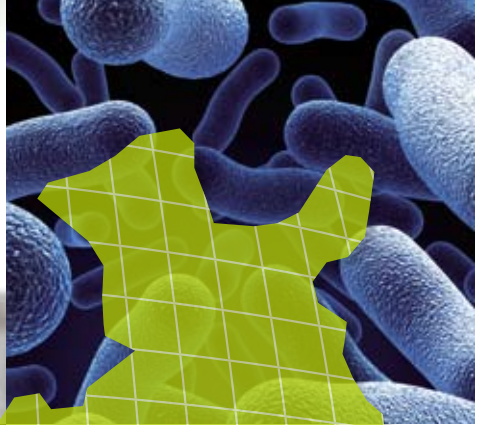


Space for Health

Cluster Health Care Economy
North Rhine-Westphalia



Region
Münsterland

Region
Ostwestfalen-
Lippe

Metropole Ruhr

Region
Südwestfalen

Region
KölnBonn

Region
Aachen





Editor:

Cluster Management Health Care Economy
North Rhine-Westphalia
c/o ZIG – Centre of Innovation for Health Care
Economy in the Region Ostwestfalen-Lippe
Jahnplatz 5
33602 Bielefeld
Phone 0049 (0)521 5432-72
Fax 0049 (0)521 5432-89
info@gesundheitswirtschaft-nrw.de
www.gesundheitswirtschaft-nrw.de

Editor:

Brigitte Meier, Cluster Manager

Issue: November 2009

Pictures:

Gabriele Dietrich, Bergisch Gladbach (2),
Susanne Freitag, Bielefeld (6), Thomas
Luenen, Düsseldorf (1), Staatsbad
Salzuflen GmbH, stockxpert.com,
sxc.hu, Hans Wiedl, Berlin (5)

Health Regions as Driving Forces of Growth and Innovation

About one million employees work in the North Rhine-Westphalian health industry. Thus, the health industry remains a factor of innovation and growth in our land. At the same time, rapid developments in nearly all branches involved are a mutual challenge for health, economic and innovation policies. Against that background, how can the health care economy be best organised, both in urban and rural areas?

How can stakeholders develop and implement common innovative solutions and what can be done to develop them further? How can we support human resource development and find ways to keep skilled personnel and specialists in our branches? What can be learned from the results of monitoring trends and innovations? How can existing competencies in future fields be best used by networks and the international exchange of knowledge? These crucial questions must be answered in the context of the future development of our health care economy.

Not Acting Today Means Loosing Opportunities Tomorrow

Supporting consistent and structured networks of local and regional stakeholders in the health care economy is one of the core targets of our cluster management in North Rhine-Westphalia. This support links the regional cluster development with future areas of health care, such as medical technology and clinical economy. Furthermore, we accelerate the field of 'work and qualification' in the health care economy.

Many competencies in technology, research and clinical treatment can already be found in our existing six health regions: namely Aachen, Köln/Bonn, Münsterland, Ostwestfalen-Lippe, Ruhrgebiet, and Südwestfalen. This brochure presents an overview of innovative and ground-breaking topics that are capable of shaping the future of the health care economy in North Rhine-Westphalia.



Brigitte Meier

Head of Cluster Health Care Economy North Rhine-Westphalia

info@gesundheitswirtschaft-nrw.de



Brigitte Meier, Head of Cluster Health Care Economy North Rhine-Westphalia



Cluster Health Care Economy in North Rhine-Westphalia

Concerted Commitment is Profitable for the Entire Land

The six health care regions – Aachen, Köln/Bonn, Münsterland, Ostwestfalen-Lippe, Ruhrgebiet, and Südwestfalen – work to develop long-term perspectives to improve the health care economy – within their individual regions, together with each other, and together for the entire Land. In doing so, those regions aim at positioning North Rhine-Westphalia as a leading location for the health care economy in Europe.

