



SERVIZIO SANITARIO REGIONALE
EMILIA-ROMAGNA

The Emilia-Romagna Regional Health Service



FACILITIES, EXPENDITURE, ACTIVITIES AS OF 31.12.2013
REPORT ON 4 YEARS OF ACTIVITY (2010-2013)



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Introduction

The annual report you are about to read provides a summary of the activities and achievements of the Regional Health Service, a complex and widespread service equipped to treat and assist thousands of people in its facilities every day. This publication summarizes the numbers, information, and records of the activities of the services and hospitals, the volumes and types of services offered, the cost and performance trends, and levels of quality and effectiveness ensured to meet the needs of citizens' health and welfare.

This report is also a summary of the health professionals' daily commitment to better meeting the health needs and expectations of the population, in an evolving social, demographic and economic context. The population's health care needs change over the years and consequently the regional health system has changed bringing about innovative services thus improving efficiency and quality in care. This innovation is ongoing and timely, although in 2013, for the first time, there was a reduction of the National Health Fund, despite the fact that this Region and its health system were put to the test by the drama of the earthquake. And these are just some of the changes in the context, but they are also the most important ones that the Regional Health Service has had to deal with in recent years, consolidating its growth in quality and its overall sustainability regardless of the difficulties. A representation of the main stages of this process in recent years is provided by the monographic dossier "Four years of regional health": an informal but substantial due diligence report, delivered in advance due to the earlier deadline of the IX Legislature to all the regional community - citizens, volunteers, local authorities, political and social forces, economic sectors, not for profits. For me to be able to retrace the steps, difficulties and achievements in recent years is an honour and a great satisfaction. It is with this same honour that I have tried to best fulfil the task assigned to me by President Errani in 2010, and that comes from pride of being part of our professional community of 62 thousand health service workers. Every day, this community brings its skills into play, using advanced technologies, integrating the various levels of responsibility to organize efficient quality care services that have no equal in Italy. It is no coincidence that the Emilia-Romagna Health Care System in the last four years has achieved performances that have never been achieved by other regions. It is well illustrated by the Ministry of Health's ranking on the performance in the delivery of essential levels of care: the Emilia-Romagna Region, according to the last certified survey (2009 -2012), has always come first. In recent years, therefore, the national cutting edge and leading position of our health care system has been considerably strengthened, stabilizing its leadership, establishing itself as the best Region for health care in terms of goods purchased and services offered. It is also thanks to these standards of excellence that in the new Pact for Health 2014-2016 our regional health parameters were taken as the national reference: it had happened in previous State-Region agreements, and I am sure that it will continue to happen well into the future.

But it is not a question of smugness. If we have been recognized as the regional health service in Italy that has best

been able to meet health care needs with quality, safety and sustainability, we owe it to those who, over these years, have believed in their jobs every day, working with competence, responsibility and also passion. I'm referring primarily to Regional Health Service operators and all the institutions, from regional to local, which have provided a reliable framework and shared health planning, indicating where it was and where it is right to invest and innovate the health system to continue improving care and its organization in the territory. The inroads made during the Legislature began long ago, with a vision and plan for our health care system based on priority to the health of people, effectiveness of care and equal access to services and benefits.

The solid affirmation of the right to health care, also and especially for those who in recent years have been hit the hardest by the economic crisis and by phenomena such as the devastating earthquake or the continuous floods add to what was mentioned above. For all these citizens, since 2010, the Region has temporarily eliminated the payment of the ticket, which had been further increased by the Government in 2011 against the advice of the Regions. Among the many difficulties faced in recent years, the international economic and financial crisis has had serious repercussions for the Italian Health System: for the first time, the National Fund has suffered a reduction producing serious impacts on the Regional Health Service. National and Regional Authorities' health policies have had to adapt to an uncertain framework of planning and resource management. Despite this difficult context from all points of view, the Health Service of Emilia-Romagna has maintained its course, pursuing its health goals with determination, sustainability and quality. These results could not be taken for granted especially if we think that behind us, and not too far in the past, we were able to overcome other great difficulties for the sustainability of our system. In 1996, for example, Emilia-Romagna's health system was identified as responsible for 30% of the entire deficit of the National Health System.

In recent years we have invested in the modernization of the hospital network to ensure greater safety and clinical competence, strengthening the hub and spoke model, the care organization to intensify care and integrating it with primary care services. In this latter area, the main innovation was the establishment of proximity outpatient clinics (Case della Salute), anticipating once again the National Health policy measures. There are already 61 clinics and there will soon be more, to bring even more health care to citizens, extending the working hours for services throughout the day and throughout the whole week. There has been continued investment to further decrease waiting times for appointments and tests, and to ensure greater uniformity over the whole region, and investment will continue in the coming months thanks to new extraordinary measures that all Local Health Trusts are adopting and making operational. There have been significant achievements in the areas of care, with even higher performance achieved in recent years.

Emilia-Romagna, just to mention a few examples, is first in the field of the in-home care for terminally ill persons. It holds



the record for the dissemination and effectiveness in early diagnosis cancer screening, and is above the national average for the quality and the number of transplants and donations of organs and blood. Scientific research has increasingly characterized the daily work even within the Units, not only in university hospitals or Research hospitals (IRCCS) but also territorial ones, bringing care and academic skills together in projects and thus strengthening the irreplaceable relationships and collaborations with the regional university system. The necessary ongoing innovation has also affected the organizational model of the Regional Health system: Regional Health planning is no longer envisioning individual Health Units, self-sufficient but not always efficient (because of being more expensive), but larger Health Trusts. It has already happened in Romagna, where earlier this year a single Health Trust was formed from four previous ones. Centralization is the challenge that has been met, now also in support services and infrastructure: the centralized pharmaceutical warehouse in

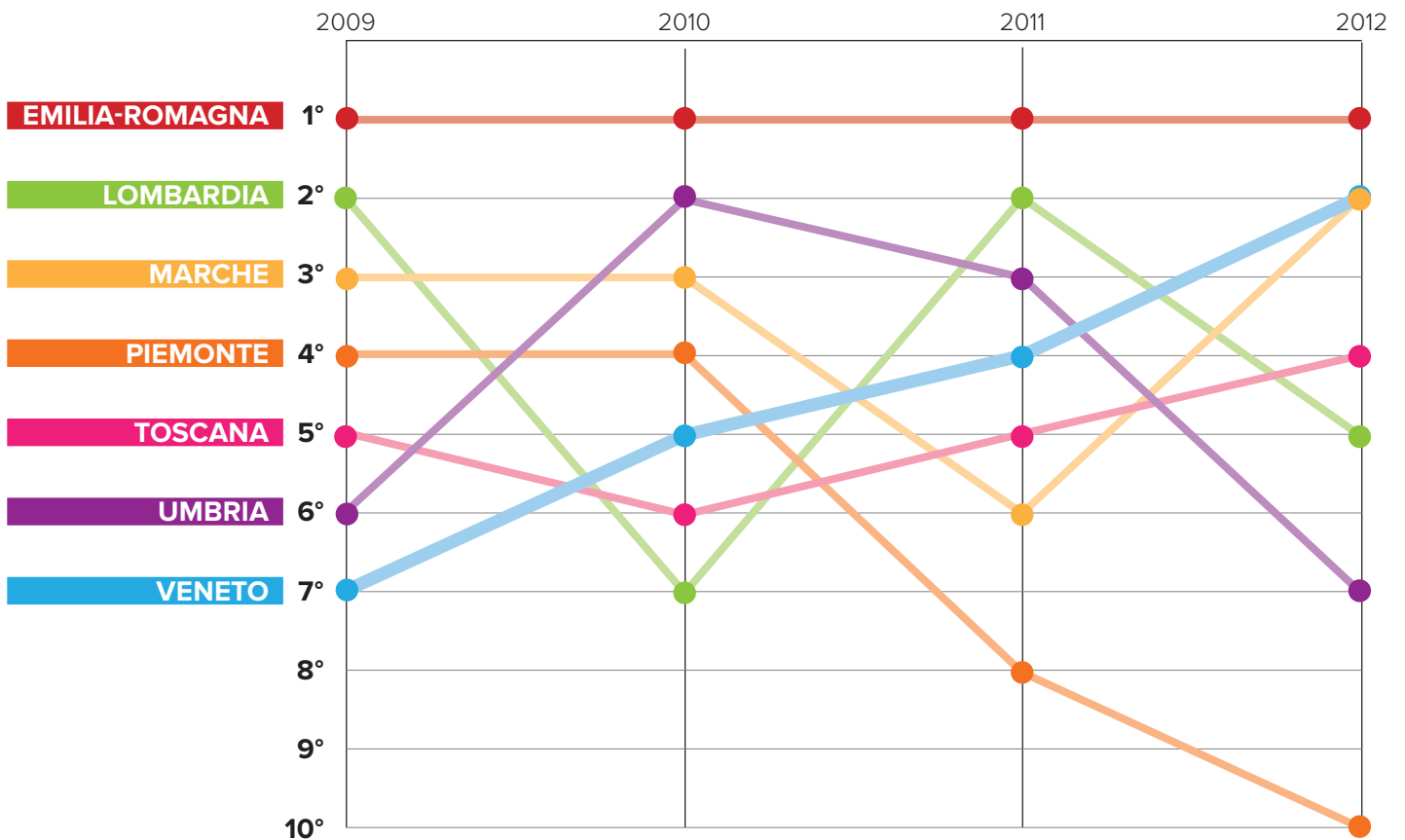
the vast Northern Emilia Area (the largest healthcare logistics site in Italy), or the merging of the many 118 points into just three inter-provincial structures, are just the latest examples of this process.

We also wanted to adopt new processes of administrative efficiency throughout the system, with measures already implemented in the Trusts that we want to keep going, thanks to which resources can be recovered to invest again in health care and prevention.

For all this, looking forward with confidence to the future of our Regional Health system is a possibility. But the way ahead will certainly not be easy. On the contrary: it will always be full of obstacles. To overcome them we will have to do what we do very well and what we have always done up until now: continue to constantly improve and innovate.

Carlo Lusenti
Regional Councillor of Health

Emilia-Romagna ranking in Essential Levels of Care (LEA) with respect to the other Regions – 2009-2012



Source: Ministry of Health – Essential Levels of Care (LEA) Grid period 2009-2012.



The population

In Emilia-Romagna in 2013, the number of residents, 4,452,782, was down slightly (-0.4%) over the previous year (4,471,104). The decline compared to 2012 (total -18,322) is mainly due to a decrease of the resident immigrant population: 536,022 compared to 548,773 immigrant residents in 31.12.2012. The majority is female: 2,295,581 against 2,157,201 males.

New citizens

They are 12% of the population, down slightly compared to 2012 (548,773). There continues to be a significantly higher number of women (283,247, 52.8%) than men (252,775, 47.2%); from 2001-2011 females have become gradually more and more numerous to the point of becoming the majority in 2008 (50.1%). The figure can be linked to care work, often assigned to female caregivers of other nationalities. The increase in the number of new citizens in the Emilia-Romagna Region is much higher than that recorded at the national level where the resident immigrants make up 8.1% as of 31.12.2013.

The analysis of the presence of new citizens in the Local Health Trusts confirms that in recent years: the Local Health Trust with the largest number of resident immigrants is Piacenza with 14.2% of the population (14.4% in 2012), followed by Reggio Emilia with 13.5% (14.1% in 2012), Modena with 13.3% (13.7% in 2012), Parma with 13.2% (13.5% in 2012), then Ravenna, Forlì, Bologna, Cesena, Rimini, Imola, and lastly Ferrara with the same value of 2012, 8.4%.

The most represented countries were also confirmed: the first 5 are Romania, Morocco, Albania, Moldova, and the Ukraine.

Newborns

Newborns in 2013 numbered 38,057 (39,337 in 2012). The birth rate per thousand inhabitants was 8.6, down from the previous year (9) and in line with the national average (8.5).

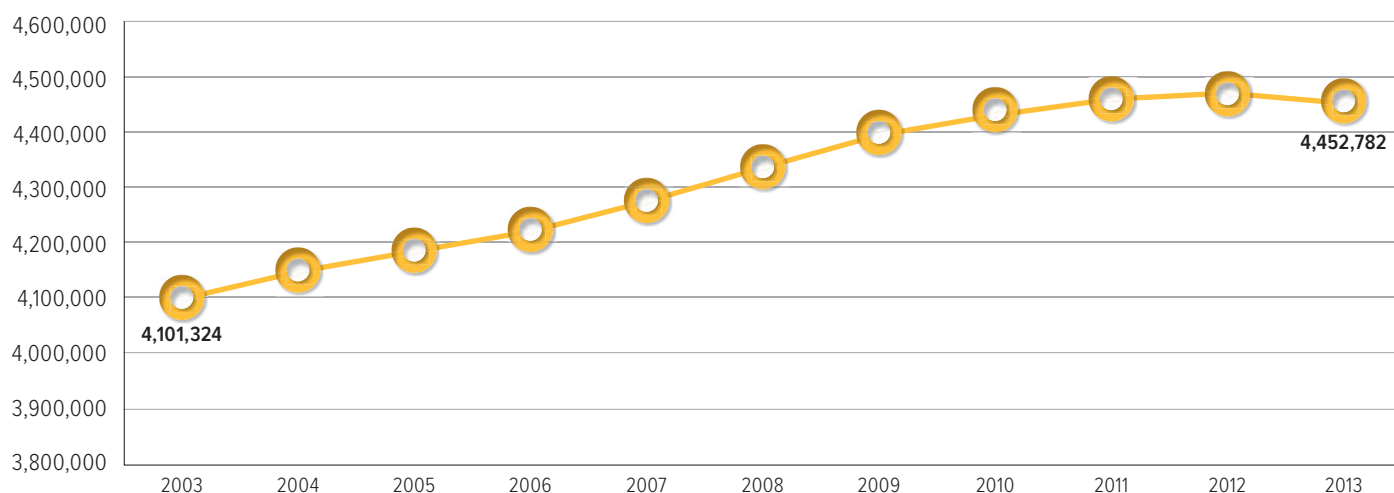
The elderly

Growth was seen in the number of people over 65 years of age: 1,032,128, 23.2% of the population (there were 1,018,053 in 2012, 22.8% of the population). The figure is higher than the national figure that records 21.4% over 65 in 31.12.2013 and has been growing steadily for more than two decades.

There is a high number over 75 years old, 541,762, 12.2% of the population (529,876, 11.9% in 2012) and over 80 years old, 330,435, 7.4% of residents (324,426, 7.3 % in 2012). There are 167,683 of the "very elderly" over 85 years, 3.8% of the population (163,133, 3.6% in 2012).

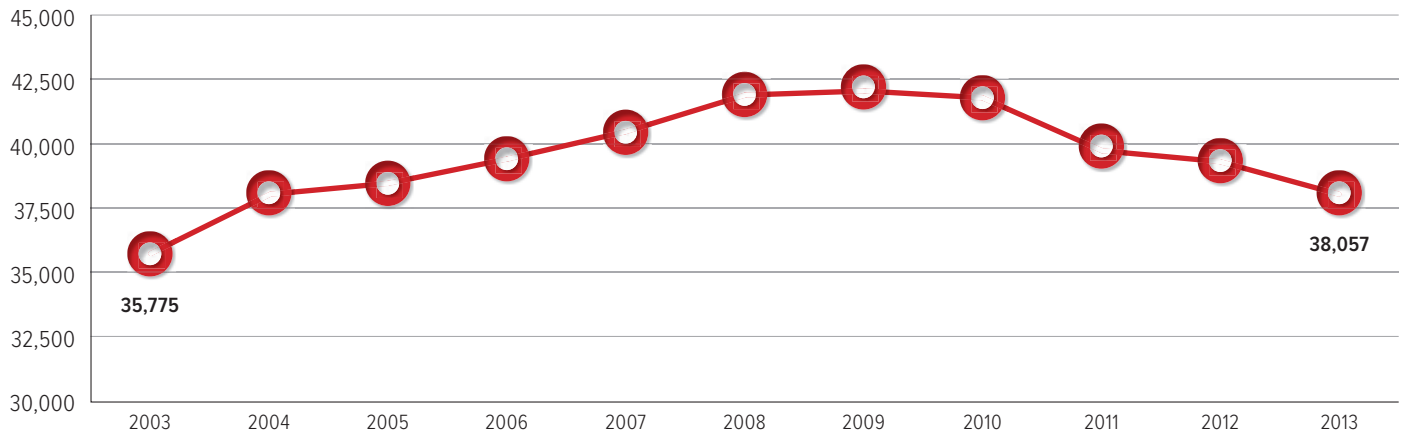
Analyzing the population over 65 years of age per Local Health Trust, at the top ranks, as in previous years, the LHT of Ferrara with 26.8% (26.2% in 2012), followed by Piacenza and Ravenna with 24.5% (respectively 24.2% and 24% in 2012), Forlì with 24.4% (24%), Bologna with 24.3% (24% in 2012), Imola with 23.3% (22.8% in 2012), Parma with 23% (22.5% in 2012), Cesena with 21.9% (21.5%), Modena with 21.7% (21.3% in 2012), Rimini with 21.6% (21.1%) and finally Reggio Emilia with 20.4% (20.1% in 2012).

Resident population in Emilia-Romagna – Period 2003-2013



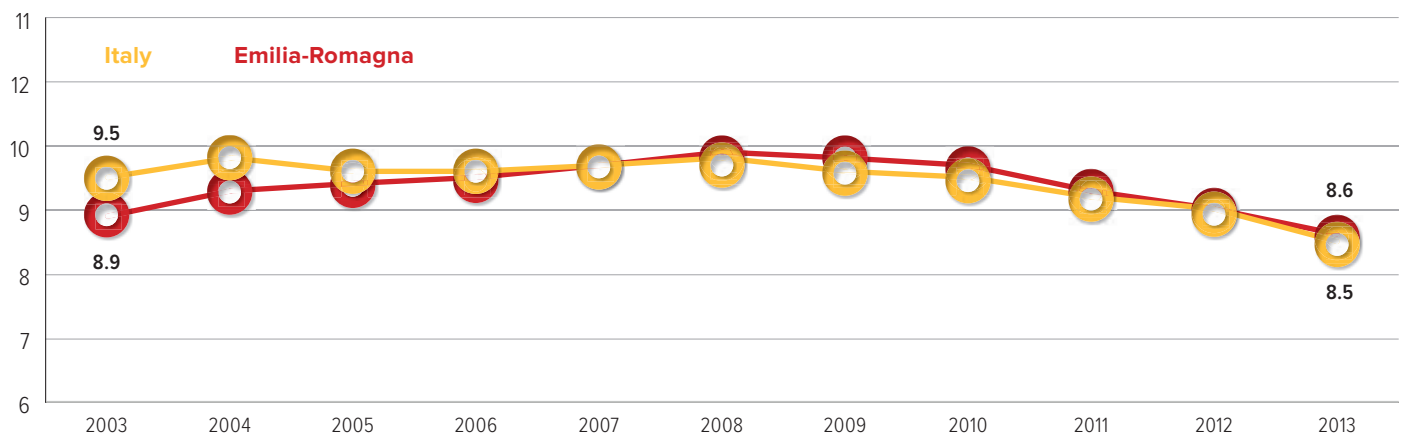


Residents born in Emilia-Romagna – Period 2003-2013



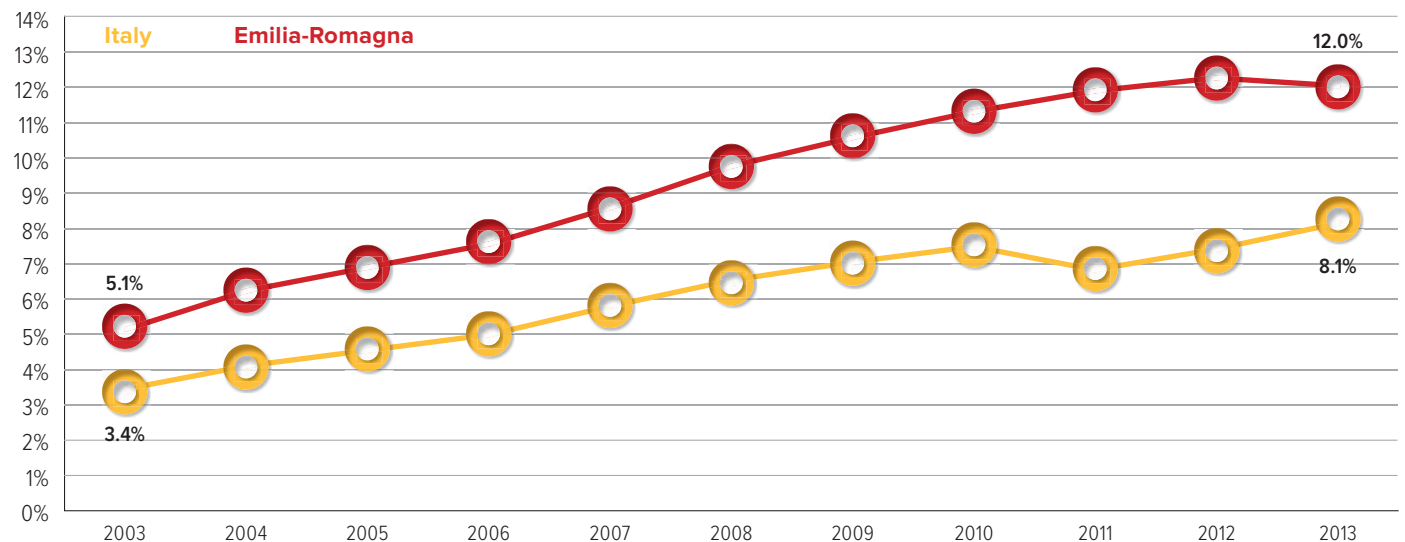
Source: ISTAT

Birth rate per 1,000 inhabitants: comparison between Emilia-Romagna and Italy – Period 2003-2013



Source: ISTAT

Percentage of immigrant population with respect to resident population in Emilia-Romagna and Italy – Period 2003-2013



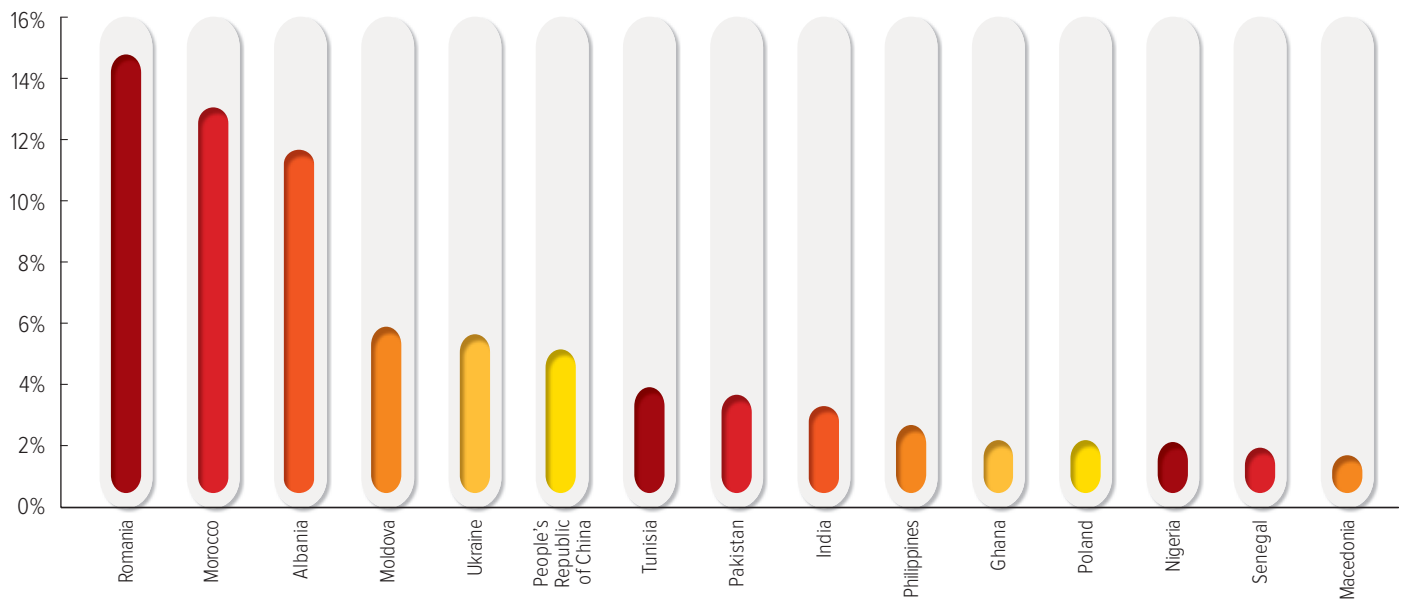
Source: ISTAT



Immigrant population by Local Health Trust – Year 2013

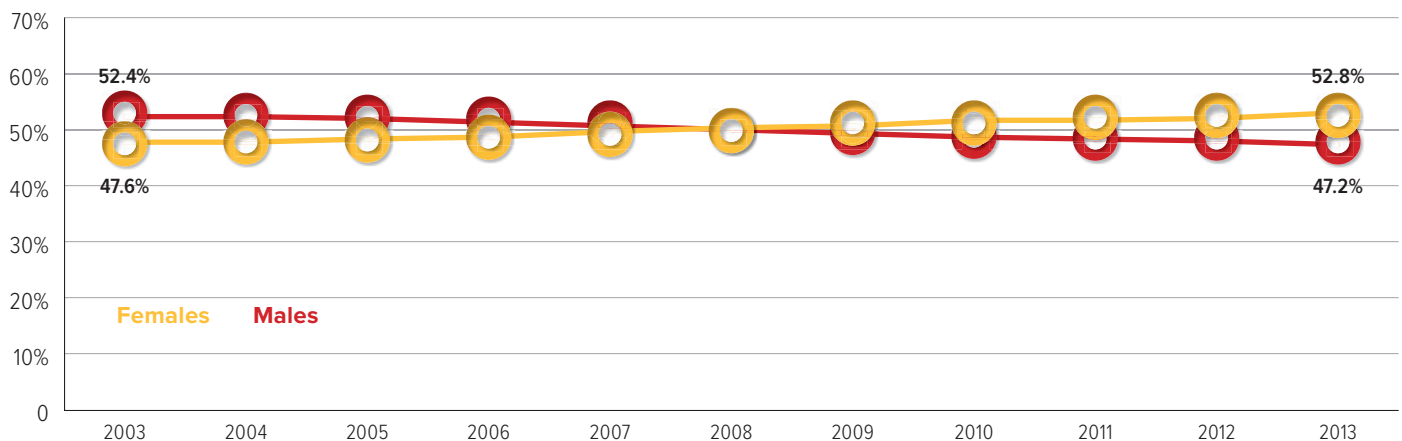
Local Health Trust	Immigrant male residents	Immigrant female residents	Total no. of immigrant residents	Total population	% of immigrants out of total no. of residents
LHT of Piacenza	20,078	21,067	41,145	288,982	14.2%
LHT of Parma	27,714	30,758	58,472	444,285	13.2%
LHT of Reggio Emilia	35,209	37,054	72,263	534,845	13.5%
LHT of Modena	45,087	48,299	93,386	702,761	13.3%
LHT of Bologna	46,288	54,392	100,680	868,575	11.6%
LHT of Imola	5,862	6,911	12,773	132,876	9.6%
LHT of Ferrara	13,013	16,681	29,694	355,334	8.4%
LHT of Ravenna	22,536	24,381	46,917	393,184	11.9%
LHT of Forlì	10,624	11,517	22,141	187,691	11.8%
LHT of Cesena	10,351	11,679	22,030	209,216	10.5%
LHT of Rimini	16,013	20,508	36,521	335,033	10.9%
Total	252,775	283,247	536,022	4,452,782	12.0%

Resident immigrant population by Country of citizenship* – Year 2013



(*) First 15 nationalities as percentage of total no. of immigrant residents.

Resident immigrant population by gender – Period 2003-2013

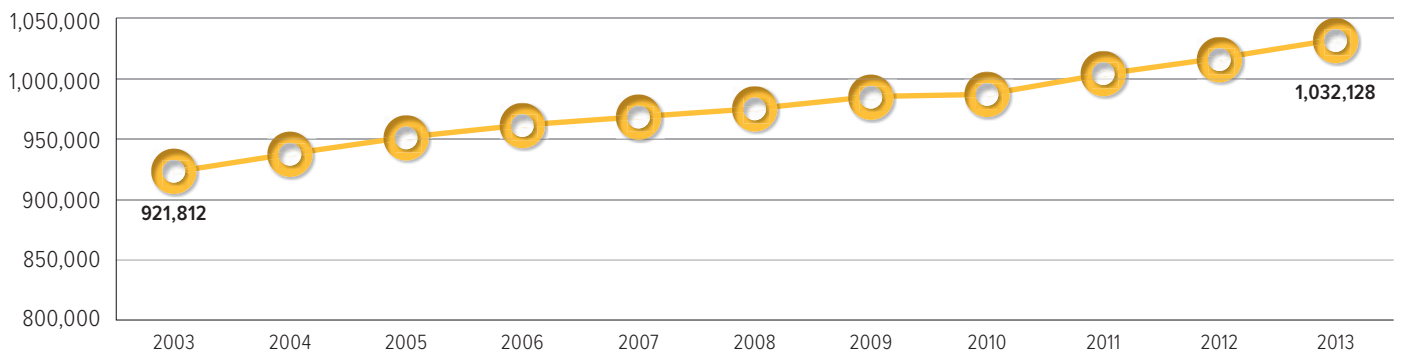




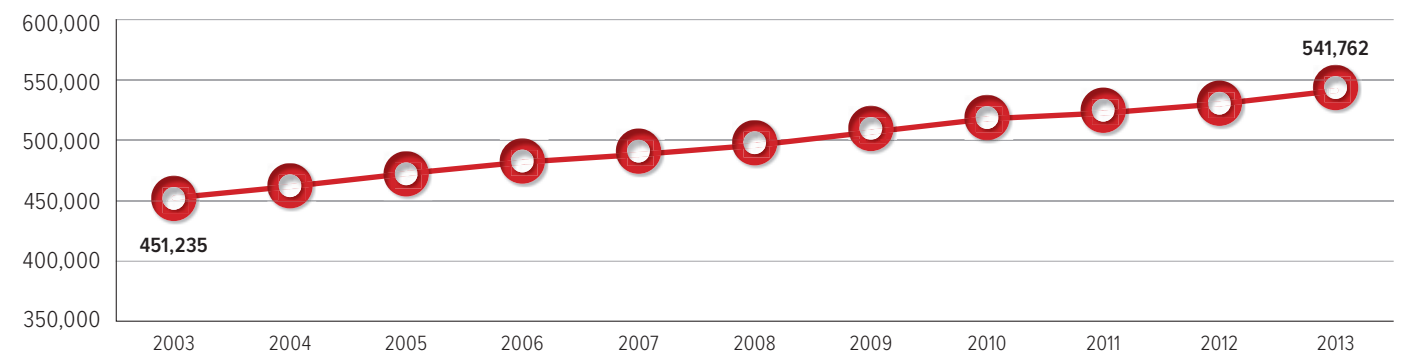
Resident elderly population by Local Health Trust of residence – Year 2013

Local Health Trust	Total population	65 and over	% over 65	75 and over	% over 75	80 and over	% over 80	90 and over	% over 90
LHT of Piacenza	288,982	70,694	24.5%	37,553	13.0%	23,182	8.0%	4,140	1.4%
LHT of Parma	444,285	102,003	23.0%	53,663	12.1%	32,930	7.4%	6,143	1.4%
LHT of Reggio Emilia	534,845	109,345	20.4%	56,656	10.6%	34,561	6.5%	6,225	1.2%
LHT of Modena	702,761	152,654	21.7%	78,868	11.2%	47,798	6.8%	8,645	1.2%
LHT of Bologna	868,575	211,276	24.3%	111,760	12.9%	69,015	7.9%	12,800	1.5%
LHT of Imola	132,876	30,957	23.3%	16,448	12.4%	10,106	7.6%	1,757	1.3%
LHT of Ferrara	355,334	95,106	26.8%	49,750	14.0%	29,932	8.4%	5,106	1.4%
LHT of Ravenna	393,184	96,267	24.5%	52,234	13.3%	31,976	8.1%	5,909	1.5%
LHT of Forlì	187,691	45,828	24.4%	24,473	13.0%	15,100	8.0%	2,752	1.5%
LHT of Cesena	209,216	45,748	21.9%	23,414	11.2%	13,760	6.6%	2,326	1.1%
LHT of Rimini	335,033	72,250	21.6%	36,943	11.0%	22,075	6.6%	3,951	1.2%
Total	4,452,782	1,032,128	23.2%	541,762	12.2%	330,435	7.4%	59,754	1.3%

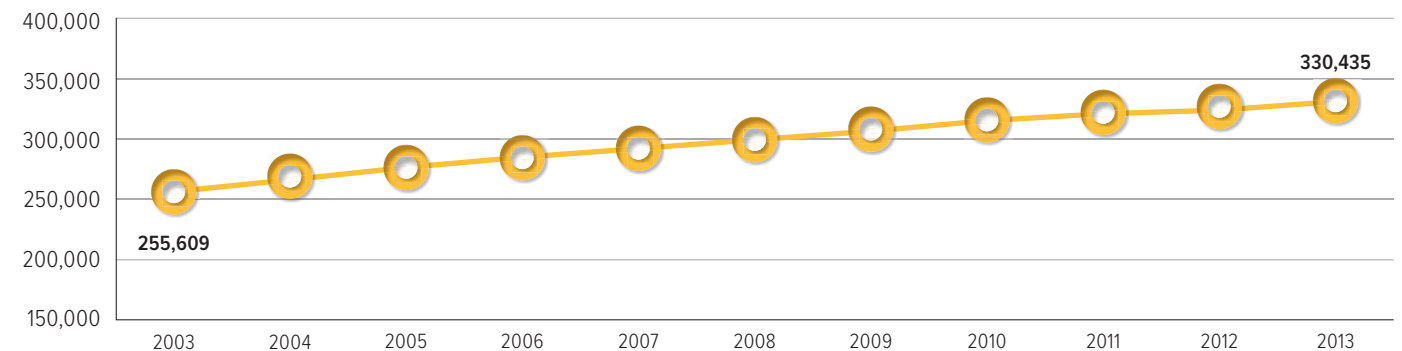
Resident elderly population 65 and over period 2003-2013



Resident elderly population 75 and over period 2003-2013



Resident elderly population 80 and over period 2003-2013





Local Health Trusts, Research Hospitals, public hospital beds, employees

The Regional Health Service of Emilia-Romagna comprises:

- 8 Local Health Trusts. On January 1st, 2014 the Local Health Trust of Romagna (regional law no. 22/2013) was established. It gathers the facilities and services of the Local Health Trusts of Cesena, Forlì, Ravenna and Rimini which starting from that date ceased to be. The other Local Health Trusts are: Piacenza, Parma, Reggio Emilia, Modena, Bologna, Imola and Ferrara. They usually cover the entire provincial area, with the exception of Bologna (Bologna LHT and Imola LHT);
- 4 University Hospitals Parma (Maggiore Hospital), Modena (Policlinico Hospital), Bologna (S. Orsola-Malpighi Policlinico Hospital) and Ferrara (S. Anna di Cona Hospital);
- 1 Hospital Trust: Reggio Emilia Hospital (Santa Maria Nuova Main Hospital);
- 4 Research Hospitals (IRCCS): the Rizzoli Orthopaedic Institute

of Bologna, the Bologna Institute of Neurological Sciences (within Bologna Local Health Trust) the Reggio Emilia Institute of Advanced Technologies and Care Models in Oncology (within the Reggio Emilia Hospital), the Romagna Institute for Cancer Research and Care in Meldola, acknowledged as Research Hospital in advanced therapies for medical oncology on May 2012.

Public hospital beds are 14,442, with 38 Health Districts. The employees in the Regional Health Service are 61,567, in 2012 numbered 61,887. General practice physicians are 3,086, primary care paediatricians are 628.

To rationalise expenditure and to optimise quality and efficiency of technical/logistic services or integrated care functions, three Vast Care Areas were created: Emilia Nord, Emilia Centrale and Romagna. Vast Care Areas do not possess a legal status and consist in a functional grouping of the Health Trusts.

Local Health Trusts: beds, employees, general practice physicians and primary care paediatricians – Year 2013

Local Health Trust	Beds (*)	Employees (**)	GP physicians	Primary care paediatricians
LHT of Piacenza	796	3,649	196	33
LHT of Parma	395	2,638	285	58
LHT of Reggio Emilia	723	3,991	334	87
LHT of Modena	1,462	6,148	514	102
LHT of Bologna	1,431	8,155	586	122
LHT of Imola	559	1,789	94	22
LHT of Ferrara	600	2,877	270	39
LHT of Ravenna	1,127	4,891	276	51
LHT of Forlì	524	2,543	139	27
LHT of Cesena	559	2,964	147	31
LHT of Rimini	955	4,336	235	47
Total	9,131	43,981	3,076	619

(*) Accredited private hospital beds are not included in the table.

(**) Employees of the Romagna Institute for Cancer Research and Care (Ircs - Irccs) of Meldola are included in the quota of the Health Trust of Forlì, while the employees of the Rehabilitation Institute of Montecatone are not employed by the Regional Health service but by the Montecatone RI SpA.

Hospital Trusts, University Hospitals, Research Hospitals: beds and employees – Year 2013

Hospital Trusts, University Hospitals, Research Hospitals	Beds (*)	Employees
University Hospital Trust of Parma	1,154	3,771
University Hospital Trust of Reggio Emilia	907	2,900
University Hospital Trust of Modena	677	2,384
University Hospital Trust of Bologna	1,535	4,806
University Hospital Trust of Ferrara	711	2,479
Research Hospital - Istituto Ortopedico Rizzoli Bologna	327	1,246
Total	5,311	17,586

(*) Accredited private hospital beds are not included in the table.



Regional Health Service employees: professional skills distribution – Year 2013

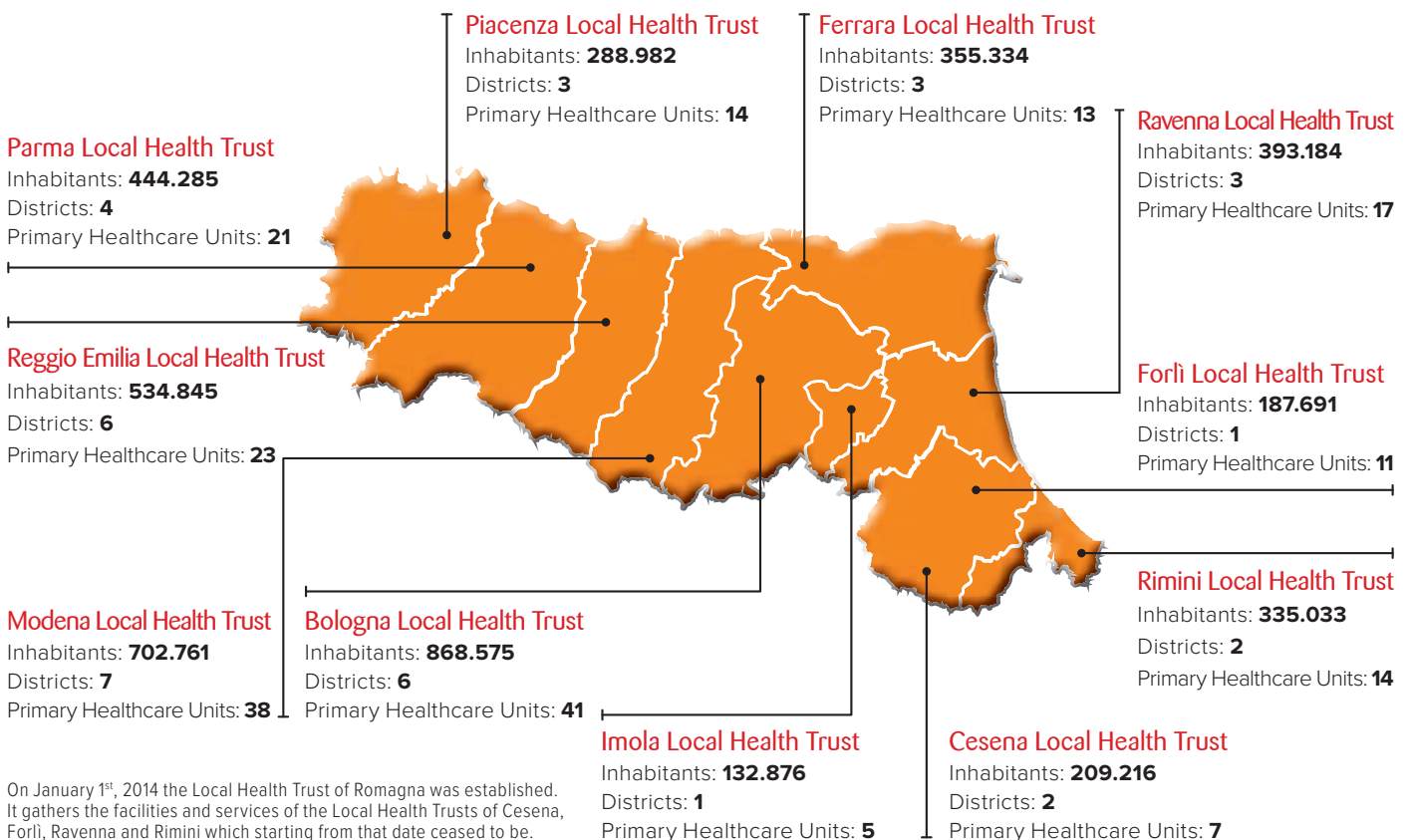
Occupations	Year 2013
Physicians	9,116
Vets	502
Health officers	1,330
Health Service Managers, Technical and administrative managers	570
Nurses	26,353
Health Care technicians	3,323
Prevention personnel	808
Rehabilitation personnel	2,380
Social workers	388
Technicians	4,862
Care assistants	161
Social care workers	5,729
Specialized auxiliary personnel	250
Administrative personnel	5,795
Religious personnel	5
Total	61,567

Organization of the Health District

The Health District is the territorial organization of the Local Health Trust guarantor for the delivery of essential levels of care. The Health District is the framework within which requirements are gathered, services are planned, healthcare and social-health care is provided, and results are assessed. Health District

commissions services to the different Departments: territorial departments (Primary Care Department, Public Health Department, Mental Health and Pathological Addiction Department) and hospital departments. As of 31 December 2013 there are 38 Health Districts and 204 Primary Healthcare Units.

Districts, Primary Healthcare Units, reference population – Year 2013





Expenditure for health care and social services

The total expenditure of the Regional Health Service of Emilia-Romagna in 2013 amounted to 8.616 billion euros, a decrease compared to 2012, the year in which the expenditure was 8.677 billion. For the first time since the creation of the National Health Service, in 2013 there was a decrease in the National Health Fund which consequently generated a reduction in spending; the Region has achieved the break-even, through careful monitoring and control of health care spending, both at a Regional and corporate level, by pursuing policies to streamline spending in the field of pharmaceuticals, human resources policy and management of staff turnover, policies for purchasing goods and services in the Vast Area and through centralized calls for tender of the regional Intercent-ER Agency. The breakdown of expenditure between levels of care represents the percentage of absorption of the three macro-levels. Hospital care, reserved for people who require complex in-patient care, in 2013 accounts for a percentage of resources that is lower than the previous year: 41.3% against 41.8% in 2012.

Instead the resources absorbed by the district level and collective health care in the daily/work environment have increased,

confirming the continuous and constant commitment of the Region to improve services related to disease prevention and care in the territory.

The level that absorbs the greatest percentage of resources continues to be district care, that saw an increase over the previous year: 54.05% (in 2012 it was 53.6%). This increase is particularly evident because it regards the resources allocated to measures in favour of vulnerable groups such as the elderly, physically disabled, mentally disabled and terminally ill. Collective health care in the daily/work environment absorbs 4.6% of the total resources (in 2012 it was 4.5%). The methodology used for processing the data is the same for both 2012 and for 2013: starting in 2012, in fact, for that which regards services financed by the Regional Fund for long-term care, the costs also include the portion financed with regional resources, in addition to the share of expenses related to the Lea financed by the Regional Health Fund.

