

Invest in HEALTH CARE in Emilia-Romagna

The **health care industry** in our region is made up of specialized sectors and its real competitiveness is based on high quality products and services, better still given that the number of people employed in this cluster is lower than in the other productive clusters.

Research also has a highly strategic and important value, especially in the life science sectors, and the network that connects companies, laboratories, universities and public services contribute towards creating an excellent base for investment

Health also reflects quality of life; hospitals and clinics in our region are leaders in their field and renowned for their high quality of service.

Invest in research and investment in this sector

The region has some important leading centres when it comes to the manufacture of orthopaedic prostheses: the Centro Protesi INAIL is the largest in its sector in Europe. The bio-medical and pharmaceutical companies in our region also have the benefit of the support of a local network of high technology laboratories. In addition there are numerous specific degree courses at various faculties in the region which represent yet another advantage for those investing in the sector who require the availability of necessary specialized human resources and want to establish collaborative projects with universities in the region.

The cluster on an international level

It's well worth investing in the life sciences. The strong growth of the sector can be seen in the data on export trends from our region: between 2004 and 2008 exports from the pharmaceutical sector rose by 93%; biomedical exports show a rise of 23% in the same period. There are eight international trade fairs in the region (including Exposanità, Sana e HandiMatica) all specific to the sectors in the cluster and they promote the products and services of companies in the region and also act as a meeting point for investors and international operators from the field.

Invest in local specialization

The business structure is made up of 4,000 companies. The highest concentration of those working in the sector are to be found in Bologna and Parma. Amongst the districts, the most important is the biomedical one in Mirandola in the area around Modena, which numbers 70 companies, around 3,500 people employed and the presence of some large multinational groups. Budrio instead has a large concentration of companies from the prosthesis sector. There is also a widespread range of spas all over region which represent further confirmation of the high quality of life our region Emilia-Romagna offers.



LEADING FACTORS

- From 2004 to 2008 exports from this cluster rose by 45% and those of pharmaceutical industry by 93%
- Research centres and laboratories for innovation in the following sectors: biotechnology, bioinformatics, tissular repair, rehabilitation, pharmaceutical technology
- Leading centres for the production of prostheses
- Specialized degree courses
- Widespread presence of thermal and non thermal spas
- Eight international trade fairs