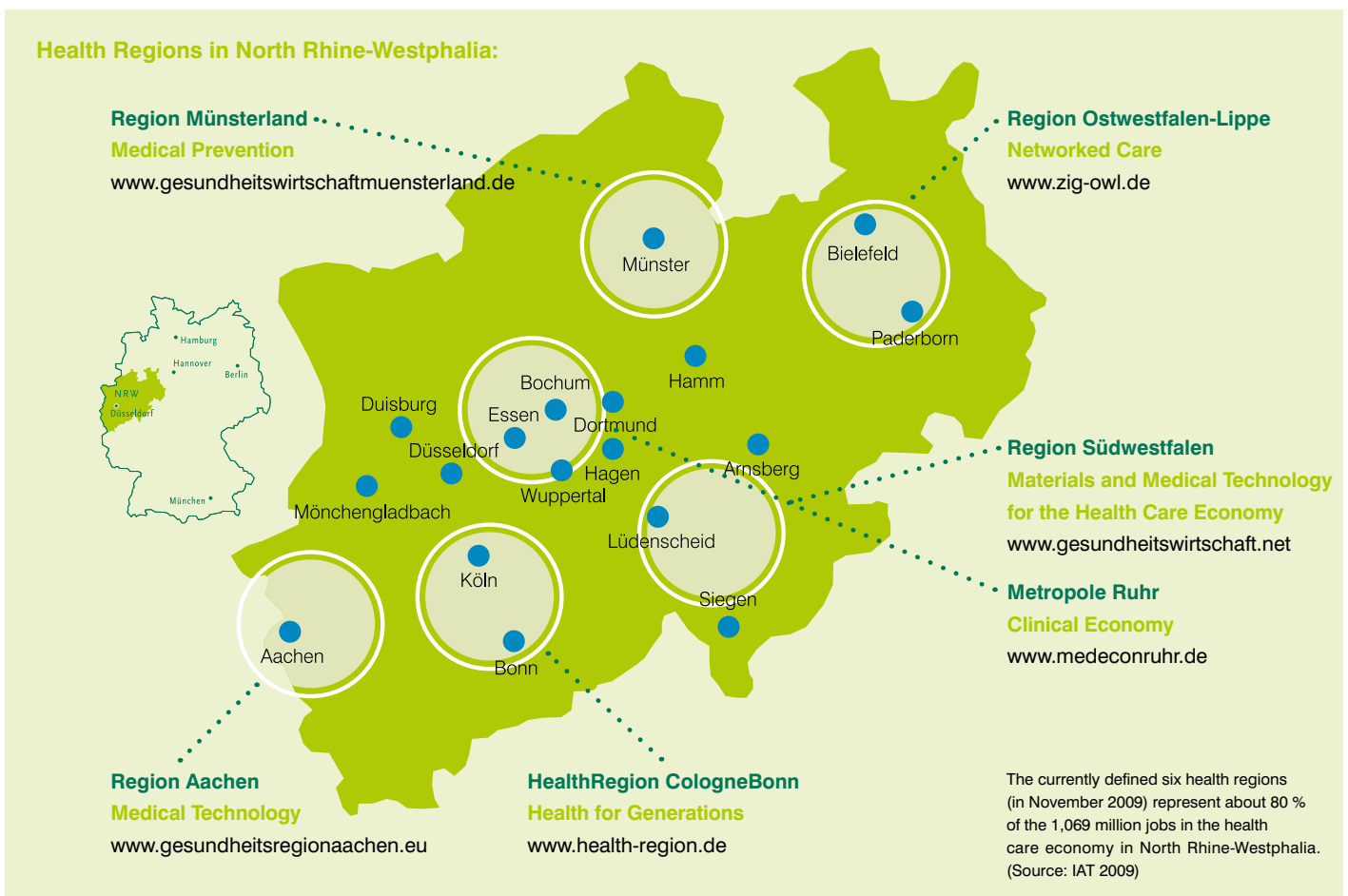
With its cluster policy, North Rhine-Westphalia supports its health regions in their systematic development and networking (see: www.exzellenz-nrw.de). The initial phase of developing regional concepts, establishing regional branch forums, and implementing

regional conferences with structural policy partners has already been completed. Within the scope of thematic sponsorships, regional networks engage in developing and profiling selected fields of actions. In 2010, the results of these processes will be presented in thematic conferences.