The total expenditure per capita for residents in 2013 amounted to 1935.06 Euros and showed a slight decrease compared to 2012 (-0.3%). *(For trend of spending over the years, see the dossier "Four years of health care").*

Expenditure by levels and functions of care – Year 2013

Levels of care	Cost in thousand Euros in 2013	% of total	Per-capita cost Euros in 2013
Primary care (contracting general practice physicians, continuity of care and paediatricians)	496,034	5.76%	111.40
Territorial emergency services	142,283	1.65%	31.95
Territorial pharmaceutical services	923,193	10.71%	207.33
Supplementary care and prosthesis	135,159	1.57%	30.35
Specialist care including emergency care not followed by admission	1,541,922	17.90%	346.28
In-Home care	262,062	3.04%	58.85
Healthcare for women, families, couples (Family Advisory Health Centres, community paediatricians)	77,369	0.90%	17.38
Psychiatric care	376,991	4.38%	84.66
Rehabilitation for disabled	184,351	2.14%	41.40
Care for drug addicts	76,731	0.89%	17.23
Care for elderly	386,539	4.49%	86.81
Care for terminally ill persons	30,827	0.36%	6.92
Care for people with HIV	5,832	0.07%	1.31
Hydrothermal treatment	17,965	0.21%	4.03
Total Health District care	4,657,258	54.05%	1,045.91
Total hospital care	3,562,875	41.35%	800.14
Total general health care in daily/work environments	396,356	4.60%	89.01
Total of care levels for residents	8,616,490	100%	1,935.06

The calculation of the per-capita cost refers to regional resident population as of 31/12 (self-service statistics).

Population as of 31/12/2013: 4,452,782

NOTES

- The cost of prison health care, which amounted to 21,244 million Euros in 2013, is not included in the per capita figure.
 - For care activities financed through the Regional Fund for non self-sufficient people, costs include the share financed by regional resources.
 - Specialist care level does not include the expenditure for diagnostic tests carried out as part of screening programs (mammographic, cervical and colorectal), estimated around 17 million Euros. This expenditure is included in total general health care in daily/work environments.
- The breakdown was done at full cost, namely Health Trust general costs were re-assigned proportionally to healthcare functions.



Payment periods for suppliers

The average times of payments were more than halved compared to 2012 and reduced to about one-third compared to December 2011. In 2013, 1 billion and 150 million euros were released, reducing the average regional payments in December to 91 days for health goods and hospital equipment and 96 days for contracted services. A year earlier, in December 2012, the average time for regional payments amounted to 230 days for health goods and equipment and 199 days for the contracted services.

A turning point in solving the problem of payment times came with the Decree Law 35/2013, converted into Law 64/2013, with which the State ensured liquidity for payment on 31 December 2012 of the entities of the National Health Service. In 2013, the Emilia-Romagna Region obtained cash advances for a total of 806,364 million euros, fulfilling all the obligations prescribed by the regulations. In July 2013, the Regional Government also arranged for an extraordinary cash dispensing, amounting to more than 244.5 million euros.

The Health Trusts proceeded immediately to the payment of invoices included in the payment plans. Subsequently, the Health Trusts have complied with the reporting obligations to creditors and publication under the Decree Law 35/2013. In December 2013 a further cash dispensing amounting to 100 million was prepared by the Region following the transfer from the State of the reward quota (75 million) following the positive assessment of compliance relative to 2011. The stock of debt of the Health Trusts to suppliers of goods and services in December 2012 was approximately 1 billion euros; in December 2013 it was reduced to 263 million.

Again in December, the Region submitted a request to the Ministry of Economy and Finance for a further advance of cash, relative to 2014 funds, amounting to 140 million. The Regional Government has already allocated these resources to the Local Health Trusts with resolution 882/2014. *(For the schedule of payment times over the years, see the dossier "Four years of health").*

Average payment periods for suppliers of goods and services (in days) – Year 2013

Local Health Trust	2013	
	Health goods and hospital equipment	Contracted services
LHT of Piacenza	90	90
LHT of Parma	90	90
LHT of Reggio Emilia	90	90
LHT of Modena	90	90
LHT of Bologna	98	99
LHT of Imola	90	90
LHT of Ferrara	80	80
LHT of Ravenna	90	90
LHT of Forlì	90	90
LHT of Cesena	90	90
LHT of Rimini	90	90
University Hospital Trust of Parma	90	90
University Hospital Trust of Reggio Emilia	80	80
University Hospital Trust of Modena	90	90
University Hospital Trust of Bologna	90	90
University Hospital Trust of Ferrara	135	210
Research Hospital - Istituto Ortopedico Rizzoli Bologna	75	75
Regional average value	91	96



Purchases via Intercent-ER

The Intercent-ER Agency is a way to manage purchases of goods and services through innovative telematic tools, in order to promote and support the process of optimization of purchases and manage the technology platform set up by the Region. Intercent-ER stipulates framework agreements under which the selected supply companies undertake to accept the conditions and the determined prices, orders for delivery up to a predetermined maximum quantity of goods or services. The Intercent-ER Agency thereby acts as a regional centre

for purchases for the Regional Health Trusts. Even in 2013, as in previous years, the health expenditure was confirmed as the main area of intervention for the Intercent-ER. In particular, framework agreements covered all the Health Care Trusts and the spending carried out by them through these agreements amounted to 34% of purchases of goods and services for a total value of 433 million euros. The value, which saw an increase over the previous year (189 million) allowed the Local Health Trusts to save 63 million euros.

The Regional Fund for non self-sufficient people

The total regional spending in 2013 for non self-sufficient people was 460.2 million and includes measures funded by the Regional Fund and the National Fund for non self-sufficient people. The total expenditure also includes resources remaining from previous years, both regional and national. Compared to 2012, a total of 8.6 million more was spent overall (1.9%): +2 million euros for the elderly area; +5.3 million for the disabled area and 1.3 million for transversal measures.

The increase marks a turnaround in spending compared to the last two years in which there was a decrease in overall spending. The restoration, from 2013, of the National Fund for non self-sufficient people contributed to the overall increase in resources used.

The total expenditure was distributed as follows: 65% was intended for measures for the elderly (total 299.8 million), 33.2% to the area of disability (total 152.7 million) and 1.7% to transversal

measures dedicated to the elderly and disabled (total 7.7 million). For 2014, the Emilia-Romagna Region allocated in the Regional Fund for non self-sufficiency (Frna) 120 million of its own additional resources (in addition to the 310 million euro of the Regional Health Fund), for a total of 430 million and 600 thousand euro (the same proportion allotted in 2013). For 2014 as well, the resources of the Regional Fund for non self-sufficient people was higher than the total of the National Fund (overall share for all regions, 350 million euros). The national quota recognized for Emilia-Romagna is 26.6 million: the total funding of the Regional Fund for non self-sufficiency is for 2014, therefore 457.2 million (compared to 452.3 million in 2013). This is the breakdown for each Local Health Trust: Piacenza (29.4 million euros), Parma (42.4), Reggio Emilia (46.1), Modena (64.1), Bologna (89.1), Imola (12.5), Ferrara (37, 4), Romagna (109.3 million: of which 39.2 in Ravenna, 19.3 in Forlì, Cesena 18.8, 31.8 in Rimini).

The Regional Fund for non self-sufficient people: resources used in million Euros, areas of intervention – Year 2013

Area of intervention	Resources used from the Regional Fund for non self-sufficient people	Resources used from the National Fund for non self-sufficient people	Total resources used euros/million	% of total resources used in 2013
Residential care for the elderly	208.47	0.00	208.5	45.3%
In-home care for the elderly	75.42	12.87	88.3	19.2%
Access and handling	2.13	0.88	3.0	0.7%
Total for the elderly sector	286.02	13.7	299.8	65.1%
Residential care for the disabled	70.3	0.0	70.3	15.3%
In-home care for the disabled	72.1	7.9	80.0	17.4%
Access and handling	1.9	0.4	2.4	0.5%
Total for the disabled sector	144.25	8.4	152.7	33.2%
Emersion and qualification of care work of family assistants	0.97	0.00	1.0	0.2%
Counselling service and financial support for home adaptation	0.85	0.35	1.2	0.3%
Social network support programs and prevention programs for subjects at risk	5.5	0.0	5.5	1.2%
Total for cross sector activities	7.36	0.3	7.7	1.7%
Totals	437.63	22.5	460.2	100.0%



Care and pharmaceutical expenditure

Pharmaceutical expenditure

In 2013, the public pharmaceutical expenditure decreased by -3.5% compared to 2012. This result was achieved through a 5% decrease in the net expenditure contracted with the Regional Health Services (pharmaceuticals dispensed by pharmacies in the territory with Health Service prescriptions), mainly due to a number of patent-expired drugs, while the prescriptions increased by 1.3%. Expenditure for the direct distribution of Class A medicines (after hospitalization or a specialist consultation, for chronic diseases, in home and residential care, dispensed by pharmacies on behalf of the Local Health Trusts on the basis of contracts) increased by 0.6% overall, due to the introduction of new high-priced pharmaceuticals. The hospital expenditure increased by 5.5% because of the increase in consumption which was particularly affected by immunosuppressive, antiviral and oncological drugs, some of which are innovative and newly released on the market. At the national level, in 2013, the increase in prescriptions (number of prescriptions) of the Regional Health Service-contracted pharmaceuticals was equal to 2.6% and the net expenditure decreased by 2.8% (source: National Agency for Health Services - AGENAS).

The per capita cost

The net cost per capita for Regional Health Service-contracted pharmaceuticals in Emilia-Romagna was lower than the national average: 124.3 euros against 152.3 (source: National Agency for Health Services - AGENAS).

Generic medicines

The loss of the patent of a pharmaceutical and the subsequent marketing of generic medicines has resulted in a significant reduction in price and this allows for appropriate, safe, effective, low cost care. The Emilia-Romagna Region has promoted the increased use of these drugs resulting in a containment of Regional Health Service-contracted pharmaceutical expenditure and opportunities to employ the resources saved in new high-cost drugs and in other areas of the health system. In 2013, spending for generic medicines was 51% of the total contracted expenditure while in 2005 it represented only 15%; the percentage of the total consumption of pharmaceuticals distributed instead increased from 26% in 2005 to 68% in 2013.

The Regional Pharmaceutical Commission and the Regional Therapeutic Handbook

The goal of pharmaceutical care is to promote the appropriate use of pharmaceuticals, in particular drugs with the most solid evidence of their effectiveness. This is done through the Regional Pharmaceutical Commission activities and its many working groups that systematically assess the evidence of efficacy, define the risks and benefits of each treatment, equally favouring efficacy and safety in the pharmaceuticals' best cost/benefit ratio. The Regional Therapeutic Handbook publishes all the decisions of the Regional Commission. In late 2013, the Handbook contained 169 documents regarding technical and scientific support of treatments: 32% of the documents concerned antineoplastics and immunomodulators, 15% were pharmaceuticals that act on the nervous system, and 10% were pharmaceuticals for the cardiovascular system.

Safe use of pharmaceuticals

In the year 2013, a Program of Clinical Audits was begun, with field training on the safe use of pharmaceuticals, with particular reference to the process of Pharmaceutical Recognition and Reconciliation. A regional Recommendation on the Safe Handling of Anti-neoplastic Drugs was drafted including the transposition of Ministerial Recommendation no. 14. A Personal Card pilot project was conducted for the drug therapy to be used in the integrated clinical pathways for the patient. Specific training events on the issue of the safety of drug therapies were organized.

Pharmacovigilance

In 2011 educational activity on pharmacovigilance continued, with training courses for healthcare workers to support reporting of adverse reactions to medicines.

This activity is coordinated by the Regional Pharmacovigilance Centre and involves all Health Trusts and the National Network of the Italian Drug Agency. In 2011 the vaccine-vigilance sector was also implemented and now consolidated.

In addition many pharmacovigilance projects in different sectors, both in hospitals and at a territorial level, are underway. Healthcare workers' pharmacovigilance reports during 2013 numbered 3,136, with an increase of 58% with respect to the previous year.

Most frequent reactions: dermatologic, systemic and gastrointestinal reactions. During 2013, 72 reports per 100,000 inhabitants (73 at a national level) were made.

Expenditure for medical devices

Medical devices, essential to patient care in the same way that medicines are, are characterized by a wide diversity of products, rapid obsolescence, technological complexity and variability of clinical use in relation to the skill and experience of those who use them. For such products, in the absence of national lists and reference prices, it is extremely important to identify effective government actions.

In 2013, the expenditure incurred by the Regional Health Service for medical devices was 437 million (443 million euros in 2012). Confirmed, as in 2012, the categories with the highest impact and spending were: prosthetic implantable devices and products for osteosynthesis (24%), devices for administration, sample-taking and collection (11%), devices for the cardiocirculatory apparatus (10%), finally the active implantable devices (7%) and devices for general and specialist treatments (6%).

The regional system of medical devices is composed of the Regional Commission, the Health Trust Commissions and professional working groups. The Observatory on Safety monitors reports of accidents in the use of medical devices. The number of reports submitted by health professionals has been increasing steadily since 2010, a sign of a growing awareness: in 2013 there were 319 (303 in 2012).



Pharmaceutical expenditure by type and percentage variation– period 2012-2013

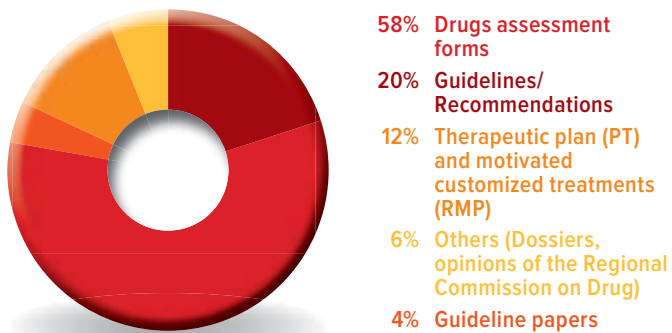
	2012	2013	% variation
Contracted pharmaceutical net expenditure	590,288,929	560,567,262	-5.0
Direct distribution to the citizen expenditure for class A* medicines	225,812,561	227,157,750	0.6
of which by Health Trusts' pharmacies	202,519,974	201,816,359	-0.3
of which "on behalf" of RHS	23,292,587	25,341,391	8.8
Total territorial pharmaceutical expenditure	816,101,490	787,725,012	-3.5
Hospital pharmaceutical expenditure*	413,426,956	436,010,127	5.5
Total regional pharmaceutical expenditure	1,229,528,446	1,223,735,139	-0.5

* Oxygen not included.

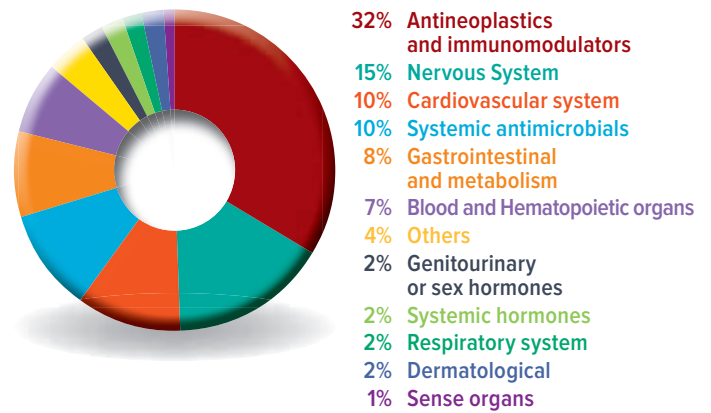
Per-capita contracted pharmaceutical expenditure: the comparison between Emilia-Romagna and Italy – Year 2013

Emilia-Romagna	124.3 euro
Italy	152.3 euro

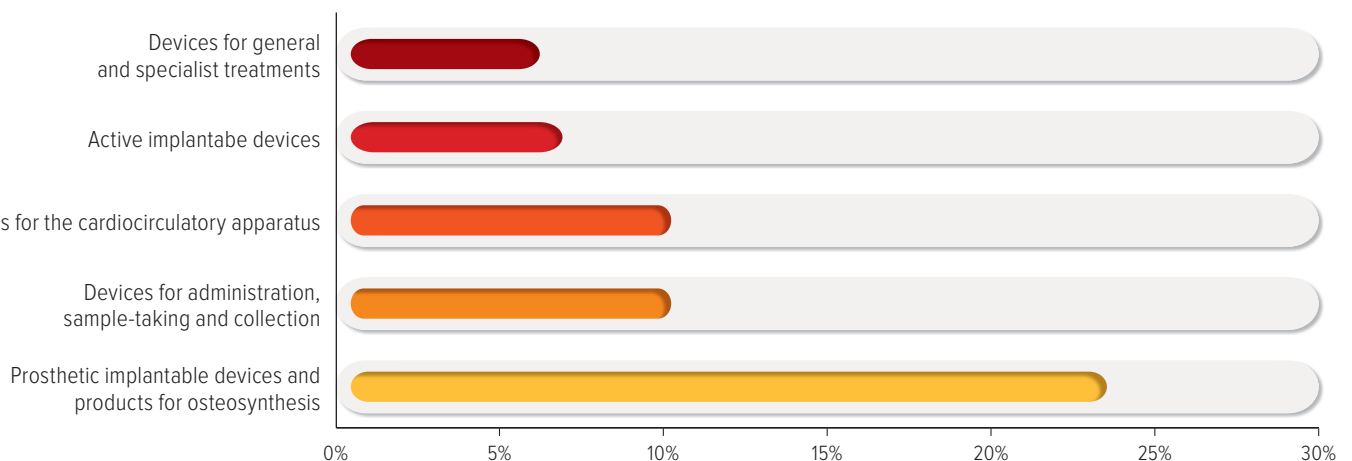
Regional Therapeutic Handbook: type of documents – Year 2013



Regional Therapeutic Handbook: document distribution per therapeutic area – Year 2013



Medical Devices: first five categories with the highest expenditure out of total expenditure – Year 2013





Investments for healthcare and social health buildings

Between 1991 and 2013 investments to modernise, adapt and implement the Regional Health Service's technological and structural network amounted to 2.6 billion Euros.

Overall investments relate to 650 interventions implemented by the Regional Health Trusts for new constructions, renovations, operational and legislative adaptations for safety and accreditation of the hospital network and facilities on the territory, adaptation of technologies and initiatives for the freelance profession within public hospitals.

Of these 650 interventions, 70% have been concluded, 10% are in progress, 20% are in the planning stage.

Of these 2.6 billion Euros, 70% has been allocated to new constructions or expansions, 15% to renovations, 8% to technologies, 7% to legislative adaptations.

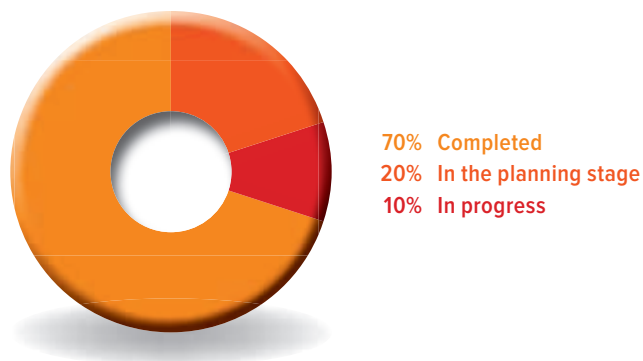
In addition starting from 2008 a further, 125 million euro have been overall invested in social care and social health facilities in our territory. Of these resources 12% (15 million) come from the State and 13% (16 million) from the Regional Administration, 69% (87 million) from implementation bodies (Municipalities, Public Organizations for Services to Citizens - ASP, third sector) and the remaining part from other sponsors (Banks or donations). Overall planned interventions are 164, more than 50% from Municipalities with an investment of 52 million Euros, 15% from ASP (Public Organizations for Services to Citizens) equal to 18 million euros, 18% from Foundations (23 million) and 11 % from Social Cooperatives (more than 14 million Euros) and by Volunteering Associations, Religious Bodies and Private-public companies. 65% of interventions is completed, 28% in progress and only 7% in the planning stage.

Investments for interventions in healthcare and social health buildings implemented by the Regional Health Service Period 1991-2013

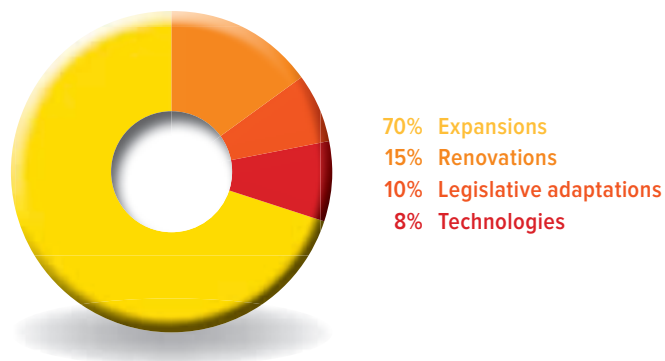
Implementing body	State funds	Regional funds	Implementing body funds	Other funds	Total of funds
LHT of Piacenza	93,783,291.43	21,838,270.08	15,309,591.94	950,280.69	131,881,434.14
LHT of Parma	49,875,544.09	8,225,758.20	58,829,294.52	1,000,000.00	117,930,596.81
University Hospital Trust of Parma	119,594,419.40	23,001,867.54	28,686,121.38	127,709.66	171,410,117.98
LHT of Reggio Emilia	65,017,109.77	11,215,400.91	50,488,816.58	136,410.46	126,857,737.72
University Hospital Trust of Reggio Emilia	76,219,641.65	21,616,119.70	41,040,418.47	2,000,000.00	140,876,179.82
LHT of Modena	165,597,795.72	28,624,532.24	100,895,879.10	8,556,766.79	303,674,973.85
University Hospital Trust of Modena	71,179,381.20	12,473,313.40	17,472,087.21	-	101,124,781.81
LHT of Bologna	206,482,972.05	35,951,027.69	116,649,203.76	17,680,797.53	376,764,001.03
University Hospital Trust of Bologna	155,721,307.20	46,322,014.09	95,783,526.03	12,910,000.00	310,736,847.32
Istituto Ortopedico Rizzoli Bologna	14,132,504.55	7,446,976.67	10,267,162.57	24,664,125.00	56,510,768.79
LHT of Imola	22,470,523.55	12,270,800.53	15,036,338.07	-	49,777,662.15
LHT of Ferrara	55,747,613.15	17,280,232.20	18,912,584.36	-	91,940,429.71
University Hospital Trust of Ferrara	80,190,122.13	55,227,994.38	9,027,668.70	-	144,445,785.21
LHT of Ravenna	104,962,775.94	25,396,485.80	19,951,718.21	437,481.96	150,748,461.91
LHT of Forlì	69,137,702.08	20,612,093.74	57,764,346.27	-	147,514,142.09
LHT of Cesena	47,506,716.04	13,485,839.10	16,716,339.21	1,978,524.58	79,687,418.93
LHT of Rimini	86,624,741.20	36,196,045.99	44,652,144.93	973,000.00	168,445,932.12
Total	1,484,244,161.15	397,184,772.26	717,483,241.31	71,415,096.67	2,670,327,271.39



Investments for interventions in healthcare and social health buildings implemented by the Regional Health Service: implementation status
Period 1991-2013 – % values



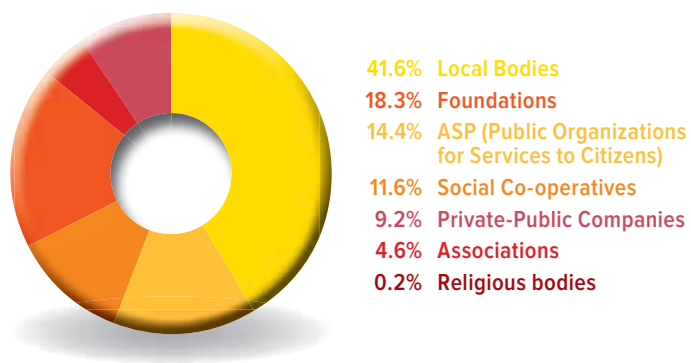
Investments for interventions in healthcare and social health buildings implemented by the Regional Health Service: funds allocation by area of intervention
Period 1991-2013 – % values



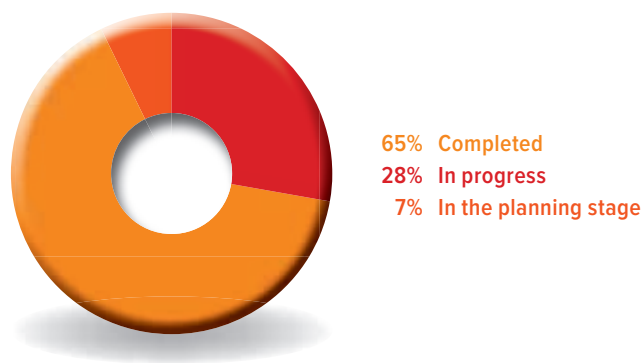
Investments for social care and social health facilities by type of users – Period 2008-2013

	Elderly	Disabled	Immigration	Poverty/social exclusion	Under age	Total
Piacenza	3,229,923.35	1,862,686.70	445,134.42	-	-	5,537,744.47
Parma		3,586,741.13	770,000.00	299,734.56	3,609,893.87	8,266,369.56
Reggio Emilia	14,838,570.23	1,859,410.00	612,551.14	230,834.14	286,000.00	17,827,365.51
Modena	11,892,202.28	9,449,104.01	2,144,271.49	-	2,990,636.49	26,476,214.27
Bologna	11,418,727.39	4,151,568.11	2,562,949.03	-	2,210,624.33	20,343,868.86
Ravenna	15,588,090.37	2,048,282.49	-	1,233,598.40	1,562,620.36	20,432,591.62
Forlì-Cesena	3,588,151.45	3,899,926.97	1,698,038.27	-	933,500.00	10,119,616.69
Rimini	1,268,553.56	952,574.48	359,188.24	521,320.00	1,705,995.88	4,807,632.16
Total	70,586,915.62	30,160,656.55	9,161,132.59	2,285,487.10	13,519,270.93	125,713,462.79

Investments for social care and social health facilities: fund allocation by the implementing bodies
Period 2008-2013 – % values



Investments for social care and social health facilities: planned intervention progress from 2008 to 2013 – % values





Hospital Care

As of 31st December 2013 beds in public and accredited private hospitals amounted to 19,016 – 14,442 public (75.9% of the total) and 4,574 accredited private beds (24.1%).

In 2012 beds amounted to 19,945 (15,359 public -77%; 4,586 accredited private -23%). The small increase in 2011 is due to the conclusion of the accreditation process for private hospitals, that counts all authorised beds, not only those used by the Regional Health Service (3,016 in 2011).

For every 1,000 inhabitants there were 3.46 beds for acute care (3.62 in 2012) and 0.82 beds for long-term care and rehabilitation (0.85 nel 2012).

13,906 beds (73.1% of the total) were reserved for standard admissions; 3,631 beds (19%) for long-term care and rehabilitation; 1,479 beds (7.8%) for day hospital treatments and day surgery. The hospitalization rate for 1,000 inhabitants registered a little decrease with comparison to 2012 and 2011: 123.5 (125.3 in 2012, 127.5 in 2011) for standard admissions and 37 (38.8 in 2012, 41.7 in 2011) for day hospital treatments.

A little decrease is also registered for hospitalizations compared to 2012 and 2011: 791,316 (734,117 for acute care, 21,940 for rehabilitation, 35,259 for long-term care) while in 2012 they amounted to 806,880 and 834,009 in 2011.

The attraction index of hospitals in Emilia-Romagna for people coming from other regions was 14% (13.7% in 2012).

Waiting times for planned admissions

The Region monitors waiting times for some planned admissions: uterine neoplasms surgery (surgery within 30 days, 66.5% of the total), breast cancer (surgery within 30 days, 73%), colorectal cancer (surgery within 30 days, 81%), coronary angioplasty (surgery within 60 days, 94%), aortocoronary bypass (surgery within 60 days, 85.4%) carotid endarterectomy (surgery within 90 days, 90.5%), hip replacement (surgery within 90 days, 57.1%),

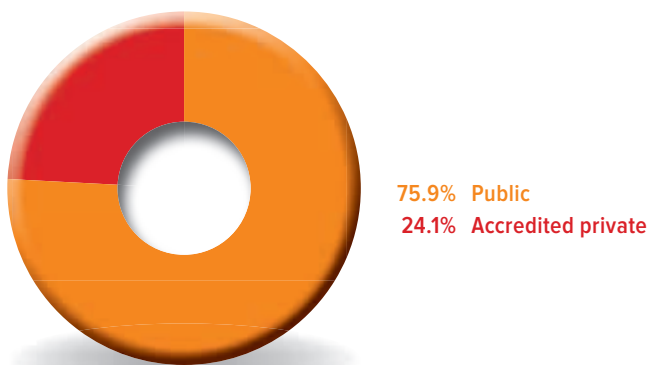
Goal achievement in the cardiology and vascular areas was satisfactory. In the area of oncology, standard performance levels have not yet been reached; however it should be considered that waiting times are counted starting from the diagnosis, but pre-surgical therapies may be needed. As for hip replacement, the national standard target has not yet been achieved; paradoxically, this is due to the strong attraction index of the IRCCS Rizzoli in Bologna: the great number of patients from all over the Country lengthens waiting times.

Emergency room Units

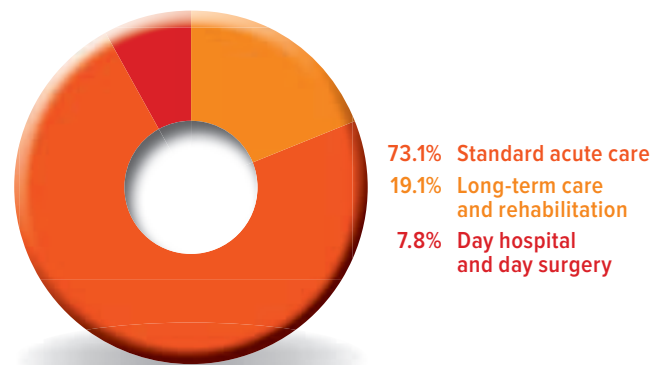
In 2013 there were 1,821,564 visits to Emergency Room units (1,862,192 in 2010). This figure underlines the relevance of the activity. Hospital admissions following visits to Emergency Rooms accounted for 15.2%, same percentage as 2012 and 2011.

Beds in public and accredited private hospitals – Year 2013: 19,016

Beds – Year 2013



Admissions – Year 2013





Beds per 1,000 inhabitants as of 31/12/2013

Acute care	3.46
Long-term care and rehabilitation	0.82

Hospital Admission rate per 1,000 inhabitants

Standard	123.5
Day Hospital	37.0

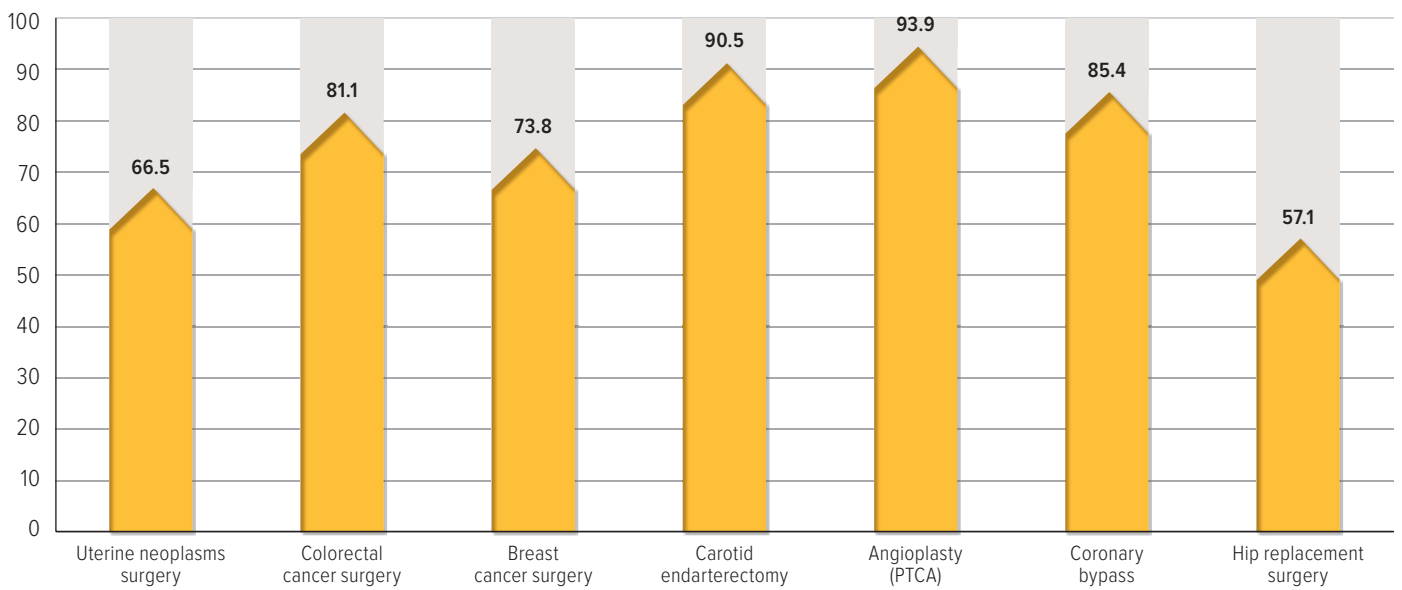
Admissions

Acute care	734,117
Rehabilitation	21,940
Long-term care	35,259
Total	791,316

Extraregional attraction index

Year 2013	14.0
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Percentage of planned surgery performed within time limits set by national standards – Year 2013





Outpatient specialist care

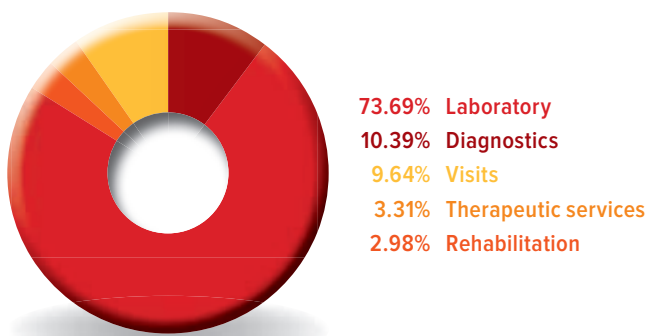
In 2013, in Emilia-Romagna, 63,055,537 outpatients were given specialist care in public and private accredited facilities, over 2 million fewer visits and treatments with respect to the previous year (65,301,801).

A motivation behind this reduction is due to the fact that from 2012, emergency care treatments (about 2 and a half million) are no longer included in the specialist information flow. But also the introduction in 2011 of the new tickets, imposed by the Government despite the common negative opinion of the Regions, is one of the causes of the decline in use among people who are not exempt. The measure, in fact, was yet another effect of the economic crisis and there is the risk of the public health system losing its attractiveness with respect to the private system for some services. The most relevant percentage in the services provided, as in previous years, regards the laboratory with 73.69% (it was 74.54% in 2012), whose overall rate is approximately 27.68% of the total of those of all the specialty areas. Following this was diagnostics with 10.39%, an increase compared to 2012 (9.96%), whose economic value is the highest of all the specialist areas

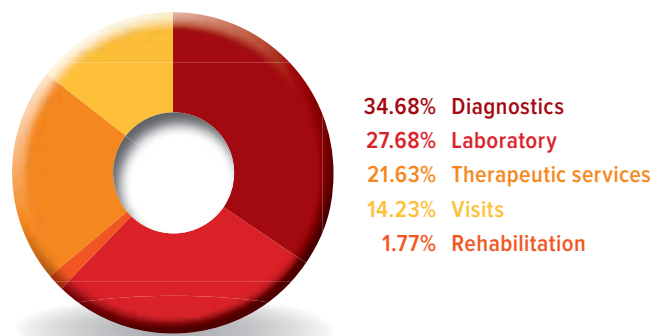
with 34.68% of the total; visits with 9.64% (9.47% in 2012), economic value of 14.23%; therapeutic services with 3.31% (3.17% in 2012), the economic value of 21.63%; rehabilitation with 2.98% (2.87% in 2012), the economic value of 1.77%. In 2013, again based on regional indications (Resolutions 925/2011 and 1532/2006), Health Care's work to shorten waiting times continued. The regional legislation defines the commitments with respect to waiting times: 24 hours for emergencies, 7 days for deferrable urgent cases, 30 and 60 days respectively for programmable visits and examinations. The regional legislation also requires that special attention be given to the issue of the appropriateness throughout the entire process, from prescription to delivery of the service. The monitor on waiting times has been active for years, with special attention given to visits and examinations that are more critical with respect to delivery times. On the website www.tdaer.it it is possible to see, ex-post, every three months, the waiting times projected for citizens at the time of booking in a sample week for 41 delivered services for the most critical cases in terms of waiting times.

Specialist medical services – Year 2013: 63,055,537

Type of service – Year 2013



Economic values of services – Year 2013





Specialist care service by type and economic value – Year 2013

		Services		Amounts	
		Number	%	Value	%
Visits	First visit	3,700,261	5.87	84,588,880	9.48
	Follow-up visit	2,377,405	3.77	42,385,268	4.75
	Total visits	6,077,666	9.64	126,974,148	14.23
Diagnostics	Instrumental diagnostics with radiation	2,152,426	3.41	112,620,648	12.62
	Instrumental diagnostics without radiation	3,995,093	6.34	185,933,621	20.84
	Biopsy	72,156	0.11	4,502,894	0.5
	Other diagnostics	330,421	0.52	6,326,683	0.71
	Total diagnostics	6,550,096	10.39	309,383,845	34.68
Laboratory	Blood samplings	4,430,610	7.03	13,447,153	1.51
	Clinical Chemistry	33,510,032	53.14	142,861,300	16.01
	Haematology/clotting	5,635,272	8.94	29,934,219	3.36
	Immunohaematology and transfusions	131,631	0.21	3,837,148	0.43
	Microbiology/virology	2,113,750	3.35	23,845,290	2.67
	Anatomy and pathologic histology	508,338	0.81	14,045,074	1.57
	Genetics/cytogenetics	134,619	0.21	18,977,230	2.13
	Total Laboratory	46,464,252	73.69	246,947,415	27.68
Rehabilitation	Diagnostic rehabilitation	104,114	0.17	1,334,908	0.15
	Rehabilitation and functional re-education	1,399,601	2.22	13,126,866	1.47
	Physical therapy	296,479	0.47	602,888	0.07
	Other rehabilitation	77,365	0.12	700,935	0.08
	Total rehabilitation	1,877,559	2.98	15,765,597	1.77
Therapeutic treatments	Radiotherapy	389,158	0.62	38,379,984	4.3
	Dialysis	444,954	0.71	66,947,383	7.5
	Odontology	153,072	0.24	8,046,504	0.9
	Transfusions	19,604	0.03	1,504,296	0.17
	Out-patient surgery	268,222	0.43	63,961,778	7.17
	Other therapeutic treatments	810,954	1.29	14,144,146	1.59
	Total therapeutic treatments	2,085,964	3.31	192,984,091	21.63
Total	63,055,537	100	892,055,097	100	



Proximity outpatient clinics

Concentrating efficient services with proximity of care: this is the philosophy that underlies the Proximity outpatient clinics. Envisaged by the resolution of the Regional Council 291/2010, the Proximity outpatient clinics are designed to represent a point of reference for citizens' access to primary care, as places that receive patients and direct them toward services, but also provide ongoing care, the management of chronic diseases and the completion of the main diagnostic pathways that do not require hospitalization.

The Proximity outpatient clinics fall under the supervision of the District, which is managed by the Department of Primary Care. They can differ in terms of complexity (and offer different services) in relation to the population density of the area in question and their geographical location.

In the Proximity outpatient clinics, in fact, care is provided through the joint action of general practitioners, paediatricians, territorial specialists, nurses, midwives, social care workers and front office staff.

According to a recent regional survey carried out in August of 2014, in Emilia-Romagna there are 61 functioning Proximity outpatient clinics, including 26 "small" ones, 21 "medium", and 14 "large". Most of these are concentrated in the Vast Area Emilia Nord (30 in total), in particular, in the area that falls under

the jurisdiction of the Parma Health Trusts with 15 functioning Proximity outpatient clinics. At present, 120 projects for Proximity outpatient clinics are planned for the local Health Trusts (59 Proximity outpatient clinics in the Health Trust's planning).

There are three types of Proximity outpatient clinic:

The 'small' Proximity outpatient clinic

It also guarantees general medical assistance 12 hours a day (8 a.m. till 8 p.m.), nursing care, 1st level family advisory health centre with obstetrician, in-home care co-ordination department, and unified booking centre (CUP). A social worker is also available.

The 'medium' Proximity outpatient clinic

It also guarantees outpatient specialist services, out-of- hours service (24 hour assistance), paediatric clinic, public health clinics for vaccinations and screening activities. Possible presence of a gym for physical exercise.

The 'large' Proximity outpatient clinic

It guarantees all healthcare activities relating to primary care, public health and mental health. It ensures a response to health and social-health needs that do not require hospitalisation.

Proximity outpatient clinics in the Health Trusts planning (August 2014)

Local Health Trust	Operating Proximity outpatient clinics				Projects for Proximity outpatient clinics				Planned Proximity outpatient clinics			
	Small	Medium	Large	Total	Small	Medium	Large	Total	Small	Medium	Large	Total
LHT Piacenza	1	0	0	1	4	4	0	8	5	4	0	9
LHT Parma	5	5	5	15	7	1	3	11	12	6	8	26
LHT Reggio Emilia	7	1	0	8	6	2	1	9	13	3	1	17
LHT Modena	4	1	1	6	4	3	2	9	8	4	3	15
Vast Area Emilia Nord	17	7	6	30	21	10	6	37	38	17	12	67
LHT Bologna	2	6	1	9	4	7	3	14	6	13	4	23
LHT Imola	1	1	0	2	0	0	0	0	1	1	0	2
LHT Ferrara	1	0	2	3	0	1	2	3	1	1	4	6
Vast area Emilia Centrale	4	7	3	14	4	8	5	19	8	15	8	31
LHT Romagna	5	7	5	17	1	2	2	5	6	9	7	22
Total	26	21	14	61	26	19	14	59	52	40	28	120



Family counselling services

In Emilia-Romagna, there are 191 family service facilities, 37 Spaces for Youth (aimed at young men and women aged between 14 and 19 years) and 17 Spaces for immigrant women and their children (aimed at the population of recent immigrants or those with special difficulty accessing services).

The strengths of these services are their multidisciplinary nature, team work, their widespread presence in the territory, in collaboration with other services or local institutions, many unrestricted and free services offered, designed to ensure quality of access and ongoing commitment. According to the data from the SICO (Information System of Family services, active since 2012) for the year 2013, users who have turned to counselling services (Family services, Spaces for Youth, and Spaces for immigrant women) amounted to 355,892 of which 20.1% are originally immigrants.

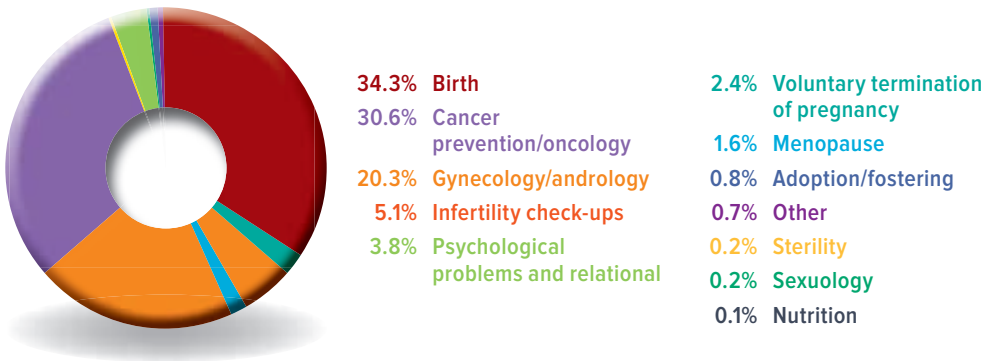
The number of services performed (777,599 in 2013), broken down by area show a prevalence of those related to birth

(pregnancy, support for breastfeeding and postpartum services, 34.3%). Following this are activities for the prevention of cancer (30.6%) and gynecology/andrology (20.3%). The services related to contraception represent 5.1% of the total, psychological problems and relational, 3.8%, and those relating to termination of pregnancy (certifications, talks and visits) 2.4%.