SOME COMPANIES FROM THE REGION

BIOMEDICAL



PHARMACEUTICAL



WELLBEING



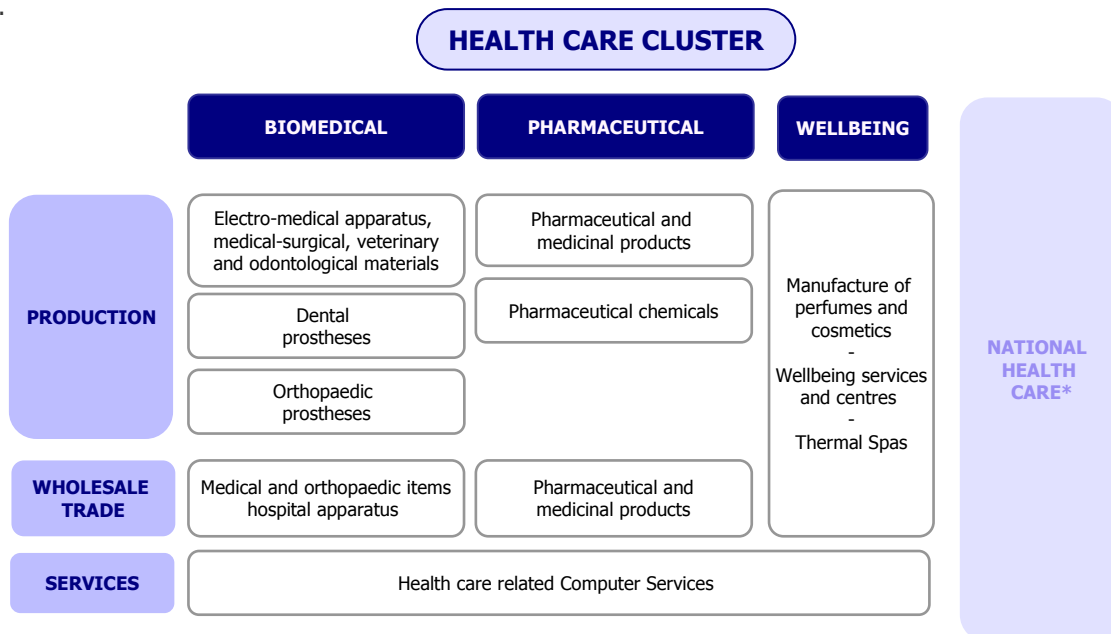
PACKAGING





The regional health care cluster

The health care cluster is also connected to the national health care service in the region: our hospitals are renowned for their high quality of service and performance. The health care industry can be divided into **two main sub-clusters: biomedical, pharmaceutical** and a third one linked to **wellbeing** which also has a good impact on tourist attractiveness to the region.



* This sector has not been taken account of in terms of companies and number employed

Companies and the number employed

The health care cluster and sub-clusters: local units and the number employed (absolute values and quotas) - Databank Istat-Asia 2006

Sub-Clusters	Macrosectors	Companies (Local units)	Quota of local units in the entire cluster	Number employed	Quota of number employed in the entire cluster
BIOMEDICAL	Strictly biomedical	295	7.4%	6,464	30.2%
	Dental prosthesis	1,180	29.5%	2,723	12.7%
	Orthopaedic prosthesis	92	2.3%	651	3.0%
Total Sub-Cluster		1,567	39.2%	9,838	45.9%
PHARMACEUTICAL	Transformation	78	1.9%	3,439	16.0%
	Wholesale trade	1,981	49.5%	4,899	22.9%
Total Sub-Cluster		2,059	51.5%	8,338	38.9%
WELLBEING	Perfumes and cosmetics	124	3.1%	1,428	6.7%
	Thermal and non thermal spas	251	6.3%	1,822	8.5%
Total Sub-Cluster		375	9.4%	3,250	15.2%
Total HEALTH CARE		4,001 companies		21,427 number employed	

Note: the pharmaceutical sub-cluster includes figures related to the trade of biomedical products that were not possible to separate.

Focus: The Prosthesis cluster and the Biomedical district

The biomedical sub-cluster is notable for being a leader in orthopaedic prostheses. In **Budrio, in the province of Bologna, we have the largest leading centres in the health care sector related to the production of orthopaedic prostheses**: the Centro Protesi INAIL (the largest prosthesis centre in Europe, with 90 beds and over 20,000 prosthetic pieces supplied in 2007); the Rizzoli Ortopedia Spa, Rtm Ortopedia and Arte Ortopedia specialize in more advanced prosthetic pieces. The four centres put together employ 550 people and had a turnover of 20 million Euros in 2007. In Budrio we also have Otto Bock HealthCare, the leader in the orthopaedic and rehabilitative technical sector.

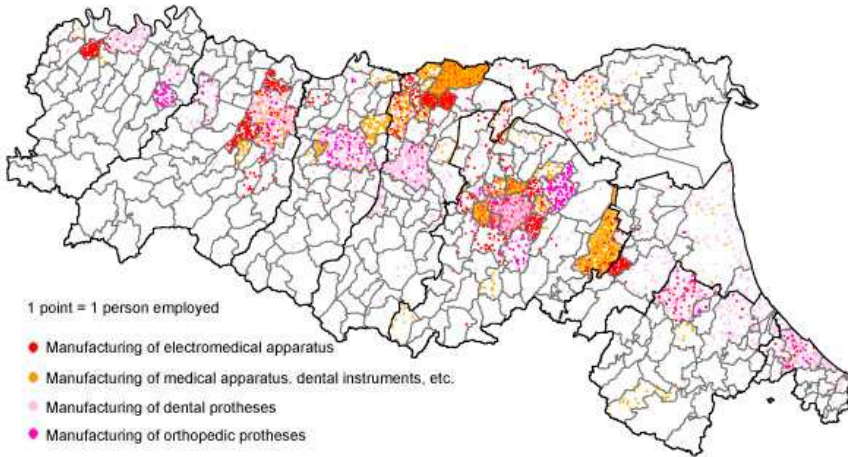
The **Mirandola Biomedicale district, in the province of Modena**, is spread over the municipalities of Medolla, Concordia and Cavezzo San Felice sul Panaro, San Possidonio and San Prospero and is made up of 70 companies with about 3,500 people employed and a turnover of over 400 million Euros. Some of the more important companies to be found there are Dasco and Dideco. The district produces electromedical and diagnostic apparatus, dental and orthopaedic prostheses and supplies relevant services.



