary Healthcare Units



Population as of December 31st, 2007.

VAST AREAS

North Emilia Central Emilia Romagna

Agreement with general practice physicians

In 2007, an important step towards the organizational development of general practice services in all Health Trusts was made. The main goal of this process - supported by an agreement between the Region and general practice physicians' organizations and Unions - is to allow general practitioners to work at best, in connection with the Regional Health Service, to simplify access to services, to guarantee care appropriateness and continuity.

At the end of 2007, 94% general practitioners (3,013 on a total of 3,221) were integrated in Primary Healthcare Units, organizational structures which can share outpatient facilities, nursing resources and specialist resources that citizens can easily access. This kind of organization (complete answers to health related problems are concentrated in a single facility near home) allows the interaction among territorial health professionals for citizens' interest - safeguarding the physician's fundamental and privileged fiduciary role with the patient - and in the interest of professionals working on the territory, who have the opportunity to improve care quality thanks to daily interaction and contacts.

This process is aimed at full integration of general practice physicians in Health Trust's life and mainly into Primary Healthcare Units, that are the cornerstone of primary care and the link with other healthcare services.

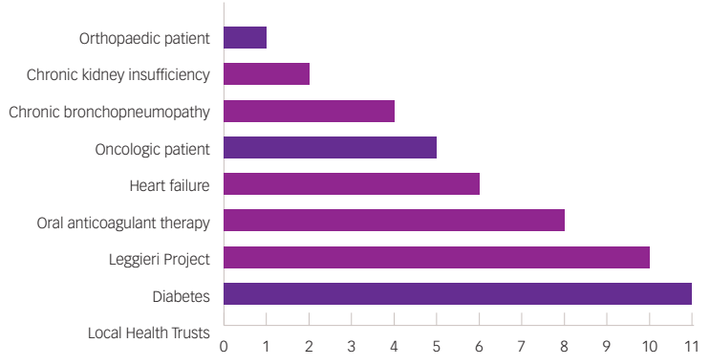
The new organizational model provides for a gradual lengthening of opening hours for outpatient facilities (through the coordination among general practitioners of a specific Unit and the development of "group" and "network" medicine), from a minimum of 7 hours per day till 12 hours per day whenever necessary. This implies wider chances of care from the general practice physician, even for urgent problems that do not require turning to Emergency Rooms (the so called "white codes").

With such an organization, the general practitioner is more integrated with the other Health District professionals for the coordination of clinical activities, of care supply in social-health residences and in particular of home care to chronic patients.

The goal for 2008 is to complete the organizational and technological reorganization of general practice and to spread innovative experiences in dealing with patients affected by the most common chronic diseases (diabetes, heart problems, chronic bronchitis, kidney deficiency, ...) that Health Trusts have already developed at different levels. During 2008, plans aimed at a deeper integration with care continuity professionals are developed to guarantee healthcare services supply 24 hours per day, 7 days a week.

From the technological point of view, the telematic network (SOLE Project - online healthcare) that connects general practice physicians among themselves and with other Health Service physicians has been expanded; the network allows to share patient's information, safeguarding his/her privacy, and to contact Health Trusts for reports and treatments requests.

Integrated care paths for chronic pathologies in Local Health Trusts, as of December 31st, 2007



General practice physicians (GPP) and assisted population for Primary Healthcare Unit (PHU), as of December 31st, 2007

	GPP average per PHU	Min & max number of GPP per PHU	Average population assisted per PHU	Min & max assisted population per PHU
Piacenza Local Health Trust	15	12-22	18,120	12,458-26,759
Parma Local Health Trust	14	6-23	17,972	6,533-29,885
Reggio Emilia Local Health Trust	15	4-28	16,720	3,862-30,855
Modena Local Health Trust	14	4-28	15,725	4,087-32,332
Bologna Local Health Trust	15	8-28	20.524	10,005-36,224
Imola Local Health Trust	13	6-21	15,978	7,277-24,699
Ferrara Local Health Trust	16	11-30	18,073	9,836-34,748
Ravenna Local Health Trust	17	9-25	19,611	11,429-27,393
Forlì Local Health Trust	14	5-24	14,251	5,449-22,469
Cesena Local Health Trust	21	15-31	25,017	15,706-34,614
Rimini Local Health Trust	12	5-17	13,754	7,311-20,285
Regional average	**15**	**4-31**	**17,674**	**3,862-36,224**