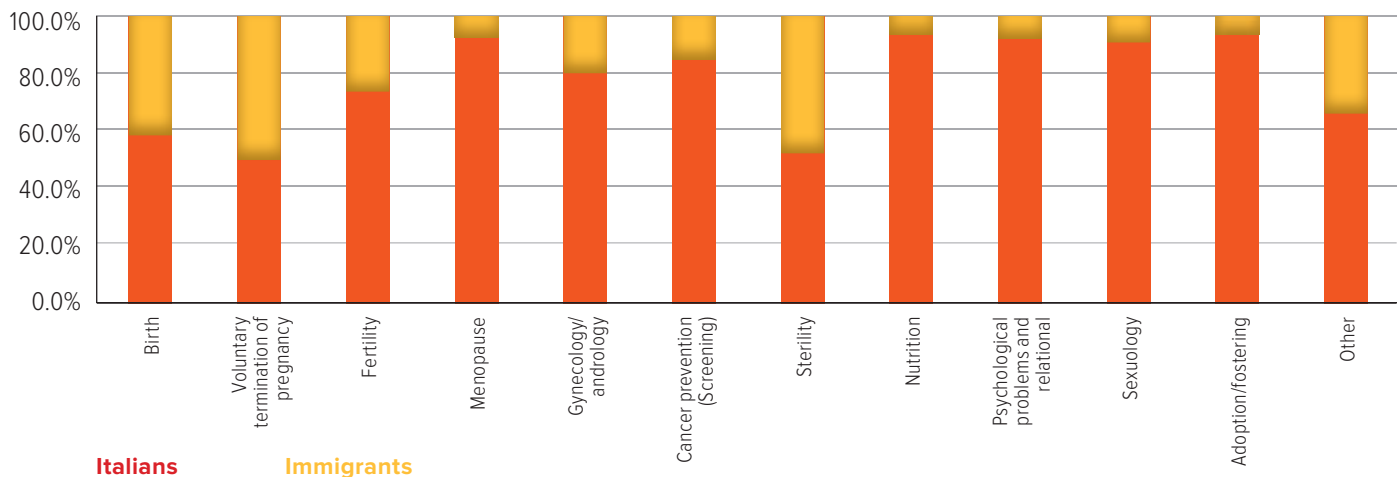
Analysing the nationality of the users according to different areas of activity, it is clear that the percentage of immigrant users is higher for the voluntary termination of pregnancy (50.7%), for the infertility area (47.9%), for the childbirth area (41.7%) and for birth control (27.1%).

The distribution by age group of users who turn to counselling services shows that the majority is concentrated into the classes 25-29 years (10.5%), 30-34 years (12.2%), 35-39 years (13, 3%), 40-44 years (12.7%) and 45-49 years (11.5%). The highest percentage of immigrant users is in classes 25-29 years (38.5%), 20-24 years (35.0%) and 30-34 years (33.3%).

Areas of activity – Year 2013



Areas of activity based on users' citizenship – Year 2013





In-home care

In 2013 the number of in-home care patients amounted to 102,531, a little decreased in comparison to the previous year (103,728) due to the lower available funds allocated at a national level.

Nevertheless, as far as 65 years old people, the share of handled patients for integrated in-home care services puts Emilia-Romagna among the first places in the national scenario. The number of patients handled (i.e. the in-home care paths planned for a person or for a family of cohabitants, according to the level of care needed) is 125,725 (130,637 in 2012) with a total of more than 2.5 million services provided by assistants for in-home care. Considering the specific rates by age group, people aged over 80 use in-home care services the most - 160 for every

1,000 inhabitants in the 80-84 age group (169 in 2012), 294 in the 85-89 age group (314 in 2012), 439 in the 90 -94 age group (461 in 2012).

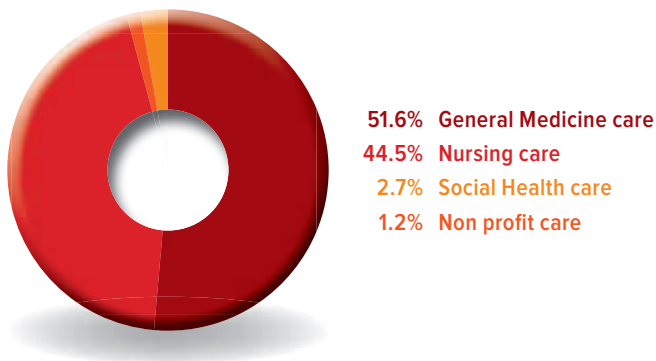
The in-home care system takes care of non self-sufficient or people at risk of non self-sufficiency, who have clinical conditions that can be treated at home, live in suitable conditions and can be supported by the family or neighbours. This form of care aims at avoiding improper hospitalizations, while guaranteeing care continuity, enhancing autonomy and relational abilities, supporting families, simplifying access to medical aids.

Support to home care is one of the priorities of the Regional Fund for non self-sufficient people.

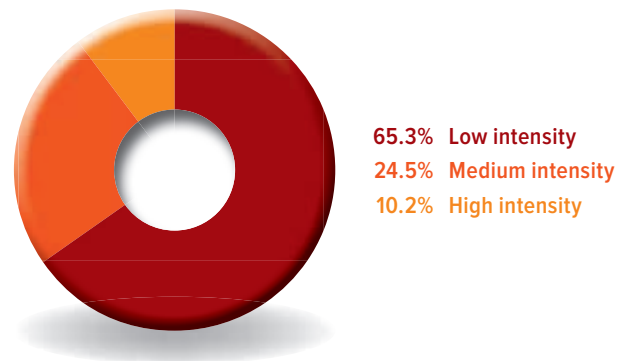
People cared for in 2013: 102,531

People handled in 2013: 125,725

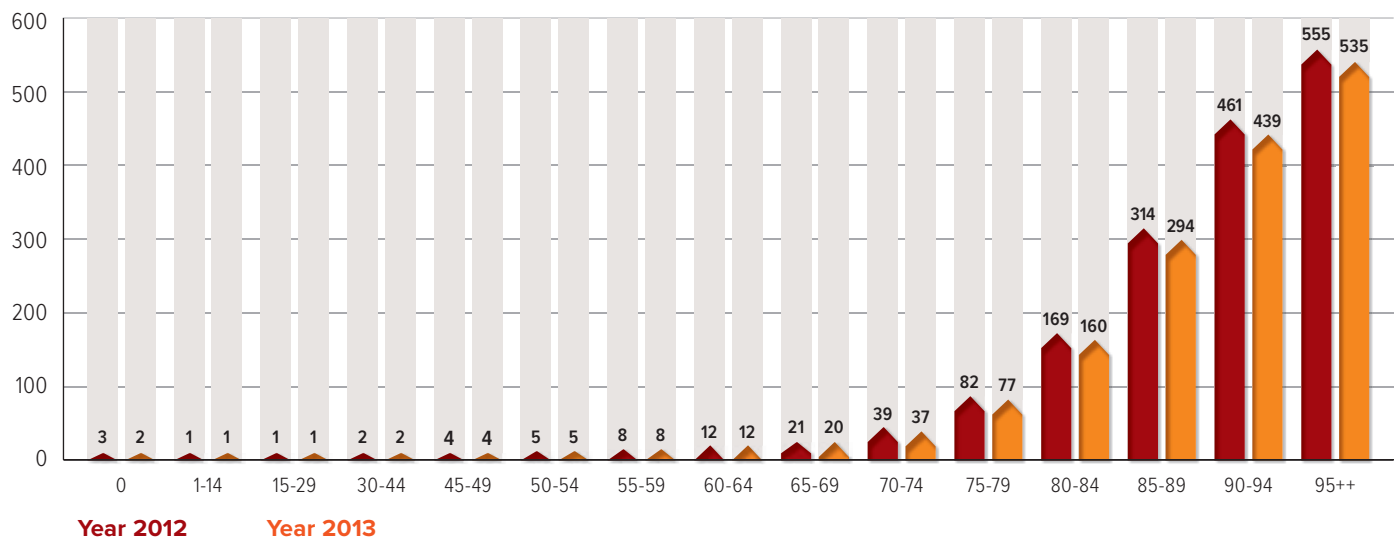
Type of in-home care – Year 2013



Levels of care intensity – Year 2013



In-home care recipients, specific rates by age groups per 1,000 inhabitants – Period 2012-2013





Care allowances

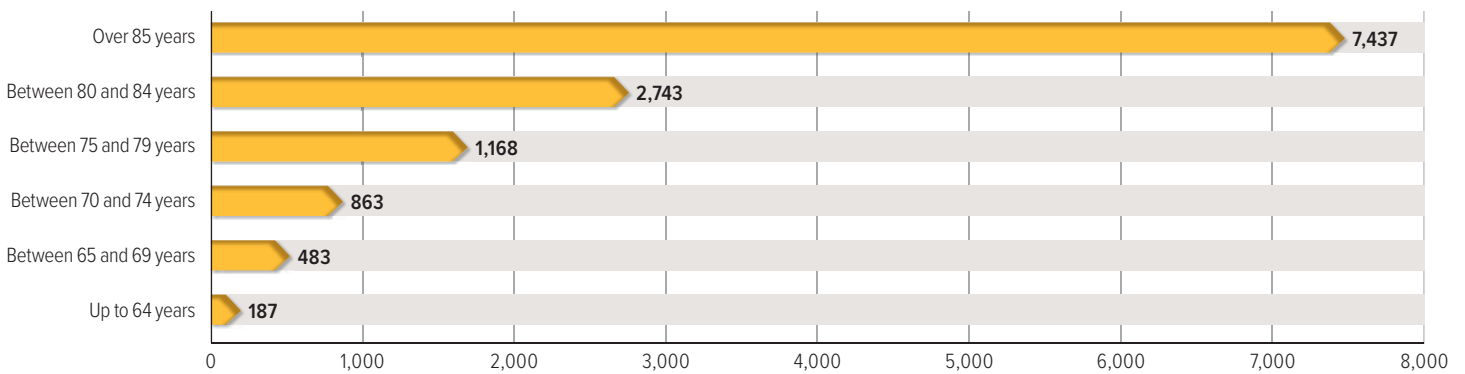
In Emilia-Romagna in 2013 the number of people who received care allowances was 15,033, of which 13,394 were elderly and 1,639 disabled. The number of beneficiaries decreased with respect to 2012 (16,263, of which 14,700 were elderly and 1,563 disabled); regional resources allotted to care allowances were essentially constant, compared to a fluctuation of national resources which in recent years created uncertainty as to the total of available resources.

In 2013, expenditure for care allowances for the elderly and disabled was approximately 44.8 million euros (45.9 million in 2012), representing approximately 10.2% of the total resources of the Regional Fund for non self-sufficient people used in 2013.

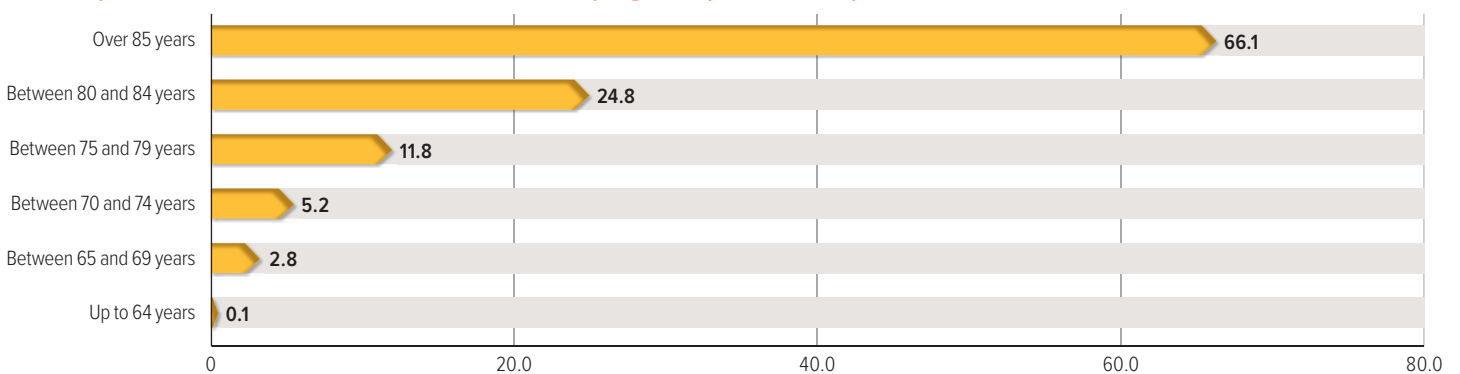
In regard to the elderly who received care allowances, 55.5% were over 85 years of age (specific rate, 66.1 per 1,000 inhabitants). As to people with disabilities who received care allowances, 41.2% were in the age group 45-59 years. Regarding the additional contribution of 160 euros for the regularization of family caregivers, in late 2013 there were 5,944 contracts activated for the recognition of this contribution, a decrease of 723 compared to the previous year (6,667 in 2012), with a total expenditure of about 5.4 million euros. The financing of care allowances is included in the resources allocated to the Regional Fund for non-self-sufficient people and represents about 30.4% of the total resources allocated to the same Fund and used for "in-home care".

People who benefited from care allowances in 2013: 15,033

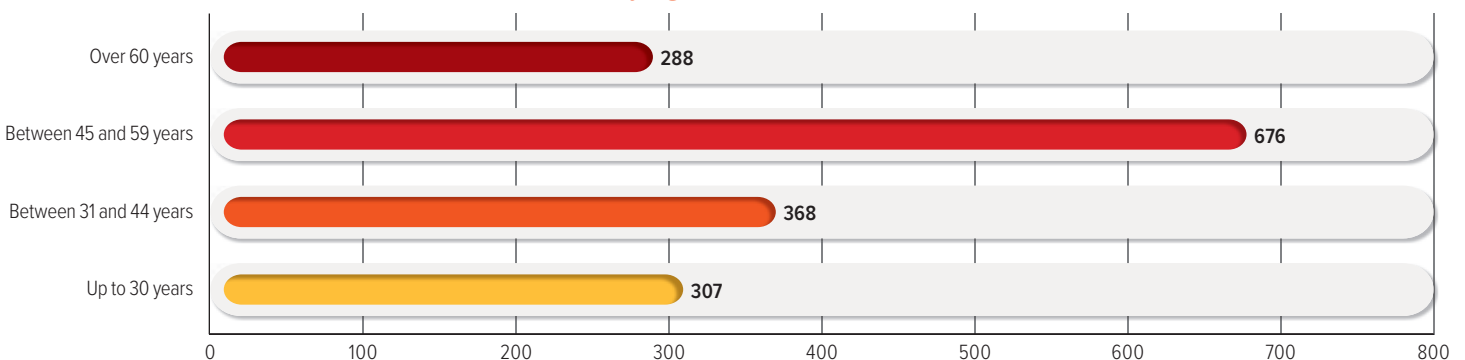
Elderly who benefited from care allowances by age – Year 2013



Elderly who benefited from care allowances by age – Specific rate per 1,000 inhabitants – Year 2013



Disabled who benefited from care allowances by age – Year 2013





Places in nursing homes for elderly

In 2013 in Emilia-Romagna there were 30,057 (30,146 in 2012) Health Service-funded residential and semi-residential places in the social-health and healthcare service network for the elderly, people with disabilities, mental health problems, pathological addiction: 21,427 in residential facilities, 8,630 in semi-residential facilities. In 2012 there were 21,499 residential facilities and 8,647 semi-residential facilities.

Of the 21,427 places in residential facilities, 15,743 (73,5%), are for the elderly, 2,416 (11.3%) for the disabled; 1,968 (9.12%), for people with mental health problems; 1,300 (6.1%) for people with pathological addictions.

Of the 8,630 places in semi-residential facilities, 4,593 (53,2%) are for people with disabilities; 3,034 (35.2%) for the elderly; 807 (9,4%) for people with mental health problems; 196 (2.3%), for people with pathological addictions.

Care for the elderly

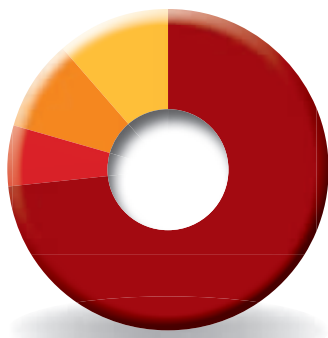
During 2013, 30,686 elderly were hosted in facilities of which 25,274 are residential facilities and 5,412 semi-residential ones.

Care has been mainly provided to people in the age group 85-89 (27.2% in residential facilities and 27.7% in semi-residential ones) and elderly over 90 (31.2% in residential facilities located in the region). The total number of admissions both in residential and semi-residential facilities and 17.9% in semi-residential ones. 70% of the total of hosted elderly is female with an average age of 58 years. The admission rate is equal to 4.5% per 1,000 resident inhabitants out of total population. The specific rate in the over 90 years age group is about 120 every 1,000 (120 over 90 years age group on 1,000 are hosted in residential facilities (the same person can be admitted more than once in the same year) is 34,022.

The analysis per admission type shows that admissions in residential facilities were: 71% long-term stay (86% in semi-residential facilities); 12% temporary relief stay (7% in semi-residential facilities), 2% temporary stay for people with significant cognitive and behavioural deficit (7% in semi-residential facilities); 16% recovery/rehabilitation following hospital discharge.

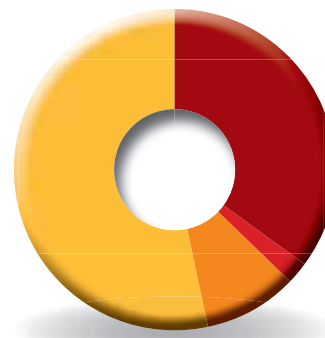
Residential and semi-residential places – Year 2013: 30,057

Residential places as of 31/12/2013



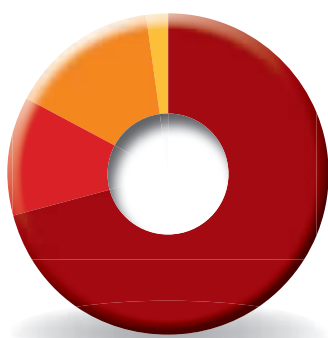
- 73.5% Elderly people
- 11.3% Disabled people
- 9.2% Psychiatric patients
- 6.1% Pathological addiction

Semi-residential places as of 31/12/2013



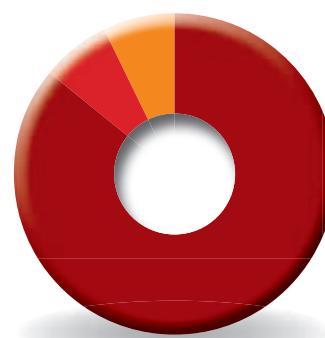
- 53.2% Disabled people
- 35.2% Elderly people
- 9.4% Psychiatric patients
- 2.3% Pathological addiction

Admissions to residential facilities by type of stay Year 2013



- 71% Long-term stay
- 16% Recovery/rehabilitation following hospital discharge
- 12% Temporary relief stay
- 2% Temporary stay for people with significant cognitive and behavioural deficit

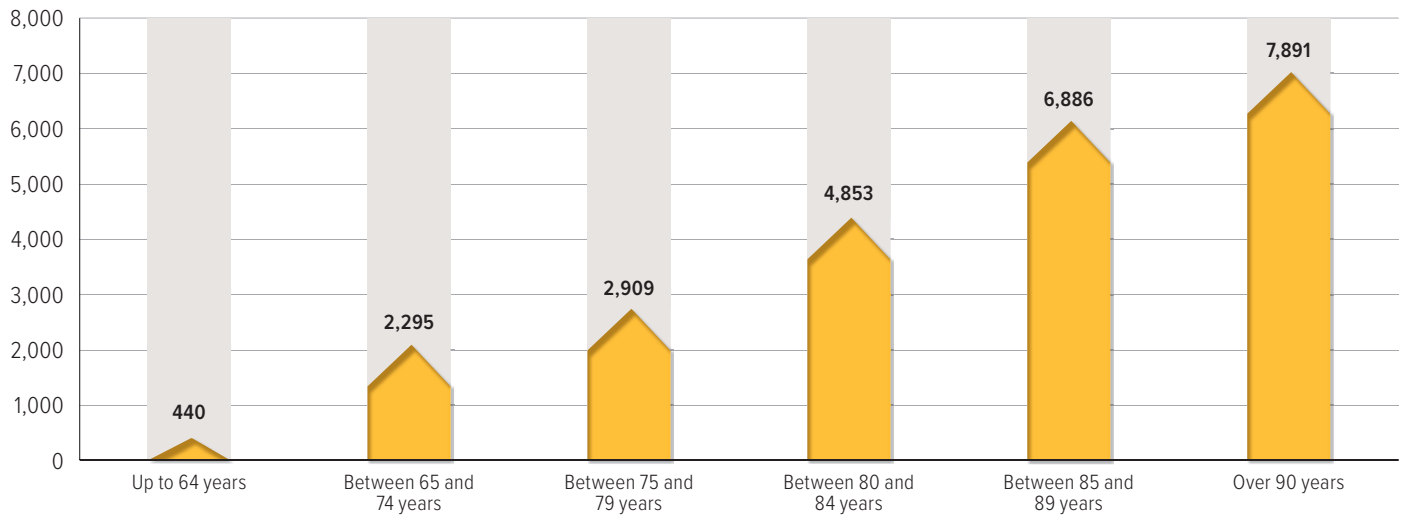
Admissions of elderly to semi-residential facilities by type of stay – Year 2013



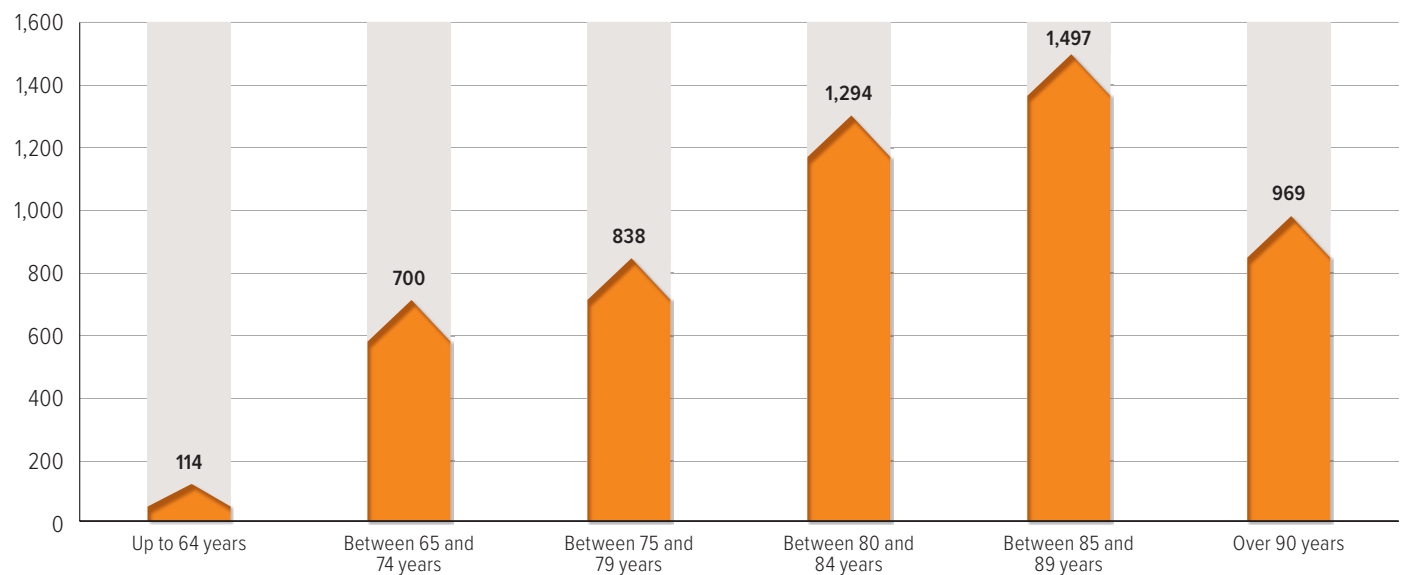
- 86% Long-term stay
- 7% Temporary relief stay
- 7% Temporary stay for people with significant cognitive and behavioural deficit



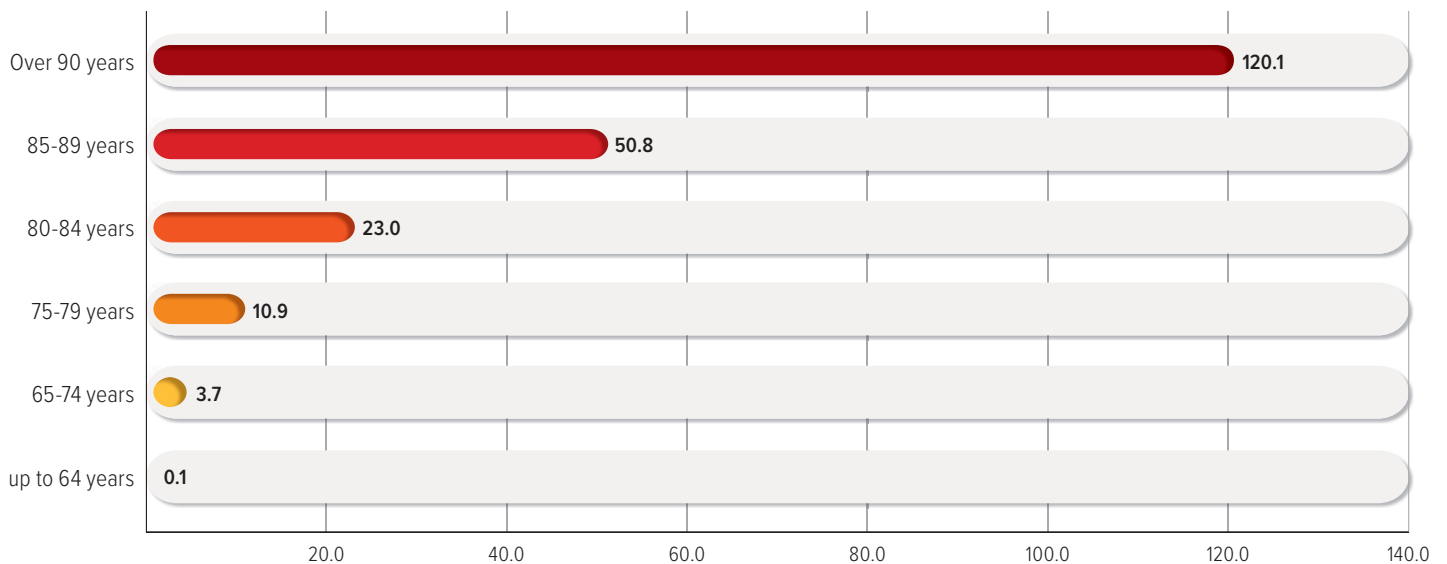
Number of people in residential facilities by age group – Year 2013



Number of people in semi-residential facilities by age group – Year 2013



Elderly people admitted to residential facilities: specific rate per 1,000 inhabitants – Year 2013





Hospice care

In 2013 in Emilia-Romagna, there were 22 functioning hospices with a total of 283 beds. Since 2011, when there were 246 beds, an increase of 15% has been recorded. Among the Health Trusts in the territory, the largest number of beds are confirmed to be in Bologna (58) and Parma (49).

Hospices are managed either directly by the Local Health Trusts or indirectly through agreements with voluntary non-profit associations. They provide personalized care that includes pain management and psychological support, and have spaces for family members in hospital rooms. Compared to 2012, there was also an increase in the number of people admitted: 5,127 in 2013 compared to 4,702 in 2012 (+425), with an average stay of 18.04 days (in 2012 the average was equal to 18.26).

There is a substantial equivalence between women (2,531) and men (2,596 men) hospitalized, with an average age of almost 74 years. The admission rates show that about 115 people per 100,000 resident inhabitants were admitted to a hospice over 2013; 601 per 100,000 inhabitants in the age group above 85 years. Of the cases, 58% were admitted (equal to 2648) following the transfer of the patient from the hospital (public or private), or by a social health facility (e.g., residential health care). In 24% (1,084) of cases, the patients were already ill and receiving in-home care. In 15% of cases (664) hospitalization occurred due to the recommendation of the family doctor. 3% of the cases (160) regards patients sent by the medical specialist.

Hospice: beds, admissions, average stay – Year 2013

Local Health Trust (LHT)	Hospice	Year 2013		
		Beds	Admissions	Average stay
LHT of Piacenza	Hospice La casa di Iris	15	257	19.07
	Hospice di Borgonovo Valtidone	8	130	20.19
LHT of Parma	Hospice Borgotaro	8	87	30.95
	Hospice Langhirano	10	106	41.54
	Hospice Fidenza	15	191	26.98
	Hospice Piccole Figlie	16	258	22.52
LHT of Reggio Emilia	Hospice Madonna dell'Uliveto (Albinea)	12	242	17.02
	Hospice Area Nord (Guastalla)	14	236	14.76
Hospital Research Trust of Modena	Hospice Policlinico di Modena	10	230	15.24
LHT of Bologna	Hospice Bentivoglio	30	686	14.74
	Hospice Casalecchio	15	265	19.52
	Hospice Bellaria	13	288	15.7
LHT of Imola	Hospice Centro residenziale di cure palliative (Castel San Pietro)	12	189	21.61
LHT of Ferrara	Hospice ADO La casa della solidarietà	12	265	15.41
	Hospice Le onde e il mare (Codigoro)	11	211	16.69
LHT of Ravenna	Hospice ospedaliero di Lugo	10	199	16.34
	Hospice Villa Agnesina (Faenza)	9	110	26.3
	Hospice Villa Adalgisa (Ravenna) *	10	74	20.54
LHT of Forlì	Hospice Forlìmpoli	11	267	13.51
	Hospice Dovadola	8	183	13.56
LHT of Cesena	Hospice Savignano sul Rubicone	14	218	20.62
LHT of Rimini	Hospice Rimini	20	435	13.93
Total		283	5,127	18.04

(*) The Ravenna Hospice opened on 3/06/2013.



Hospice admission proposal – Year 2013



- 58% Hospital specialists
- 24% Palliative treatment network
- 15% General physician
- 3% Suggested by specialist-outpatient physician

Admissions by gender and age group – Year 2013

Gender	Discharged patients by age group							Total discharged patients	Average age
	≤29	30 - 44	45 - 54	55 - 64	65 - 74	75 - 84	≥85		
Female	5	56	180	298	574	855	563	2,531	74.09
Males	8	35	158	311	721	945	418	2,596	73.52
Total	13	91	338	609	1,295	1,800	981	5,127	73.8

Admission rates in hospice by gender and age group per 100,000 inhabitants – Year 2013

Gender	Specific rate by age group							Total
	≤29	30 - 44	45 - 54	55 - 64	65 - 74	75 - 84	≥85	
Female	0.86	11.21	51.93	103.75	221.49	403.76	501.42	109.99
Males	1.30	6.87	45.88	117.22	314.81	609.75	821.99	119.63
Total	1.08	9.02	48.91	110.22	265.27	490.81	601.35	114.67



Mental health care for adults

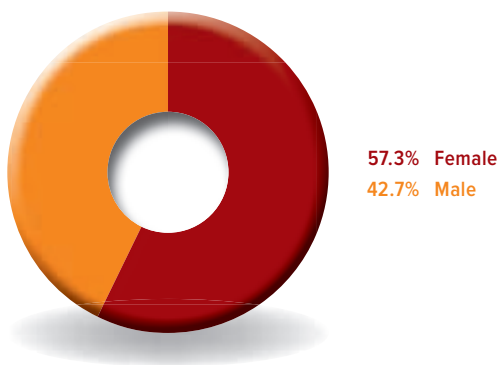
In 2013 there was a slight decline of users assisted in mental health centres: there were 78,111 (there were 78,620 in 2012). In 2013, the new information flow for adult Mental Health was approved, which introduced more accurate methods for counting patients, making it possible to input more clinical and assessment information on the activities carried out by the Services.

The majority of those assisted were women (57.3%), but there was a slight increase in the number of men (42.7%, 0.6% compared to 2012). The most represented age group was the central one, from 35 to 54 years, with a peak between 45 and 54 years (22.6%). Mental health services for adults provide

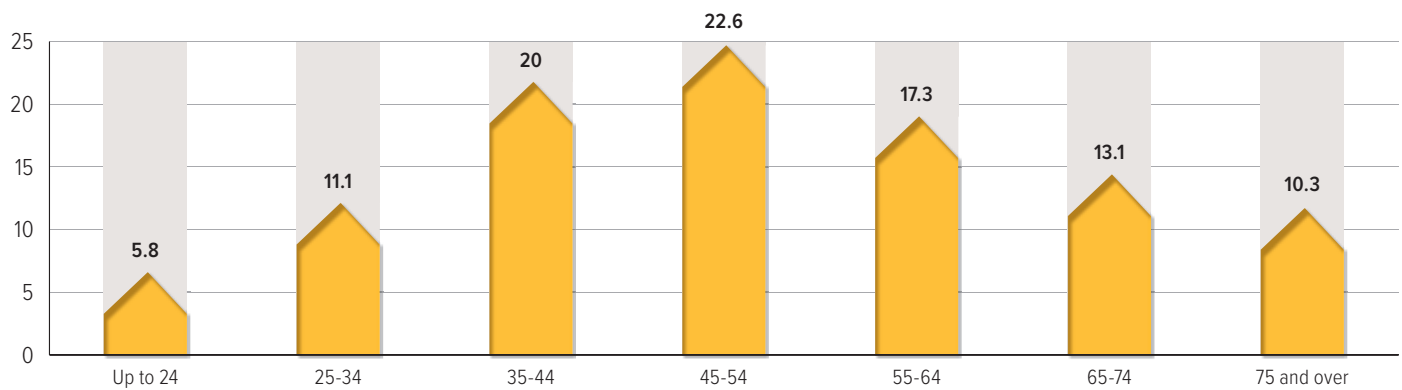
prevention, promotion, diagnosis, treatment, rehabilitation, social integration, and health education for adults (18 years and over) with psychiatric disorders of different types and degrees of severity. The system of services reports to the Department of Mental Health and Addictions of the Local Health Trust and consists of mental health centers that operate in the territory, from the Psychiatric diagnosis and care (hospital), to residential and semi-accredited public and private facilities. These services operate in conjunction with other services in the health and social care network and in collaboration with the associations for families, volunteering, local institutions, as per the provisions of the Regional Mental Health Plan.

Adults treated in Mental health centres – Year 2013: 78,111

Adults treated in Mental health centres by gender – Year 2013



Adults treated in Mental health centres by age group – % Value – Year 2013





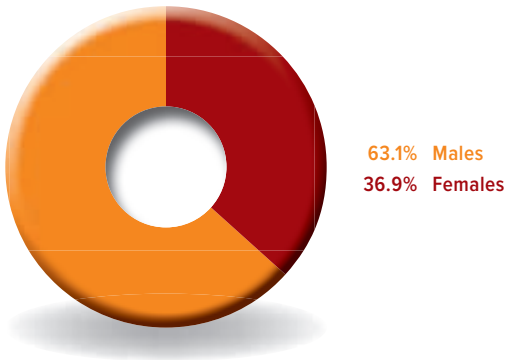
Mental health care for minors

In 2013, the total number of minors assisted by the Neuropsychiatry Services for minors was 48,578, a number that is increasing steadily with respect to previous years. The number of boys assisted by the services (63.1%) was greater than that of girls (36.9%). Access to services for minors increases particularly in the transition from one school to another, and between the various life stages of development and learning, when neurological, psychiatric and cognitive problems are more evident. The greatest percentage of minors is concen-

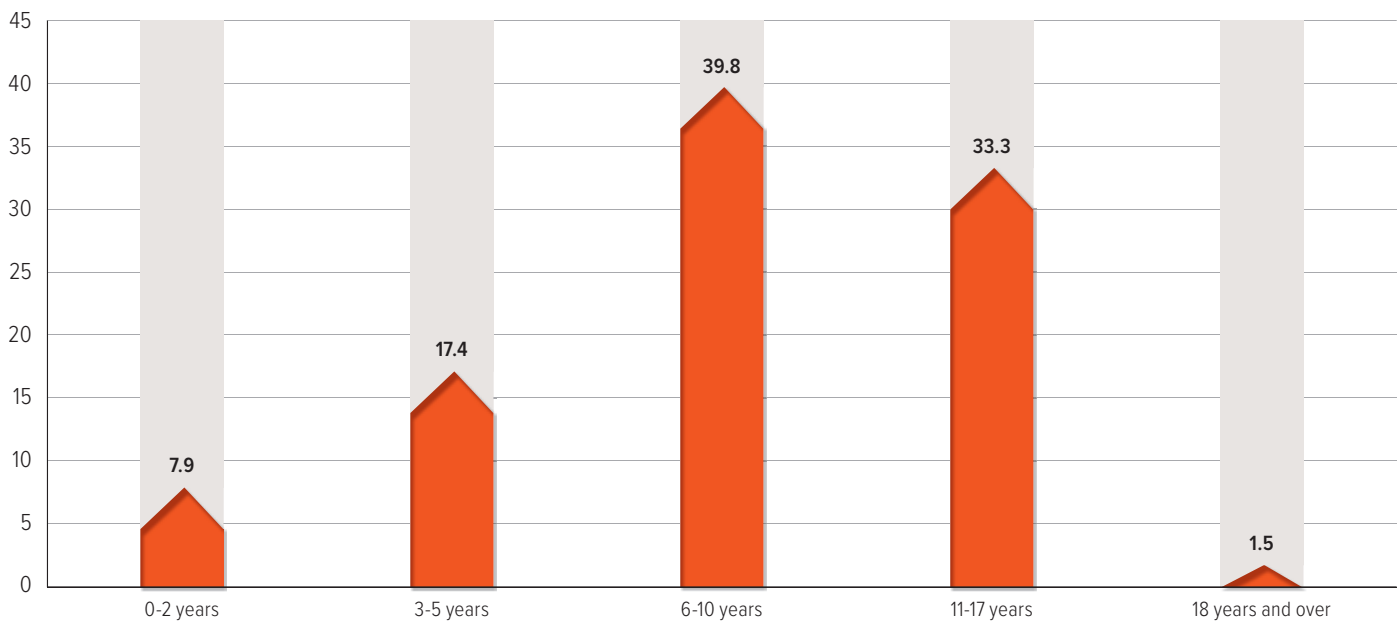
trated in the age groups 6 to 10 years (39.8%) and 11 to 17 years (33.3%). The Neuropsychiatry Services for minors deal with issues related to psychological or mental health problems of minors. In these facilities, families can meet with specialists for advice, diagnosis and treatment of disorders that regard learning, language, food, and affective and emotional problems of minors. They also treat minors with disabilities, who are ensured customized plans for psychological and motor-skills care and rehabilitation.

Minors treated in Neuropsychiatric Services for children and adolescents – Year 2013: 48,578

Minor Patients treated at Neuropsychiatric Services for children and adolescents by gender – % values – Year 2013



Minor Patients treated at Neuropsychiatric Services for children and adolescents by age group – % values – Year 2013*



* In Neuropsychiatric Services for children and adolescents some users continue the treatment also after 18 years of age for various reasons: treatment continuity (e.g. psychotherapy), end of scholastic path (e.g. users with a disability certificate who still attend school), while waiting to be transferred to other services.



Substance abuse care facilities

In 2013, the number of people who had a consultation or clinical treatment in the Emilia-Romagna SerTs (Substance Abuse Care Facilities) was 30,839, an increase over the previous year (there were 30,409 in 2012, a lower figure than the one reported in last year as the criteria adopted provides a more accurate count of users).

SerTs deal with a wide range of forms of addiction and problems:

- drugs and / or pharmacological substances (65.3% of total users in treatment in 2013)
- alcohol (26.9%)
- tobacco (4%)
- pathological gambling (3.8%).

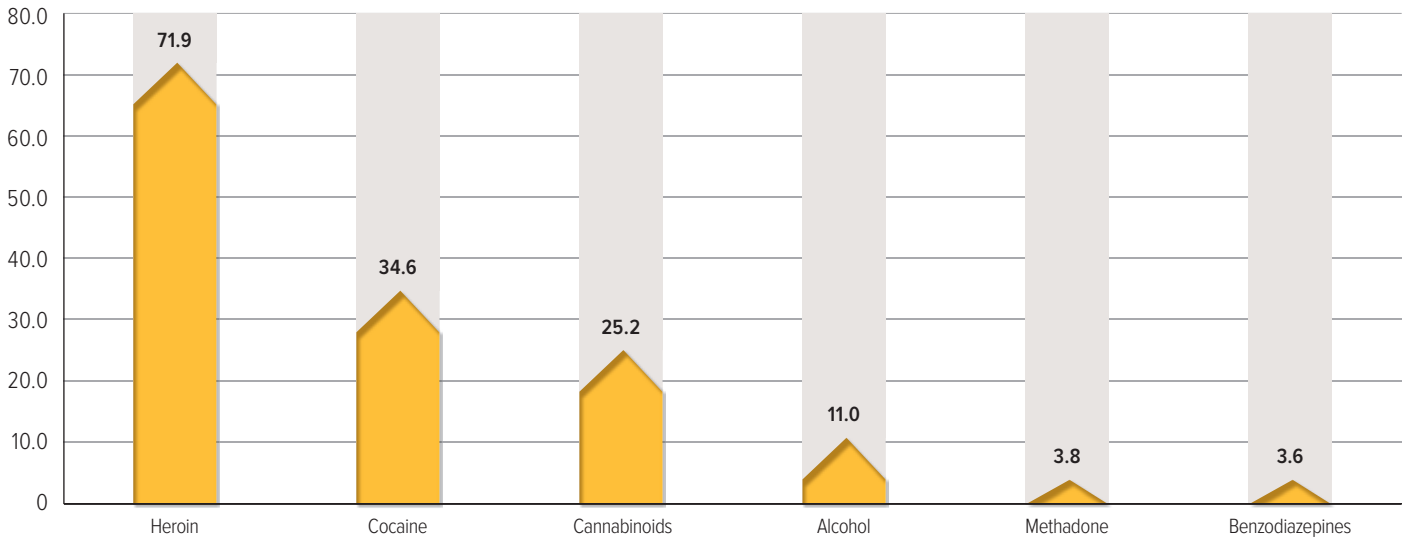
Heroin is still the most common substance of abuse among users of the SerTs, involving 71.9% of those drug addicts in treatment at the SerTs in 2013. The quota of people who turn to the Services for problems associated with cocaine has increased significantly compared to past years: it was 5.9%

in 1991, compared to 34.6% in 2012. Care for people with an addiction is ensured through an integrated system of services involving the Local Health Trusts with the Substance Abuse Care Facilities (SerT), the private accredited facilities, the local authorities, and volunteers. The services deal with the prevention, harm reduction, diagnosis, treatment, rehabilitation and social reintegration of people with disorders related to the abusive consumption of psychoactive substances or addictive behaviours such as gambling.

The regional activity in the field of addiction also includes measures to reduce risks in the night time world and harm reduction aimed at people with problems of illegal substance abuse via 24 Street Units. During 2013, contact was made with 58,315 people, 21,162 breathalyzer tests were performed, 48,627 condoms, 45,924 information packages and 7,181 disposable breathalyzer tests were distributed, 18,424 syringes were distributed and 11,076 used syringes were disposed of.