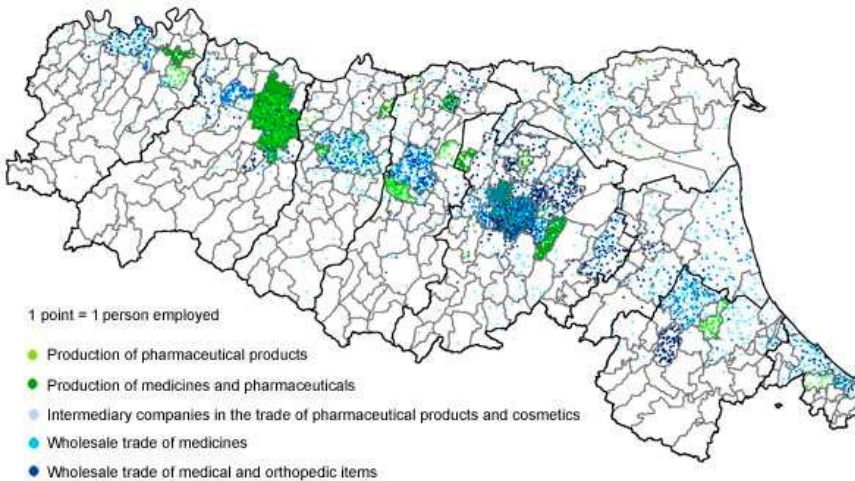
The regional health care cluster

The number employed and local units are equally split between the two main sub-clusters: biomedical and pharmaceutical.

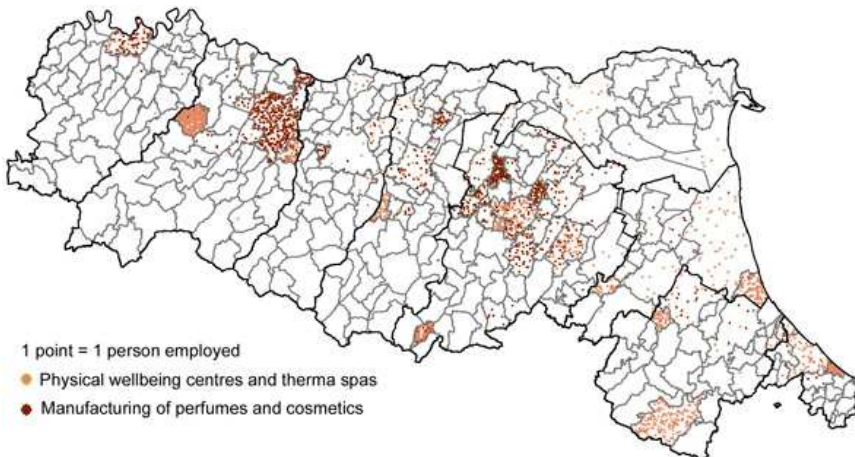
Health care cluster – Number employed in the biomedical sector in 2006



Health care cluster – Number employed in the pharmaceutical sector in 2006



Health care cluster – Number employed in the "wellbeing" sector in 2006



Districts and areas with higher concentrations of number employed

Biomedical Sub-Cluster

- **The Mirandola** District (also comprises Medolla, Concordia, Cavezzo) with over 3,500 people employed
- Followed by **Bologna, Imola** and **Parma**
- In **Budrio (BO)** the largest centres for the production of orthopaedic prostheses

Pharmaceutical Sub-Cluster

- High concentration in the province of **Parma**, specialized in the production of medicines and pharmaceutical preparations
- Followed by **Bologna**, which has a larger concentration of wholesale trade businesses supplying medicines

Wellbeing Sub-Cluster

- **Thermal spas** concentrated in **Salsomaggiore** (449 people employed), followed by Bagni di Romagna
- Widespread presence of **wellbeing centres and spas** mainly in **Bologna**
- **Manufacturing of perfumes and cosmetics** concentrated in Parma (354 people employed), followed by Sala Bolognese (Bo), Piacenza and Granarolo(Bo).