Hub & spoke model for hospital care

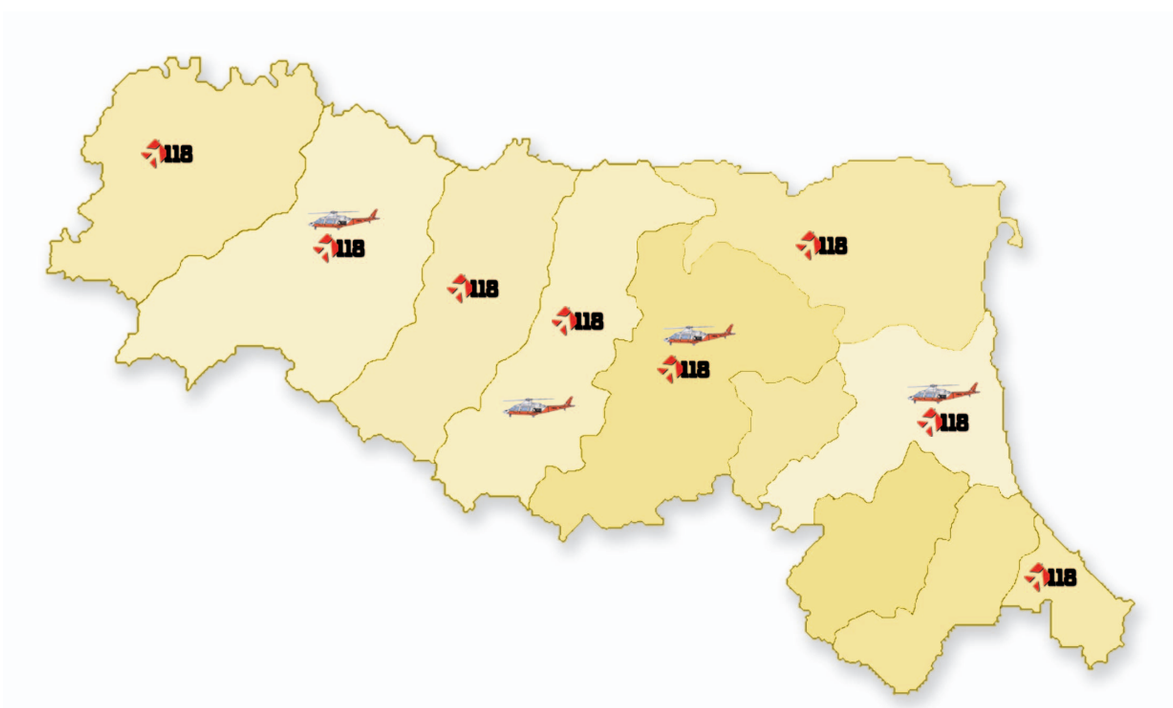
For their low frequency or for the complexity of care, high specialty functions are offered only in a few hospitals, where patients with particular clinical conditions are transferred from local hospitals.
Planning for high specialty centres is developed at regional level. The organizational model adopted (hub & spoke) is based on the connection between hubs (high specialty centres) and spokes (local hospitals). Access to hub centres can only be requested by specialists at local hospitals.
This network model was defined by the Regional Health Plan 1999-2001 and is confirmed by the Social and Healthcare Plan 2008-2010. It refers to specific disciplines; those already implemented are: heart surgery and cardiology, neurosciences, transplants, severe burns, perinatal and paediatric intensive therapies, rehabilitation high specialties, emergency-urgency system, transfusion system and blood plan, rare diseases, genetics.
The regional planning is now focused particularly on oncology and high complexity laboratory diagnostics.

118 Emergency system

The 118 Emergency system of Emilia-Romagna deals with a high number of aid interventions (more than 400,000 in 2007) and with more and more complex cases (from early treatment of heart infarction to maxi emergencies). The system is composed of:

- 8 operational centres;
- a network of 347 mobile stations units: ambulances and equipped cars with physician and nurse;
- 4 bases for helicopter ambulances.

The operational centres work 24 hours a day; a nurse answers the calling citizen according to standard procedures and protocols with a medical supervision. On the basis of information collected during the phone call, the nurse decides what rescue vehicle should intervene (ambulance, helicopter ambulance, equipped car with physician and nurse).
The calls for health interventions arrive to one of the 8 operational centres and are quickly sorted out to the network of available rescue vehicles; once reached the intervention location, the rescue team decides the best referral hospital on the basis of care needs.
The network of vehicles is directly managed by the Health Trusts, or – with specific agreements – by ANPAS voluntary associations, by Italian Red Cross and by private organizations.
According to the agreed standard, 118 system has to guarantee that rescue vehicles arrive within 8 minutes in urban areas and within 20 minutes in rural areas.
The 118 Emergency system can actually rely on advanced computer and radio-communication systems that, in some areas, can locate the position of the rescue vehicle.
Recently, Emilia-Romagna Region – first in Italy – has implemented a new radio network with digital technologies that will integrate communication between 118, City Police and Civil Defence Department.
From the beginning of 2009, emergency calls in the Rimini province are handled by the Romagna operative centre (located in Ravenna).
Internet website: *http://www.118er.it/*



Hub & spoke networks for severe disabilities

In 2008 Emilia-Romagna Region completed the hub & spoke network of rehabilitation high specialties. The Trauma Centre at Maggiore Hospital in Bologna, that in the near future will also host the Unified Spinal Unit, is the hub centre of the **regional network for rehabilitation from severe myelolesions**.

In this transition process the regional system is acting through a "network of spinal units" that guarantee timely care to people with myelolesion and the management of emergency and acute phases.

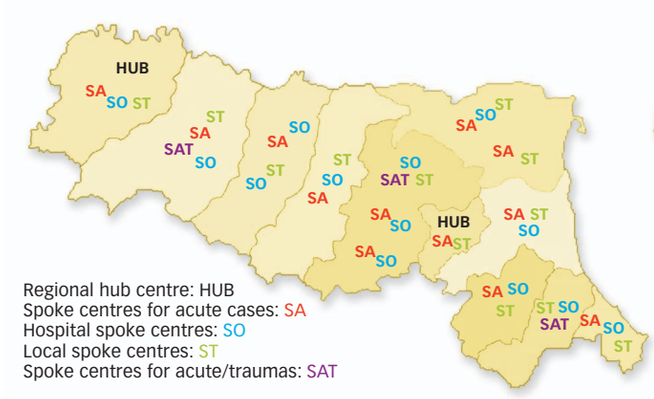
The two rehabilitative medicine complex units at Villanova d'Arda Hospital (Piacenza Local Health Trust) and Montecatone Rehabilitation Institute (Imola Local Health Trust) act as hubs with the three regional Trauma Centres (hosted at Maggiore Hospital in Parma, Maggiore Hospital in Bologna, "Bufalini" Hospital in Cesena).

The **regional network for rehabilitation from severe neuromotor disabilities in developmental age** refers to the Rehabilitation Unit for severe disabilities in developmental age at Reggio Emilia Hospital Trust, which acts as hub centre that gathers patients coming from the Health District Units of childhood and adolescence neuropsychiatry.