People assisted by SerT – Year 2013: 30,839

Primary substance of abuse in drug users cared for by SerT – Values % – Year 2013





Senile dementia care facilities

A network of social and health services to accompany the person with dementia and their families along the disease's long progression and to promote the best quality of life possible. The regional project for dementia, begun in the late 90s, has allowed for the development of a network of 56 Senile Dementia Care Facilities under the Local Health Trusts, staffed by multidisciplinary professionals (doctors, nurses, psychologists and other professionals). The Centres work in conjunction with local authorities, voluntary associations, and families.

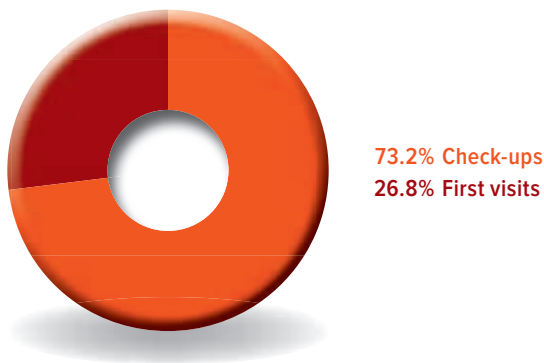
The network of services ensures pharmacological treatments that slow the progression of cognitive deficits, patient and family-oriented programs (such as cognitive stimulation, support groups and self-help groups), specialist counselling, training, information and socialization initiatives, economic and other care opportunities (e.g. temporary relief accommodation, care allowances, additional contributions for the regularization of the home care assistant). These interventions are also guaranteed with the financial support from the Regional Fund for non self-sufficient people.

The 56 centers include the following: 6 in Piacenza, 4 in Parma, 8 in Reggio Emilia, 10 in Modena, 10 in Bologna, 1 in Imola, 7 in Ferrara, 4 in Ravenna, 1 in Forlì, 3 in Cesena, 2 in Rimini.

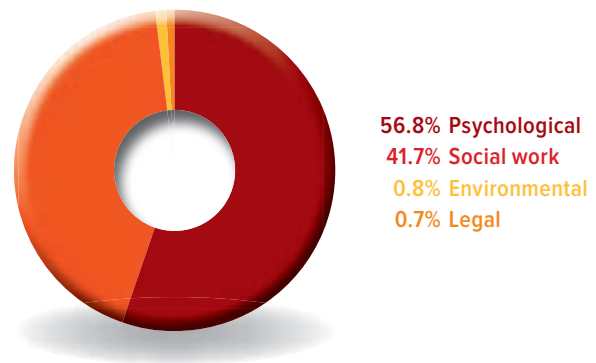
In 2013, 75,554 visits were carried out (75,298 in 2012). The number of new users was 20,277 (19,808 in 2012, 18,284 in 2011, 18,017 in 2010) and of these, 72% were provided with support. The family members were able to take advantage of 14,096 specialist consultations (12,469 in 2012). About 11,300 people were involved (2,200 including general practitioners and network services operators) in information initiatives, training, in support and self-help groups and the activities of the "Caffé Alzheimer" (about 60 at the end of 2013). Often managed by the associations of the family members, the "Caffé Alzheimer" provide cognitive stimulation and socialization activities in a completely informal setting. Over the course of 2013, the Region actively participated in the national roundtable for the drafting of the National Plan on Dementia, currently being considered by the Minister of Health. In 2013, Emilia-Romagna published, with updated content, new sections and a new graphic design, the manual "I don't know what I would have done today without you." The manual provides families with practical solutions to the problems involved in the daily care work and is a useful tool for the training and qualification of professionals and carers. It is downloadable on the web portal of the Regional Health Service at www.saluter.it in the area dedicated to services for dementia.

Total number of visits – Year 2013: 75,727

Visits – Year 2013



Specialist consultations with family members – Year 2013





Donations and transplants of organs, tissues, cells

Donations

There were 106 donors of organs and tissues in 2013 in Emilia-Romagna, amounting to 24.4 donors per million population (pmp), compared to the Italian average of 18.6. In the national network of transplants, 14 kidneys, 4 hearts, and 3 lungs became available. The regional network of Emilia-Romagna for the donation and transplantation of organs and tissues confirms data of activity above the national average, in the context of a quality system, equipped to make maximum use of the opportunities for donation in very safe conditions.

Obstacles to donations amounted to 22.9% of donors reported by the regional health facilities (29.6% of the national average). The average age of the donors in the region in 2013 was 61.3 years (it was 59.1 in 2012, 58.4 in 2011).

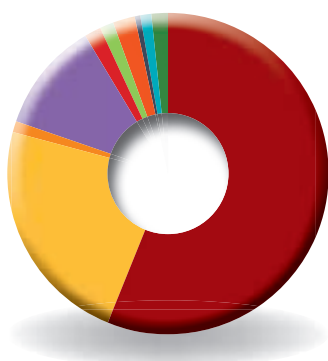
Compared to the donation of tissues and cells, in 2013 the other donations were: 1,031 corneas (1,169 in 2012), 210,963 cm² of skin (cm² 213 058 in 2012), 52 heart valves (50), 1614

segments of bone (1766), 137 vascular segments (138), 24 amniotic membranes (12). The Blood Bank at the regional hospital Sant'Orsola-Malpighi in Bologna collected and certified 296 cord blood units (260 in 2012), ready to be used in children with leukaemia throughout the world. The regional bank, with over 4,000 units, is the second in Italy for the quantity of blood bags certified and distributed through the worldwide network. Supporting donation are the initiatives of the regional campaign "A conscious choice", which takes place throughout the year with the coordination of the Emilia-Romagna Centre for Transplants (CRT-ER). The message to support the donation of organs and tissues ("A transplant is life") was entrusted in 2014 to six women and men who received a transplant and let their faces be used for the advertising campaign. To support the campaign, the Facebook profile "A conscious choice" (www.facebook.com/UnaSceltaConsapevole) was created.

Donors used (per million population) Emilia-Romagna – Year 2013: 24.4

Donors used (per million population) Italy – Year 2013: 18.6

Potential donors reported in Emilia-Romagna – Year 2013



- 56.4% Used
- 22.9% Opposition
- 11.2% Post history ineligibility
- 2.1% Suitable offered, did not enter operating theatre because no compatible recipient
- 1.6% Pre transplant ineligibility
- 1.6% Suitable entered operating theatre, not removed due to organ pathology
- 1.6% Effective donors not used because of organ ineligibility
- 1.1% Effective donors not used because of their pre-transplant ineligibility
- 1.1% Cardiac arrest
- 0.5% Suitable offered, did not enter operating theatre due to organ ineligibility



Transplants

In 2013, the number of organs harvested (kidney, heart, liver, pancreas and lung) was 304, of which 277 were transplanted in recipients (91.1% of those harvested). There were 147 kidney transplants (149 in 2012) in the three centres of Parma (53 transplants at the Ospedale Maggiore), Modena (27 at the Policlinico), Bologna (67 at S. Orsola-Malpighi). Of these, there were 20 transplants from living donors who were blood relatives or had similar requisites. The index of transplants (percentage of kidneys implanted compared to those donated in the region), which provides significant feedback on the quality of the donation and harvesting process, was 89.4%. The average age of the donors was the cause, at the national level, for a generally strong decrease in heart donations. However, in 2013, Emilia-Romagna performed the same number of transplants as the year before (20, of which one is associated with the kidney transplant), equal to 4.6 per million population (pmp), higher than the national figure of 3.7. The transplant index was equal to 117.6%, demonstrating the efficiency of the transplant centre in the use of the organs coming from other regions.

There were 115 liver transplants (119 in 2012), in the centres in Bologna (72 transplants at S. Orsola-Malpighi) and Modena (43 at the Policlinico). Of these transplants, 5 (4 in Bologna and 1 in Modena) were performed with the split technique, which allows transplants to be performed in two patients with a single donor. The index of transplants remains very high: 117.3%. There were 10 lung transplants (3 in 2012): 7 double-lung and 3 single-lung, performed at S. Orsola-Malpighi in Bologna. The comparison with some European countries:

- the number of liver transplants in Emilia-Romagna was 26.5 per million population (16.8 in Italy), exceeding the data of 2012, the last available, Spain (23.2), France (18.3), Germany (13.4), England (13);
- the number of kidney transplants, again in the region, was 29.2 pmp (25.3 in Italy). The figure in 2012 was 22.2 in Germany, 29.7 in England, 42.3 in France, 46.8 in Spain;
- the number of heart transplants in Emilia-Romagna was 4.6 pmp, above the national average (3.7), while in 2012 it was equal to 4.2 in Germany, 6.6 in France, 2.3 in England, 5.3 in Spain. The activity of regional tissue banks allowed in Emilia-Romagna for 4,303 tissue transplants (4,046 in 2012). There were 582 cornea transplants (624 in 2012) and 78 sclera (white membrane of the eye, 82 in 2012), 242 skin transplants (174), 616 osteotendinous segments (616) and 2474 bone grafts (2253), 250 amniotic membranes (202); there were also 12 cardiac valve transplants (12) and 49 vascular segments (79). In Emilia-Romagna 113 allogeneic transplants (there were 118 in 2012) of hematopoietic stem cells were also performed; 386 autologous bone marrow transplants were performed (patient's own cells, there were 326 in 2012).

The average waiting times for people registered on the list are: in just over three years for a kidney transplant, the survival of patients who received transplants in Emilia-Romagna 5 years after transplantation is close to 94% (the national average is around 92%); 1 and a half years for heart transplants, survival in Emilia-Romagna 5 years after transplantation is 82.3% (the figure for Italy is 74.8%); about 2 years for liver transplants, survival in Emilia-Romagna 5 years after transplantation is higher than 71% (74% is the Italian figure).

Transplants of organs, cells and tissues in Emilia-Romagna – Year 2013

Kidney	147	Vascular segments	49
Heart	20	Skin	242
Liver	115	Allogeneic transplants	113
Lung	10	Autologous bone marrow	386
Corneas	582	Bone segments	616
Sclera	78	Processed bone	2,474
Heart valve	12		

Transplant activity in Emilia-Romagna, Italy, Germany, France, England, Spain (number of transplants per million people) – Year 2013

	Emilia-Romagna 2013	Italy 2013	Germany 2012	France 2012	U.K. 2012	Spain 2012
Kidney transplant	29.2	25.3	22.2	42.3	29.7	46.8
Heart transplant	4.6	3.7	4.2	6.6	2.3	5.3
Liver transplant	26.5	16.8	13.4	18.3	13.0	23.2
Lung transplant	2.3	2.4	4.4	5.4	2.9	5.1
Pancreas transplant	0.0	1.0	2.0	1.1	4.0	1.8
Intestine transplant	0.0	0.0	0.0	0.1	0.2	0.2



Blood collection and consumption

The data on activity for 2013 confirms a schedule of blood collection based on the actual needs of the system and an improvement in the appropriateness of its use. The collection of red blood units (- 6.2% in 2013 compared to 2012, 234,457 units of blood collected against 249,825 the previous year) and their use decreased (-4.7%, 234 529 units of blood used against 246,074 the previous year). Instead there has been a great increase in the collection of blood components (+8%, 63,994 units of plasma and platelets collected in 2013 against 59,243 the previous year).

Overall, there was a decrease in the total number of donors: 143,535 against 146,717 in 2012. One fact which affects the sharp increase in donors who can no longer donate blood because of age (by law you cannot donate blood over the age of 65, in some cases extended to 67) or for health reasons: the number of donors suspended permanently in 2013 was 15,108; there were 7,152 in 2012.

This further confirms the need to invite more young people to

donate blood. In 2013 in Emilia-Romagna, the number of donors between ages 18 and 25 was 16,784, a slight increase compared to 2012 (16,635). In the entire regional population between 18 and 25, the figure means 57 donors per 1,000 inhabitants, a heterogeneous figure among the provinces of the region (with positive spikes in Parma, Modena, Rimini, Forlì-Cesena and much lower figures in Piacenza, Ferrara, Reggio Emilia, Bologna). Bearing witness to a blood drive today geared towards programming, in 2013 the total number of donors for blood components: as of December 31, 2013, was 26,652; there were 24,885 in 2012. Thanks to blood donors, in 2013 the viability of the regional system in Emilia-Romagna was confirmed (4,099 units of blood were sent to the regions that failed to meet the needs of their services). Throughout the region, the volunteers of the Avis and Fidas associations pledged to organize initiatives to encourage citizens to donate blood, to provide information, to invite them to learn more about how, where and why to become blood donors.

Collection and consumption of blood (red units) and collection of plasma and platelets (apheresis) – Period 2012-2013

Transfusion services	Comparison of blood collection activities 2013-2012			Comparison of consumption of units of red blood cells 2013-2012			Comparison of apheresis activities 2013-2012		
	Year 2013	Year 2012	Differences % 2013-2012	Year 2013	Year 2012	Differences % 2013-2012	Year 2013	Year 2012	Differences % 2013-2012
Piacenza	13,924	15,372	-9.4	12,528	13,583	-7.8	1,656	1,328	24.7
Parma	28,208	29,762	-5.2	26,704	27,400	-2.5	4,387	3,634	20.7
Reggio Emilia	20,198	22,744	-11.2	19,756	21,425	-7.8	9,073	8,086	12.2
Modena	35,368	35,574	-0.6	34,035	32,568	4.5	19,013	18,058	5.3
Bologna IOR	0	0	-	5,741	5,911	-2.9	0	0	-
Bologna S.Orsola	10,993	12,214	10.0	28,557	29,119	-1.9	4,267	4,108	3.9
Bologna LHT (*)	46,043	49,57	-7.1	29,837	33,017	-9.6	8,579	7,827	9.6
Ferrara	21,794	23,368	-2.6	23,088	23,035	0.2	953	856	11.3
Forlì	8,764	9,165	-4.4	7,147	7,787	-8.2	1,413	1,099	28.6
Cesena	9,873	10,492	-5.9	7,035	7,713	-8.8	2,963	2,810	5.4
Rimini	15,094	16,020	-5.8	14,975	14,614	2.5	2,654	2,477	7.1
Ravenna	24,198	26,544	-8.8	22,895	26,806	-14.6	9,036	8,960	0.8
Pievesestina	0	0	-	1,821	2,010	-9.4	0	0	-
Total	234,457	249,825	-6.2	234,529	246,074	-4.7	63,994	59,243	8.0

Source: CRS (Regional Blood Centre)

(*) Includes: Hospital Maggiore/Bellaria, Imola

Units of blood (red units) transferred to other regions – Year 2013: 4,099



Screening programs for breast, cervical and colorectal cancer

There are three active screening programs in Emilia-Romagna: prevention and early detection of breast cancer (addressed to women aged 50 to 69 proposing mammography every two years, and from January 1, 2010, for women aged 45 to 49 with annual mammography, and from 70 to 74 with mammography every two years), cancer of the cervix (addressed to women aged 25 to 64 with a proposed PAP test every three years), colorectal cancer (addressed to men and women aged 50 to 69 with faecal occult blood tests every two years).

Program participation is by invitation, actively addressed to the whole target population, not only resident but also domiciled and which also includes a large part of the immigrant population. From the date of activation to today, the three programs have involved more than 3 million people, men and women in different age groups.

Breast cancer screening

Active since 1996, the program covers all women from 45 to 74 years of age (over 900,000 in total). Acceptance of the invitation in women aged 50-69 years (100% of the segment involved) was high again in 2013: 76% (74% in 2012) compared to 62% nationally.

In 2013, 89% of women aged 45-49 years were invited and 100% of women aged 70-74 years; participation was respectively 75% and 71%. The outcome of the controls is available for 2012: 312,441 women of 45-74 years took the mammography, 5.4% (16 943) were called back for further testing and 1659 women were diagnosed with breast cancer (75% in early stage). Surgery was conservative for 86% of cases. From 1997 (the first year of the program) to 2012, the screening has made it possible to find 17,403 women with cancer, including 3,088 with cancer "in situ" (not yet invasive), and, among those with invasive cancer, for 9675 (67.6%) it was in the early stages (prerequisite for timely treatments).

Website: http://www.saluter.it/screening_femminili/

Screening for cervical cancer

This is intended for women aged 25 to 64 years (more than 1,250,000 in total). Acceptance of the invitation (intended for 100% of those involved) is above the national average: 62% vs. 44%. In 2012 (latest available data) 5,800 colposcopies were performed in women who tested positive in the PAP-test. Among these 1,150 women were identified (20%) with

precancerous lesions at low risk (CIN1), which often regress spontaneously. In another 924 women (16%) precancerous lesions at high risk were found (CIN2 and CIN3) which, although they may recede spontaneously, are generally treated for their potential to develop into invasive forms. 38 invasive cancers were diagnosed, of which 29% were micro-invasive.

From 1997 (the first year of the program), to 2012, the screening revealed that there were 13,416 women with pre-cancerous lesions and 750 with invasive tumours (of which more than 30% with micro-invasive cancer, therefore a chance of recovery that was close to 100%). The therapeutic treatment of pre-cancerous lesions aims to prevent their possible transformation into invasive carcinomas. The intervention is undergoing transformation with the adoption of the HPV-DNA testing as the primary screening test in the age group 30-64 years at five-year intervals, while the PAP test as a screening test in the age group 25-29 years at three-year intervals will continue as is. Activation of the intervention with this structure is scheduled for 2015.

Website: http://www.saluter.it/screening_femminili/

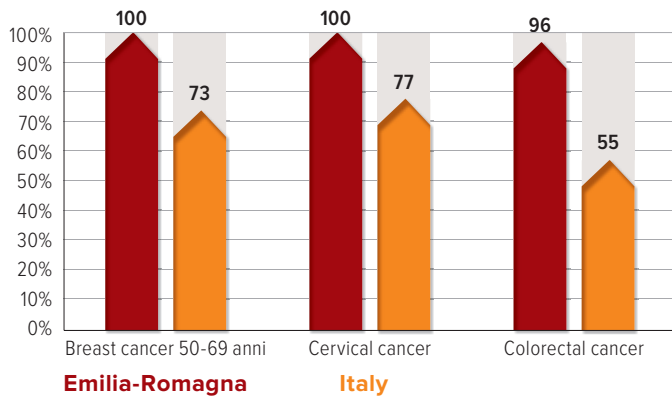
Screening for colorectal cancer

Since 2005, there has been an active screening program for the prevention of colon cancer with testing for occult blood in the stool. Offered every two years, so far the program has involved about 1.3 million people, women and men aged 50 to 69 years. In 2013, almost the entire population was invited (96%) with 51% accepting the invitation (national average 46%). Of the 291,723 people who were tested for occult blood in the stool, in 2012 (latest data available) 4.1% (average) was positive (positive results increase with age and are more common in men in all age classes). The outcome of the test, the colonoscopy, in 9554 people was positive, showing 26% of the people with high-risk polyps and 3% with a colorectal cancer. From 2005 (the year of initiation), to 2011, the screening has identified 3,706 people with malignant tumours, of which 55% were in the early stage and 25% in the advanced stage. The case studies in the region, before the screening program, reported 51% with advanced cancer and only 20% at an early stage. Removal of high-risk polyps (adenomas) (found in 22,338 persons in the period considered) reduced the onset of malignant tumours.

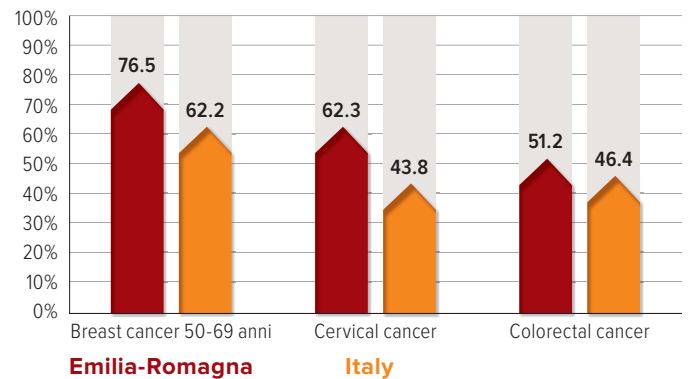
Website: <http://www.saluter.it/colon/>



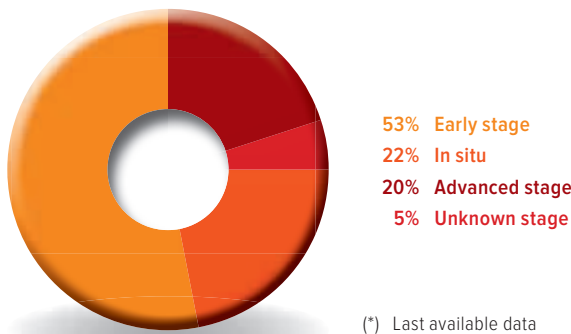
Screening for breast, cervical and colorectal cancer. Population invited as of 31/12/2013: Emilia-Romagna and Italy – % values



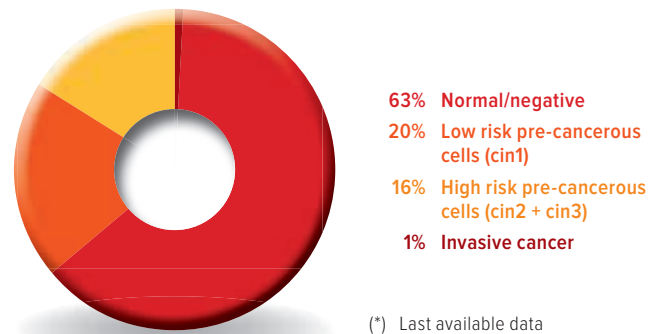
Screening for breast, cervical and colorectal cancer. Population invited in Emilia-Romagna and Italy Year 2013 – % values



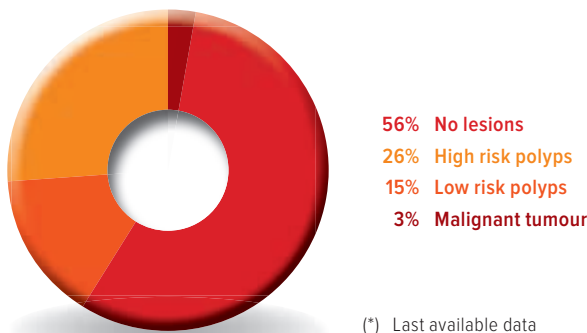
Breast cancer screening: stage of the 1,659 tumours detected in 2012*



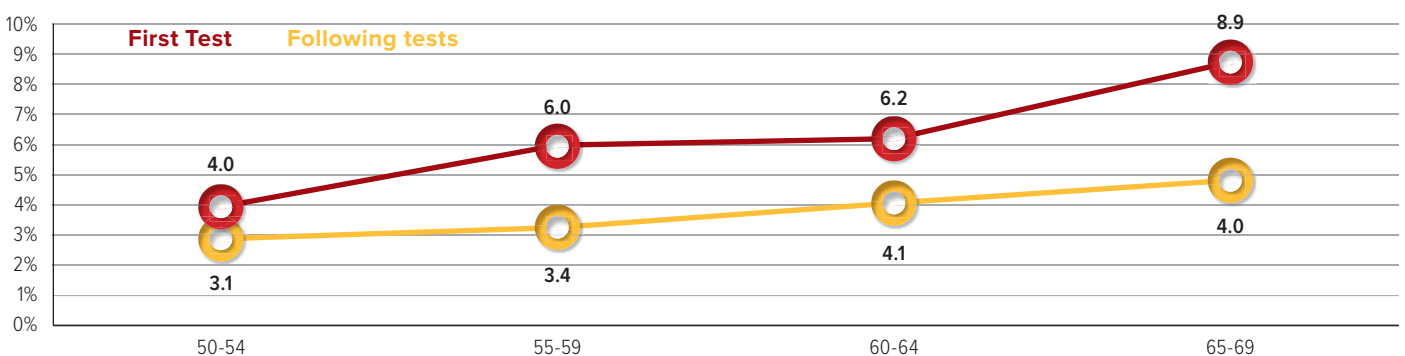
Cervical Cancer screening: colposcopy results in the 5,800 examined women in 2012*



Colorectal cancer screening: colonoscopy results in the 9,554 people examined in 2012



Colorectal cancer screening: % positive results of faecal occult blood test, by age group and gender – Year 2012*





Vaccinations

The Health Service of Emilia-Romagna ensures vaccinations and organizes vaccination programs aimed at specific groups of people. Some vaccinations are recommended for everyone; others are recommended in different ways depending on the age, the presence of diseases, the type of business or profession, in the case of international travel to specific countries. Therefore, as well as a public health tool to be offered throughout the world, vaccinations should also be considered as a targeted and personalized measure for people who are particularly vulnerable because of the presence of chronic diseases or other high risk conditions.

The National Vaccine Plan 2012-2014 has effectively adopted the vaccination schedule that has been in place for some time in Emilia-Romagna and therefore, also vaccinations against meningococcal and pneumococcal and HPV - already guaranteed by the Region with its resources respectively from 2006 and 2008 - have been included in the national program and therefore in the essential levels of care. The objective of the new National Plan is to overcome regional differences through the harmonization of strategies to ensure equal access in the prevention of diseases susceptible to vaccination throughout the country.

Vaccinations in childhood and adolescence

For all the vaccinations provided by the vaccination schedule, which are free, the coverage in Emilia-Romagna is very good although the trend of recent years shows a decline. For vaccinations that are considered compulsory- polio, diphtheria, tetanus, hepatitis B - the coverage within 24 months of life in 2013 is 95.7% (96.1% in 2012). It should be remembered that following the extraordinary spread of the polio virus recorded in 2014 in 10 nations of Asia and Africa and the public health risk that this poses at the international level, on May 5, the Director

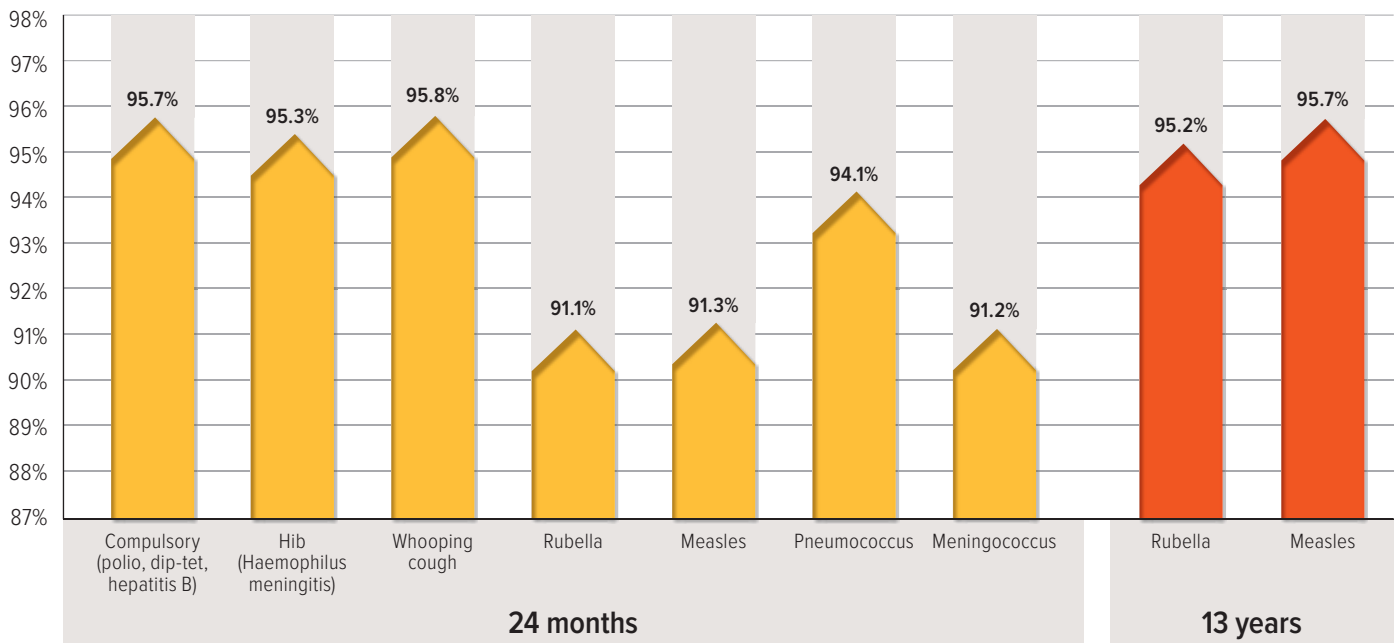
General of the World Health Organization (WHO), declared it a public health emergency of international scale. And this reaffirms the importance of maintaining a high immunization coverage (in other words, above the 95% target needed to control diseases) also against diseases that are believed to no longer be a public health risk.

For vaccinations strongly recommended within 24 months of life, the coverage in 2013 was: 95.3% for meningococcal haemophilus b, 95.8% for whooping cough; 94.1% for pneumococcal vaccination and 91.2% for the meningococcal vaccination. The coverage for the measles vaccination reached and exceeded the target of 95% (necessary to eliminate the disease) at age 7 years (96.6%) and age 16 (95.7%), while the coverage is not yet optimal for 24 months (91.3% and it was 92.6% in 2012). Vaccination against rubella at age 16 is 95.2%. Thanks to this high coverage, a reduction almost to the point of disappearance was seen in related diseases.

For measles, mumps, rubella and whooping cough, after extensive vaccination programs, we have gone from several thousand cases per year in the eighties to a few tens of cases, but in recent years for measles, the epidemic situation in the European Union has also had consequences in Emilia-Romagna with the appearance of cases of the disease, mainly in young people aged between 25 and 30 years, not vaccinated. This is why there is a continued commitment to vaccinations against this disease, whose complications are underestimated.

For pneumococcal meningitis, after the introduction of the vaccination in 2006, there has been a reduction of approximately 60% of cases in the age group of 0-4 and 74% of the mortality rate in the same segment; for meningococcal meningitis C, the cases are reduced to zero in the age range of 0-4 and we are seeing a significant reduction in all other ages.

Vaccinations in childhood and adolescence – Year 2013 – % values





The influenza vaccination

It is offered free of charge to adults and children with chronic diseases, elderly people aged 65 and over, women in the second and third trimesters of pregnancy, health and care workers, essential service workers (for example, the police forces, school staff, emergency health services volunteers), blood donors, and personnel of farms and slaughterhouses. Vaccination not only protects those who receive the vaccines, it also protects those around them and helps to limit the circulation of the infection.

The vaccination campaign 2013-2014 showed, compared to last year, a slight increase in the number of vaccine doses administered (743,065 compared to 710,840). Again there was a modest increase in vaccination coverage of people aged less than 65 years (55.8% versus 54.7% the previous season) and that of health workers (16.2% versus 14.4%). Compared to the previous season, there was also an increase in the number of people vaccinated under age 65, suffering from chronic pathologies, for which vaccination is strongly recommended since there is the risk of developing serious complications: 119,765 people were vaccinated, compared to the 109,065 of the previous season. Alongside these results, it should be noted that the latest flu outbreak affected about 391,849 citizens of Emilia Romagna (there were about 550,000 the previous season) and 25 severe cases that required hospitalization in intensive care wards were recorded (there were 76 the previous season). Despite the modest upswing and improvement of all indices monitored, there is still clearly a need for sustained commitment by the health service in supporting the vaccination campaign to increase as much as possible the vaccine coverage: the goal remains that of protecting the most vulnerable citizens, that is, persons of any age with chronic medical conditions that may be exposed to greater complications in the case of influenza, but also to reduce the number of people who contract the disease. Health care personnel, in particular, must make efforts to minimize the viral circulation by being vaccinated and adopting general preventive measures to protect care patients, all care users and to ensure continued care while avoiding the disease.

Vaccination against Human Papilloma Virus (HPV) types 16 and 18

The program of free vaccination against HPV, active throughout the country since 2008, is aimed at teenaged girls in the twelfth year of life. HPV, in about 90% of cases, causes transient, asymptomatic infections, that heal spontaneously, although in rare cases, some types of HPV (Human Papilloma Virus) - including the most dangerous types which are 16 and 18 - can cause alterations in the cervical cell which, if not treated promptly, can develop into cancer. In these years of studies on the efficacy of the vaccine, we have seen that, thanks to the so-called "cross-protection", the vaccine protects not only from HPV 16 and 18 but also, albeit partially, from other serotypes, thus providing a broader protection, even if not total (it is therefore recommended, even for the vaccinated, to be screened with the PAP test). As of December 31, 2013, the vaccination coverage achieved (regional average) was, for those born in 1997, 76.2% (69.5% in Italy), for those born in 1998, 76.6% (69.6% in Italy), for those born in 1999, 73.6% (69.4% in Italy), for those born in 2000, 74.8% (67.8% in Italy), and for those born in 2001 (with the cycles, however, still to be completed), 69.3% (56.6% in Italy). The data demonstrate for all the different age cohorts, a progressive increase with every six-monthly survey, showing that many parents prefer to take their daughters to be vaccinated not in the year in which they are called, but the following years, taking advantage of the opportunities offered by the Region, maintaining the right to free vaccination up to age 18. This data, although above the national average, continues to be not entirely satisfactory, highly variable between Local Health Trusts and districts, and therefore requiring an additional commitment on the part of the entire Regional Health Service. With the intention of promoting the opportunity to be vaccinated against HPV in safe situations and with favourable prices, the regional program offers the opportunity to be vaccinated at health service clinics to women (born before '96) up to 45 years of age and young women up to 26 years (as set out in the vaccine's data sheet) with a cost equal to that incurred by the health service for the purchase of the vaccine plus payment of a fee for the injection. In addition, the only Italian Region to do this, there is provision for free vaccination for those people with HIV, because they have a higher risk of becoming infected and developing malignancies.

HPV vaccination coverage for cohorts by year of birth with free vaccine, divided by Local Health Trust Year 2013 – Emilia-Romagna region

LHT	Cohorts by year of birth									
	1997		1998		1999		2000		2001	
	% vaccinated girls with at least one dose	% vaccinated girls with 3 doses	% vaccinated girls with at least one dose	% vaccinated girls with 3 doses	% vaccinated girls with at least one dose	% vaccinated girls with 3 doses	% vaccinated girls with at least one dose	% vaccinated girls with 3 doses	% vaccinated girls with at least one dose	% vaccinated girls with 3 doses
LHT of Piacenza	80.1	78.6	81.5	80.0	73.4	70.7	76.1	74.2	78.0	74.3
LHT of Parma	71.7	68.7	74.5	72.0	66.8	63.3	66.9	63.6	69.3	62.5
LHT of Reggio Emilia	81.7	79.1	84.7	82.6	82.9	80.5	83.0	80.6	81.6	75.3
LHT of Modena	83.5	81.7	84.3	81.4	83.7	81.2	82.3	79.8	81.3	74.7
LHT of Bologna	78.9	71.8	78.2	72.2	73.3	69.1	73.9	70.3	72.7	66.7
LHT of Imola	95.4	94.7	88.5	86.0	85.5	81.0	85.7	83.0	89.6	86.3
LHT of Ferrara	85.9	84.0	83.9	81.4	84.8	83.4	87.3	85.1	82.5	67.5
LHT of Ravenna	84.3	83.2	83.7	81.2	81.5	79.4	82.7	79.6	78.9	62.1
LHT of Forlì	91.2	76.4	90.8	75.8	89.9	72.6	89.6	75.3	88.9	71.4
LHT of Cesena	72.4	69.2	71.2	68.9	75.1	72.9	76.8	73.8	70.8	67.9
LHT of Rimini	62.8	60.0	65.0	61.5	62.8	58.7	66.8	62.4	66.0	61.5
Emilia-Romagna Region	79.8	76.2	80.3	76.6	77.3	73.6	78.2	74.8	77.1	69.3



Occupational health and safety

Accidents at work in Emilia-Romagna are on a continual decline: in 2013 reported accidents were 83,304, 9.7% fewer than the previous year. Fatalities have also decreased: from 99 reported in 2012 to 63 reported in 2013 (-36.4%).

The reports of injuries show a similar trend nationally, although to a lesser extent (-7.8% total accidents/injuries and -16.4% fatalities). In contrast, occupational diseases are on the rise: 7,885 occupational diseases were reported in 2013, and 7,337 in 2012 (+7.5%). The most common occupational diseases in this region are musculoskeletal diseases (1,008 cases in 2013). The regional trend is in line, although to a lesser extent, with the national trend (11.2%).

The increase in occupational diseases is not directly due to a deterioration in the level of healthy conditions in the workplace, but the gradual emergence of a phenomenon that has long been underestimated. The emergence is determined

by several factors including the implementation of specific programs coordinated by the Region and implemented by the Local Health Trusts, aimed at prevention, the refinement of the methods of diagnosis for connecting the cause of diseases to the work activity, also for the purposes of the proper recognition of workers' compensation.

In this region, the citizens on an Inail (Italian government agency for the insurance against work-related injuries) pension, due to work accidents or occupational diseases, number 63,781. The disability is derived from work injuries in 80.8% of the cases and occupational disease in the remaining 19.2%. In 50.7% of cases, disability is motor-related, 18.5% is the psycho-sensory, 3.6% is cardio-respiratory, and in 27.2% it is mixed. The level of disability is classifiable as medium (disability greater than 10%) in 72.7% of the cases; severe in 23.8%, very severe in 2.6%, and in 0.9% absolute.

Occupational accidents, fatal accidents – Period 2012-2013

Territory	Total accidents		% variation 2013/2012	Fatal accidents		% variation 2013/2012
	2012	2013		2012	2013	
Piacenza	5,051	4,630	-8.3%	9	5	-44.4%
Parma	9,815	9,270	-5.6%	7	9	28.6%
Reggio Emilia	12,647	11,285	-10.8%	14	11	-21.4%
Modena	15,706	14,512	-7.6%	27	9	-66.7%
Bologna - Imola	20,065	18,327	-8.7%	11	12	9.1%
Ferrara	5,203	4,587	-11.8%	11	5	-54.5%
Ravenna	8,808	7,717	-12.4%	9	5	-44.4%
Forlì - Cesena	8,276	7,223	-12.7%	6	3	-50.0%
Rimini	6,684	5,753	-13.9%	5	4	-20.0%
Emilia-Romagna	92,255	83,304	-9.7%	99	63	-36.4%
Italy	656,952	605,484	-7.8%	860	719	-16.4%

Occupational diseases reported to Inail – Period 2012-2013

Territory	Occupational diseases		% variation 2013/2012
	2012	2013	
Piacenza	131	167	27.5%
Parma	620	527	-15.0%
Reggio Emilia	1,702	1,715	0.8%
Modena	548	637	16.2%
Bologna - Imola	1,271	1,633	28.5%
Ferrara	260	339	30.4%
Ravenna	1,294	1,151	-11.1%
Forlì - Cesena	1,092	1,257	15.1%
Rimini	419	459	9.5%
Emilia-Romagna	7,337	7,885	7.5%
Italy	46,161	51,334	11.2%

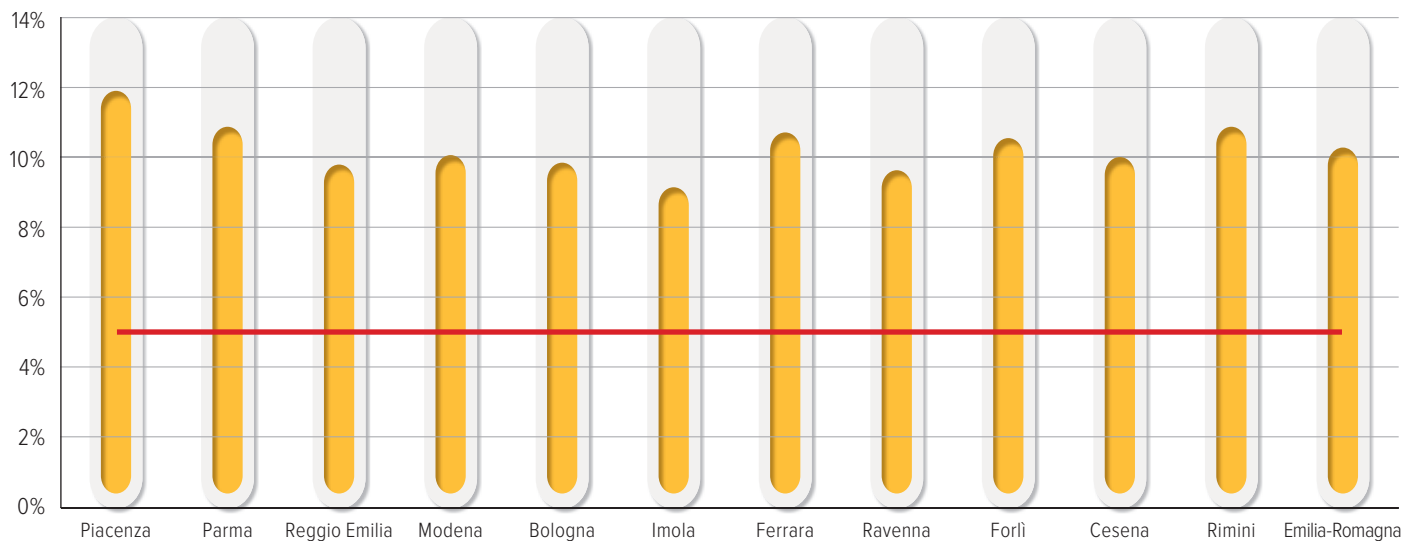


Local Health Trust inspections

The Services for prevention and safety in the workplace and the Local Health Trust accident prevention units in plants, according to the national planning, must annually inspect at least 5% of the businesses in the area of competence; this control standard, in Emilia-Romagna, was raised above 9% throughout the Local Health Trust territory, with a regional average over the last three years above 10%. In 2013, each Local Health Trust reached its goal. The regional average of the inspections was 10.3%. The inspections were aimed at sectors with a higher risk of accidents, in particular construction (a sector where 64.1% of the inspections were carried out) and agriculture (4.2% of the

inspections). In 2013, 20% of the regional businesses did not comply with standards. The highest index of non-compliance was found in agriculture (36%). The index of compliance is an indicator of inspection effectiveness since it indicates the number of businesses in which the most significant risks to the health and safety of workers were removed. The findings, in the course of the inspection visit, are subject to legal standards. The index of average regional compliance is very high and is equal to 94.3%, however, it differs in the sectors examined: 89.6% in agriculture, 97% in construction, and 91.1% in all other sectors.

Ratio between inspected/total companies – Year 2013 – % values



Law standard at a national level 5%

Ratio between sanction measures and inspected companies – Year 2013

Sector	Inspected companies		Administrative and penal sanctions		Penal sanctions, only		
	Inspected companies	% of distribution	Inspected companies - total	Percentage of irregularities in inspected companies	Companies sanctioned with penal measures	Regularised companies	Ratio between regularised/sanctioned companies
Agriculture	873	4.20%	312	36%	211	129	89.6%
Construction	13,350	64.10%	2,203	17%	1,784	1,530	97.0%
Other sectors	6,611	31.70%	1,609	24%	1,272	1,012	91.1%
Total	20,834	100%	4,124	20%	3,267	2,671	94.3%
Inspections for advice	761						
Total	21,595						



Occupational health and safety for health care workers

In 2013, the new information system that was activated to learn about the state of health of workers and specifically, workers of the Regional Health Service (implementation of Article 40 of Legislative Decree 81/08) examined 63,196 people, of which 27.9% were men and 72.1% were women (all insured by Inail, including specialists-in-training and interns).

The total number of workers subject to health monitoring, inasmuch as they were exposed to occupational hazards, was 95.1% (60,125 units). In most cases, workers have medical check-ups every two years: in 2013, 28,065 workers, 44.4%, had medical examinations.

A total of 67.7% of health workers were exposed to biological risk, 48% to biomechanical problems caused by the need to move patients, and 13.2% worked night shifts (more than 80 nights a year).

Of those examined, 83.5% of the people were deemed fit for the task they had to perform, 2.6% fit with limitations/temporary prescriptions, and 11% fit with limitations /permanent prescriptions. There were 84 (0.3%) workers who were assessed as temporarily unfit and 67 (0.3%) workers permanently unfit.