The health care cluster on an international level

Exports

In 2008, the health care industry in the region exported over 1.5 billion Euro of goods (27.3% of the national total). Exports from the cluster in our region amounted to 3.0% of the regional total (Databank: Istat - Coeweb).

Where we export to

The main destination of our exports is Europe. Germany is the country with highest level of export.

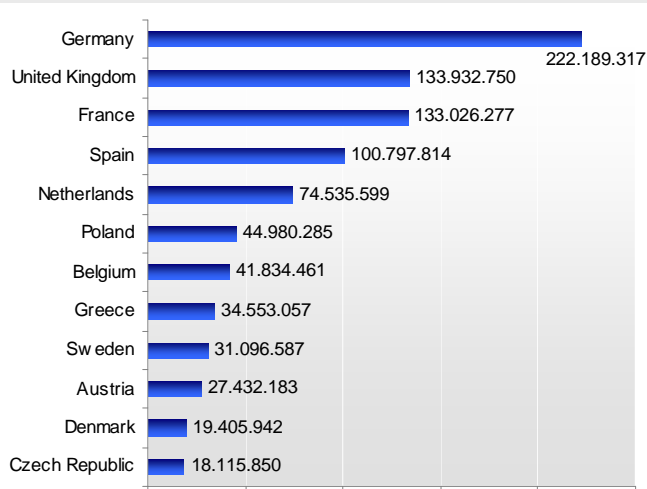
Exports to North America are particularly concentrated on the USA (almost 85 million euro).

In the area "other European countries" Swiss has the highest level of export (about 52 millions of Euros), followed by Russia and Turkey.

In East Asia, export is concentrated in South Korea and Japan, followed by China.

The main EU countries we export to

All figures given in millions of Euros – 2008



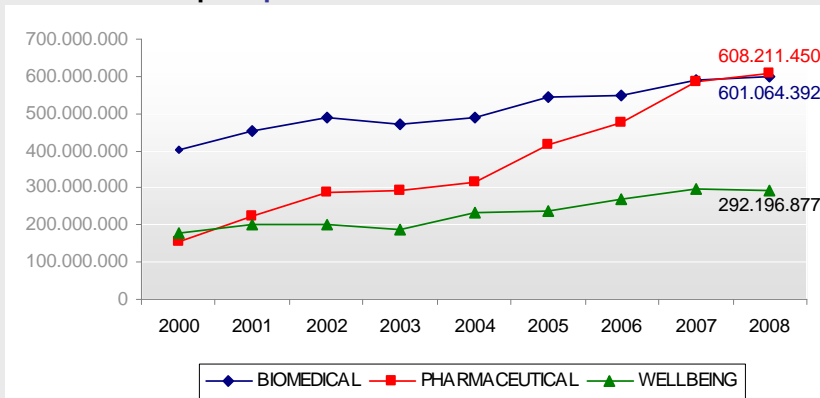
Percentage of total exports per destination area - 2008

EU 27	Other European countries	North America	East Asia	Centre-South America	Other countries
64,0%	10,7%	7,4%	6,6%	3,3%	8,1%

Export trends

The variations over the long and short period show a strong growth in general of exports from the sector. Particularly positive and notable is the growth trend in the pharmaceutical cluster that shows an absolute value slightly higher than biomedical since 2008.

Graph. Export trend of the main sub-clusters



Variation in % of exports

	2004-2006	2006-2008	2004-2008
Biomedical	+12,7%	+9,1%	+23,0%
Pharmaceutical	+50,7%	+28,1%	+93,0%
Wellbeing	+15,1%	+9,1%	+25,5%
Totale cluster	+24,8%	+16,1%	+44,8%