The multifunctional technological poles for childhood disabilities hosted at 3 highly specialised structures - "Corte Roncati" centre (Bologna Local Health Trust), "Regional centre for spina bifida" (Parma University Hospital Trust) and Bologna Research Hospital "Rizzoli" - act as intermediate centres between the Reggio Emilia hub and the other facilities in the network.

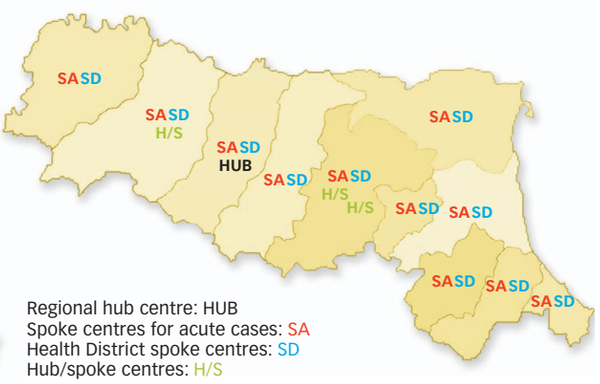
The **network for rehabilitation from severe acquired brain lesions** (the first to be created) has its regional centre of reference at the Severe Brain Lesions Operational Unit at Ferrara University Hospital Trust, that is linked to the hub & spoke centres and to the spoke hospital and territorial centres. Internet website: *http://www.gracer.it*

Regional network for rehabilitation from severe myelolesions



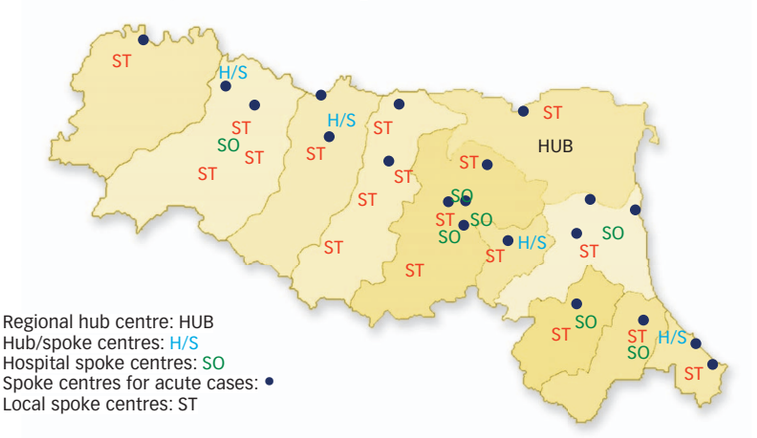
Regional hub centre: HUB
Spoke centres for acute cases: SA
Hospital spoke centres: SO
Local spoke centres: ST
Spoke centres for acute/traumas: SAT

Regional network for rehabilitation from severe neuromotor disabilities in developmental age



Regional hub centre: HUB
Spoke centres for acute cases: SA
Health District spoke centres: SD
Hub/spoke centres: H/S

Regional network for the rehabilitation from severe acquired brain lesions



Regional hub centre: HUB
Hub/spoke centres: H/S
Hospital spoke centres: SO
Spoke centres for acute cases: •
Local spoke centres: ST

Hub & spoke networks for diagnosis and care of rare diseases

By definition, "rare diseases" affect only small groups of people (fewer than 1 in every 2,000 persons). A National network for rare diseases and a list of about 600 rare disorders classified by pathologic branch were established in 2001 at national level with a Ministerial Act.

Consequently, Emilia-Romagna Region instituted the Regional network for prevention, diagnosis and treatment of rare diseases.

Only the Rare Diseases Centres of the network can release diagnosis certifications needed to obtain exemption from prescription charges.

Within this context, specific care networks devoted to a single pathology or to small groups of pathologies have been set up. At present, 4 networks have been activated:

- haemophilia and congenital haemorragic diseases;
- hereditary haemolytic anaemia;
- glycogenosis;
- Marfan syndrome.

Since June 2007 an information system on rare diseases - based on the network connection among authorized Centres and Departments for Primary Care - was implemented, thus allowing data exchange among health professionals. Patient's data input in the system allows the creation and implementation of the Regional Register of Rare Diseases.

A regional technical group is charged with consulting about specific problems also related with particular assistance benefits.

A search engine provides interested people with the list of rare diseases and the Emilia-Romagna diagnosis and care centres.

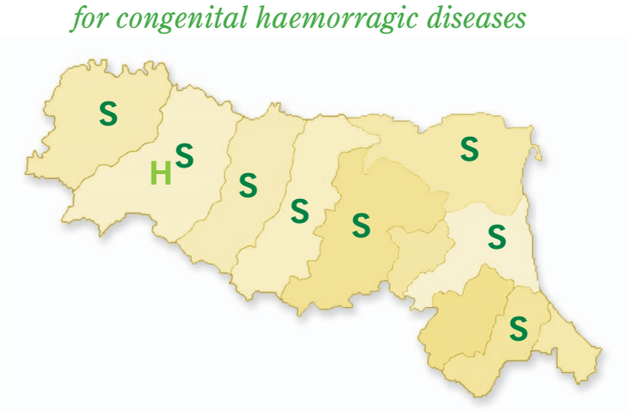
Internet website: *http://www.saluter.it/malattierare/*

Hub & spoke network for the Marfan syndrome

Hub & spoke network for hereditary haemolytic anaemia

Hub & spoke network for glycogenosis

Hub & spoke network for congenital haemorragic diseases



The "Stroke care" network, integrated care for stroke patients

With the "Guidelines on the organization of integrated care to stroke patients - Stroke care program" the Region provided Health Trusts with indications to implement provincial "stroke networks" that should guarantee an integrated care path to stroke patients during the acute phase and afterwards. The "stroke care" model, considered in the whole hospital path (pre-admission, hospitalization and post-discharge), refers to stroke epidemiology in Italy, to available effectiveness evidences, to pharmacological treatments in the acute phase, to the most important diagnostic-therapeutic guidelines, to main care paths and to integrated home care for the patient, with the primary goal to decrease mortality and disabilities caused by the acute event.