Regional Health Service: occupational risks – Year 2013

Occupational risks	Workers exposed to specific occupational risks			Ratio between workers exposed to specific occupational risks on total workers		
	Males	Females	Total	Males	Females	Total
Biological agents	11,461	31,320	42,781	65.10%	68.70%	67.70%
Manual handling of loads	6,977	23,358	30,335	39.63%	51.23%	48%
Night shifts (more than 80 days/year)	2,748	5,592	8,340	15.61%	12.27%	13.20%
Computer monitors	1,371	4,324	5,695	7.79%	9.48%	9.01%
Chemical agents	1,319	2,842	4,161	7.49%	6.23%	6.58%
Biomechanical overload upper limb	218	657	875	1.24%	1.44%	1.38%
Electromagnetic fields	295	347	642	1.68%	0.76%	1.02%
Artificial optical radiation	95	165	260	0.54%	0.36%	0.41%
Carcinogens and mutagens	38	215	253	0.22%	0.47%	0.40%
Noise	54	13	67	0.31%	0.03%	0.11%
Hyperbaric environments	3	6	9	0.02%	0.01%	0.01%
Total workers as of 31.12.2013	17,605	45,591	63,196			

Regional Health Service: results of health check-ups – Year 2013

	Males	Females	Total	Males	Females	Total
Workers as of 31.12.2013	17,605	45,591	63,196	27.9%	72.1%	100%
Workers subject to health monitoring	16,402	43,723	60,125	27.3%	72.7%	95.1%
Workers under health monitoring	8,234	19,831	28,065	50.2%	45.4%	47%
Workers fit for their task	7,468	16,564	24,032	90.7%	83.5%	85.6%
Workers fit with temporary limitations	151	585	736	1.8%	2.9%	2.6%
Workers fit with permanent limitations	592	2,487	3,079	7.2%	12.5%	11.0%
Workers temporarily unfit	14	70	84	0.2%	0.4%	0.3%
Workers permanently unfit	13	74	87	0.2%	0.4%	0.3%



Food safety, nutrition and veterinary care

The Regional Health Service, through the Veterinary Services and food safety and nutrition of the Local Health Trusts, programs and implements controls on the entire chain of food production and animal populations. The goal is to verify and ensure adequate levels of safety in the food produced and consumed in the region and to protect the health and welfare of animals.

Inspections in food production and catering plants

In 2013 there was an increase in the region in the number of plants and a consequent proportional increase in the number of inspections. There was a significant increase of noncompliance in businesses, rising from 4,012 in 2012 to 5,288 of 16,189 inspections in 2013 out of 16,329 controls, namely, noncompliance found in about one third of the plants inspected (Table 1).

Food safety monitoring plan

To monitor the most important safety parameters of food produced and marketed within the region, the Local Health Trusts apply a sampling plan, according to the food safety criteria defined by the European Union. The sampling plan organizes various kinds of research throughout the region, both microbiological and chemical, required for the various food production and distribution systems. Again in 2013, a greater number of irregularities were confirmed in the plants where foods of animal origin are processed.

Research on phytosanitary residues in food products

The detection of phytosanitary residues in plant products (fresh and processed products, such as grains and foods for infants) is one of the most important health priorities within the framework of food safety. The prevalence of the samples

comes from the region, but a quota from other Italian regions is also included in the plan, from the European Union and non-EU countries. A part of these samples regards organic products. In 2013, there were 1,467 samples examined, 1,148 of these fruit and vegetable products (Table 3).

Overall, the percentage of regular samples was 99%. Non-compliance was due to the presence of active ingredients in phytosanitary products not authorized for use only on the crops of Italian origin, and to a lesser extent in a concentration of the residue of pest control products exceeding the limits of the law. No presence of chemicals was detected in any of the 110 biological samples analysed, nor in products for infants included in the 2013 monitoring plan.

Animal welfare monitoring

The assessment of animal welfare is necessary for certification of the food chain, in line with current guidelines of the European Union on the quality of livestock production (defined as total quality of the production process) and on the enhancement of local typical products. In 2013 there was an increase in noncompliance found on cattle farms, and a decrease in noncompliance on pig farms. A sharp decline was confirmed, as in 2012, in noncompliance found on sheep and goat farms.

Avian flu

In the summer of 2013, the Emilia-Romagna region was affected by an outbreak of highly pathogenic avian influenza type H7N7 with six outbreaks and approximately one million chickens and turkeys slaughtered. Thanks to the Region's quick reaction and the close network of health surveillance, including the health authorities, the Livestock Research Institute of Lombardy and Emilia-Romagna, and the support of the Ministry of Health and the collaboration of the productive sector, all the actions necessary for isolating and limiting the spread of the disease were taken.

Food production plants: facilities, inspections, irregularities – Period 2012-2013

Types and companies	Facilities 2012	Inspections 2012	Facilities with irregularities 2012	Facilities 2013	Inspections 2013	Facilities with irregularities 2013
Production plants for food of animal origin	2,625	2,531	952	2,676	2,638	1,066
Production plants for food of plant origin	10,939	3,449	782	11,116	3,610	1,100
Catering companies	39,156	10,209	2,287	39,965	10,081	3,122
Total	52,720	16,189	4,021	53,757	16,329	5,288

Food control plan – Period 2012-2013

Food product	Samples 2012	Irregularities 2012	Samples 2013	Irregularities 2013
Food of animal origin	1,709	84	1,782	70
Food of plant origin	1,439	13	1,560	15



Detection of phytosanitary residues in food products – Year 2013

Food product	Samples	Irregularities
Vegetables	448	9
Fruit	700	1
Processed produce	319	1
Totals	1,467	11

Inspections on animal welfare in cattle, pig, and sheep and goat farms – Period 2012-2013

Type of farm	Number of farms 2012	Number of inspected farms 2012	Number of farms with irregularities 2012	Number of farms 2013	Number of inspected farms 2013	Number of farms with irregularities 2013
Cattle	3,550	952	92	3,482	829	103
Pig	953	263	85	925	337	72
Sheep and goat	574	116	3	560	98	2
Total	5,077	1,331	180	4,967	1264	177

Promotion of healthy eating and nutritional safety

In 2013, the regional campaign “Bread without salt” was launched, under an agreement between the Region and the associations of bakers in Emilia-Romagna for salt reduction in bread and to spread the concept of quality-control in bread. The information campaign of the Regional Health Service “Healthy eating gives impetus to life” was also activated to inform junior and senior secondary school students of the importance of nutrition for their own health and to foster a greater awareness on this issue, starting from the choices of food at the bar or in vending machines.

Again for the schools, the regional project “Choose food with taste and taste the healthiness in food” was aimed at students in hospitality/hotel training schools, to promote healthy lifestyles particularly in relation to food and alcohol intake, and to influence their training as future operators in the food sector. In 2013, health protection for persons with gluten intolerance continued with monitoring of companies that produce foods for coeliacs and with a special training and updating course for food sector operators.



ICT Health: Services

The Sole computer network (Health online) that connects professionals in the health service for the exchange of information and documentation on patients, an exchange based on formal consent of the parties and in total privacy, has great potential: based on this infrastructure, it was possible to make on-line booking (www.cupweb.it) available to citizens, as well as online payment of the ticket (www.pagonlinesanita.it), change or revocation of the general practitioner or paediatrician, and creation of the Electronic Health Record (www.fascicolo-sanitario.it).

The Electronic Health Record

The Electronic Health Record is a collection of individual health records available on the internet in protected and reserved form, i.e. available only through the use of personal credentials. Over time, the clinical history of a person is created. The documents are on the Sole network, and connected to the services provided by the Public Regional Health Service (and, increasingly, also from private accredited facilities) that can be included in the personal file: prescriptions for visits and specialized tests, drug prescriptions, reports of visits and specialized tests, emergency reports, discharge letters after hospitalization, health assessments, health profile and summary documents for the management of administrative pathways related to screening and coeliac disease. In addition to these documents, everyone can decide to include other documentation in the file as well (notes, reports issued by private facilities or other regions, etc). As of December 31, 2013, there were 40,009 active electronic personal health records. Health Trusts are committed in 2014 to disseminating the information, also with the support of a regional information campaign. The creation of the Record is optional and is only possible if you have given consent to have data and documents entered on the Sole network. If one decides not to create the Record, this obviously does not affect the right to receive all health and social services provided by the Regional Health Service of Emilia-Romagna. Anyone wishing to create it can go to the site where they will find www.fascicolo-sanitario.it and detailed information and an email to contact in case of need.

Cerca medico - Find a doctor

This search engine (www.progetto-sole.it/cercamedico) allows one to locate, also with a map, the offices of general practitioners and paediatricians in Emilia-Romagna that have already joined the Sole network. It also gives indications, starting with an address, as to a clinic nearby. In 2013, the "cerca medico" page registered about 180,000 hits.

Change/revocation of doctor

Fully operational since March 2013, the service offers the opportunity to those who already have their own electronic medical files, to change doctor (general practitioner or paediatrician) and use a different one from a list of doctors available, or to revoke the general practitioner or paediatrician without choosing a new doctor. In 2013, the service made 203 changes/revocations of doctor possible.

Online booking

The service is currently activated in ten Local Health Trusts in the region. It is possible to make online bookings (www.cupweb.it) for specialist visits and tests through computerized "Sole" forms and on the paperless site that is being activated. It is available for a limited number of services, but it is predicted that it will gradually be extended to include all services. In 2013, 3,635 bookings were made online.

Online payment of the ticket

In operation since March 2011, there is the option of paying the ticket online for specialist visits and tests booked through the Cup (www.pagonlinesanita.it). In addition to the Cup reservation, one needs an email address, social security number and valid credit card, also prepaid. The receipt or payment invoice, also valid for tax purposes, will be sent to the user's e-mail address. The data on the use of the service in the last four years shows a steady increase: from 53,139 online payments in 2011, to 69,229 in 2012 and 95,784 in 2013.

The Sole network (Health online)

99% of physicians and paediatricians have joined the Sole network (Health online), the computer network that connects professionals and Regional Health Service Facilities for the exchange of information and documents on patients, an exchange based on explicit and formal consent, useful for improving the care processes and streamlining procedures (for example, the general practitioner can see, on his pc, a special examination report that he prescribed and show it to the patient to decide on an eventual treatment).

The Sole network is programmed to automatically update information on users and the exchange of: prescriptions for specialized visits and tests, drug prescriptions, reports of specialized visits and tests, reports of visits to the emergency ward, letters of discharge after hospitalization in a public facility, health budgets, summarized health profiles and documents for the management of administrative procedures related to screening. Gradually, the private accredited facilities will also be integrated into the Sole network and will be available in the network along with reports and discharge letters issued by these facilities. As of December 12, 2013, consent for the inclusion of information and personal health records on the Sole network involved approximately 84% of the people living in Emilia-Romagna (78% in 2012). The number of documents exchanged in 2013 was 73,273,059 of which 53,667,158 were prescriptions and 19,605,901 reports, notifications, and discharge letters. In 2013, the number of documents available on the Sole network amounted to 253,505,798.



Health communications

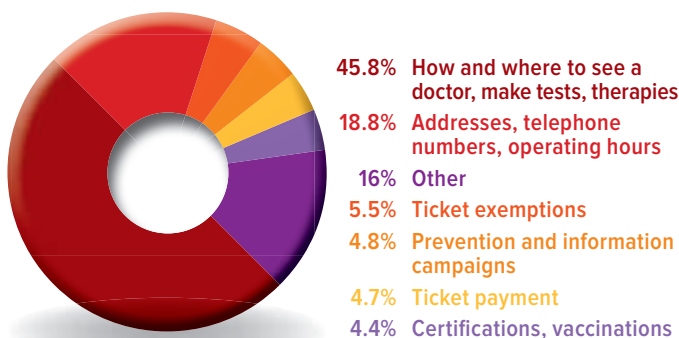
In Emilia-Romagna, the communication services for health, information and listening are being used by a growing number of citizens. The services and activities offered as of December 21, 2013, are listed below.

Toll free number 800 033 033

After 12 years of activity, the toll-free number of the Regional Health Service, 800 033 033, has seen a progressive increase in calls. From January 1 to August 31, 2014, there were 115,245 calls made (107,844 in the same period in 2013 when they were already on the rise over the previous year). In 2013, there was a total of 160,448 calls received (1,656 more than in 2012 when there were 158,792), 547 on average per day (496 in 2012). The calls are free, whether from a landline or mobile phone and from all over the country. They provide the information needed to make use of health and social services offered by the Regional Health Service (where to go, what it does, how to use it). Qualified and trained operators will answer calls from 8:30 am to 5:30 pm, and Saturdays from 8:30 am to 1:30 pm. In 2013, the average waiting time before the operator answered was 17 seconds.

The first reason to call the toll-free number is the need for specialist outpatient services, and particularly how and where specialist visits, tests, therapies, and operations can be booked: 45.8%. The second concerns the branches, the Regional Health Service operators and references for access in different places (addresses, phone numbers, schedules): 18.8%. The third concerns exemptions from paying the ticket for type of disease, income: 5.5%. The fourth regards the prevention and information campaigns: 4.8%. The fifth regards payment of the ticket: 4.7%. The sixth regards Public Health (certifications, vaccinations): 4.4%. *(For the pattern of calls over the years, see the dossier "Four years of health").*

Toll free number calls, types – Year 2013



Service Guide: on line information

2013 accesses to the Service guide, the on-line information service that can be visited besides Saluter.it, in all websites of the Emilia-Romagna Health Trusts, only refer to the second semester of the year (the new analysis system of access to the Emilia-Romagna websites, called "Piwik" started on January 1, 2013 and the statistical profile of the Service Guide was live on July) with peaks of one-time visitors (the data is monthly) in October (22,256) and in November (21,714).

The most visited pages are: the ticket for specialist visits and tests (25,703 views), the exemption from payment based on income (15,415), type of disease (13,740), pregnancy (9,471), and lastly for Cup reservation points (9,241).

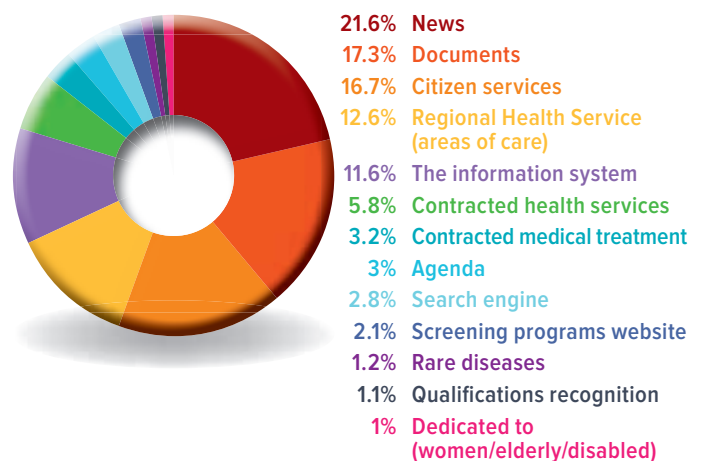
The web portal of the Regional Health Service

In 2013, there were more than 1 million visits to the web portal of the Regional Health Service of Emilia-Romagna (www.saluter.it, online from October 2003): there were 1,071,623 hits, and 169,194 were from mobile phones. The one-time visitors (the data is monthly) were stably more than 60,000, with peaks in October (89,609) and November (83,201). The analysis system of access to the Emilia-Romagna websites, called "Piwik", used from 2013, provides a more accurate statistical counting than the analyses carried out previously. Precisely because of the different way that it counts the hits, the data in 2013 cannot be compared to that of previous years.

In 2013, the pages that received the most hits were: news (480,788 views, 21.6% of the total), the documentation area (436,683, 17.3% of the total, in particular laws, the regional therapeutic handbook, the area dedicated to conferences and seminars, the tariff listings), citizen services (418,763, 16.7%, in particular the ticket and exemptions, visits and examinations, nutrition, gambling, equivalent pharmaceuticals).

The number of news items published on Saluter.it in 2013 was 1,303 (269 regional, 1,034 Health Care). There have been 251,993 files downloaded. The most frequently downloaded were: the regional fee scales, the note on the ticket with directions for self-certification for income bracket and the form for income self-certification, the announcement of the three-year course of general medicine, the final rankings for general practice, list of pharmacies and their locations, for which a procedure for the assignment through competition is taking place, the guidelines on the new oral anticoagulants (regional therapeutic handbook), the poster of the regional information campaign "Stairs: music for your health". *(For the trend of hits and the news published over the years, see the dossier "Four years of health").*

Saluter.it, most visited pages – Year 2013





Thematic websites of the Regional Health Service

Besides Saluter.it, there are also the web pages: “Information system on health and social policies”, “118 Emilia-Romagna”, “Foods and Health”, “Regional Canine Population”, “Family services”, “Pathological Addictions”, “Donating blood”, “Electronic Health Record”

“Severe brain injury”, “Open Data - Reporter”, “Online payment (for visits and specialist examinations),” “Positive Health” (project for spreading a culture of physical activity and healthy sports), “HelpAids”, “Online booking (specialist visits and tests)”, “Haemophilia registry”, “Genetic malformations registry”, “Network of genetic services”, “Donation and transplants network”, “Saperidoc - Perinatal and Reproductive Health”, “Health online – computer network of operators and services”, “SanitArte - places, works of art, historical documents of the Health Service”, “Screening for prevention of colorectal cancer”, “Screening for prevention of female cancers”, “Information system for health and social policies”, “Waiting times, visits and examinations”, “Tiger mosquito and other insects.”

The Joint Advisory Committees (CCM) and the Regional Advisory Committee on quality for the citizen (Ccrq)

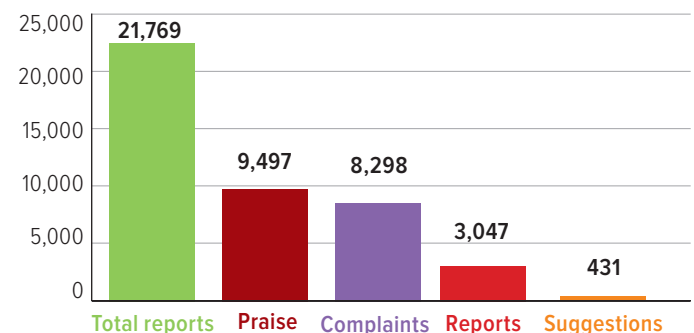
In Emilia-Romagna listening and public involvement are part of a regional system that includes the Joint Advisory Committees (CCM) of Health Care, composed of a majority of representatives of citizens (voluntary associations and citizens’ protection rights) and a minority of representatives of the Healthcare Agency, responsible for verifying the quality of services and making proposals to improve it. There are 42 Joint Advisory Committees throughout the region and there are about 900 people engaged in them, including 500 volunteers. A representative of the Joint Advisory Committees for each Health Trust is part of the Regional Advisory Committee on quality for the citizen (Ccrq), established for the same purpose at the Department for Regional Health Policies. With the involvement of the Ccrq, the Regional Health Trust and Social Care manages projects and initiatives through the Regional Laboratory for listening to the involvement of citizens.

Reports to the Health Trust Public Relations Offices

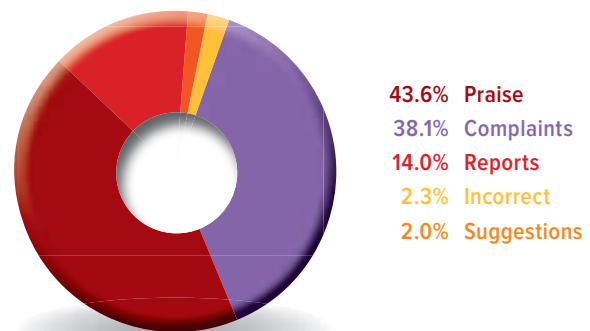
The analysis of citizens’ reports to the Health Trust Public Relations Offices (URP) is based on the classification developed by the Regional Advisory Committee on quality for the citizen (Ccrq), in collaboration with the Public Relations Offices. In 2013 there was a sharp increase in reports by citizens giving praise: +3.4% compared to 2012, a total percentage of 43.6% (9497). The complaints decreased, -3.1% or 38.1% (8,298) of the total. There has never been so much praise and never so many reports: 21,769 in total (21,145 in 2012). The largest number of reports, 55% of the total, is limited to two areas: “The technical professional aspects” and “relational aspects”. In particular, “the technical professional aspects” (38%) in recent years shows an increase in praise that in 2013 reaches 65% of all the praise and shows a trend of citizens giving importance to the quality of the service and competence of the operators, increasingly in positive than in negative terms (total in 2013, of 6159 reports of praise against 1,977 complaints). In the “technical professional aspects”, there are reports on the appropriateness/adequacy of the service,

correctness/precision/accuracy in the provision of the service, the attention to the needs of the person by the medical staff. The “relational aspects” too (17% of the total) recorded the most praise, 2774, against 850 complaints, in particular regarding “courtesy and kindness” (49.2% of the praise). The largest number of complaints in 2013 concerned “technical professional” areas (24%) and “organizational issues” (22%), 46% of the total complaints, a slight increase over the previous year (3,837 reports against 3744). There was a decrease in complaints about “economic aspects” (1333 reports, 16% of the total of complaints; there were 1,425 in 2012). *(For the pattern of reports over the years, see the dossier “Four years of health”).*

Number of reports to the Health Trust Public Relations Offices (URP) – Year 2013



Types of reports to the Health Trust Public Relations Offices (URP) – Year 2013



Communication activities: campaigns, press releases

In 2013, the Regional Health Service ran 11 campaigns: the campaign on the new free program to assess the risk in families of hereditary breast cancer and its prevention, the information campaign on the fight against pain, for the prevention of Leishmaniasis, the fight against the tiger mosquito, the promotion of organ and tissue donation, the promotion of the flu vaccination, promotion of electronic health records, an information campaign on vigilance in the use of pharmaceuticals, the promotion of blood donations for the fight against HIV/AIDS, against sexually transmitted infections, and the information campaign on vigilance in the use of pharmaceuticals. There was also a publication/report on activities of the Regional Health Service and the dossier on the earthquake in May 2012. In 2013 the Emilia-Romagna Region published 93 press releases on health topics.

Report on four years of activity





Local Health Trusts and Research Hospitals (Irccs): beds and employees

Local Health Trusts: beds, employees, general practice physicians and primary care paediatricians
The comparison period 2010-2013

Local Health Trusts (LHT)	Public Beds (*)	Employees	GP physicians	Primary care paediatricians	Year 2010		Year 2013	
					Public Beds (*)	Employees (**)	GP physicians	Primary care paediatricians
LHT of Piacenza	866	3,637	213	33	796	3,649	196	33
LHT of Parma	408	2,597	300	58	395	2,638	285	58
LHT of Reggio Emilia	717	4,141	335	82	723	3,991	334	87
LHT of Modena	1,645	6,111	519	100	1,462	6,148	514	102
LHT of Bologna	1,817	8,485	616	118	1,431	8,155	586	122
LHT of Imola	564	1,793	99	20	559	1,789	94	22
LHT of Ferrara	759	3,137	283	39	600	2,877	270	39
LHT of Ravenna	1,173	4,979	284	49	1,127	4,891	276	51
LHT of Forlì	618	2,622	140	26	524	2,543	139	27
LHT of Cesena	645	2,827	149	32	559	2,964	147	31
LHT of Rimini	918	4,214	238	45	955	4,336	235	47
Total	10,193	44,543	3,176	602	9,131	43,981	3,076	619

(*) Accredited private hospital beds are not included in the table.

(**) Employees of the Romagna Institute for Cancer Research and Care (Ircs - Irccs) of Meldola are included in the quota of the Health Trust of Forlì, while the employees of the Rehabilitation Institute of Montecatone are not employed by the Regional Health service but by the Montecatone RI SpA.

Hospital Trusts, University Hospitals, Research Hospitals (IRCCS): beds and employees
The comparison period 2010-2013

Hospital Trusts, University Hospitals, Research Hospitals (IRCCS): beds and employees	Year 2010		Year 2013	
	Public Beds (*)	Employees	Public Beds (*)	Employees
University Hospital Trust of Parma	1,233	3,855	1,154	3,771
University Hospital Trust of Reggio Emilia	921	2,822	907	2,900
University Hospital Trust of Modena	744	2,424	677	2,384
University Hospital Trust of Bologna	1,654	5,132	1,535	4,806
University Hospital Trust of Ferrara	860	2,550	711	2,479
Research Hospital – Istituto Ortopedico Rizzoli Bologna	336	1,201	327	1,246
Total	5,748	17,984	5,311	17,586

(*) Accredited private hospital beds are not included in the table.



Regional Health Service employees – Period 2010-2013

	Year 2010	Year 2011	Year 2012	Year 2013
Physicians	9,121	9,140	9,126	9,116
Vets	517	506	505	502
Health Officers	1,229	1,263	1,328	1,330
Health Service managers, Technical and administrative managers	573	575	577	570
Nurses	26,752	26,587	26,441	26,353
Health Care Technicians	3,474	3,409	3,364	3,323
Prevention personnel	907	931	899	808
Rehabilitation personnel	2,374	2,360	2,367	2,380
Social Workers	421	401	405	388
Technicians	5,045	4,981	4,846	4,862
Care assistants	204	181	173	161
Social Care workers	5,561	5,663	5,707	5,729
Specialized auxiliary personnel	291	298	271	250
Administrative personnel	6,055	5,994	5,863	5,795
Religious personnel	2	5	5	5
Total	62,527	62,294	60,877	61,567

Expenditure for health care and social services

Expenditure by levels and functions of care – Period 2010-2011

Levels of care	Cost in thousand Euros in 2010 (1)	% of total	Per-capita cost in Euros in 2010	Cost in thousand Euros in 2011 (1)	% on total	Per-capita cost in Euros in 2011
Primary care (contracting general practice physicians, continuity of care and paediatricians)	489,194	5.80%	110.37	495,802	5.82%	111.19
Territorial emergency services	124,849	1.48%	28.17	123,900	1.46%	27.79
Territorial pharmaceutical services	1,076,909	12.77%	242.96	1,034,929	12.16%	232.09
Supplementary care and prosthesis	133,667	1.59%	30.16	135,542	1.59%	30.40
Specialist care including emergency care not followed by admission (3)	1,455,509	17.26%	328.38	1,500,394	17.62%	336.47
In-Home care (2)	192,690	2.29%	43.47	216,389	2.54%	48.53
Healthcare for women, families, couples (Family Advisory Health Centres, community paediatricians)	89,550	1.06%	20.20	88,867	1.04%	19.93
Psychiatric care	363,929	4.32%	82.11	367,635	4.32%	82.44
Rehabilitation for disabled (2)	141,513	1.68%	31.93	144,090	1.69%	32.31
Care for drug addicts	75,431	0.89%	17.02	74,363	0.87%	16.68
Care for the elderly (2)	352,573	4.18%	79.54	353,175	4.15%	79.20
Care for terminally ill persons	25,871	0.31%	5.84	26,644	0.31%	5.98
Care for people with HIV	4,300	0.05%	0.97	4,710	0.06%	1.06
Hydrothermal treatment	20,382	0.24%	4.60	20,194	0.24%	4.53
Total Health District care	4,546,367	53.92%	1,025.70	4,586,634	53.87%	1,028.57
Total hospital care	3,496,538	41.47%	788.85	3,538,426	41.56%	793.50
Total general health care in daily/work environments	388,435	4.61%	87.63	389,346	4.57%	87.31
Total of care levels for residents	8,431,340	100%	1,902.19	8,514,406	100%	1,909.38

The calculation of the per-capita cost refers to regional resident population as of 31/12 (self-service statistics)

Population as of 31/12/2010: 4,432,439

Population as of 31/12/2011: 4,459,246

NOTES

- The cost of prison health care, which amounted 17,808 million Euros in 2010 and 18,446 million Euros in 2011, is not included in the per capita figure.
- For care activities financed through the Regional Fund for non self-sufficient people, costs exclusively include the expenditure share referred to Essential Levels of Care (LEA) at the charge of the Regional Health Fund. The share financed by regional resources is excluded.
- Specialist care level does not include the expenditure for diagnostic tests carried out as part of screening programs (mammographic, cervical and colorectal), estimated around 17 million Euros. This expenditure is included in total general health care in daily/work environments.

The breakdown was done at full cost, namely Health Trust general costs were re-assigned proportionally to healthcare functions.



Expenditure by levels and functions of care – Period 2012-2013

Levels of care	Cost in thousand Euros in 2012 (1)	% of total	Per-capita cost in Euros in 2012	Cost in thousand Euros in 2013 (1)	% on total	Per-capita cost in Euros in 2013
Primary care (contracting general practice physicians, continuity of care and paediatricians)	494,267	5.70%	110.55	496,034	5.76%	111.40
Territorial emergency services	137,427	1.58%	30.74	142,283	1.65%	31.95
Territorial pharmaceutical services	933,956	10.76%	208.89	923,193	10.71%	207.33
Supplementary care and prosthesis	135,667	1.56%	30.34	135,159	1.57%	30.35
Specialist care including emergency care not followed by admission (3)	1,541,801	17.77%	344.84	1,541,922	17.90%	346.28
In-Home care (2)	268,693	3.10%	60.10	262,062	3.04%	58.85
Healthcare for women, families, couples (Family Advisory Health Centres, community paediatricians)	87,550	1.01%	19.58	77,369	0.90%	17.38
Psychiatric care	362,619	4.18%	81.10	376,991	4.38%	84.66
Rehabilitation for disabled (2)	179,724	2.07%	40.20	184,351	2.14%	41.40
Care for drug addicts	76,754	0.88%	17.17	76,731	0.89%	17.23
Care for the elderly (2)	382,339	4.41%	85.51	386,539	4.49%	86.81
Care for terminally ill persons	30,693	0.35%	6.86	30,827	0.36%	6.92
Care for people with HIV	4,932	0.06%	1.10	5,832	0.07%	1.31
Hydrothermal treatment	19,062	0.22%	4.26	17,965	0.21%	4.03
Total Health District care	4,655,483	53.66%	1,041.24	4,657,258	54.05%	1,045.91
Total hospital care	3,626,895	41.80%	811.19	3,562,875	41.35%	800.14
Total general health care in daily/work environments	394,282	4.54%	88.18	396,356	4.60%	89.01
Total of care levels for residents	8,676,661	100%	1,940.61	8,616,490	100%	1,935.06

The calculation of the per-capita cost refers to regional resident population as of 31/12 (self-service statistics).

Population as of 31/12/2010: 4,471,104

Population as of 31/12/201: 4,452,782

NOTES

1. The cost of prison health care, which amounted to 19,306 million Euros in 2012 and 21,244 million Euros in 2013, is not included in the per capita figure.
2. For care activities financed through the Regional Fund for non self-sufficient people, costs include the share financed by regional resources.
3. Specialist care level does not include the expenditure for diagnostic tests carried out as part of screening programs (mammographic, cervical and colorectal), estimated around 17 million Euros. This expenditure is included in total general health care in daily/work environments.

The breakdown was done at full cost, namely Health Trust general costs were re-assigned proportionally to healthcare functions.

Health expenditure Region by Region – Period 2010-2012* (absolute figures in thousand Euros)

Region and Provincia Autonoma (Autonomous Province)	Total expenditure 2010	Total expenditure 2011	Total expenditure 2012	% difference 2011/2010	% difference 2012/2011
Piemonte	8,459,592	8,445,965	8,544,769	-0.16%	1.17%
Valle D'Aosta	277,355	284,938	286,142	2.73%	0.42%
Lombardia	17,734,377	18,514,009	18,682,374	4.40%	0.91%
Provincia autonoma di Bolzano	1,102,868	1,145,423	1,156,105	3.86%	0.93%
Provincia autonoma di Trento	1,091,019	1,169,561	1,188,729	7.20%	1.64%
Veneto	8,853,658	8,946,090	9,035,633	1.04%	1.00%
Friuli Venezia Giulia	2,464,915	2,562,462	2,590,210	3.96%	1.08%
Liguria	3,244,496	3,304,101	3,202,682	1.84%	-3.07%
Emilia-Romagna	8,405,237	8,518,794	8,841,252	1.35%	3.79%
Toscana	7,081,695	7,111,197	7,316,759	0.42%	2.89%
Umbria	1,625,831	1,663,047	1,681,894	2.29%	1.13%
Marche	2,805,795	2,797,055	2,824,956	-0.31%	1.00%
Lazio	11,171,783	11,280,459	11,263,792	0.97%	-0.15%
Abruzzo	2,337,738	2,358,247	2,384,785	0.88%	1.13%
Molise	657,922	657,897	649,439	0.00%	-1.29%
Campania	9,990,819	9,976,620	9,874,724	-0.14%	-1.02%
Puglia	7,235,544	7,083,998	7,073,103	-2.09%	-0.15%
Basilicata	1,051,993	1,067,584	1,064,698	1.48%	-0.27%
Calabria	3,427,808	3,426,834	3,390,210	-0.03%	-1.07%
Sicilia	8,521,735	8,732,121	8,716,825	2.47%	-0.18%
Sardegna	3,062,898	3,202,214	3,267,332	4.55%	2.03%
Italy	110,605,079	112,248,615	113,036,413	1.49%	0.70%

Source: General report on the economic situation of the Country.

* Last available data: 2012.



Payment periods for suppliers

Average payment periods for suppliers of goods and services (in days) – period 2010-2013

Local Health Trusts	2010	2011	2012	2013
LHT of Piacenza	250	315	220	90
LHT of Parma	120	180	180	90
LHT of Reggio Emilia	225	270	180	90
LHT of Modena	240	210	150	90
LHT of Bologna	325	305	255	98
LHT of Imola	270	330	240	90
LHT of Ferrara	320	300	230	80
LHT of Ravenna	270	300	210	90
LHT of Forlì	360	420	330	90
LHT of Cesena	240	300	210	90
LHT of Rimini	300	270	210	90
University Hospital Trust of Parma	240	260	230	90
University Hospital Trust of Reggio Emilia	290	300	285	80
University Hospital Trust of Modena	245	390	298	90
University Hospital Trust of Bologna	315	300	255	90
University Hospital Trust of Ferrara	315	255	345	135
Research Hospital – Istituto Ortopedico Rizzoli Bologna	90	90	90	75
Average regional value	266	282	230	91

Purchases via Intercent-ER

Purchases and savings of Local Health Trusts through Intercent-ER – Period 2010-2013

	2010 (*) in MIO Euros	2011 in MIO Euros	2012 in MIO Euros	2013 in MIO Euros
Total purchases of LHT through Intercent-ER	641	330	244	433
Total savings of LHT through Intercent-ER (calculation based on previous average prices)	104	56	38	63
Percentage of purchases of LHT on total expenditure for goods and services	32%	34%	35%	34%

(*) The peak referred to in 2010 is mainly due to supply orders (over a three year period) of tenders for the purchase of pharmaceuticals. Starting from 2011 such orders have a one year duration and consequently expenditures evened out increasingly.

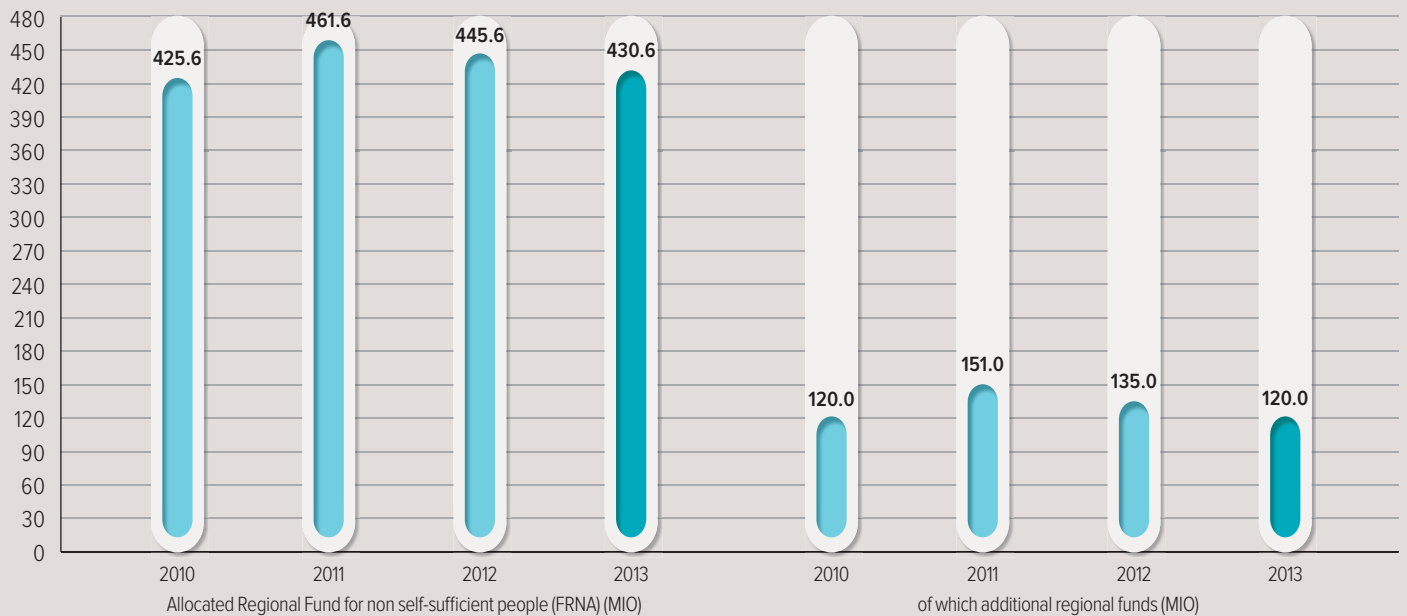


The Regional Fund for non self-sufficient people

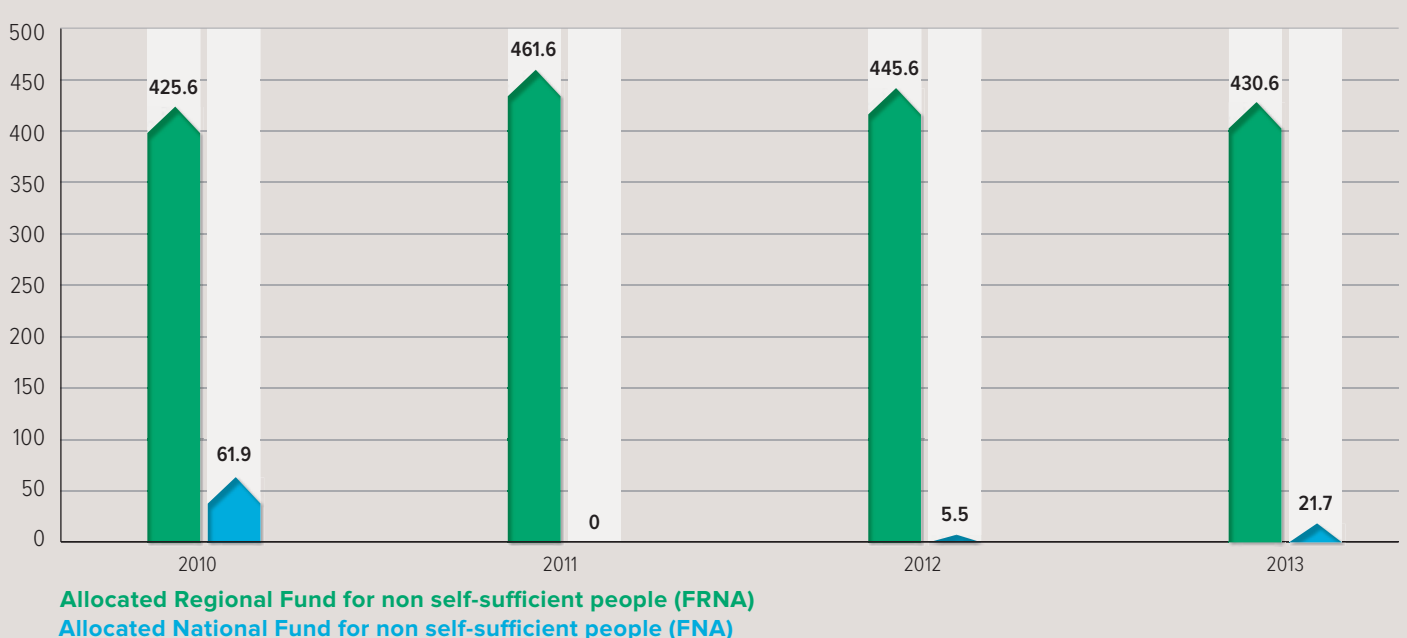
The Regional Fund for non self-sufficient people in Emilia-Romagna, which was started to fund the services dedicated to non-self-sufficient people, or people at risk of not being self-sufficient for the quantity of resources employed, the network of services in the field, the professionals involved and experience, is unique in Italy. The resources of the Regional Fund for long-term care each year exceed the total of the national fund. Between 2010 and 2013, the Region of Emilia-Romagna has allocated each year more than 120 million

additional resources (which are added to the annual amount of more than 300 million euros of the Regional Health Fund). In 2011 and 2012, the Region of Emilia-Romagna allocated more additional resources (151 million in 2011, 135 million in 2012) to compensate for the cut by the National Fund for non self-sufficient people. In these four years, the allocation for non-self-sufficient people has totalled 1.7 billion euros. Of these, 526 million euros in additional resources have been allocated by the Regional Government.

The Regional Fund for non self-sufficient people: allocated resources in million Euros – Period 2010-2013



Regional Fund for non self-sufficient people: regional and national funds in million Euros – Period 2010-2013





Care and pharmaceutical expenditure

Pharmaceutical expenditure by type and percentage variation: the comparison – Period 2010-2013

	2010	2013	% var
Contracted pharmaceutical net expenditure	742,750,167	560,567,262	-24.5
Direct distribution to the citizen expenditure for class A* medicines	193,172,613	227,157,750	17.6
Through Health Trusts' pharmacies	172,582,096	201,816,359	16.9
Through contracted pharmacies	20,590,517	25,341,391	23.1
Total territorial pharmaceutical expenditure	935,922,780	787,725,012	-15.8
Hospital pharmacies*	439,013,976	436,010,127	-0.7
Overall regional pharmaceutical expenditure	1,374,936,756	1,223,735,139	-11.0

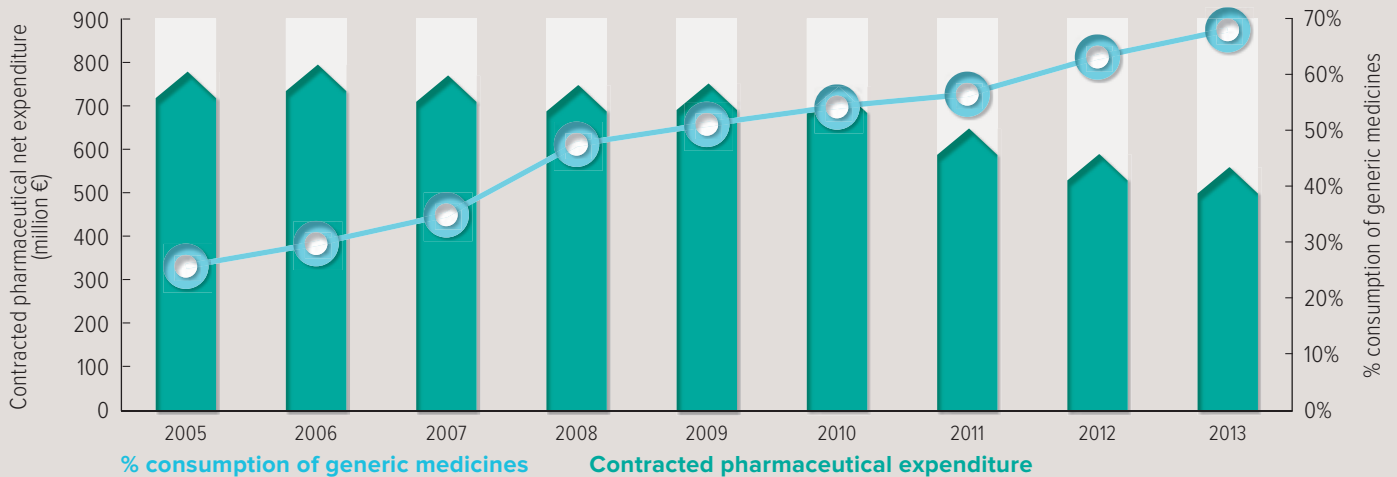
* oxygen not included.