The Health Care Cluster on an International Level

Trade Fairs

	EXPOSANITA' <i>www.senaf.it/exposanita</i>	International exhibition of health and health care services with around 31,000 visitors, with an exhibition space of over 52,000 square metres and a total of 694 companies present, of which 82 are foreign (2010).
	SANA <i>www.sana.it</i>	International salon for food, health and the environment where the common element is the "natural" products market. It boasts 45,000 square metres of exhibition space, and gathers around 1,060 exhibitors and 67,000 visitors (5.190 from abroad) in 2009. Amongst the exhibitors: individual firms, consortiums, agricultural companies and thermal facilities all of which exhibit products aimed at health and wellbeing such as organic food, herbal products, cosmetics and pieces of furniture.
	PHARMINTECH <i>www.pharmintech.com</i>	A trade fair that acts as a reference point for the pharmaceutical and para-pharmaceutical industry. It's held every three years, has around 4,000 visitors, 350 exhibitors of which 35% are from abroad.
	COSMOPROF <i>www.cosmoprof.it</i>	International salon for perfumery and cosmetics with a total exhibition space of 185,000 square metres, around 2,254 exhibitors of which 59% are international companies and 146,331 visitors in 2010.
	COSMOFARMA <i>www.cosmofarma.com</i>	International exhibition of health, wellbeing and beauty products and services for pharmacies. It numbers 512 exhibitors and around 16,000 visitors on 30,200 square meter of exhibition space.
	RIMINIWELLNESS <i>riminiwellness.com</i>	Salon dedicated to the world of sport (fitness, wellbeing and sport on stage) which every year brings together almost 195,000 visitors (7% from abroad) and around 360 exhibitors (in 2010). Among the sectors of goods covered: sports and beauty equipment, clothing, footwear, sports medicine and nutrition.
	NATURALEXPO <i>www.naturalexpo.it</i>	Salon which exhibits health care products, therapies and culture as well as natural wellbeing all connected to the field of nutrition and wellbeing, environmental tourism and homes and appropriate information.
	HANDImatica <i>www.handimatica.it</i>	Exhibition-convention on information and telematic technology to assist the integration of people with disabilities directed at companies which manufacture and distribute aids and computer and telematic solutions. It is also directed at institutions and local bodies with the aim of developing on the theme of adapting the environment for people.

Top Investors

Some important foreign investors in the health care industry in Emilia-Romagna

Companies	Investors	Country of Origin	Type of business
GAMBRO DASCO SPA GAMBRO SPA - HOSPAL SPA	GAMBRO AB	Sweden	Appliances for hemoanalysis/Dialysis equipment/Trading in dialysis filters/...
FRESENIUS HEMOCARE ITALIA SRL	FRESENIUS AG	Germany	Filters to separate white globules in blood samples
SSL HEALTHCARE ITALIA SPA	SSL INTERNATIONAL PLC	United Kingdom	Wholesale trading of sanitary healthcare items
AFM SPA	FRANZ HANIEL & CIE GMBH	Germany	Wholesale trading of pharmaceutical products; the running of pharmacies
MALLINCKRODT DAR SRL	TYCO INTERNATIONAL INC.	United States	Diagnostic products, catheters, anaesthetic products and special sanitary healthcare products
COLOPLAST SPA	COLOPLAST A/S	Denmark	Wholesale trading of products for use in hospitals (incontinence and colostomy bags)
GENZYME SRL	GENZYME CORP.	United States	Wholesale trading of biotechnical products for pharmaceutical, chemical, biological and zootechnical use
FARMACEUTICA BOLOGNESE SPA	PHOENIX PHARMAHANDEL AG & CO. KG	Germany	Wholesale and retail trading of medicines and pharmaceutical and para-pharmaceutical products
OTTO BOCK ITALIA SRL	OTTO BOCK HOLDING GMBH & CO. KG	Germany	Orthopaedic, sanitary healthcare and pharmaceutical items
LAERDAL ITALIA	LAERDAL MEDICAL	Norway	Products for training and assisting patients, therapeutic products in the medical sector



Facilities available to health care businesses in Emilia-Romagna

Innovation Centres

CIRI Scienze della vita e tecnologia della salute - Centro Interdipartimentale di Ricerca Industriale - Università di Bologna

- Medicina traslazionale per terapie diagnostiche innovative di malattie degenerative del sistema nervoso e cardiopolmonare.
- Applicazioni industriali della medicina genomica e mitocondriale.
- Tecnologie per la salute e la qualità della vita.