The most significant organizational aspects of this model are:

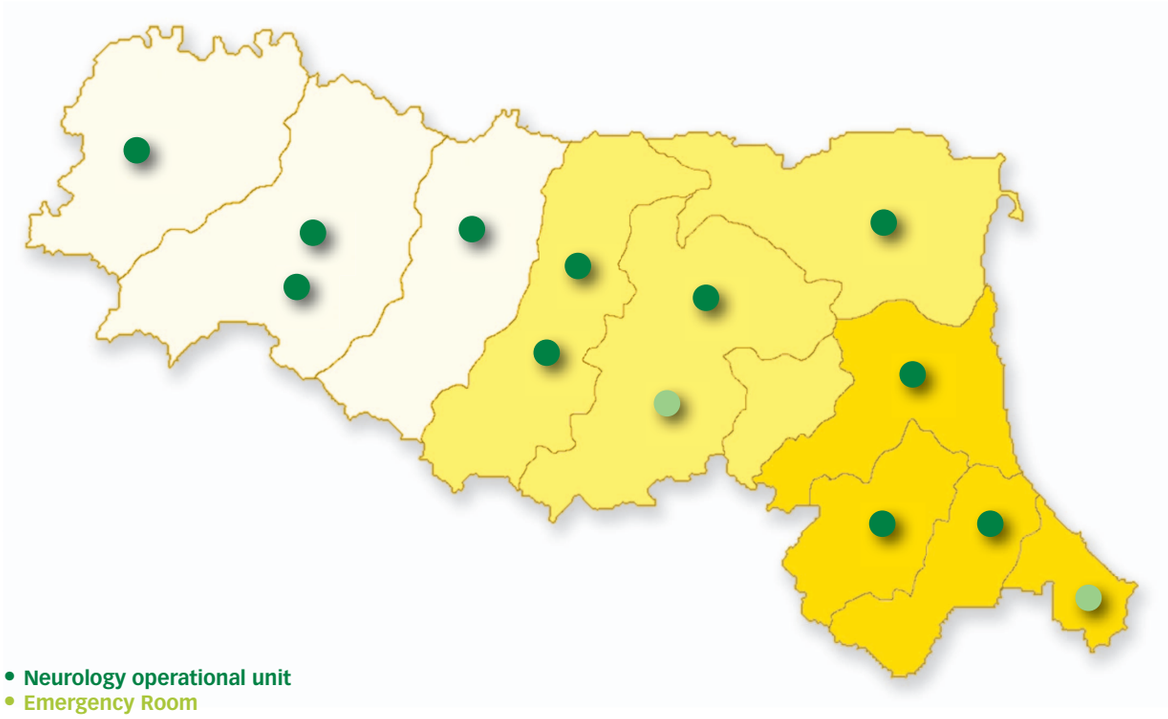
- early identification of stroke symptoms, also through specific training to general practitioners and care continuity physicians, to 118 professionals (operational centre, rescue teams) and to the Emergency Room teams (triage nurses, that first evaluate people admitted to Emergency Rooms);
- a multidisciplinary clinical approach by the involved specialists;
- identification of a stroke care area in hospitals for prompt rehabilitation treatments (within 48 hours) and continuity of care after the acute phase;
- definition of individual rehabilitation programs allowing a global care of the patient through the integration and coordination between hospital and territorial services and between health and social services.

Moreover, the Region has authorized some Centres to use Actilyse drug in the fibrinolytic treatment of acute ischemic stroke.

Since 2007, Emilia-Romagna coordinates the national project "New knowledges and care problems for stroke: a strategic program for research and development" included in the Healthcare Research Program promoted by the Italian Ministry of Work, Health and Welfare. The project aims at creating an interregional network focused on clinical and organizational research for stroke care in order to foster the transfer into clinical practice of knowledges and new information on stroke diagnosis, prognosis, therapy and rehabilitation.

Internet website: *http://www.saluter.it/stroke/*

Centres authorised for fibrinolytic treatment of acute ischemic stroke with Actilyse



- **Neurology operational unit**
- **Emergency Room**

The reorganization of Emergency Rooms

Full accessibility and correct use of Emergency Room facilities is a crucial problem that needs to be faced in a multidimensional logic. The Regional Resolution No. 264/2003 gave indications to Health Trusts to offer care paths alternative to Emergency Room through a better use of existing structures and the implementation of new solutions. Some interventions were identified to improve alternative paths in local Health Districts (Care Continuity Outpatient Units, Primary Healthcare Units with longer opening hours, specialist outpatient treatment upon urgent request by the general practice physician or paediatrician) and in hospitals (nurse triage, intensive short observation, complex outpatient paths and individual participation to costs).

The introduction of the triage function in Emergency Rooms is one of the most efficacious measures to improve accessibility and to treat patients according to definite criteria that allow an intervention prioritization. Standardized implementation of the triage function was enhanced through the use of specifically trained nurse personnel and through Guidelines for an homgeneous classification of access colour codes (defined with the collaboration of emergency area professionals). Expenditure sharing measures (Regional Resolution No. 264/2003) classified the so-called "white codes" as non urgent treatments, that can be considered as normal outpatient treatments even if supplied by Emergency Rooms.