Contracted pharmaceutical expenditure per-capita in Emilia-Romagna and Italy – The comparison 2010-2013

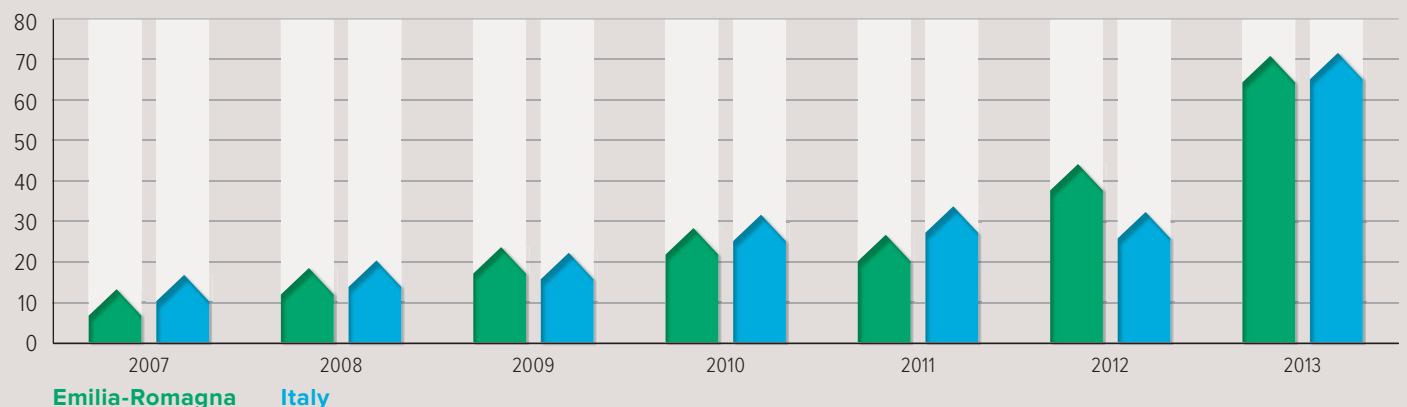
	2010	2013
Emilia-Romagna	179.4 euro	124.3 euro
Italy	215.1 euro	152.3 euro

Source: Agenas

Generic medicines: consumption trend compared to the contracted pharmaceutical expenditure in million Euros – Period 2005-2013



Pharmacovigilance: reports on adverse reactions to medicines per 100,000 inhabitants in Emilia-Romagna and Italy – Period 2007-2013





Investments for healthcare and social health buildings

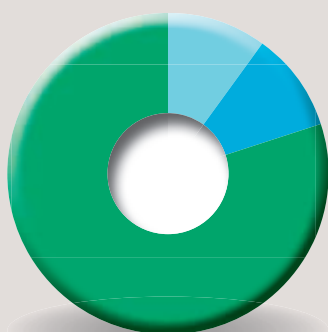
Investments for interventions in healthcare and social health buildings implemented by the Regional Health Service – Period 2010-2013

Implementing body	State Funds	Regional Funds	Implementing body funds	Other funds	Total of funds
LHT of Piacenza	7,713,300.50	3,647,913.94	547,256.15	-	11,908,470.59
LHT of Parma	6,402,565.81	3,027,062.18	9,480,333.64	-	18,909,961.63
University Hospital Trust of Parma	8,692,573.02	4,046,034.39	60,000.00	-	12,798,607.41
LHT of Reggio Emilia	14,288,361.61	2,463,522.78	585,000.00	33,119.08	17,370,003.47
University Hospital Trust of Reggio Emilia	8,609,206.73	3,951,004.48	1,467,643.59	2,000,000.00	16,027,854.80
LHT of Modena	15,891,744.60	3,130,818.87	201,200.00	-	19,223,763.47
University Hospital Trust of Modena	5,261,215.59	2,552,064.96	-	-	7,813,280.55
LHT of Bologna	14,092,949.92	5,525,854.48	550,000.00	3,904,518.82	24,073,323.22
University Hospital Trust of Bologna	11,795,951.78	31,032,428.43	-	-	42,828,380.21
Ircs - Research Hospital – Istituto Ortopedico Rizzoli Bologna	3,921,125.00	3,432,442.36	6,652.56	2,380,000.00	9,740,219.92
LHT of Imola	3,493,668.02	7,844,248.35	3,500,000.00	-	14,837,916.37
LHT of Ferrara	7,056,534.83	1,636,101.50	1,264,055.59	-	9,956,691.92
University Hospital Trust of Ferrara	4,826,000.00	39,648,469.21	-	-	44,474,469.21
LHT of Ravenna	10,393,493.91	4,022,076.13	-	-	14,415,570.04
LHT of Forlì	5,193,608.35	2,864,952.50	229,325.15	-	8,287,886.00
LHT of Cesena	5,487,913.35	4,196,710.73	201,922.00	-	9,886,546.08
LHT of Rimini	8,456,256.56	6,594,745.63	3,394,282.06	223,000.00	18,668,284.25
Total	141,576,469.58	129,616,450.92	21,487,670.74	8,540,637.90	301,221,229.14

The scheduled operations from 2010 to 2013 totalled 124, and of these, at the end of 2013, 10% had already been performed, 10% are being performed and 80% are scheduled for the future. Of the latter case, 53 operations (150 million euros) fall under the Programme Agreement signed on March 1, 2013 by the Emilia-Romagna Region with the Ministry of Health. The activities in the Program Agreement include: the Proximity outpatient clinic in the District of Levante (Piacenza); the expansion of the Hospital in Vaio (Parma); the Proximity outpatient clinics in the north and west Districts (Reggio Emilia); modernization of diagnostic and therapeutic equipment and

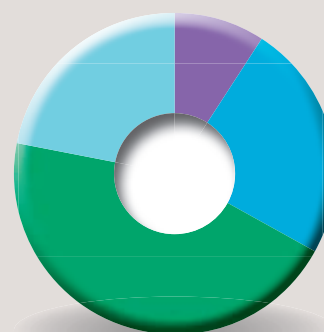
information systems of the Policlinico in Modena; adaptation and extension of the paediatric area (1st phase), completion of the infectious diseases ward, completion of the outpatient areas in the cardio-thoracic-vascular facility at Policlinico S. Orsola-Malpighi in Bologna; improvements in diagnostic imaging and radiation therapy, construction of a new single pharmaceutical warehouse at Arcispedale S. Anna di Cona (Ferrara); creation of a Proximity outpatient clinic in Bondeno; acquisition of equipment for technological renovation of the Hub & Spoke Network of the vast Area of Romagna; completion of the reception at the Emergency ward of Rimini Hospital.

Planned interventions implementation status
Period 2010-2013 – % values



80% In the planning stage
10% Completed
10% In progress

Funds allocation by area of intervention referred to
planned interventions from 2010 to 2013 – % values

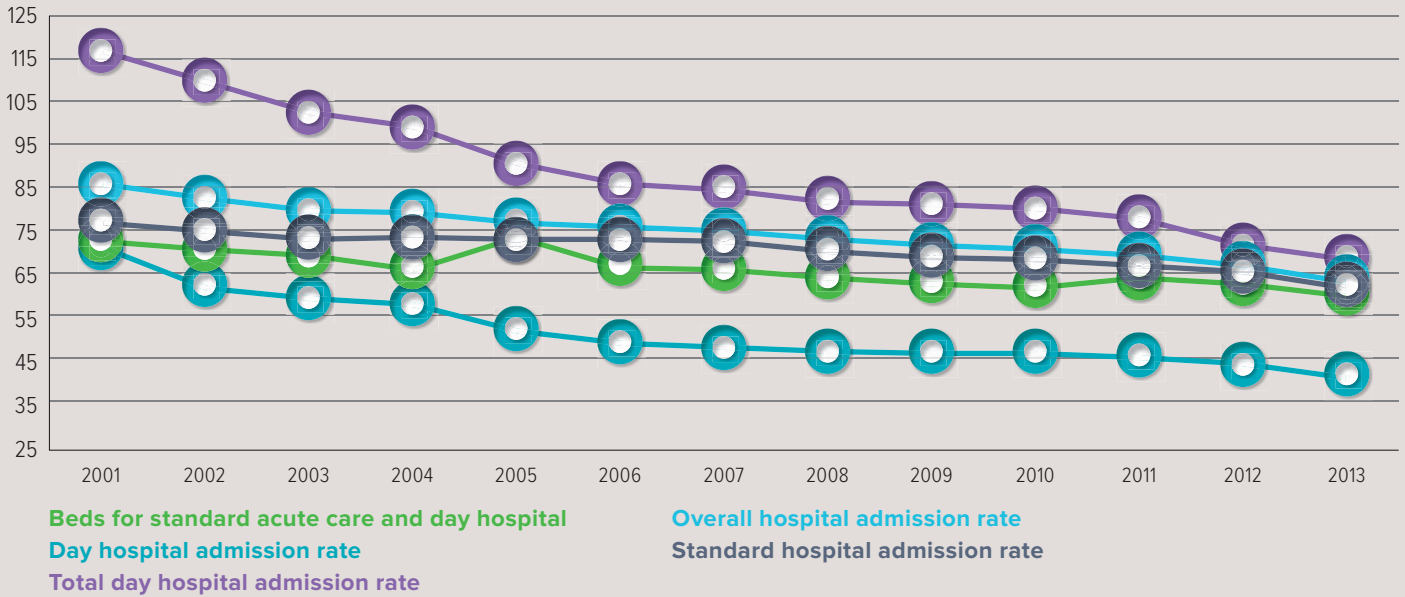


45% Expansions
24% Renovations
22% Technologies
9% Legislative adaptations



Hospital Care

Hospital Admission rates – Period 2001-2013 (index numbers 2001=100)

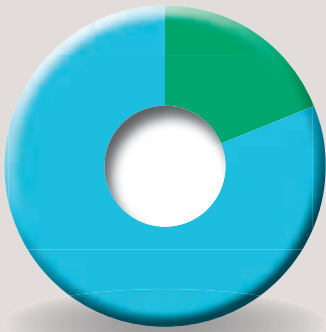


Emergency room activity – Period 2010-2013

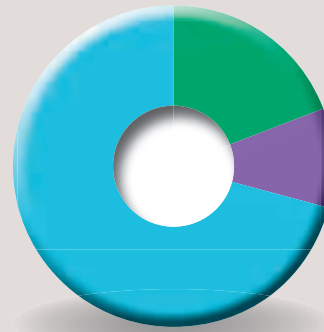
Local Health Trusts	2010		2011		2012		2013	
	Total	% admissions	Total	% admissions	Total	% admissions	Total	% admissions
LHT of Piacenza	106,798	15.0	107,573	16.1	110,938	15.8	110,098	16.3
LHT of Parma	39,325	13.8	35,762	15.4	39,632	16.1	38,718	16.4
LHT of Reggio Emilia	92,202	10.8	90,978	12.2	93,459	12.5	91,179	12.5
LHT of Modena	202,776	13.2	203,119	14.3	200,110	14.4	198,344	14.3
LHT of Bologna	246,856	13.2	249,696	15.2	239,259	15.0	237,284	14.6
LHT of Imola	59,231	15.6	57,897	15.8	55,329	16.7	54,416	17.1
LHT of Ferrara	89,257	12.3	89,265	15.9	84,543	14.4	74,037	14.0
LHT of Ravenna	183,586	12.6	188,466	14.2	183,442	14.5	179,908	14.8
LHT of Forlì	59,255	12.8	57,688	13.3	54,022	14.7	49,343	17.1
LHT of Cesena	55,074	18.2	78,757	13.0	80,742	13.1	81,907	12.9
LHT of Rimini	174,373	11.5	178,686	12.2	175,673	12.2	181,294	12.6
University Hospital Trust of Parma	82,535	17.7	83,457	18.2	88,014	18.7	102,686	18.0
University Hospital Trust of Reggio Emilia	86,574	14.1	75,039	15.5	74,974	15.0	77,539	15.1
University Hospital Trust of Modena	110,859	13.2	104,544	14.1	108,740	13.5	106,960	12.7
University Hospital Trust of Bologna	131,382	19.0	128,272	22.0	132,107	21.2	134,944	20.8
University Hospital Trust of Ferrara	77,980	18.8	79,309	20.5	75,078	21.2	78,025	20.2
Irccs - Research Hospital – Istituto Ortopedico Rizzoli Bologna	28,129	7.3	26,577	7.4	25,024	7.5	24,882	7.2
Regional total	1,826,192	14.0	1,835,085	15.2	1,821,086	15.2	1,821,564	15.2



Public and accredited private beds – Year 2010: 19,606

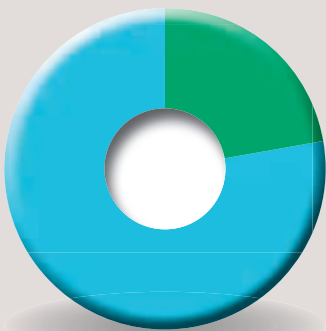


81.3% public
18.7% accredited private

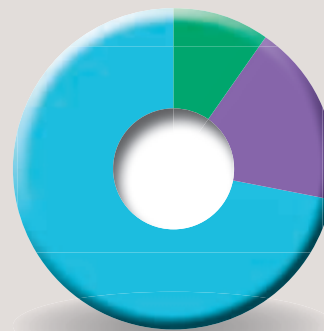


71.1% standard acute care
18.9% long-term care and rehabilitation
10% day hospital and day surgery

Public and accredited private beds – Year 2011: 20,493

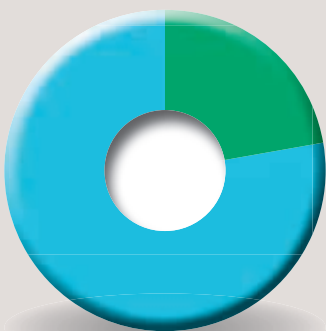


77.6% public
22.4% accredited private

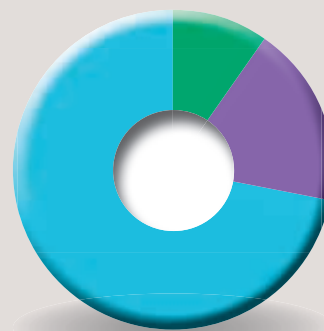


71.8% standard acute care
18.4% long-term care and rehabilitation
9.8% day hospital and day surgery

Public and accredited private beds – Year 2012: 19,945

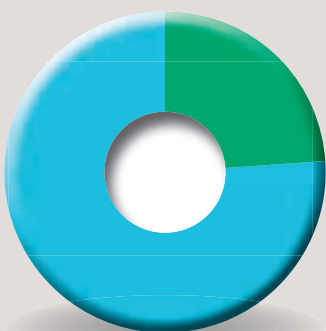


77% public
23% accredited private

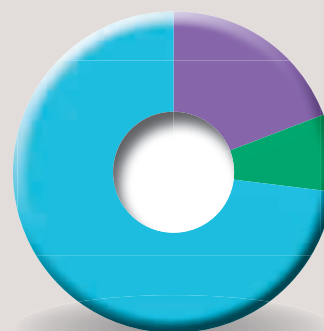


71.8% standard acute care
18.3% long-term care and rehabilitation
9.8% day hospital and day surgery

Public and accredited private beds – Year 2013: 19,016



75.9% public
24.1% accredited private

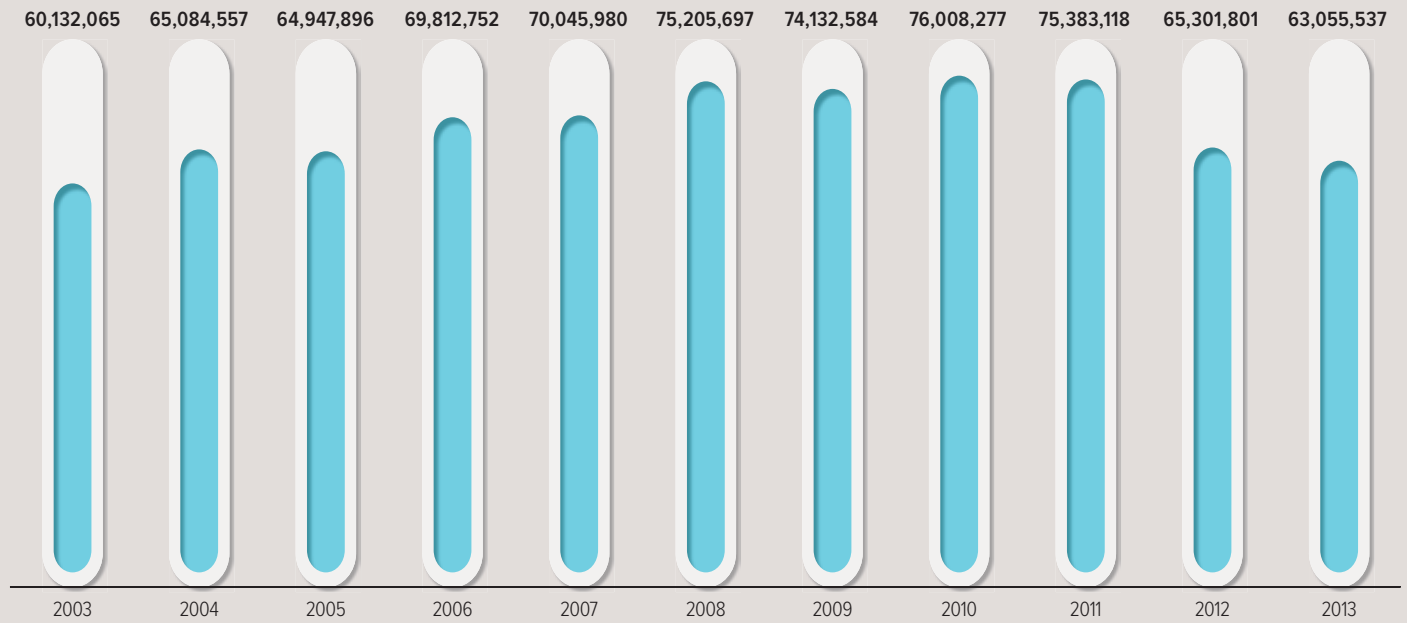


73.1% standard acute care
19.1% long-term care and rehabilitation
7.8% day hospital and day surgery



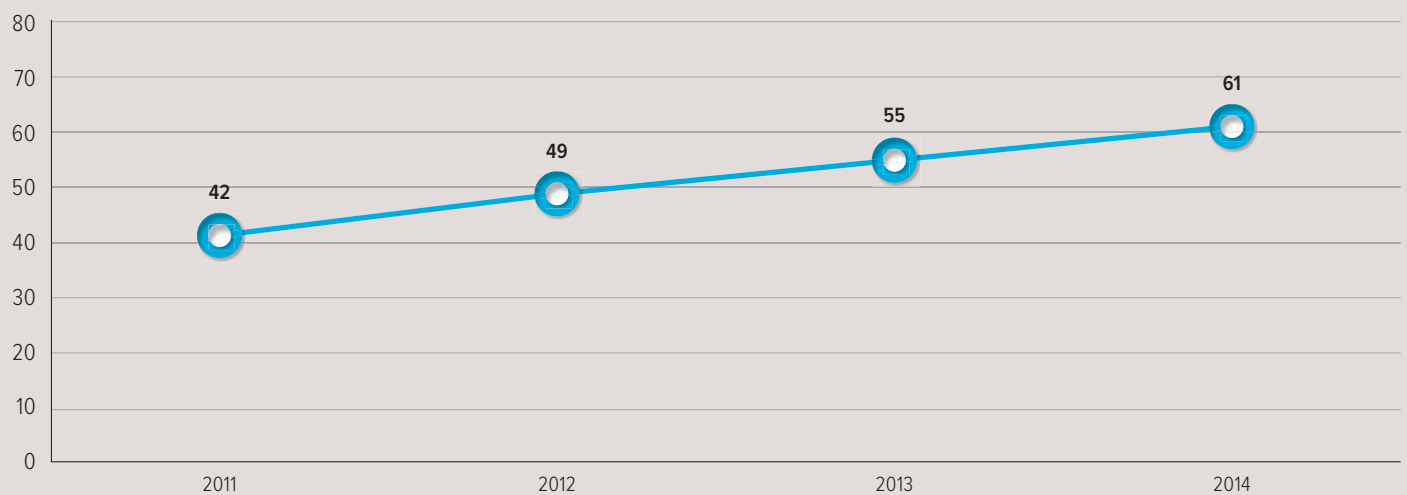
Specialist outpatient care

Specialist medical services – Period 2003-2013



Proximity outpatient clinics

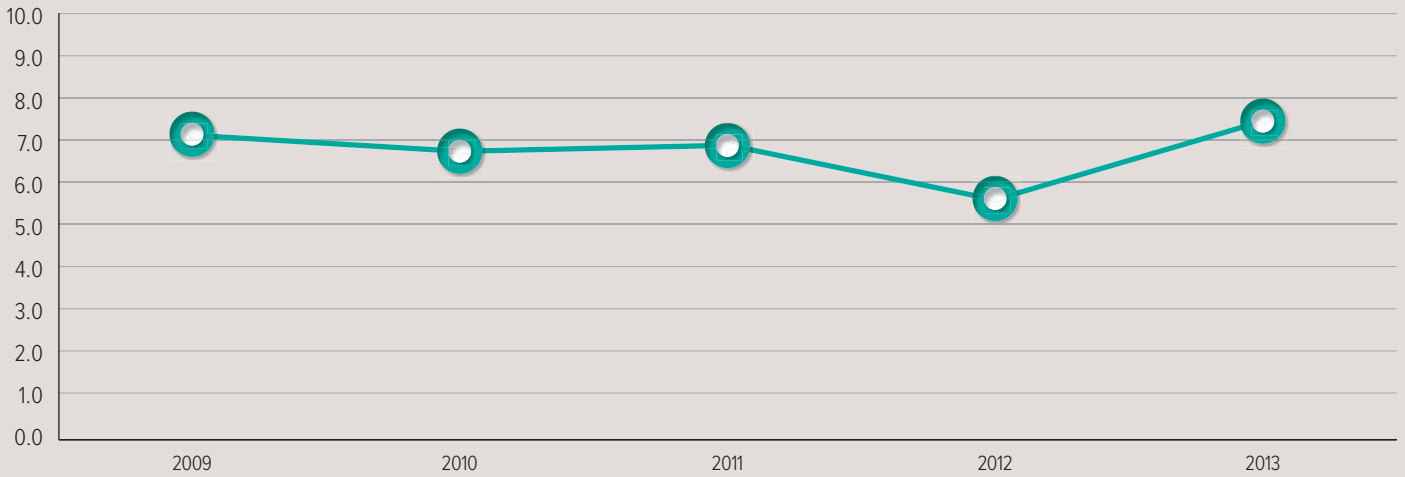
Functioning proximity outpatient clinics in Emilia-Romagna – Period 2011-2014





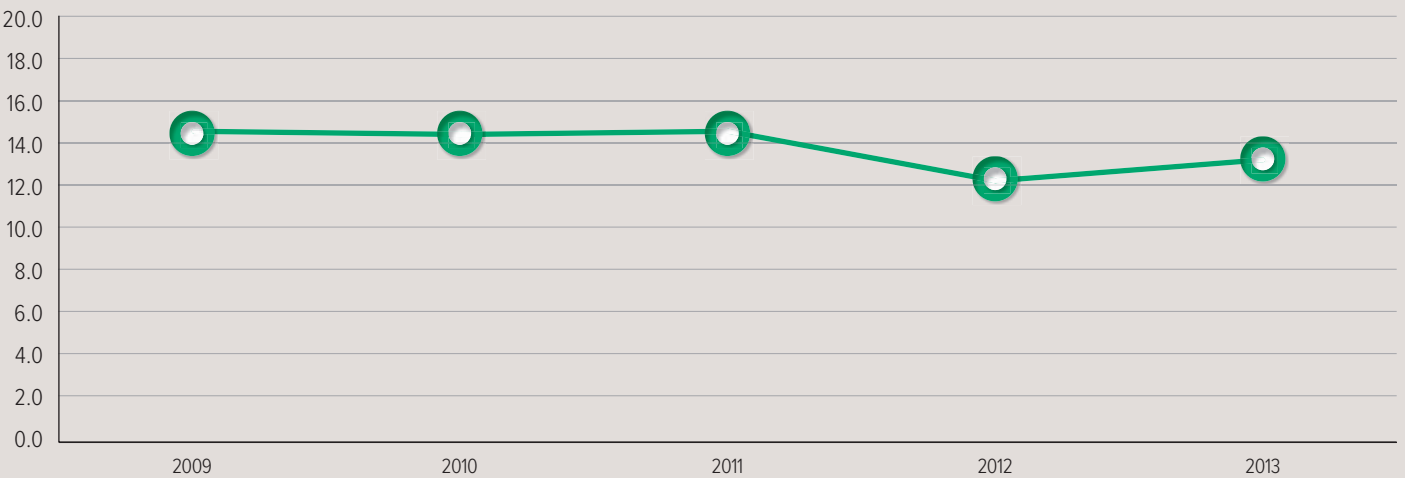
Family counselling services

Percentage of users of Family counselling service per area: obstetrics/gynaecology on target population* in Emilia-Romagna – Period 2009-2013**



(*) Target population: resident women age group 15-64.

Percentage of users of Spaces for Youth on target population* in Emilia-Romagna – Period 2009-2013**

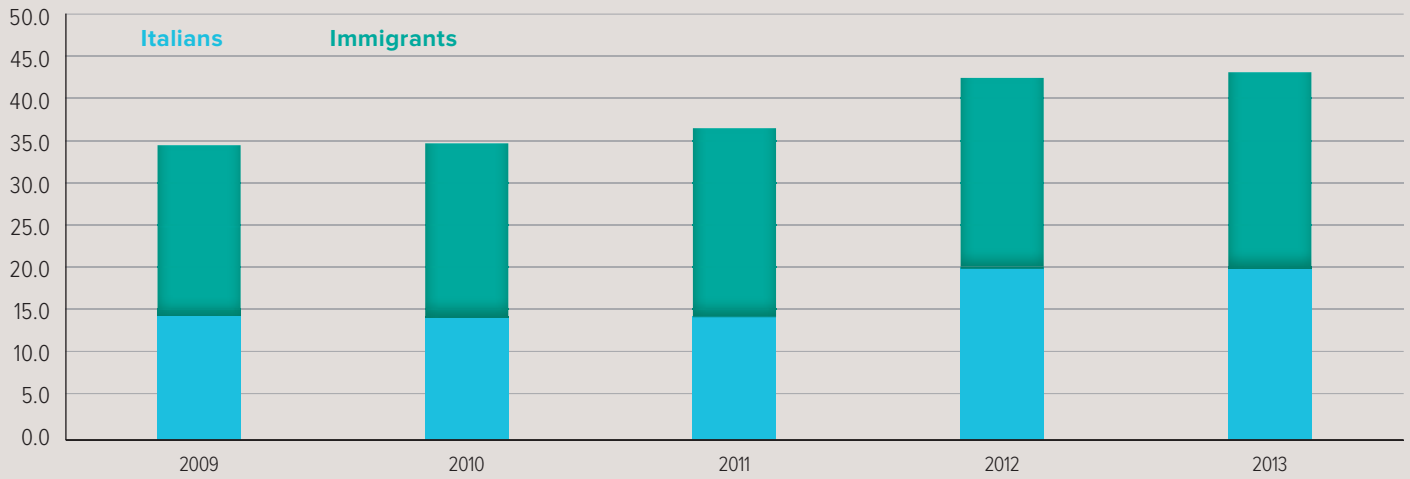


(*) Target population: boys and girls age group 14-19

(**) In both representations, the decline in the number of users in the years 2012 and 2013 is partly due to the different data collection method employed. In fact, since 2012 data has been collected as part of the Sico Information Flow (previous surveys were done by collecting paper forms at each health unit). Furthermore, the number of regional users no longer corresponds to the sum of users of Health Trusts, which in turn does not correspond to the sum of district users. This occurs when a user who goes to Family counselling facilities in two districts that are different from that of the same Local Health Trust has only been counted once in terms of Health Trust, just as a user who goes to Family counselling facilities in two different Health Districts is counted only once in the regional total.



Number of pregnancies overseen in the Family counselling services divided by citizenship – Period 2009-2013



Management of pregnancy certificates databank (CEDAP).

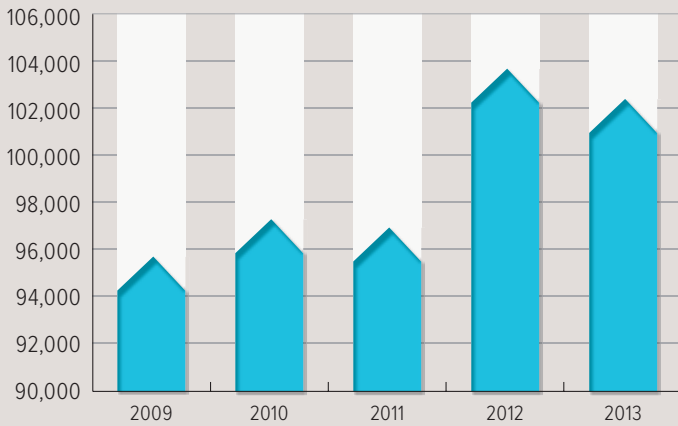


In-home care

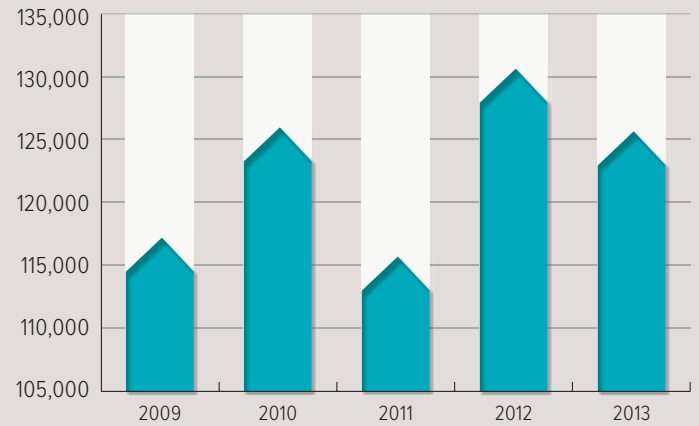
In-home care: people in care, people handled, services provided by operators – Period 2009-2013

2013	People in care	102,531
	In-home care recipients	125,725
	Total services provided by operators	2,520,346
2012	People in care	103,728
	In-home care recipients	130,637
	Total services provided by operators	2,442,949
2011	People in care	97,037
	In-home care recipients	115,799
	Total services provided by operators	2,464,867
2010	People in care	97,354
	In-home care recipients	126,033
	Total services provided by operators	2,525,799
2009	People in care	95,701
	In-home care recipients	117,029
	Total services provided by operators	2,485,082

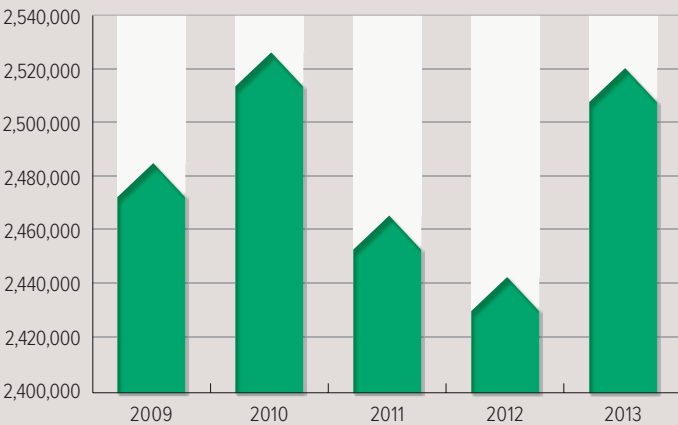
People in care – Period 2009-2013



In-home care recipients – Period 2009-2013



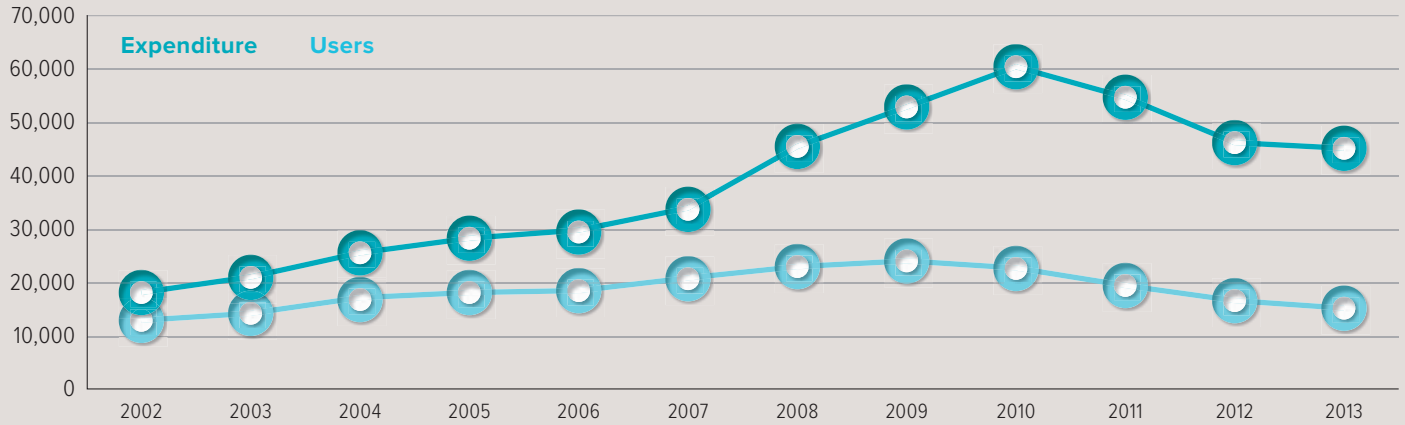
Total services provided by operators – Period 2009-2013



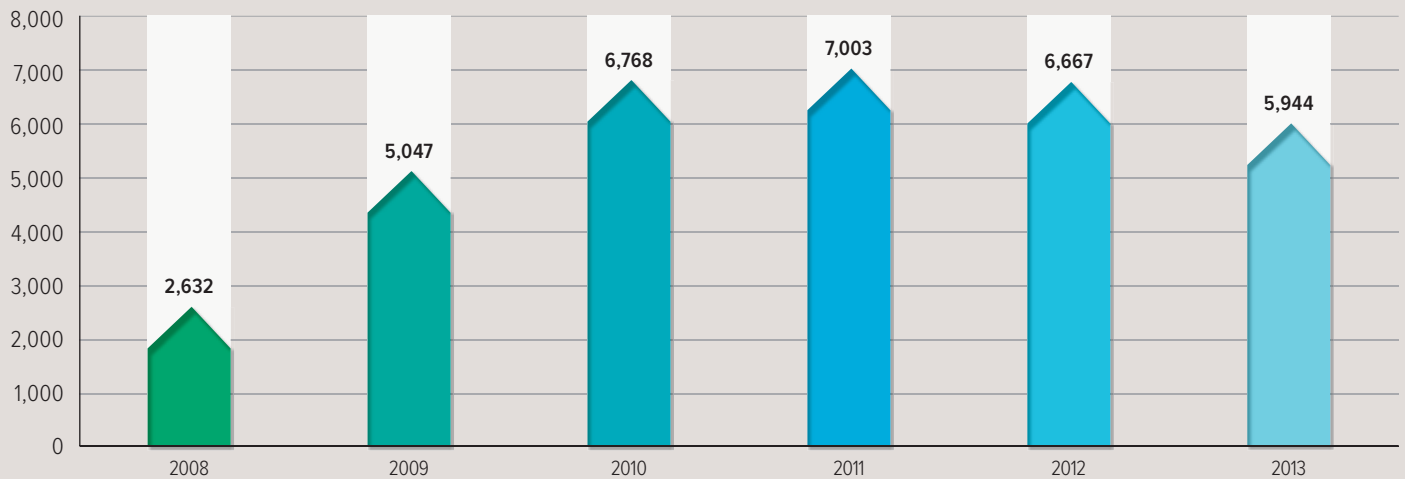


Care allowances

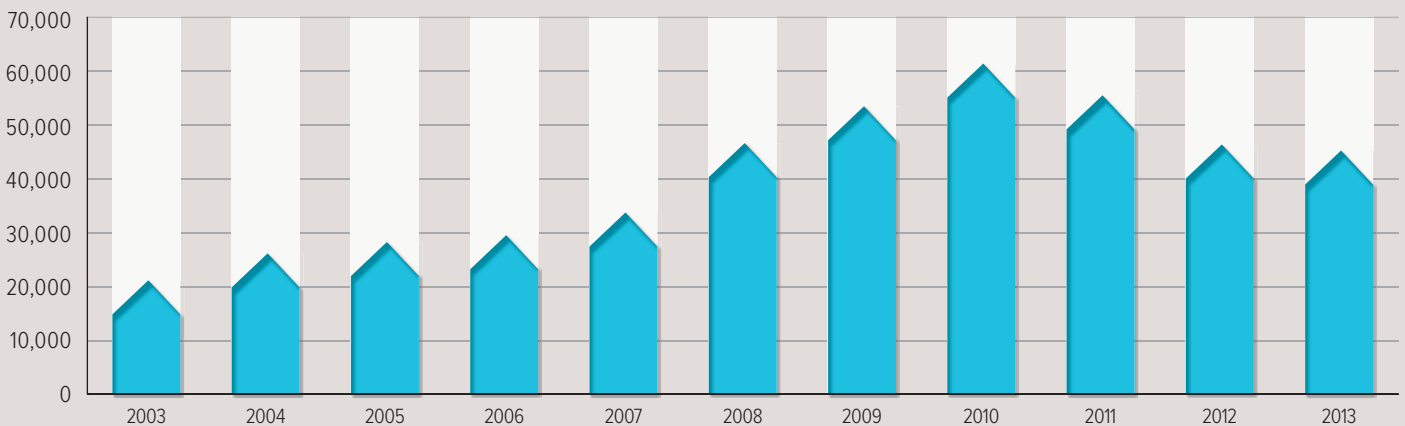
Care allowances users and expenditure – Period 2002-2013



People who benefited from allowances for family care – Period 2008-2013



Expenditure in Euros for care allowances – Period 2003-2013



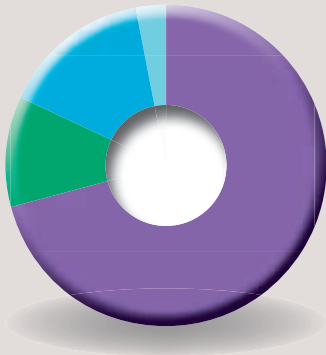


Places in nursing homes for elderly

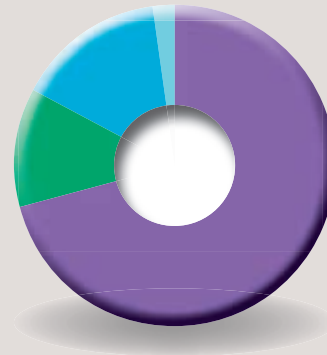
Admissions to residential facilities by type of stay – The comparison period 2010-2013

Year 2010

Year 2013

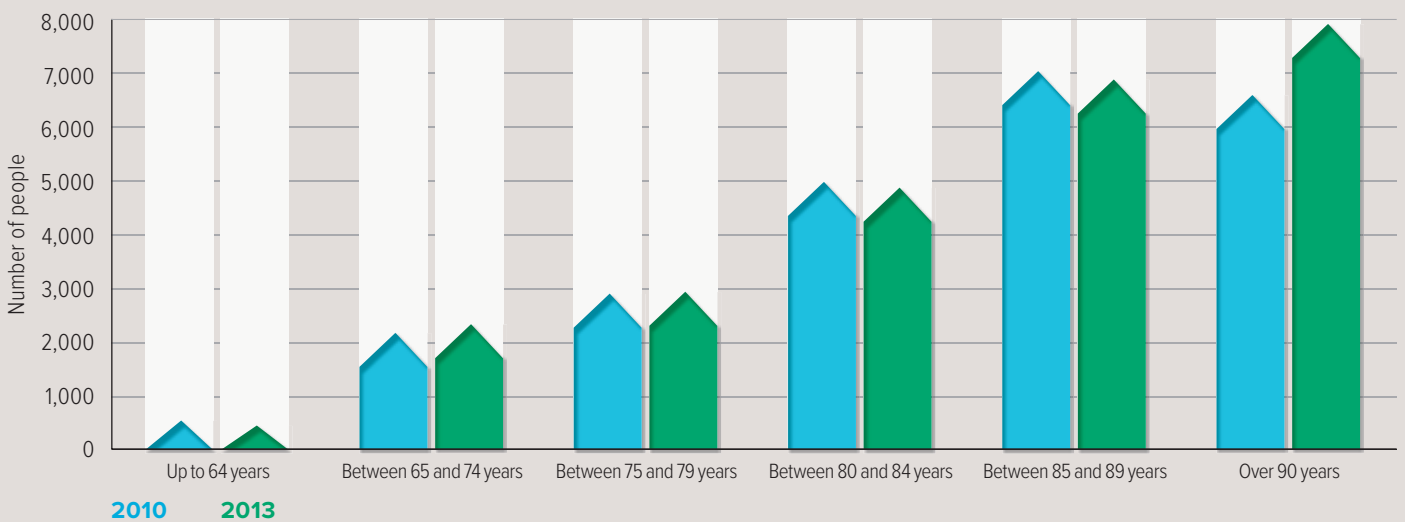


71% Long-term stay
15% Recovery/rehabilitation following hospital discharge
11% Temporary relief stay
3% People affected by dementia

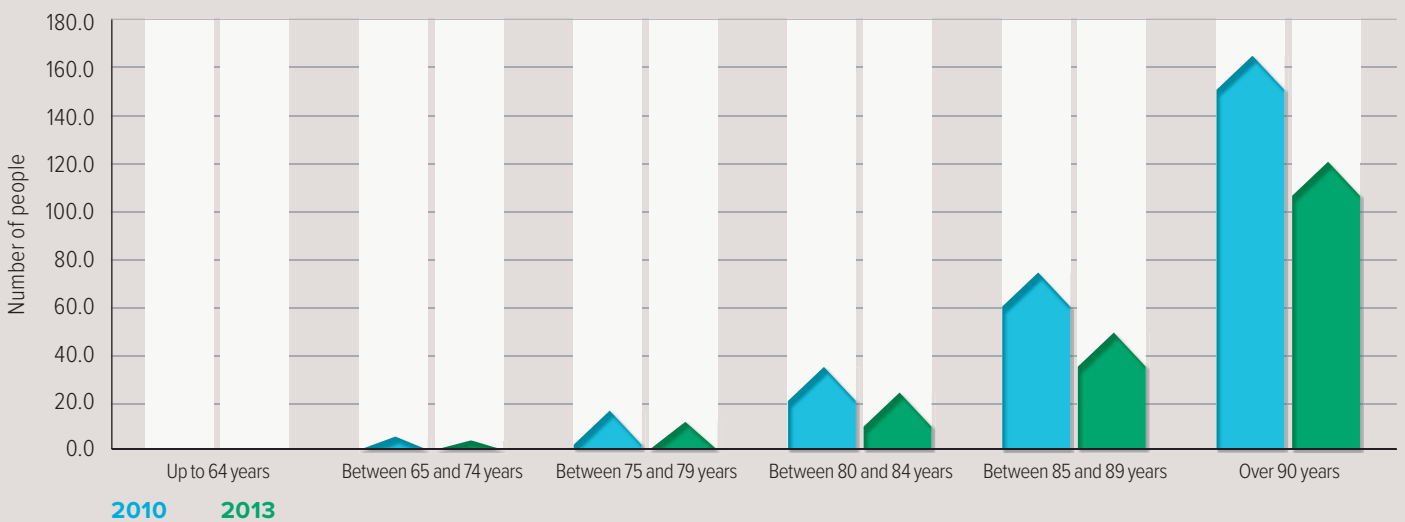


71% Long-term stay
16% Recovery/rehabilitation following hospital discharge
12% Temporary relief stay
2% People affected by dementia