BIC - Tecnologie per il biocomputing - Istituto Ortopedico Rizzoli - Bologna (Bo)

BIOPHARMANET - Innovazione nelle Scienze della Vita - Università di Ferrara

BioPharmaNet_TEC - Università di Parma

BITTA - Biomedicale; Chimico-Farmaceutico; Industria; Salute - Istituto Ortopedico Rizzoli, Bologna (Bo)

Centro di Medicina Rigenerativa "Stefano Ferrari" - Università di Modena e Reggio Emilia

CLIBI - Bioinformatica Clinica - Istituto Ortopedico Rizzoli, Bologna (Bo)

COMT - Marcatori prognostici e predittivi della risposta terapeutica; Farmaci anticorpali/ immunoterapia; Target therapy - Università di Parma

Laboratorio per le Tecnologie delle Terapie Avanzate - Biotecnologie applicate alla medicina - Università di Ferrara

NABI - Biomateriali nanostrutturati per la medicina rigenerativa - Istituto Ortopedico Rizzoli, Bologna (Bo)

PROMETEO - Prodotti per la Terapia cellulare somatica, Terapia genica, Tissue engineering, Terapia oncologica. Istituto Ortopedico Rizzoli, Bologna (Bo)

RAMSES - Studi preclinici per la medicina rigenerativa dell'apparato muscolo-scheletrico - Istituto Ortopedico Rizzoli, Bologna (Bo)

Consortiums and Associations in the Sector

Consobiomed

Consortium of small sized companies operating in the biomedical sector formed in Mirandola (Mo) in 1990
www.consobiomed.it

Invest in health care in Emilia-Romagna

For further information:



www.investinemiliaromagna.it
investinemiliaromagna@ervet.it

University and Training Courses

Degree Courses

- Three year course in quality control of health care products (Rimini branch)
- Three year course on Scienze Farmaceutiche Applicate (Imola branch)
- Magistral degree on Pharmaceutical Biotechnologies (Bologna branch)

All at the Pharmacy Faculty at the University of Bologna - www.farmacia.unibo.it

- Three year course in biomedical laboratory techniques
- Three year course in Orthopaedic Techniques
- Three year course in Dietetics and Physiotherapy
- Post graduate European specialist course in Dentistry and Dental Prosthesis

Magistral degree on Medical Biotechnologies
All at the Faculty of Medicine and Surgery at the University of Bologna - www.medicina.unibo.it

- Post graduate specialist course in Biomedical Engineering (technical management of equipment, biomedical systems, development, designing methods of acquisition and the elaboration of biomedical data)

At the Faculty of Engineering at the University of Bologna, Department of Electronics, Information Technology and Systems Theory, (Cesena branch) - www.ing2.unibo.it

- Laurea magistrale in Biotecnologie mediche e farmaceutiche (Facoltà di Bioscienze e Biotecnologie)
- Laurea in Scienze e Tecnologie Erboristiche (facoltà di Farmacia)
- Laurea Magistrale in Chimica e tecnologia farmaceutiche (facoltà di Farmacia)
- Laurea magistrale in Farmacia (facoltà di Farmacia)
- Lauree in Dietistica e Fisioterapia (facoltà di Medicina e Chirurgia)
- Laurea in Tecniche di laboratorio biomedico (facoltà di Medicina e Chirurgia)

Presso l'Università di Modena e Reggio Emilia www.unimore.it

- Corso di laurea magistrale interfacoltà in Biotecnologie mediche, veterinarie e farmaceutiche (Facoltà di Medicina e Chirurgia, Farmacia e Medicina Veterinaria)
- Corso di Laurea delle Professioni Sanitarie: Tecniche di Laboratorio Biomedico

Presso l'Università di Parma - www.unipr.it

- Corso di laurea magistrale in Farmacia
- Corso di laurea magistrale in Chimica e tecnologia farmaceutiche
- Corso di laurea triennale in Scienze e tecnologie dei prodotti erboristici, dietetici e cosmetici
- Corso di laurea specialistica in Biotecnologie medico-farmaceutiche

Presso l'Università di Ferrara - www.unife.it

The Hub & Spoke Network - www.geneter.it

The Hub (highly specialized centres) & Spoke (hospitals in the region) network carries out different functions in the field of assistance to patients and their families. They also work with communication and integration structured systems between the Centres, which cover the following disciplines: cardiac surgery and cardiology, neuroscience, transplants, large burns, perinatal and paediatric intensive therapies, highly specialized rehabilitation, emergency systems, transfusion systems and blood schemes, rare diseases, genetics.