"Regional guidelines on the activities of intensive short observation" were also approved (Resolution no. 24/2005). The efficacy of this organizational solution to make hospitalization activity more appropriate as far as non programmed accesses are concerned, is based on the possibility for Emergency Room personnel to use appropriate diagnostic and therapeutic instruments according to shared guidelines and to control the evolution of patient's clinical conditions for a short period, before deciding if hospitalization is really needed. In past years some intra- and extra-hospital paths for critical patients were also elaborated with 118 Emergency system personnel and specialists, in particular for traumas, heart attacks and strokes, adopting evidence-based models from international experiences.

The Resolution no. 602/2008 provides Health Trusts with indications to reduce inappropriate accesses to Emergency Rooms through strategies aimed at: improving access to appropriate services (first of all to Primary Healthcare Units) through the lengthening of opening hours (to be established on the basis of emergency needs of the reference population); evaluating integration opportunities offered by care continuity physicians; linking the lengthening of opening hours with the needs of people turning to Emergency Rooms (typology and distribution during the day); using communication procedures implemented with the SOLE Project among emergency services and Primary Healthcare Units, and between care continuity and general practice physicians; in this way the general practitioner can follow the patient in the whole care path.

The activities to improve accessibility and appropriateness of Emergency Room services is consistent with indications from the Social and Healthcare Plan 2008-2010: reorganization is actually connected with the integrated planning of hospital and territorial services, giving the opportunity to identify criteria and tools in order to manage avoidable admissions and to improve care times and paths.

In 2007 accesses to Emergency Rooms were 1,774,208 (almost the same as in 2006 = 1,774,416, when the increase rate with respect to 2005 had been 2.5% = 1,730,219). Hospitalization was necessary for 14.4% of these accesses, same percentage in 2006 (in 2005 it was 15%). Accesses in intensive short observation units that did not result in admission were over 56,000 (over 50,000 in 2006).

Emergency Room activity by Health Trust, 2006-2007

Health Trust	2006		2007	
	No. of accesses	% hospitalization	No. of accesses	% hospitalization
Piacenza Local Health Trust	111,512	13.9	111,569	13.9
Parma Local Health Trust	36,712	13.8	38,260	15.3
Reggio Emilia Local Health Trust	91,390	10.6	90,947	11.1
Modena Local Health Trust	195,424	13.3	193,996	13.8
Bologna Local Health Trust	219,226	16.0	228,081	14.5
Imola Local Health Trust	64,790	12.5	61,229	13.1
Ferrara Local Health Trust	88,907	13.6	86,606	13.9
Ravenna Local Health Trust	175,509	13.5	175,745	13.2
Forlì Local Health Trust	57,910	13.1	57,937	12.8
Cesena Local Health Trust	80,478	15.8	79,364	15.2
Rimini Local Health Trust	122,003	12.8	118,389	13.4
Parma University Hospital Trust	79,723	19.3	79,129	19.8
Reggio Emilia Hospital Trust	90,189	13.8	90,006	13.6
Modena University Hospital Trust	106,116	12.5	106,179	13.5
Bologna University Hospital Trust	135,958	19.0	137,217	17.9
Ferrara University Hospital Trust	73,759	21.7	74,052	20.9
Bologna Rizzoli Orthopaedic Institutes Research hospital	44,810	5.4	45,502	5.3
Total	**1,774,416**	**14.4**	**1,774,208**	**14.4**

Source: Ministerial database.

Agreement between Region and private hospitals

The agreement between Emilia-Romagna Region and the Private Hospitals Associations (AIOP-ARIS) regulate the relationships both on the financial side (by determining maximum budgets for provincial areas and specific activities) and the qualitative one (by identifying goals to ensure full integration among the structures involved in the global care network).

For the subscription of the 2007-2009 agreement, a survey was carried out involving Local Health Trusts, to register the needs for hospital care, integrating in the regional budget all the additional local resources that in the past were used by each single Local Health Trust.

In its general part, the agreement deals with access to treatments, payments control and other general aspects, while it considers separately the definition of budgets and services related to high specialty activities – such as heart surgery and neurosurgery -, psychiatric care and the other hospitalization activities not considered as high specialties.

In particular, the agreement on heart surgery and neurosurgery high specialties is under discussion with the four involved health facilities and the AIOP, so at the moment the previous agreement is still valid. For non-complex specialties, local budgets and a total regional budget are being defined for treatments offered to citizens not resident in the area where the facility is located; a regional budget is agreed for the psychiatric area.

To avoid excesses beyond budget limits, the agreement identifies some penalty mechanisms through scalar tariff cutting down.

The 2007-2009 agreement is an outline agreement as the previous ones; the volumes and types of services offered can be more specifically defined through agreements between Health Trusts and private hospitals.

Some significant changes are implemented, for example the merely "historic" concept has been abandoned in the definition of the provincial budget.

Ten years after the implementation of the regional agreements system, local needs are redefined through the direct involvement of Local Health Trusts, a new basis for budget definition is determined, that is more realistic and more connected with the real use and integration of private facilities.

As a consequence, the system of penalty annulment in case of attainment of defined targets – financed through a specific regional fund – is cancelled, and the fund is now integrated in the budget, considering its actual use through the years. Quality goals are updated and maintained (particularly with reference to the contribution of private facilities in reducing surgery waiting times and in responding to hospitalization needs following Emergency Rooms access and for long-term care following discharge from public hospital acute units) and they will affect penalty evaluations by a Joint Commission – the organism that evaluates penalty application and certifies the final net turnover of facilities.

The agreement, that already allocates the total amount for the three years, represents a step forward towards a deeper integration of private facilities in the care network of the Regional Health Service and pushes towards a systematic development of connection paths with Local Health Trusts' services to implement protected discharges also from private facilities.

The 2007-2009 agreement fully integrates the private psychiatric area in the public healthcare system. The number of hospital beds in intensive care units for ordinary inpatient and specialist residential care, and for intensive and long-term care was reconsidered and, in order to better ensure integration with the public network to allow continuity of care, meetings for activities coordination with the participation of representatives from private facilities and from Local Health Trusts' Mental Health Departments are also programmed.