Number of elderly in residential facilities by age group – The comparison period 2010-2013



Elderly in residential facilities: specific rate per 1,000 inhabitants – The comparison period 2010-2013



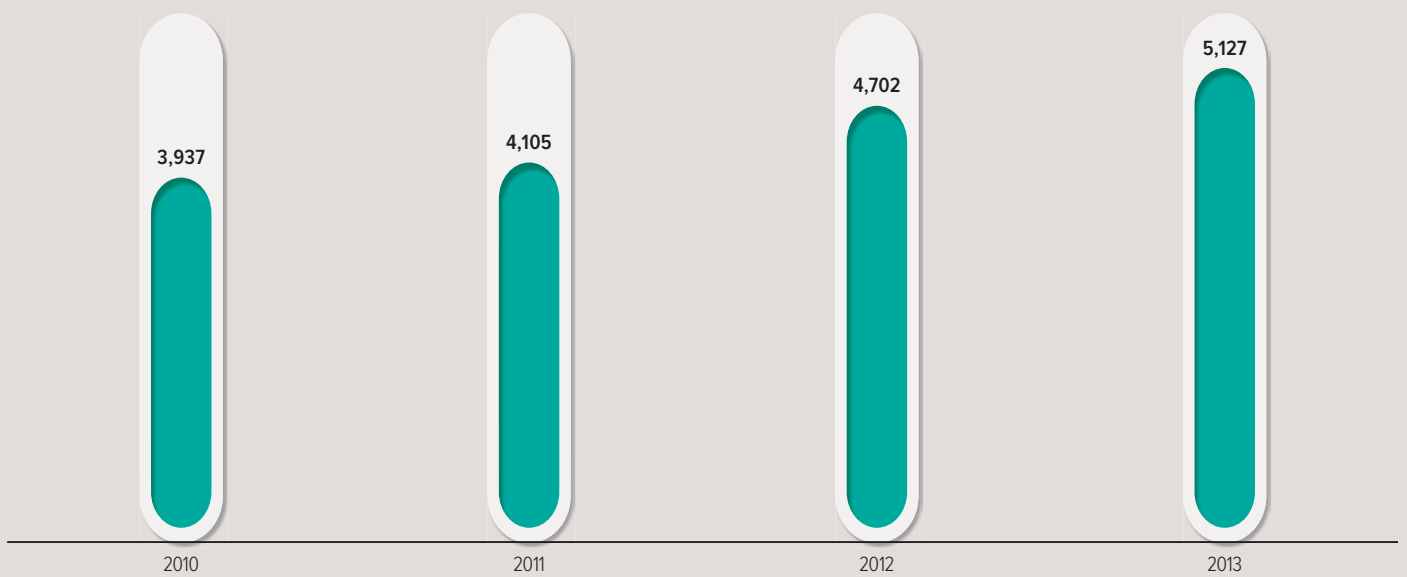


Hospice care

Beds in hospice by Health Trust – Period 2010-2013

Local Health Trust	2010	2011	2012	2013
LHT of Piacenza	10	23	23	23
LHT of Parma	41	41	49	49
LHT of Reggio Emilia	26	26	26	26
LHT of Modena	10	10	10	10
LHT of Bologna	43	43	58	58
LHT of Imola	12	12	12	12
LHT of Ferrara	23	23	23	23
LHT of Ravenna	33	25	19	29
LHT of Forlì	19	19	19	19
LHT of Cesena	14	14	14	14
LHT of Rimini	10	10	20	20
Total	241	246	273	283

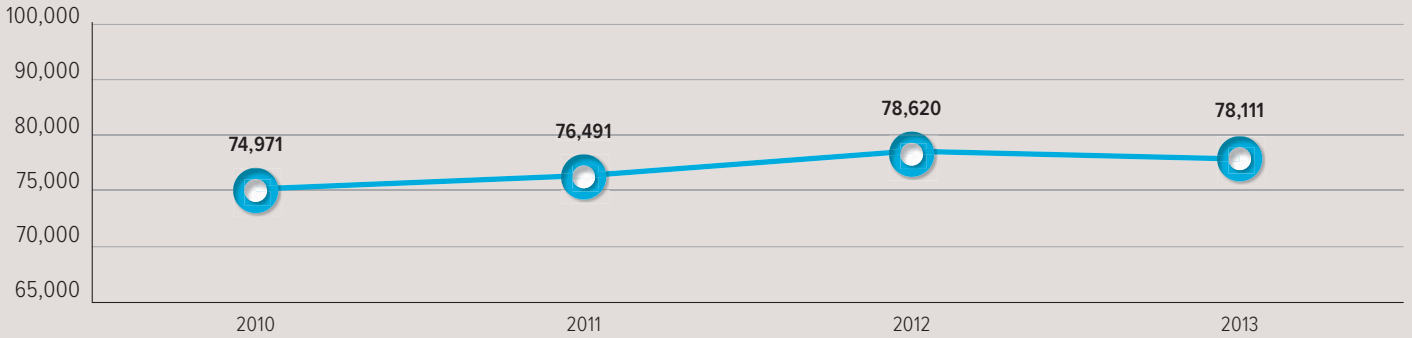
Admissions in hospice in Emilia-Romagna – Period 2010-2013





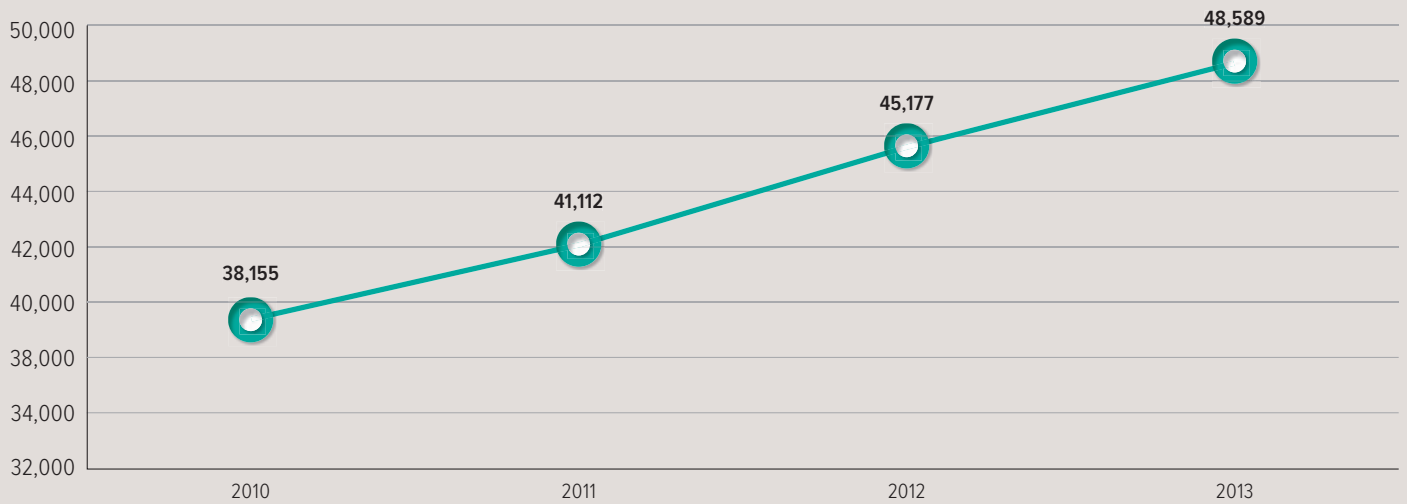
Mental health services

Adults treated in Mental health centres – Period 2010-2013*



(*) With the regional circular of 1/2013 the new information flow for Adult Mental Health was approved, introducing methods that give a more accurate count of the patients. The 2013 data also contain more clinical and evaluation information on the activities carried out by the Services.

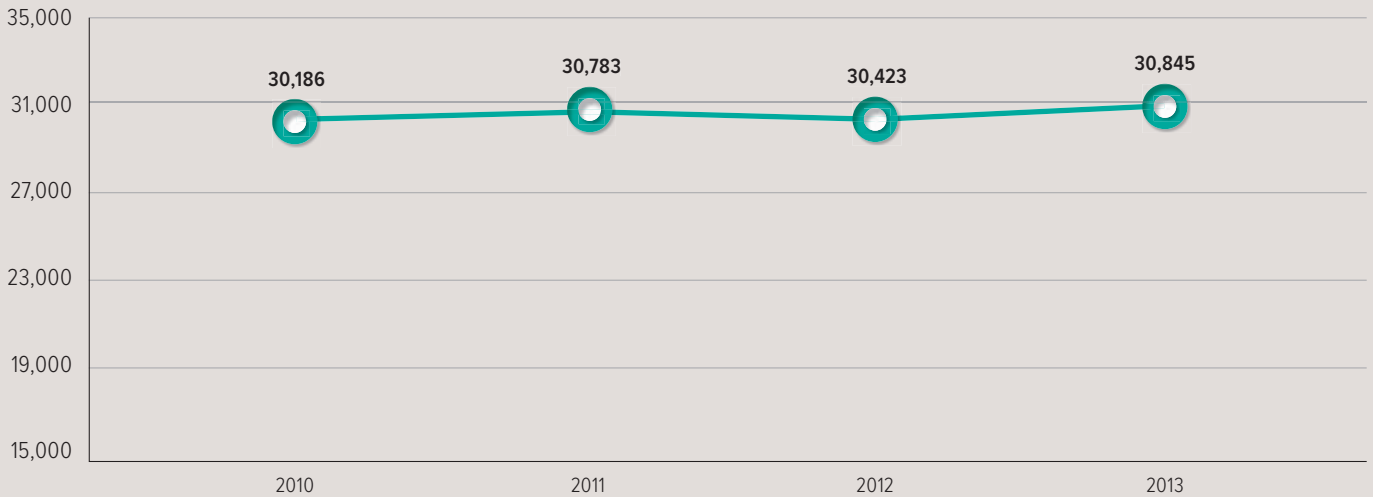
Minors treated in Neuropsychiatric Services for children and adolescents – Period 2010-2013





Substance abuse care facilities

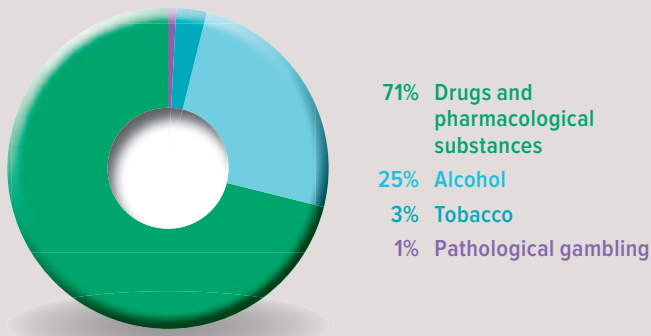
Drug addicts in treatment at the SerTs – Period 2010-2013 (*)



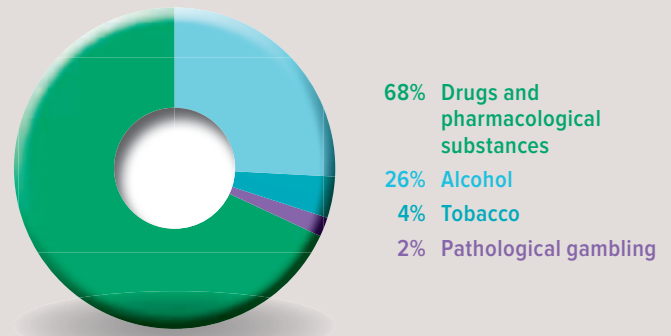
(*) Figures for 2012 differ from those reported in the previous report as the criteria adopted gives a more accurate count of users.

SerT users by type of addiction/problem from 2010 to 2013

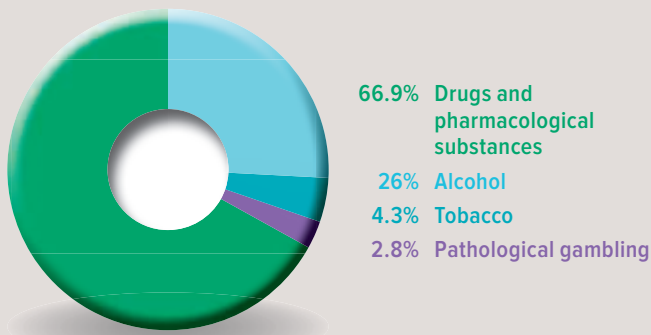
Year 2010 – % values



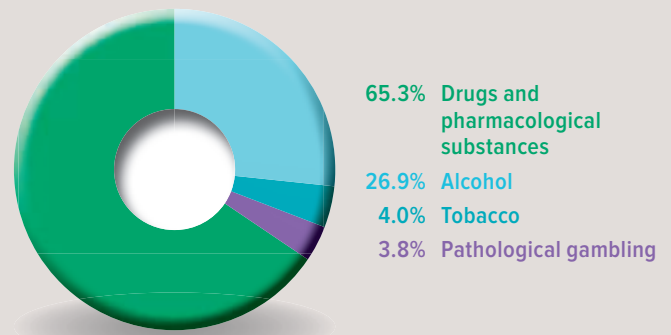
Year 2011 – % values



Year 2012 – % values



Year 2013 – % values





Senile dementia care facilities

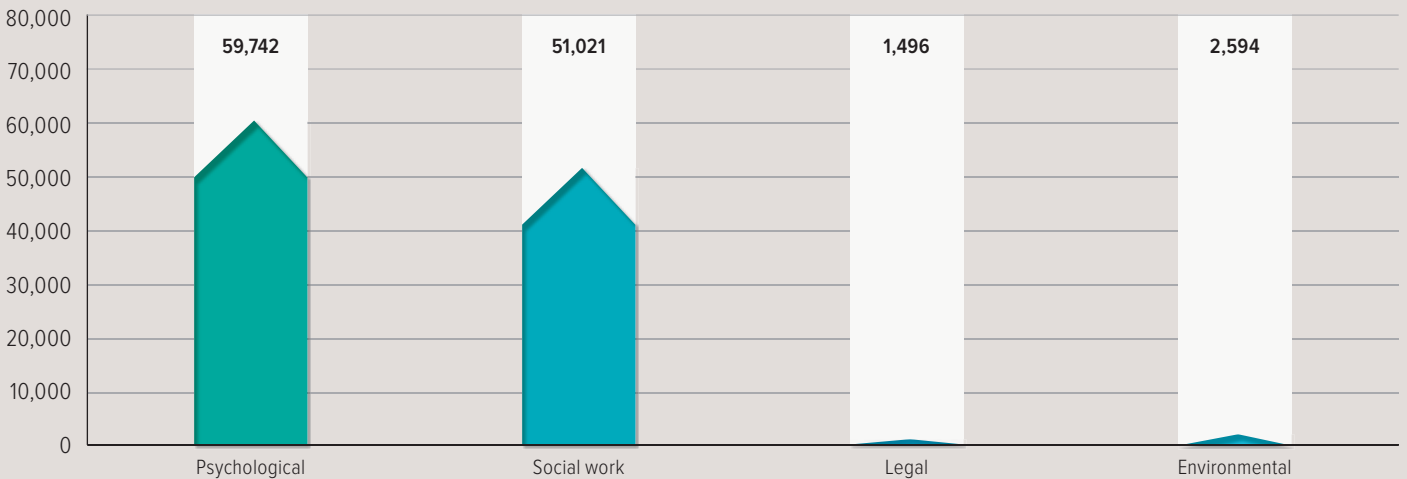
Visits – Period 2002-2012

	First visits	Check-ups	Total number of visits
2010	18,017	47,598	65,615
2011	18,284	51,074	69,358
2012	19,808	55,490	75,298
2013	20,277	55,450	75,727
Total	202,749	493,992	696,741

Specialist consultations with family members – Period 2002-2012

	2010	2011	2012	2013	Total
Psychological	8,016	6,088	5,896	7,606	73,244
Social work	8,769	6,026	6,146	5,862	63,029
Legal	215	200	93	104	1,693
Environmental	89	72	61	121	2,776
Total	17,089	12,386	12,196	13,693	140,742

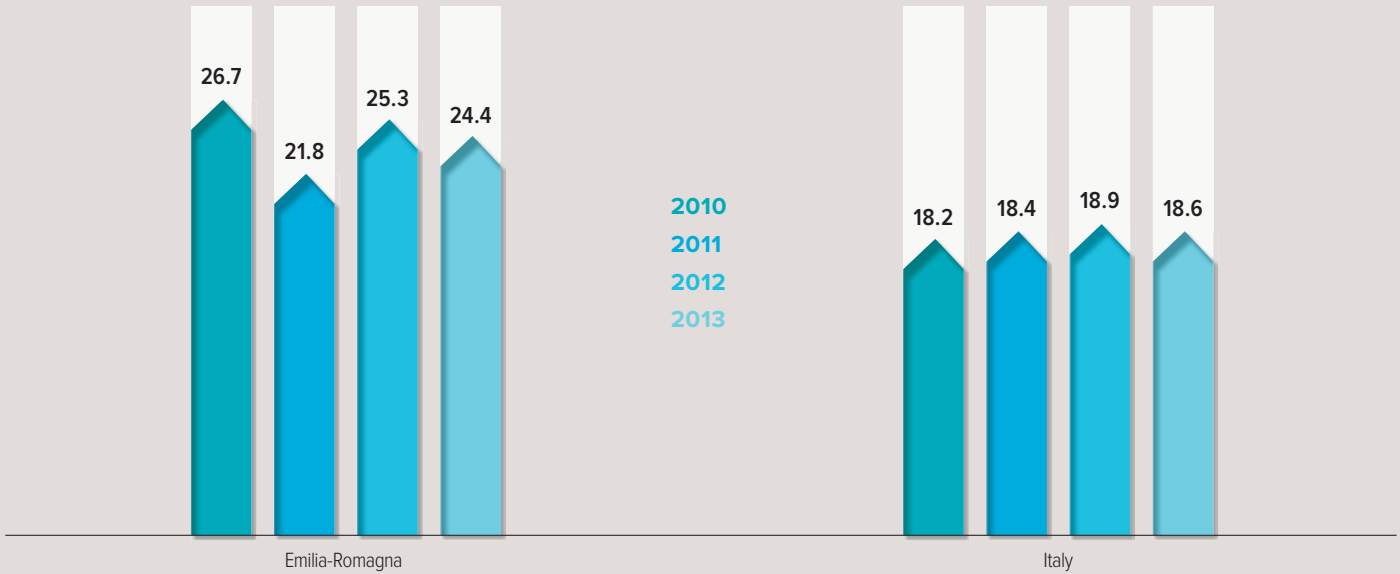
Specialist consultations for dementia – Period 2002-2013



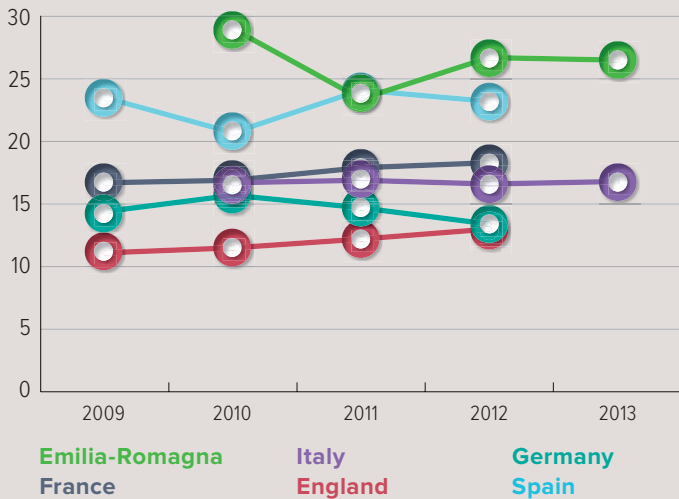


Donations and transplants of organs, tissues, cells

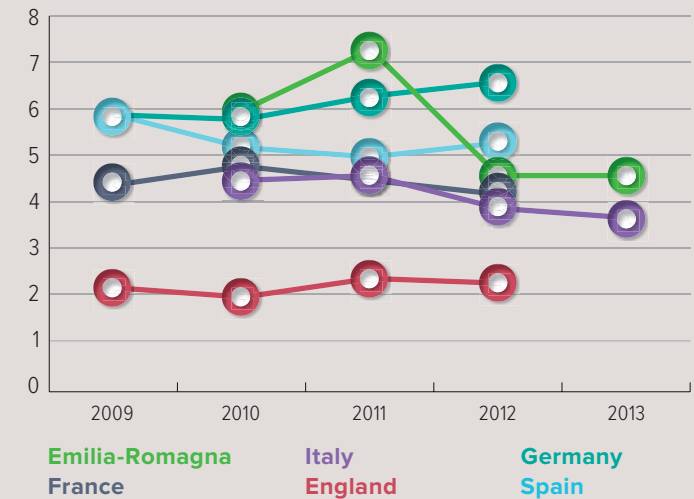
Donors used (per million population) in Emilia-Romagna and Italy – Period 2010-2013



Number of liver transplants per million inhabitants Period 2009-2013



Number of heart transplants per million inhabitants Period 2009-2013



The average age of donors is the cause of the general nationwide strong decrease in heart donations. However, in 2013, Emilia-Romagna performed the same number of transplants as the previous year (20, of which one was associated with a kidney transplant), equal to 4.6 per million population (pmp), higher than the national figure of 3.7. The transplant index was equal to 117.6%, demonstrating the transplant centre's efficiency in the use of the organs from other regions. The interregional program "Adonhers" was initiated in Emilia-Romagna and Tuscany, with the aim of expanding the number of potential heart donors. It includes the study of less than optimal donors to better assess suitability, using an investigation on organ function (pharmacological eco-stress with dipyridamole) prior to donation.



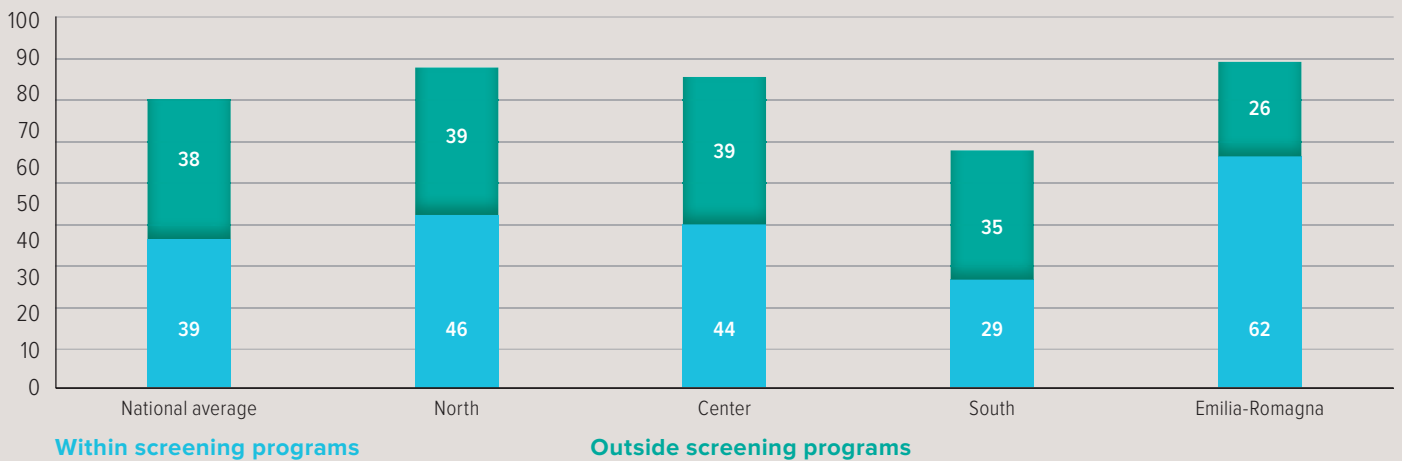
Screening programs for breast, cervical and colorectal cancer

From the date of activation to today, the three programs have involved more than 3 million people, men and women in different age groups. The data available from 2010 shows the extent of the programs that have affected the entire target population that is regularly invited in rather significant percentages. The figure is confirmed by PASSI (Progress of the Health Trusts for Health in Italy) which showed a coverage of 85% of the population for mammogram screening, 88% for cervical uterus screening, and 70% for colorectal screening. The participation of the affected population was also (in total and per program) much higher than the national average and that of the geographical macro-area of origin. As regards

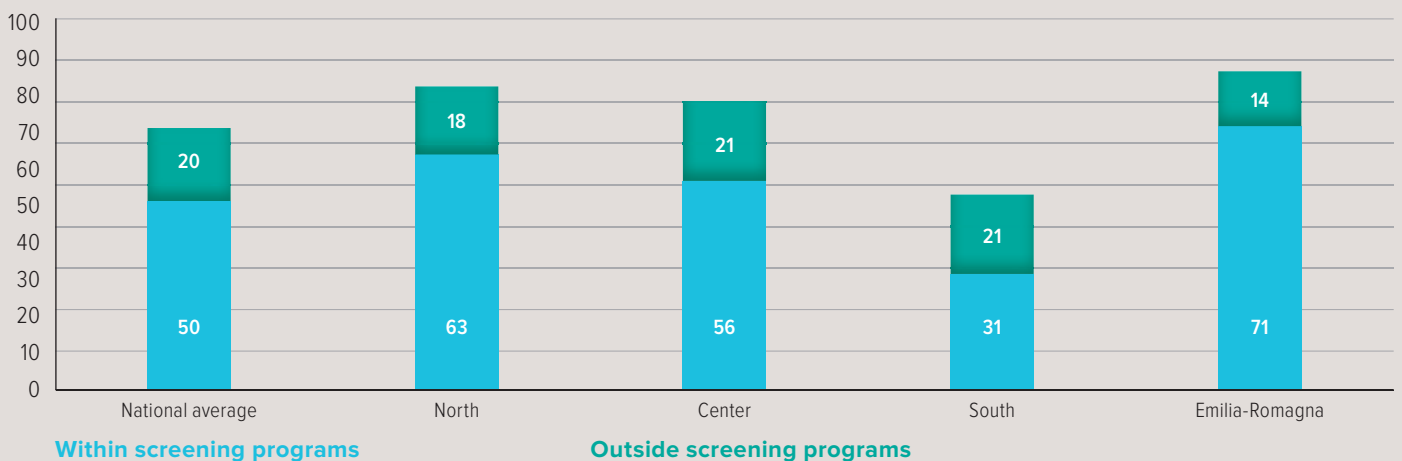
breast cancer, there is a progressive reduction (over a third) in cases identified in the advanced stage in the female resident population in the age group 55-74 years; in the same age group, which is the one targeted by the screening program, the data shows a reduction in mortality from 1996 to 2013 by 2.2% per year.

As for cervical cancer, evaluating the time trend in the incidence of invasive cancer over the years (1995-2010) through the cancer registry of the Emilia-Romagna Region, we see an average reduction of that cancer by 6.1% per year, which led, in the same period, to an overall reduction in the incidence of that cancer by about 60%.

Screening for cervical cancer: % population invited to the screening in the last 3 years: women from 25 to 64 years (Passi report 2010-2012)

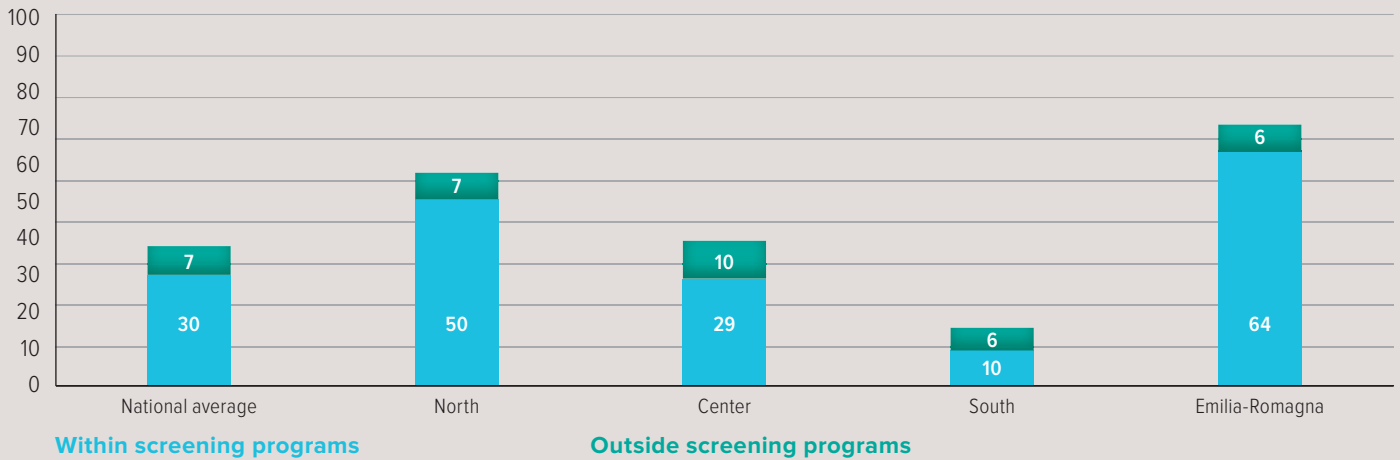


Screening for breast: % mammograms performed in the last 2 years in women from 50 to 69 years (Passi Report 2010-2012)



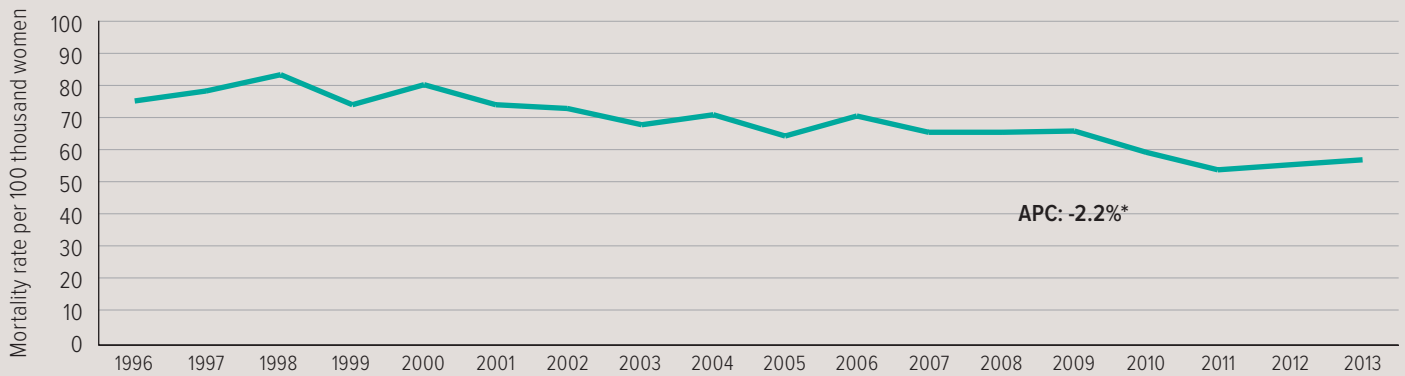


Screening for colorectal cancer: % population invited to the screening in recommended deadlines in people from 50 to 69 years (Passi Report 2010-2012*)



(*) Last available data.

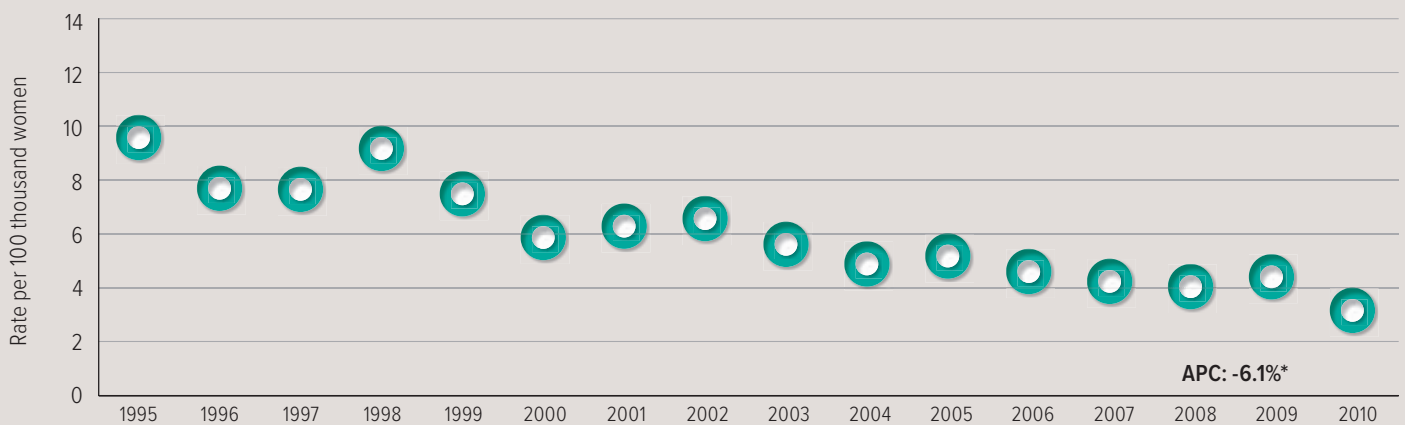
Mortality rate for breast cancer in women from 55 to 74 years in Emilia-Romagna – Period 1996-2013



APC: Annual percentage change.

NOTE: acceptance of invitations to screening in Emilia-Romagna shows a decrease in the rate of cancers in target population over the years in women from 55 to 74 years).

Cervical cancer rate per 100 thousand women in Emilia-Romagna – Period 1995-2010*



(*) Last available data.

APC: Annual percentage change.

NOTE: acceptance of invitations to screening in Emilia-Romagna shows a decrease in the onset of cancers in target population over the years.



Vaccinations

The vaccine coverage, while remaining at high levels in recent years, shows a declining trend, mainly due to the misperception of high-risk citizens and the poor efficiency of vaccinations against diseases that are wrongly thought to have disappeared or are not serious. These opinions are driven by websites and movements of citizens opposed to vaccinations that spread stories to scare people, totally unjustified from a scientific viewpoint, convincing many parents not to vaccinate their children. In Emilia-Romagna accurate monitoring of vaccine coverage is ensured and data is analysed at the District and Local Health levels, with special attention to those areas where coverage for “mandatory” vaccinations has fallen below 95%. There is also a confirmation of the reasons why people do not vaccinate, in order to ensure that it is not due to difficulties in accessing

services, related to conditions of immigrants or disadvantaged social situations.

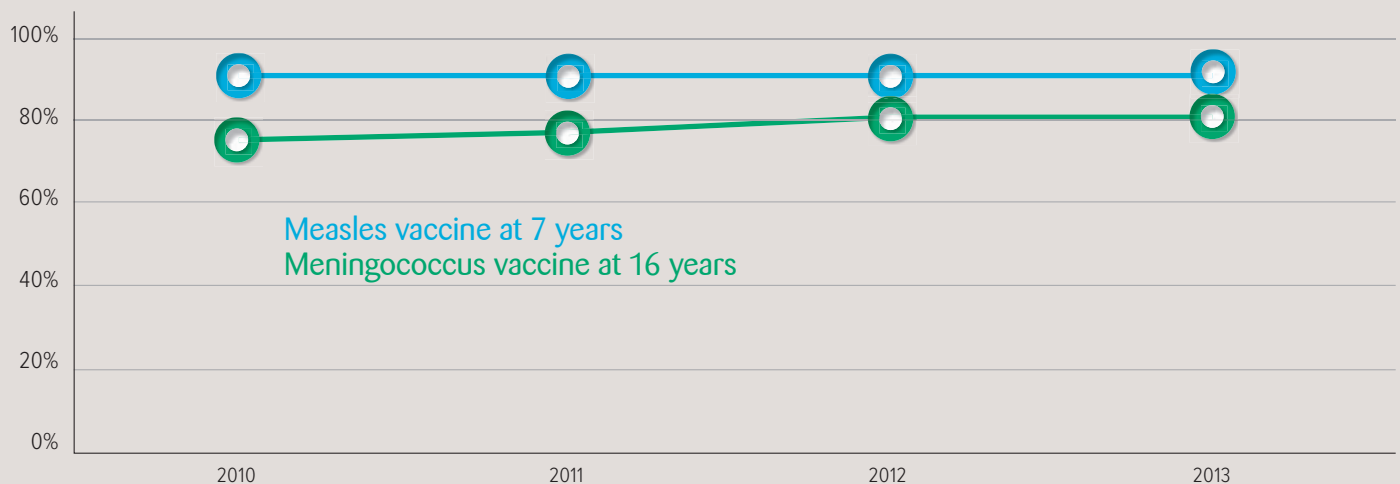
In the overall picture of modest decline, the positive elements to be emphasized are:

- coverage for vaccinations in the first year of life (the four mandatory ones - tetanus, diphtheria, polio and hepatitis B - plus pertussis and meningitis Haemophilus B remain above 95%;
- coverage at seven years for two doses of measles vaccination shows an increasing trend, as well as vaccination against meningococcal meningitis C at 16 years, also among the highest recorded in Italy;
- coverage for the HPV vaccination is continuously improving surpassing 75%, for the first birth cohorts vaccinated.

Vaccination coverage in Emilia-Romagna and Italy – Period 2010-2013

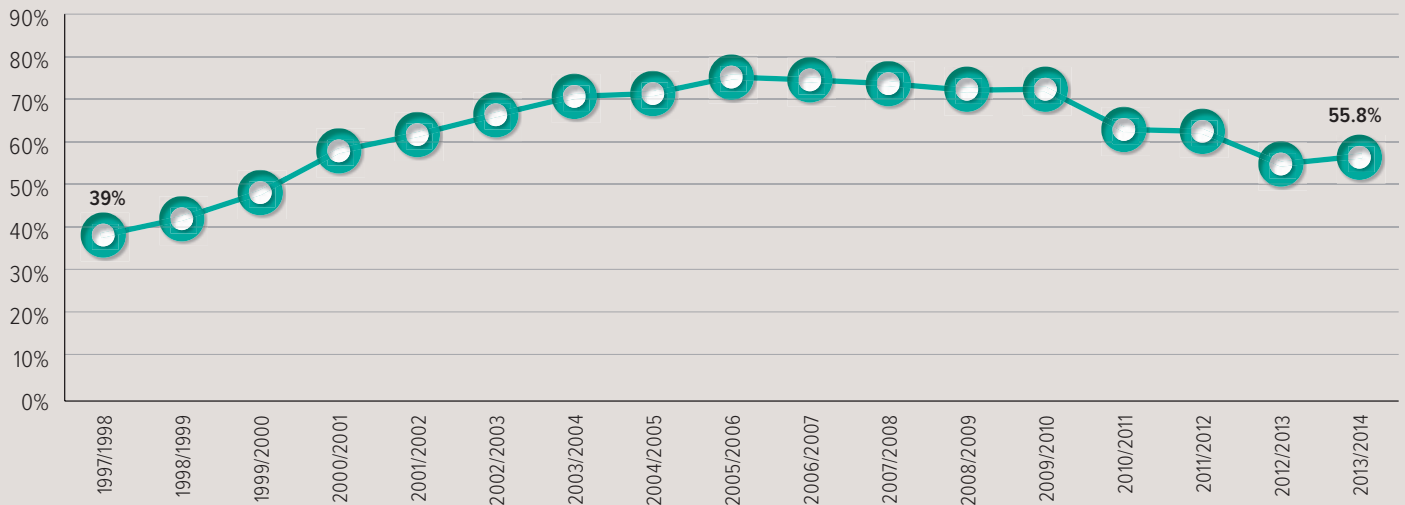
Type of vaccine	Emilia-Romagna 2010	Emilia-Romagna 2013	Italy 2013
Polio at 24 months	96.7	96.1	95.4
Whooping cough at 24 months	96.4	95.8	95.4
Dip-tet at 24 months	96.8	96.0	95.4
Haemophilus B at 24 months	96.0	95.3	94.5
Hepatitis B at 24 months	96.5	95.8	95.3
Measles-parotitis-rubella at 24 months	92.7	91.1	88.1
Pneumococcus at 24 months	94.6	94.1	n.d.
Meningococcus at 24 months	92.3	91.2	n.d.