Private healthcare providers also commit themselves to respect the agreements between Emilia-Romagna and the other Italian Regions for the governance of the mobility phenomenon, that represents a national issue.

Regional Observatory for Innovations in Healthcare

The Regional Observatory for Innovations in Healthcare (ORI) was instituted in 2007. It is managed by the Emilia-Romagna Regional Healthcare and Social Agency and has the following objectives:

- to support and guide the adoption of procedures of diagnostic and therapeutic new technologies in healthcare contexts;
- to early identify - through the collaboration with companies and with the international networks of technology assessment agencies - innovative technologies potentially relevant for the Regional Health Service in order to allow the evaluation of their potential implications and the definition of adoption programs that include impact assessment;
- to register and document relevant clinical-organizational innovations adopted by healthcare services, with the aim to foster their knowledge, sharing and possible spreading.

If on the one hand the need to acquire innovative diagnostic-therapeutic technologies or to rearrange organizational settings in order to give proper answers to the evolution of healthcare complex needs can be a positive dynamic element for the whole system, on the other hand it is likewise necessary to timely discriminate true innovations from false ones, and to harmonize their introduction in the healthcare service ensuring easy access throughout the region, avoiding redundant services and guaranteeing economic sustainability.

The Observatory is a network of experts from the Emilia-Romagna Regional Healthcare and Social Agency and from the Health Trusts, involving in particular the Boards of Directors that have to act, according to Regional Law no. 29/2004, as promoters and verifiers of the strategic development of research, innovation and training. The Observatory began to operate in the organization of training initiatives and other courses, the definition of shared methods to elaborate plan for innovative technologies adoption in Trusts, the creation of regional working groups dealing with high technologies adoption.

For further information:
http://asr.regione.emilia-romagna.it/

Goods and services purchase: agreements with Intercent-ER

As established by Regional Law no. 11/2004, in February 2005 the Regional Purchase Agency (Intercent-ER) was activated; 49 regional public bodies have adhered – included all the Health Trusts – thus engaging themselves to acquire goods and services exclusively through the agreements signed by the Agency.

Starting from 2002, the Regional Health Service implemented initiatives to homologate purchase procedures of goods and services in the Health Trusts. This system allows to obtain better economical outcomes and to pursue a progressive reorganization of the functions above Trust level, aimed at the optimization of resources use and expenditure qualification.

This process also led to the creation of the three Emilia-Romagna Vast Areas – North Emilia, Central Emilia and Romagna – and Intercent-ER has become the fundamental support tool for purchase strategies of the Regional Health Service.

In 2007, the value of the contracts activated through Intercent-ER agreements amounted to 190 million Euros, of which 92 million for Health Trusts' contracts related to: ordinary expenditure (stationery, personal computers, phone services, surveillance, food) for 25 million Euros; specific healthcare-related expenditure (vaccines, anti-decubitus systems, antiseptics and disinfectants, laboratory equipments, needles and syringes, growth hormone, intraoperatory radiotherapy devices) for 67 million Euros.

The objective is now to widen the purchase volume through Intercent-ER centralized tenders concerning: phone services, energy, internal and external signs for healthcare facilities with the Regional Health Service logo, drugs, health devices and equipments, special waste collection, databases.

Internet website: *http://www.intercent.it*

SOLE Project (online healthcare)

The planning of a computerized network that connects physicians, paediatricians, hospital and territorial services began in 2003 to ease communication among healthcare professionals and to consequently simplify citizens' access to services, thus improving treatments and continuity of care for patients. The SOLE project will make, as far as possible, information and not people "moving", while always respecting privacy laws.

The computerized network for information exchange

Once fully operative, the network will connect general practice physicians and paediatricians, nursing domiciliary care services, continuity of care services, hospitals, District and hospital general outpatients' departments, hospices, mental health centres and family advisory health centres, giving all of them the opportunity to exchange information on patients' clinical records, specialist diagnostics and visit prescription, medical reports, admissions, discharges, personalized care plans; the network also simplifies administrative procedures.

SOLE network is an integrated network based on the fundamental role of general practitioners and paediatricians as clinical reference points and starters of healthcare pathways. This network will guarantee to general practitioners and paediatricians the comprehensive knowledge of services supplied to their patients in different health services (in order to guarantee continuity of care); it will ease communication and administrative procedures between general practitioners and paediatricians and the Departments of Primary Care; it will widen the opportunity to access virtual libraries to make lifelong learning effective and qualified.

SOLE network will guarantee to Local Health Trusts, to territorial services, to hospital services (of Local Health Trusts, Hospital Trusts, University Hospital Trusts and the Research Hospital "Rizzoli") timely communication from general practice physicians and paediatricians on patients, prescriptions, admission requests, home care requests, integrated management of patients affected by particular diseases (i.e. patients with diabetes, for whom a specific care program is active).

Services already available

As of May 2008, 2,075, physicians and paediatricians are connected within the network. All of them have received a PC, a printer, ADSL line and a software to communicate with Health Trusts.

The following services have already been activated:

- automatic communication from Local Health Trusts to general practice physicians and paediatricians and transmission of the updated register of patients, including choices/repeal notifications;
- communication from general practice physicians and paediatricians to Local Health Trusts on additional services supplied to patients (drips, dressings, vaccinations);
- use of a unified regional catalogue (SOLE catalogue) by general practice physicians and paediatricians, Health Trusts and the Research Hospital for the prescription of outpatient specialist services in order to automatize the phases of information, booking and medical recording;
- computerized management of the system for prescription transmission:
  - general practice physicians/paediatricians communicate to Local Health Trusts the prescriptions for specialist visits and diagnostics;
  - Local Health Trusts automatically communicate the prescriptions to the unified booking centres;
  - Local Health Trusts send medical records back to general practice physicians/paediatricians (giving priority to laboratory and radiology tests outcomes, with the possibility to send images);
- computerized management among general practice physicians and paediatricians and Local Health Trusts of the request forms for clinical tests that require contrast medium;
- unified code list of services offered free of charge, that is available to general practice physicians and paediatricians;
- Local Health Trusts' management of the administrative process for integrated home care, that is possible thanks to the participation of general practice physicians and paediatricians and Local Health Trusts in the patient's treatment since its beginning;
- communication by hospital facilities to general practice physicians and paediatricians on admissions, discharges and brief medical records of services supplied by Emergency Rooms (in full respect of privacy laws);
- testing in some Health Trusts of real time exchange of information on patients with diabetes included in the diabetes integrated care program, among general practice physicians and paediatricians and specialists;
- availability online of the "Regional Clinical Events Index" for general practice physicians and paediatricians, Health Trusts and the Research Hospital to be used for the management of patients' clinical files;
- help desk all day long.

Future objectives

Other 1,075 general practice physicians and paediatricians will be connected in the network. The real time exchange of information on diabetes patients will be progressively spread.

Apart from the direct connection of each general practice physician/paediatrician with the Health Trust's services, SOLE network will keep on testing the link among Primary Healthcare Unit physicians as to allow each of them to access information on patients referring to that Unit. General practice physicians and paediatricians will also be able to consult health documents related to their patients' access to other Health Trusts.

Within 2008 general practice physicians and paediatricians, outpatient specialists and hospital specialists and the Health Trusts' administrative personnel receive a digital signature card to be used to sign prescriptions, medical records, hospital discharge letters.

The system will be completely activated and operating within 2009. The total cost of the project will amount to 34 million Euros and the yearly management will cost 8 million Euros.

Public Trusts for Personal Services

The transformation of Public Institutions for Assistance and Charity (IPAB) into Public Trusts for Personal Services (ASP), established by Regional Law no. 6/2003, is part of a local and regional welfare development process based on the principles of universalism, equity and solidarity aimed at guaranteeing uniform and undeniable rights to citizens. The goal is to create a public network of social and social-health, residential, semi-residential and home care services that is as homogeneous as possible throughout the region and that can strengthen its capacity for response, together with services offered by the private sector.

The reform gives the opportunity to IPABs in possess of the needed Law requirements to become private institutions.

IPABs are public organizations, often established many centuries ago, that arose as "charitable" answer to the need of assistance from the weaker parts of the population. In Emilia-Romagna, in the last years these institutions were transformed to adapt to new care needs brought on by the social-demographic development. Nevertheless, they remained anomalous because they were not connected to any institutional level of government nor to community participation. This led to the decision to transform IPABs into the new Public Trusts for Personal Services, which retain a public legal status in the institutional and governmental responsibility system. ASPs are public bodies entitled to manage and supply the social and social-health services indicated in the District planning with the collaboration of Municipalities.

The transformation process went through various stages:

- the Health District Committees issued transformation programs;
- Public Institutions for Assistance and Charity interested in transforming into the Public Trusts for Personal Services identified in the program, prepared their transformation plans;
- the Public Institutions for Assistance and Charity that possessed the needed requisites and that had chosen this pathway, applied for privatization;
- the Region evaluated the submitted plans and Statute proposals and sent the evaluation outcomes to the interested Municipalities and Public Institutions for Assistance and Charity;
- the Region instituted the Public Trusts for Personal Services.

At present, 226 Public Institutions for Assistance and Charity are still located in Emilia-Romagna: 50 of them will be closed because of long inaction periods or upon specific request; 55 applied to become private organizations; 121 asked to be transformed into ASP, but as a consequence of unifications or merging they will finally be 50.

As of July 1st, 2008, 34 Public Trusts for Personal Services had already been instituted; the remaining 16 are undergoing the final steps of transformation.

The regional Legislative Assembly has defined (Resolution No. 170/2008) the principles and rules regulating the autonomy of Public Trusts for Personal Services; the same Resolution establishes also incompatibility and decadence causes of governance organisms members and the criteria to define wages for the members of the governing bodies.