Vaccination coverage trend for Measles-parotitis-rubella (two doses) and for Meningococcus C at 16 years Period 2010-2013

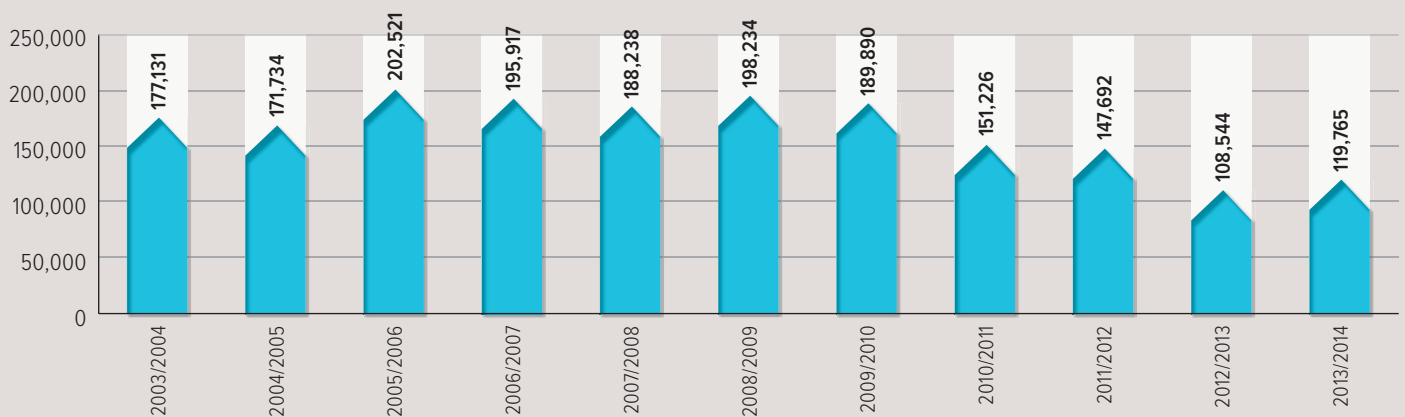




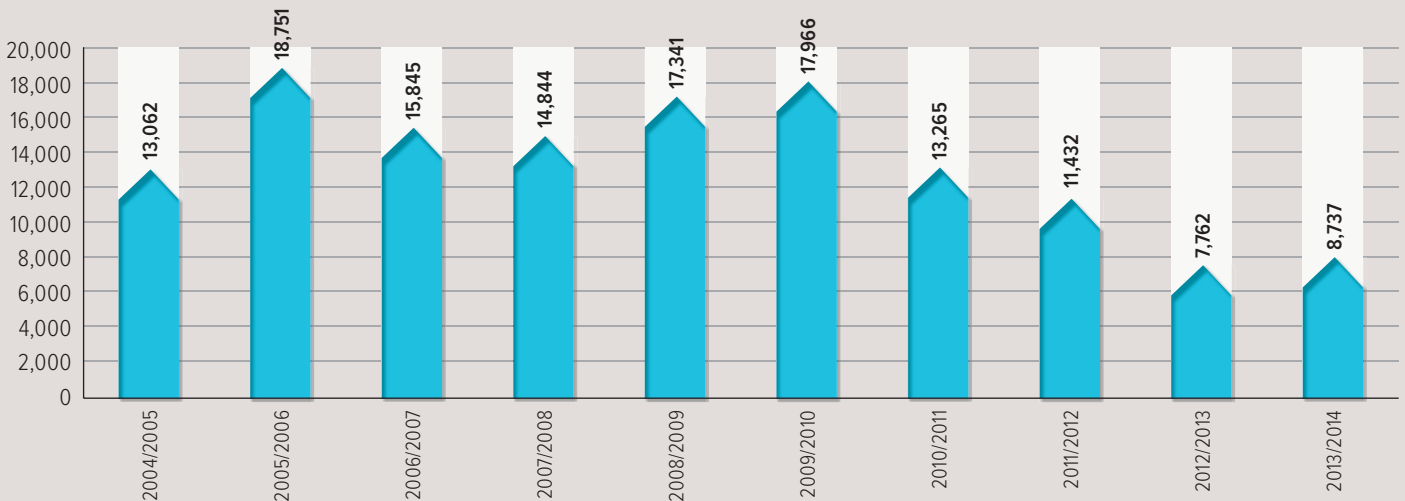
Flu vaccination in population 65 years and over: campaigns from 1997-1998 to 2013-2014 – % values



Flu vaccination in adults and children with chronic diseases: campaigns from 2003-2004 to 2013-2014

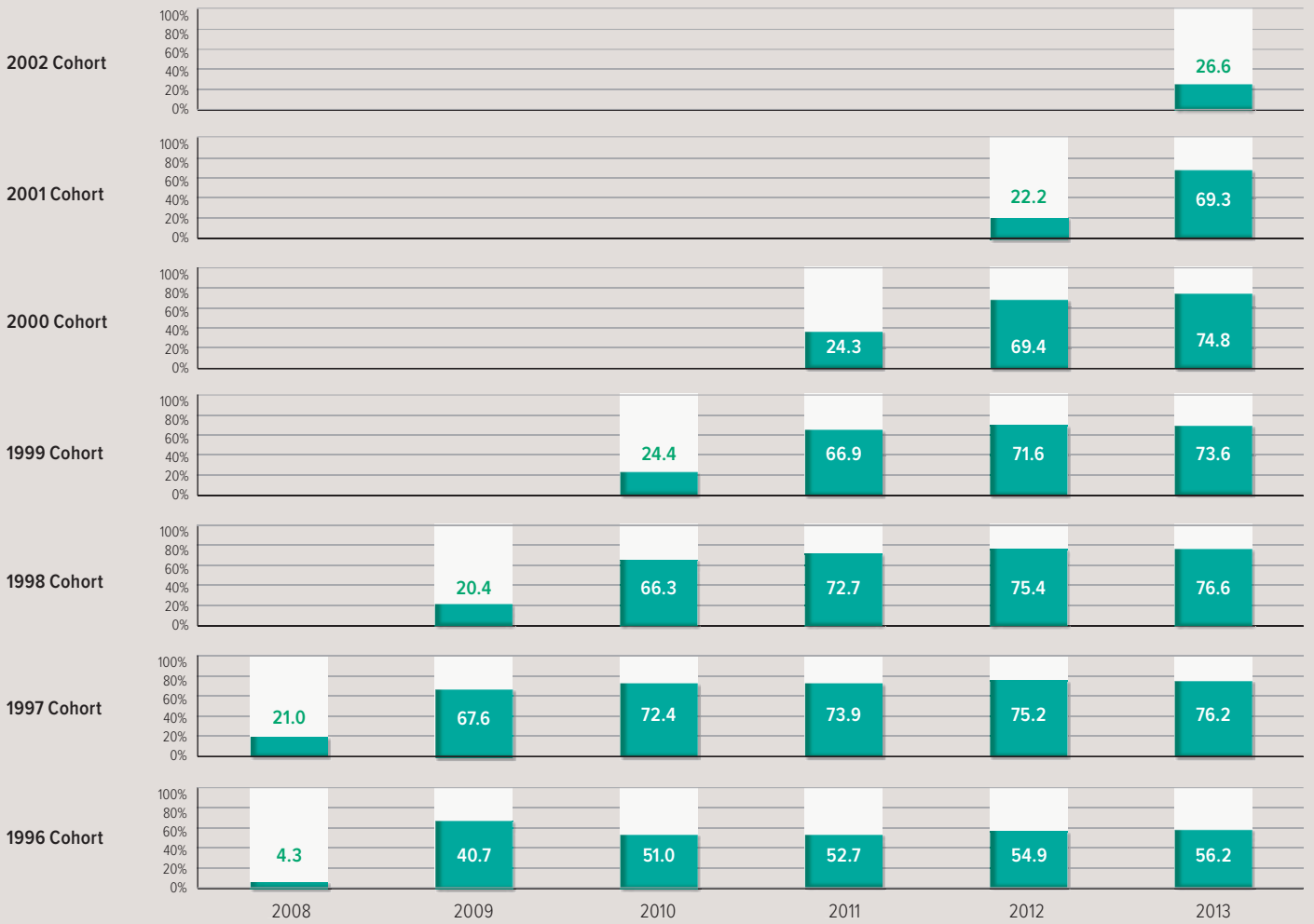


Flu vaccination in health workers: campaigns from 2004-2005 to 2013-2014

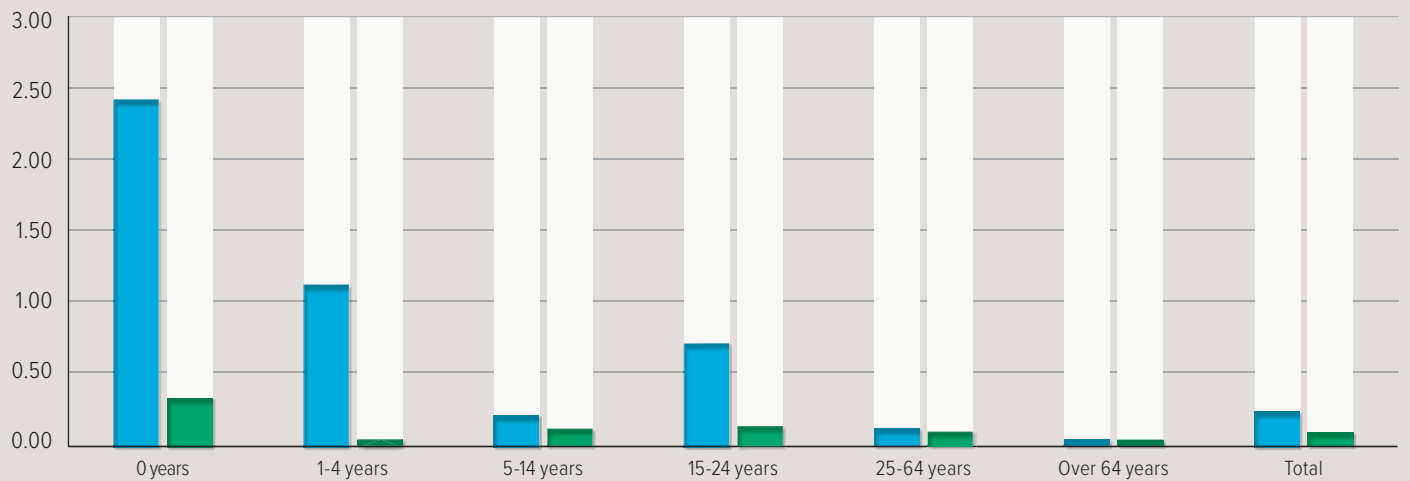




HPV Vaccination coverage (%) in Emilia-Romagna for cohort of birth and year – Period 2008-2013



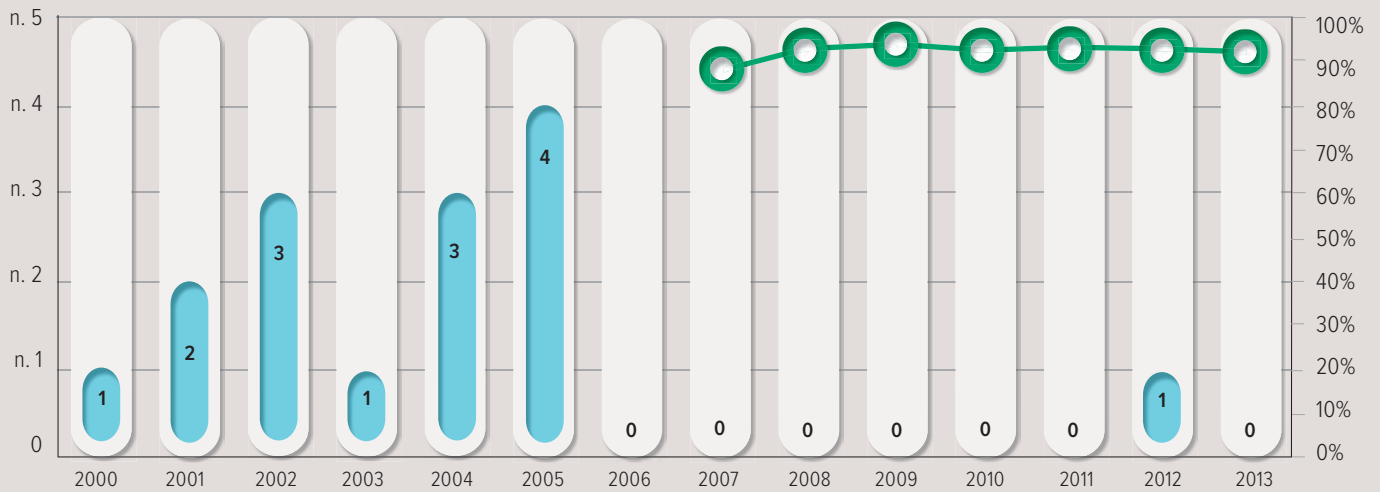
Invasive bacterial diseases (Mib) caused by Meningococcus C by age group before and after vaccination



Cases per 100,000 before the implementation of the vaccination program (2000-2005)
 Cases per 100,000 after the implementation of the vaccination program (2006-2013)



Invasive bacterial diseases (Mib) caused by Meningococcus C in the age group 0-4 in Emilia-Romagna Period 2000-2013

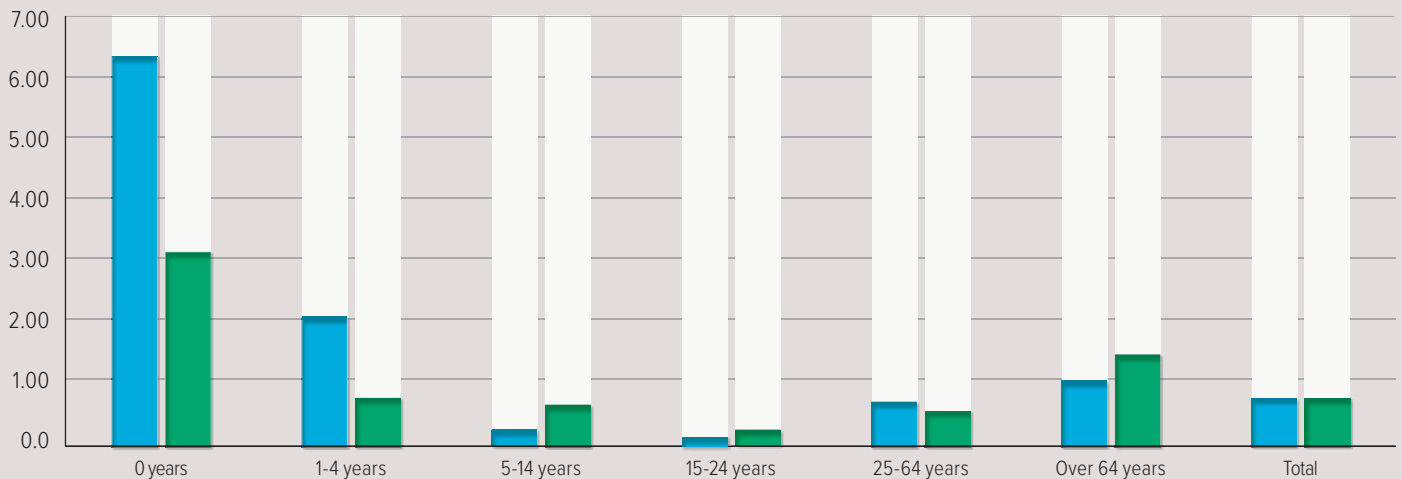


The histogram shows the Meningococcus C cases in the age group 0-4. The green curve shows trends in vaccine coverage at 24 months.

For invasive bacterial diseases (MIB: meningitis and septicaemia) meningococcal C (for which the regional program of vaccination began in 2006), cases have virtually disappeared in the age group 0-4 years and were reduced in all other ages. Before

the vaccination was begun, in children under 4 years of age, in Emilia-Romagna, there were 1 to 4 cases of meningitis or meningococcal septicaemia C per year.

Pneumococcus- meningitis: comparison in cases (per 100,000) per age group pre and post vaccine



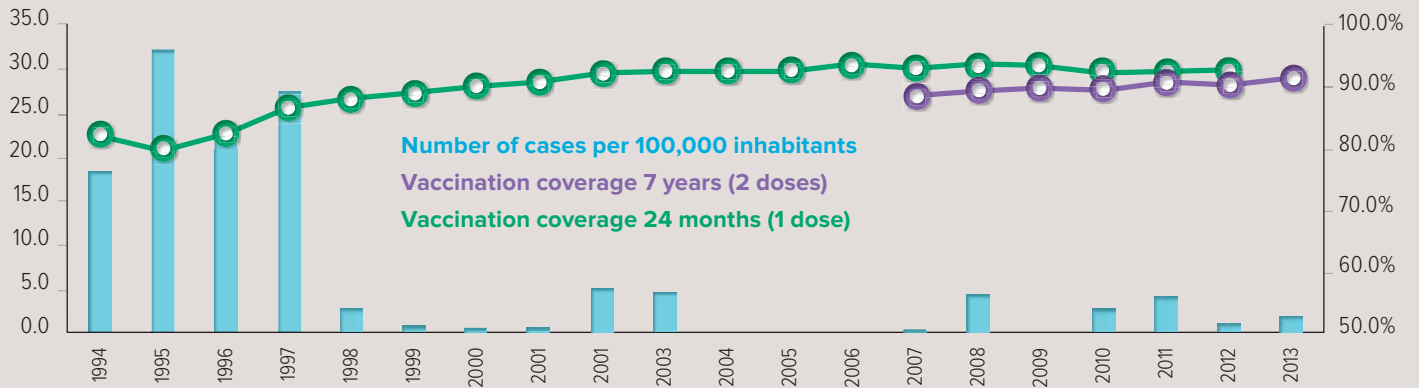
Cases per 100,000 before the implementation of the vaccination program (2001-2005)
Cases per 100,000 after the implementation of the vaccination program (2006-2013)

The comparison of the number of cases/100,000 inhabitants of pneumococcal meningitis in the years before the introduction of the vaccination and in those that followed, shows that vaccination led to a significant decrease in the number

of cases of meningitis under 4 years of age. It should be noted that the offer of vaccination against pneumococcus began in Emilia-Romagna in 2006 and is for children in the first year of life.



Measles: number of cases per 100,000 inhabitants and vaccination coverage (%) at 24 months (1 dose) and at 7 years (2 doses)



The histogram shows the measles cases per 100,000 inhabitants in the Emilia-Romagna. The purple curve shows the course of vaccination coverage in 7th year (two doses) and the green curve shows trends in vaccine coverage at 24 months (1 dose).

After the introduction of vaccination against measles, the numbers have gone from a few thousand cases a year to a few dozen. Furthermore, in recent years the cases concern children and young adults who have not been vaccinated or who received only one dose. It should be remembered that vaccination against measles includes two doses: the first to be carried out at 13-

15 months and the second at 5-6 years of age. Reducing the number of cases of measles consequently involves reducing the sometimes serious complications that this disease may involve (pneumonia, encephalitis, hepatitis, etc.). The increase in cases in recent years is also connected to the decline in vaccination coverage in the resident population in Emilia-Romagna.

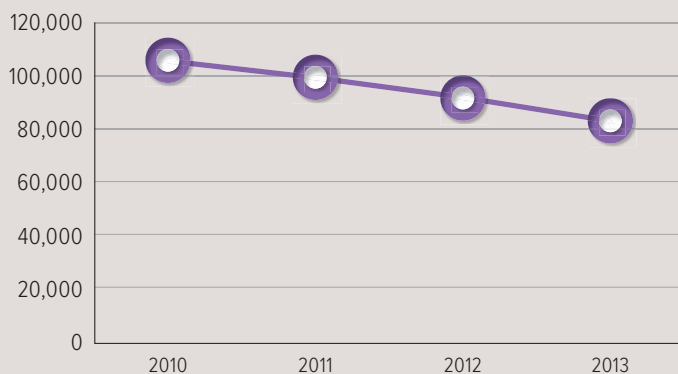


Occupational health and safety

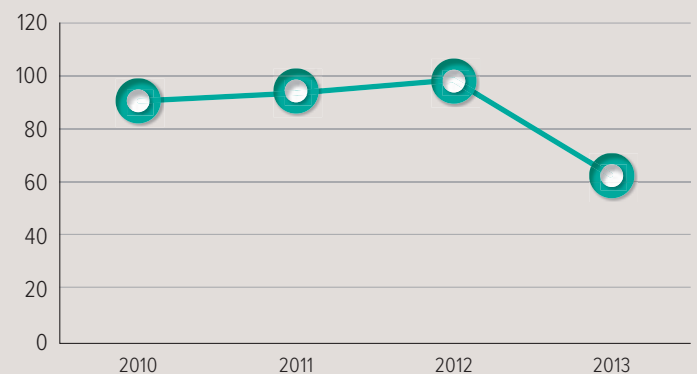
Occupational accidents, fatal accidents reported to Inail – Period 2010-2013

Provinces	Occupational accidents					Fatal accidents				
	2010	2011	2012	2013	% variation 2013/2010	2010	2011	2012	2013	% variation 2013/2010
Piacenza	5,873	5,441	5,051	4,630	-21.2%	6	4	9	5	-16.7%
Parma	10,824	10,382	9,815	9,270	-14.4%	10	9	7	9	-10.0%
Reggio Emilia	14,258	13,559	12,647	11,285	-20.9%	7	16	14	11	57.1%
Modena	17,588	16,940	15,706	14,512	-17.5%	8	13	27	9	12.5%
Bologna	22,595	21,353	20,065	18,327	-18.9%	27	17	11	12	-55.6%
Ferrara	6,267	5,823	5,203	4,587	-26.8%	11	8	11	5	-54.5%
Ravenna	10,306	9,678	8,808	7,717	-25.1%	8	16	9	5	-37.5%
Forlì and Cesena	10,083	9,072	8,276	7,223	-28.4%	9	6	6	3	-66.7%
Rimini	8,286	7,465	6,684	5,753	-30.6%	5	5	5	4	-20.0%
Emilia-Romagna	106,080	99,713	92,255	83,304	-21.5%	91	94	99	63	-30.8%

Occupational accidents in Emilia-Romagna Period 2010-2013



Fatal occupational accidents in Emilia-Romagna Period 2010-2013



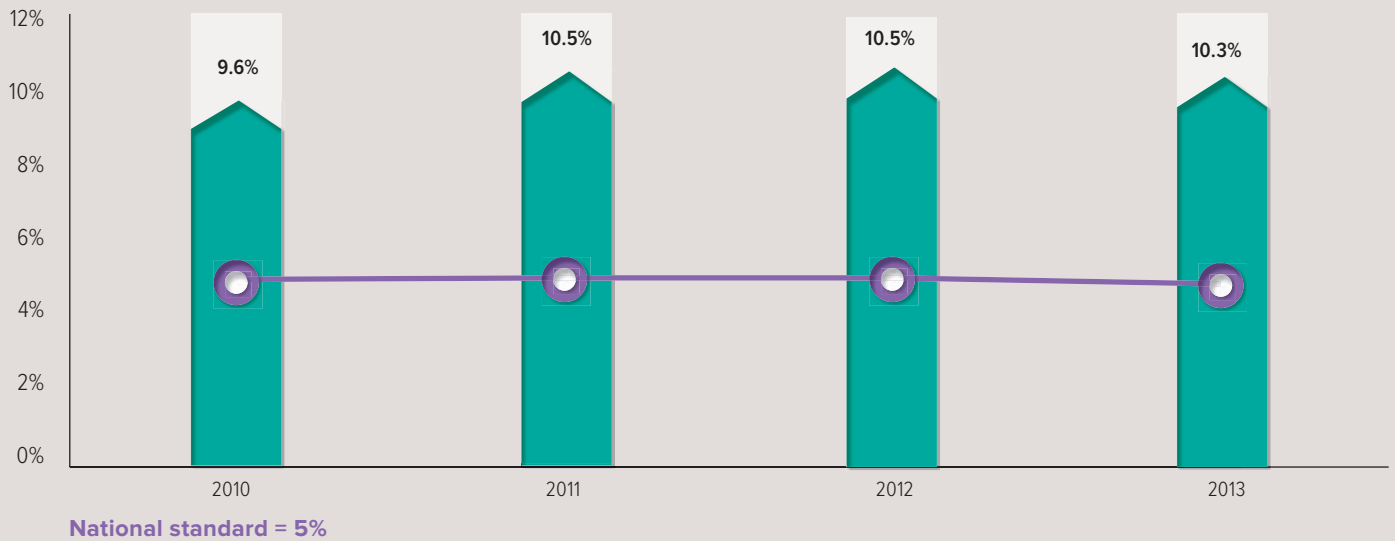
Occupational diseases reported to Inail – Period 2010-2013

Provinces	Occupational diseases				
	2010	2011	2012	2013	% variation 2013/2010
Piacenza	94	115	131	167	77.7%
Parma	437	569	620	527	20.6%
Reggio Emilia	1,064	1,229	1,702	1,715	61.2%
Modena	665	628	548	637	-4.2%
Bologna	1,415	1,555	1,271	1,633	15.4%
Ferrara	258	320	260	339	31.4%
Ravenna	806	1,061	1,294	1,151	42.8%
Forlì and Cesena	1,223	1,182	1,092	1,257	2.8%
Rimini	460	500	419	459	-0.2%
Emilia-Romagna	6,422	7,159	7,337	7,885	22.8%

Note: The increase in occupational diseases is not directly due to a deterioration of health conditions in the workplace, but the gradual emergence of a phenomenon that has long been underestimated. These have been revealed thanks to specific programs coordinated and run by the Local Health Authorities to remove the factors that cause such diseases and encourage early diagnosis and treatment, rehabilitation, correct recognition in the workplace.



Inspection Trend – Ratio between inspected/total companies – Period 2010-2013 – % values



Note: each year, according to national planning, Local Health Authorities must check at least 5% of the businesses in the area. The regional average of checks in Emilia-Romagna in recent years has steadily exceeded 10%.

Ratio between sanction measures and inspected companies – Period 2010-2013

Inspected companies by sector	Inspected companies				Percentage of irregularities on inspected companies				
	2010	2011	2012	2013	2010	2011	2012	2013	% on total 2010-13
Agriculture	694	717	862	873	33%	47%	38%	36%	38.2%
Construction	14,314	13,601	13,589	13,350	21%	23%	19%	17%	19.9%
Other sectors	5,960	6,314	6,484	6,611	28%	33%	28%	24%	28.3%
Total	20,968	20,632	20,935	20,834	23%	27%	23%	20%	23.1%
Inspections for advice	1,538	1,737	1,250	761					
Total	22,506	22,369	22,185	21,595					



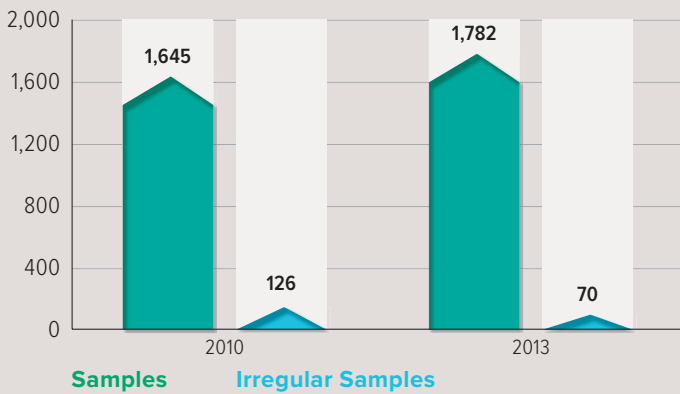
Food safety, nutrition and veterinary care

Food plants: facilities, inspections, irregularities – Period 2010-2013

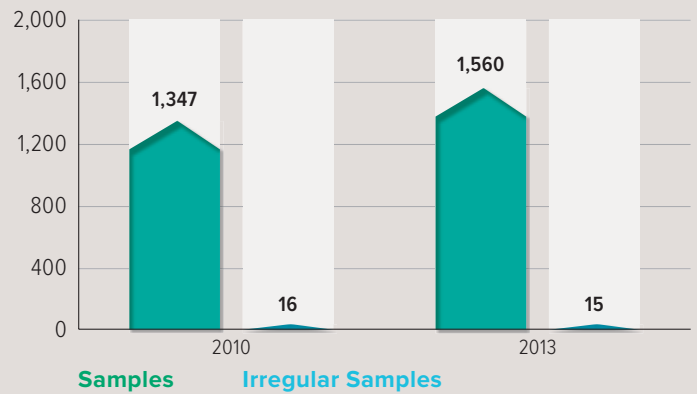
Types and companies	Facilities 2010	Inspections 2010	Facilities with irregularities 2010	Facilities 2013	Inspections 2013	Facilities with irregularities 2013
Production plants for food of animal origin	3,339	2,805	1,302	2,676	2,638	1,066
Production plants for food of plant origin	10,390	3,319	1,176	11,116	3,610	1,100
Catering companies	40,133	10,309	2,994	39,965	10,081	3,122
Total	53,862	16,433	5,472	53,757	16,329	5,288

Inspection activity on food – Period 2010-2013

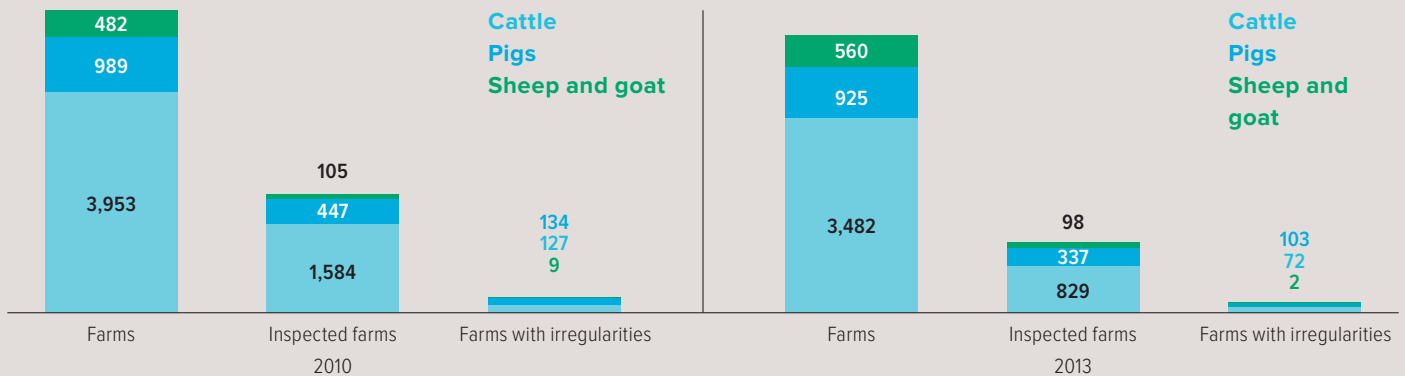
Food of animal origin



Food of plant origin



Inspections on animal welfare in cattle, pig, sheep and goat farms – Period 2010-2013





The research program, Regional administration-University

Seven years of activity, 144 projects financed, 60 million euros in resources allocated by the Emilia-Romagna Region (compared with 65 million allocated to tenders). These are the “numbers” of the Research Program of the regional administration and University of Emilia-Romagna (PrRU), launched in 2007 and coordinated by the Regional Health Trust and Social Care, one of the main areas of intervention in which the Emilia-Romagna supports and encourages research within the Regional Health Service. One of the main aims of the program is: the development of the role of University-Hospitals in research for the Regional Health Service, the greater involvement of the Health Trust (thus also of the Local Health Trusts) and their operators and development centers of excellence and professional networks. The selection process, perfected over time, only allocates funding to high quality projects, and at the same, allows for a savings that has made it possible to announce two additional calls for tender for 2013, with an additional allocation of 5 million euros. The program has three areas. The first area dedicated to innovative research aims to produce new knowledge regarding technologies and operations of potential relevance to the Regional Health Service. Of the 52 projects

funded in this area, special attention has been given to the fields of oncology (29% of projects), regenerative medicine (15%), advanced diagnostics (13%), neuroscience (12%), and transplants (10%). This area included a competition for young researchers, headed by Alessandro Liberati, member of the Health Research Committee of the Ministry of Health and Head of Research and Innovation for the Health Trust and Social Care, who died prematurely in 2012. In total, 28 projects were funded: 15 included in the total of 52 for the two triennial competitions, plus the 13 funded by the annual 2013 edition.

Area 2 is dedicated to clinical governance, clinical evaluation of the impact in terms of efficiency and appropriateness and the organizational impact of specific health interventions and technologies. In this area, 56 projects were funded (in the two triennial tenders and the 2013 edition), with special attention given to oncology, the organization of services, neurology and psychiatry, and the circulatory system. Area 3 is dedicated to training and aims at developing operators' skills in research and to facilitate research networks. In this area, 23 projects were financed. The research funded to date has produced a total of 373 studies published in journals and internationally accredited scientific reviews.

Project financed within the research program, Regional administration-University – Period 2007-2012

Projects funded in the three-year period 2007-2009*			
Year	Announcement	Projects funded	Allocated funds
2007	Area 1a - Innovative Research	21	€ 12,489,300
2007	Area 1b - Regenerative Medicine	7	€ 8,384,823
2007	Area 2 - Clinical Governance	13	€ 2,473,000
2007	Area 3 - Research Training	6	€ 499,813
2008-2009	Area 2 - Clinical Governance	14	€ 4,710,500
2008	Area 3 - Research Training	3	€ 361,000
2009	Area 3 - Research Training	7	€ 776,500
2007-2009	Coordination		€ 305,064
	Total	71	€ 30,000,000

Projects funded in the three-year period 2010-2012*			
Year	Announcement	Projects funded	Funds committed
2010-2011	Clinical Governance Area 2	13	€ 4,474,832
2011	Strategic Programs Area 1	9	€ 13,923,810
2012	Clinical Governance Area 2	7	€ 1,945,500
2012	Young Researchers Area 1	15	€ 3,114,443*
2012	Research Training Area 3	6	€ 396,000
2012	Other Activities Area 3	1	€ 300,000
2010-2012	Coordination		€ 485,000
	Total	51	€ 24,639,585

(*) The tables do not include the 22 projects funded with two calls to tender of 2013 (young researchers - Area 1 and clinical governance - Area 2) with an additional allocation of 5 million euros.

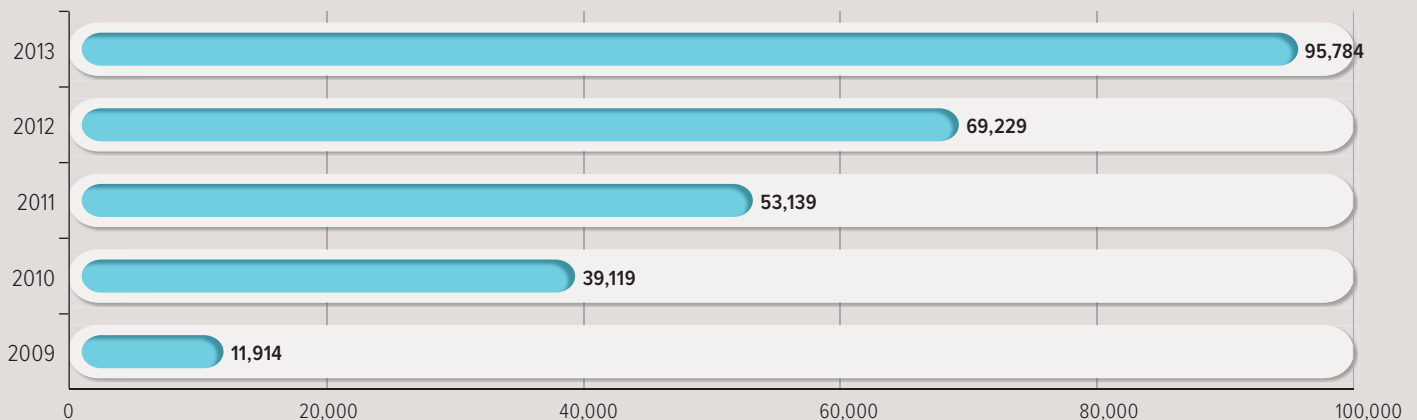


ICT Health: Services

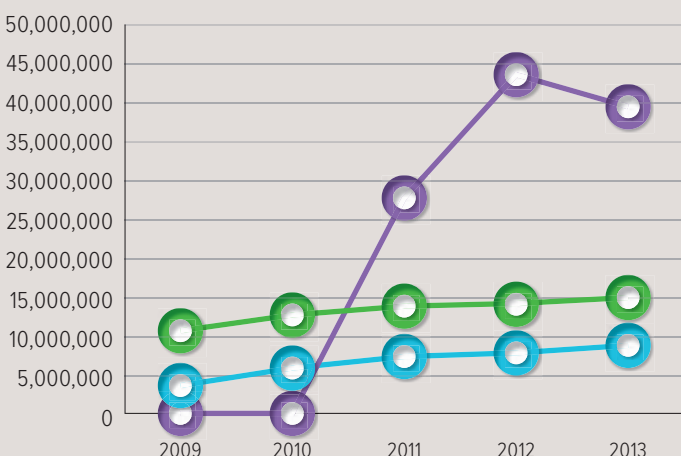
Investment resources in Emilia-Romagna for projects and ICT services (Information Communication Technologies) in health (in million Euros) – Period 2010-2013

Period 2010-2013	2010	2011	2012	2013
Investments for projects and ICT services	17.2	14.7	15.4	15.8

On-line payment of ticket – Period 2009-2013

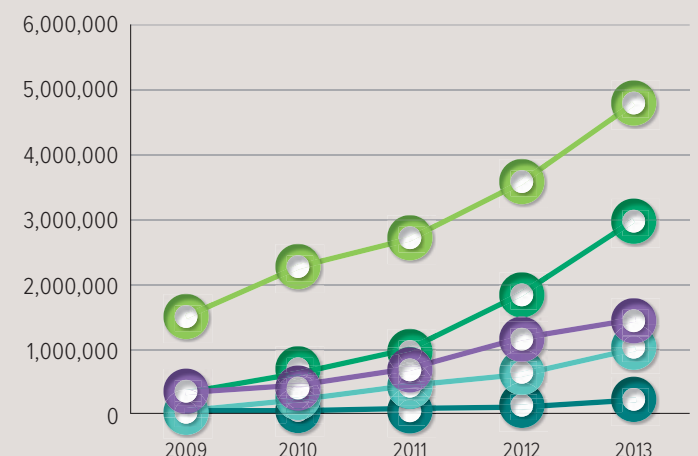


Prescriptions and bookings exchanged in the Sole network – Period 2009-2013



Prescriptions for specialized visits
 Drug prescriptions
 Bookings

Referrals, notification and letters of discharge exchanged in the Sole network – Period 2009-2013



Laboratory reports
 Admission notifications
 Emergency room reports
 Specialistic visits reports
 Discharge notifications
 Letters of discharge

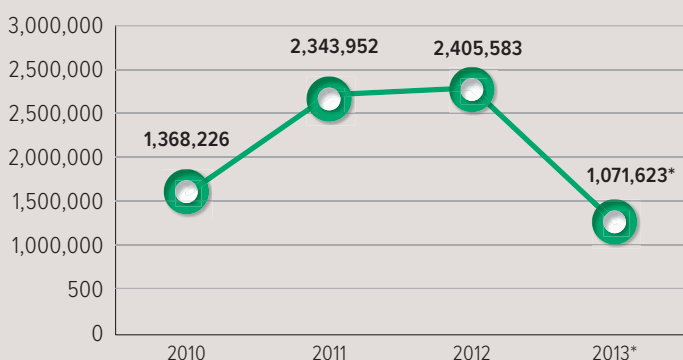


Communication and information: services

Toll-free Regional Health Service number – Trend in calls 2010-2013

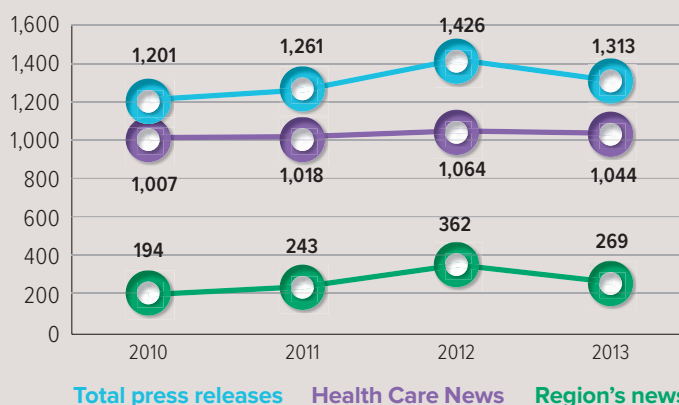
Year	No. telephone calls received	% calls transferred to the URP of the Health Care
2010	123,183	13.3
2011	386,818	11.2
2012	158,792	14.5
2013	160,448	14.2

Number of accesses to web portal of the Regional Health Service “Saluter.it” – Period 2010-2013

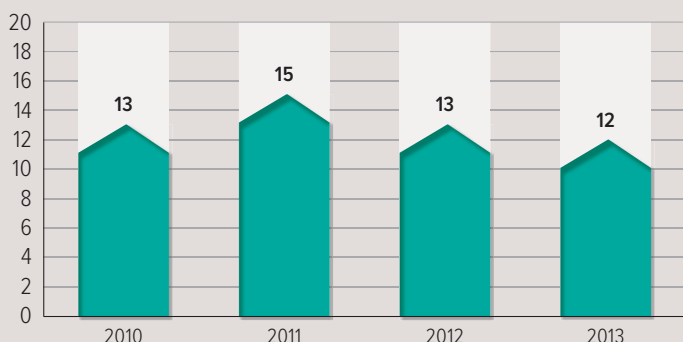


(*) From 1 January 2013, the program to analyse accesses to the web sites of the Emilia-Romagna Region was changed: the Open Source “Piwik” system guarantees more accurate statistical counts compared to previous analyses performed with the program “Web Trends Marketing Lab”.

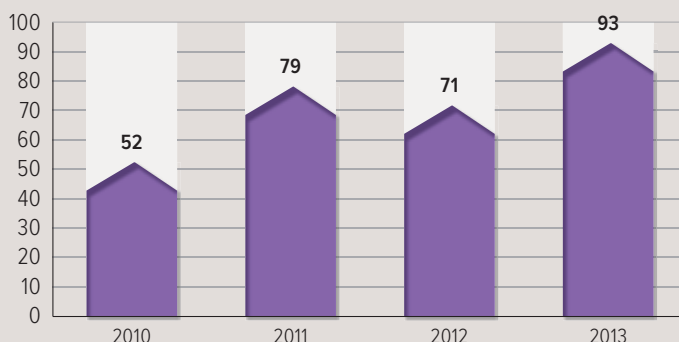
Number of press releases from the Region and Health Care published on the web portal of the Regional Health Service “Saluter.it” – Period 2010-2013



Communication campaigns and reports of the Regional Health Service – Period 2010-2013

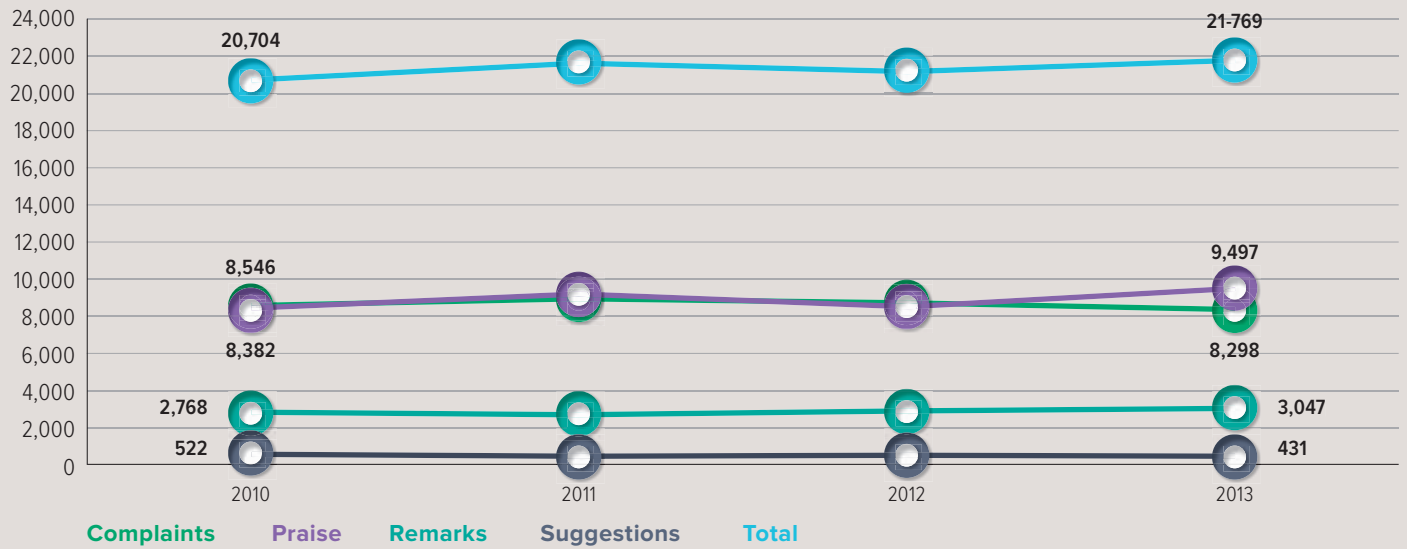


Press releases on Emilia-Romagna Health Care Period 2010-2013





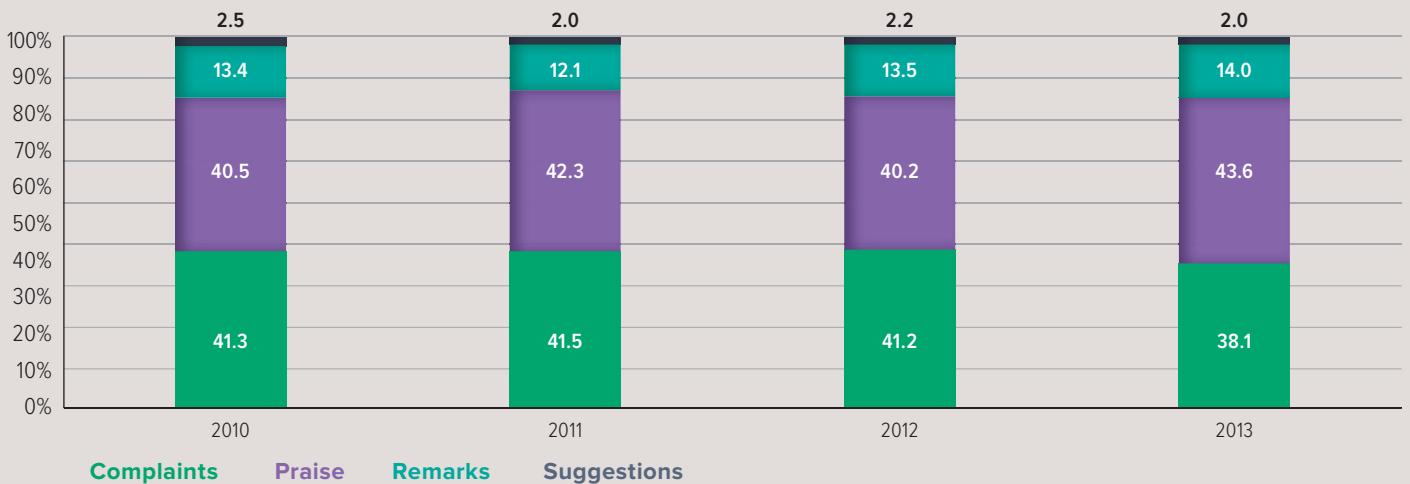
Trend in reports to the URP of the Health Care by type – Years 2010-2013



By examining trends in the various types of reports (complaints, praises, remarks, suggestions), 2011 was the first year in which the values of the complaints and praises intersected the trends and the praise surpassed the complaints. These

two types have always made up more than 80% of the total annual reports. In 2013 the gap between praise and complaints was even more marked in both absolute terms and as a percentage.

Percentage of reports to the URP of the Health Trusts by type. Trend 2010-2013



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