Public Trusts for Personal Services already instituted, as of July 1st, 2008

Province	District	Institution name	Municipality	Date of institution
Bologna	Bologna	Giovanni XXIII	Bologna	January 1, 2007
Modena	Vignola	G. Gasparini	Vignola	January 1, 2007
Parma	Parma	Ad Personam	Parma	May 3, 2007
Bologna	Bologna	Poveri vergognosi	Bologna	January 1, 2008
Modena	Carpi	ASP delle Terre d'Argine	Carpi	January 1, 2008
Ferrara	Centro Nord	Centro servizi alla persona	Ferrara	January 1, 2008
Bologna	Imola	Circondario imolese	Castel S.Pietro	January 1, 2008
Modena	Modena	Caritas – ASP servizi assistenziali per disabili	Modena	January 1, 2008
Bologna	Pianura Est	Donini-Damiani	Budrio	January 1, 2008
Bologna	Pianura Est	Galuppi-Ramponi	Pieve di Cento	January 1, 2008
Bologna	Pianura Ovest	Seneca	Crevalcore	January 1, 2008
Reggio Emilia	Reggio Emilia	Opus Civium	Castelnuovo di sotto	January 1, 2008
Reggio Emilia	Reggio Emilia	Rete – Reggio terza età	Reggio Emilia	January 1, 2008
Rimini	Rimini Nord	Valle del Marecchia	Santarcangelo di Romagna	January 1, 2008
Ravenna	Faenza	Solidarietà insieme	Castelbolognese	February 1, 2008
Ravenna	Lugo	Bassa Romagna	Bagnacavallo	February 1, 2008
Ravenna	Faenza	Prendersi cura	Faenza	March 1, 2008
Parma	Provinciale	Rodolfo Tanzi	Pama	March 1, 2008
Bologna	Bologna	Irides (Istituzioni riunite infanzia disabilità e sociale)	Bologna	April 1, 2008
Forlì-Cesena	Forlì	Oasi	Forlì	April 1, 2008
Reggio Emilia	Guastalla	ProgettoPersona – Azienda intercomunale servizi alla persona	Guastalla	April 1, 2008
Modena	Mirandola	ASP dei Comuni modenesi Area Nord	San Felice s/P	April 1, 2008
Reggio Emilia	Reggio Emilia	OSEA Opere di servizi educativi assistenziali	Reggio Emilia	April 1, 2008
Rimini	Rimini Nord	Casa Valloni	Rimini	April 1, 2008
Forlì-Cesena	Rubicone Costa	ASP del Rubicone	San Mauro Pascoli	April 1, 2008
Reggio Emilia	Correggio	ASP Magiera Ansaloni	Rio Saliceto	May 1, 2008
Ferrara	Ferrara sud-est	ASP del Delta Ferrarese	Codigoro	May 1, 2008
Modena	Castelfranco Emilia	Delia Repetto	Castelfranco Emilia	June 1, 2008
Ravenna	Ravenna	ASP Ravenna Cervia e Russi	Ravenna	July 1, 2008
Bologna	San Lazzaro di Savena	L. Rodriguez y Laso De' Buoi	San Lazzaro di Savena	JJuly 1, 2008
Parma	Sud-est	Azienda sociale Sud Est	Langhirano	July 1, 2008
Parma	Fidenza	Distretto di Fidenza	Fidenza	July 1, 2008
Ferrara	Ferrara sud-est	Argenta – Portomaggiore "Eppi-Manica-Salvatori"	Argenta	July 1, 2008
Modena	Modena	Patronato pei Figli del Popolo e Fondazione San Paolo e San Geminiano	Modena	July 1, 2008

Information on services: toll free number

The toll free number 800 033 033

Information and communication have a strategic importance for the achievement of the distinctive principles of public health service – universality and fair access to services for all – and the pursuit of appropriateness in the use and delivery of services.
For the purpose of providing fair access to information – as first step to fair access to services – it is necessary to act in the framework of an integrated system.
These are the basis for the creation of a free and unique Regional Health Service telephone number, which was activated in June 2002 in order to guarantee clear and homogeneous information about health and social-health services supplied, the ways of access and the places of delivery all over the region.
The toll free number is available from 8:30 a.m. to 5:30 p.m. from Monday to Friday and from 8:30 a.m. to 1:30 p.m. on Saturday. The call is free of charge all over the country, from both mobile and fixed network.
The Region, thanks to its own information and communication structures and those of the Health Trusts, laid the information and technological foundations for the service management, ensuring its constant and real time updating.
The information service of the toll free number relies on a single database consisting in 2,300 health services/provisions, regional programs, a glossary and a set of standard replies to frequently asked questions.
Phone calls are collected in a call centre, managed by duly trained operators, connected through computer and phone network to the Offices for Relations with the Public of the Health Trusts. This connection allows the call centre to transfer - free of charge - the phone call, if further and more detailed information is necessary.
In the first six years of activity, the services received more than 530,000 calls. In 2007 alone, the received calls for information numbered 113,880 (108,413 in 2006, +4.8%); in the same year, confirming the trend, 42% calls concerned specialist visits, diagnostic tests, therapies, surgery interventions; 14.5% related to health facilities and professionals; 11.4% were on certificates and vaccination information; 7% referred to health campaigns information.
Most calls come from the area of Bologna.

Evolution of the toll free number service

On the basis of the database shared by the call centre service and by the Health Trusts' Offices for Relations with the Public, two projects were activated to publish information on services and provisions on Internet and to connect the toll free number to the phone booking centres for specialist visits and diagnostics. In the future, projects for the connection of the toll free number to social services information points will be implemented as established by the Social and Healthcare Plan 2008-2010.

1) Online guide to services

In November 2006 the "Online guide to services" was published in the web portal of the Regional Health Service (*http://www.saluter.it*) and in all the Health Trusts' websites. Specific information – such as where to go, how to do, what is needed to use health and social-health services supplied by the Regional Health Service – that was previously available only at the call centre and at the Health Trusts, has been revised and is now directly available also to navigators, thanks to an expressly developed search engine. The Guide offers information on Health Trusts, Hospitals, Districts and Offices for the Relations with the Public. Information on specialist visits and diagnostics (not yet available) will be soon added in the Guide.
In 2007, the pages counted 71,592 accesses. The most frequently asked information concerned general practice physicians choice, certificates, vaccinations, health card, youth assistance and counselling services, prescription charges, healthcare for travellers, home care, care during birth.

2) Phone booking of specialist visits and diagnostics

Beginning from March 2007, a new experiment was carried out. The project consisted in transferring the calls requiring information on specialist visits and diagnostics (only those for which phone booking is allowed) to the phone unified booking centres of the Health Trusts; it represents the first step towards the phone booking of specialist visits and diagnostics by means of a single regional access and with standardized paths. From March to December 2007, 2,773 visits and diagnostics booking calls have been transferred from the toll free number to the Health Trusts' unified booking centres.

3) Connection with the social services information points

The future perspective of the Regional Social and Healthcare Plan 2008-2010 is to use the toll free number as a support for welfare development in the local and regional community. One of the main challenges will be the coordination between the toll free number and the other information and access points to social-health services (i.e. Municipalities' information desks for social services and Offices for the Relation with the Public), with particular attention to socially vulnerable groups such as elderly, immigrants and people living in social and economic disadvantaged conditions.

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