The health region Aachen focuses on “Medical Technologies”, Köln/Bonn concentrates on “Health for Generations”, Münster aims at “Medical Prevention”, Ostwestfalen-Lippe zeros in on “Interlinked Health Care Provision”, and the Ruhr region concentrates on further developing their “Clinical Economy”. Südwestfalen has only recently (October 30th 2009) been ap-

pointed as a health care region and the region attends to materials and medical technology for the health care economy. The health care economy in North Rhine-Westphalia already links high-class health provision with excellences in technology, research and treatment. Furthermore, the health care economy in North Rhine-Westphalia aims, in line with relevant stakeholders, at patient-oriented treatment solutions in the context of demographic change. The innovative clinical industry in North Rhine-Westphalia brings together care and supplier networks and stands for a change of paradigm towards medical prevention and rehabilitation.

www.gesundheitswirtschaft-nrw.de



Essential Ratio of Employment in the Health Care Sector

Total jobs in the health care sector by specific areas of employment in North Rhine-Westphalia as well as in each of the North Rhine-Westphalia health regions in 2008.

	NRW	Ruhrgebiet	Köln/Bonn	Aachen	Münsterland	Ostwestfalen-Lippe	Südwestfalen
In-patient and Semi In-patient Care	278,789	77,974	42,580	14,489	26,697	34,543	24,263
Mobile Care	267,636	75,801	50,576	19,563	23,872	27,707	19,182
In-patient and Mobile Elder-care	232,407	64,631	35,112	17,448	23,091	32,715	17,207
Pharmaceutical Industry	13,886	1,782	1,655	466	722	903	23
Medical and Gerontological Technology, Health Trade Professions	42,511	10,219	7,086	3,734	3,505	6,190	3,121
Pharmacies	46,038	14,139	8,090	3,315	4,189	4,793	3,131
Administration/Insurance	96,635	31,939	20,722	3,676	7,437	7,108	5,184
Research	9,784	1,422	1,737	3,219	424	214	132
Trade in Health Care Products	45,817	10,840	10,513	2,062	4,292	3,003	2,567
Sport and Leisure, Wellness	12,819	3,669	2,497	768	1,118	1,349	902
Health Tourism	8,921	1,520	2,009	439	720	1,176	1,285
Education, Training	3,833	1,030	760	93	346	260	147
Other Areas	9,976	1,685	1,359	327	562	939	442
	1,069,052	296,651	184,696	69,599	96,975	120,900	77,586

Sources: Bundesagentur für Arbeit, Kassenärztliche und Kassenzahnärztliche Vereinigung Nordrhein und Westfalen-Lippe, Apothekerkammern Nordrhein und Westfalen-Lippe, LIGA NRW, Handwerkskammern Aachen, Dortmund, Düsseldorf, Dortmund, Köln, Münster, OWL und Südwestfalen, Berechnung und Darstellung: Institut Arbeit und Technik

Total jobs in the health care sector by mode of employment in North Rhine-Westphalia as well as in each of the North Rhine-Westphalia health regions in 2008.

	NRW	Ruhrgebiet	Köln/Bonn	Aachen	Münsterland	Ostwestfalen-Lippe	Südwestfalen
Employment Subject to Social Insurance Contributions	856,424	236,734	148,585	52,485	75,973	99,037	60,913
... advanced payment and delivery area	96,305	18,980	17,540	7,995	7,139	8,808	4,103
... core area	745,052	214,426	127,550	43,841	67,641	88,540	55,471
... marginal areas	15,067	3,328	3,495	649	1,193	1,689	1,339
Marginally Employed	156,049	45,376	26,599	12,788	16,105	15,729	12,767
... advanced payment and delivery area	14,020	3,793	2,701	1,009	1,294	1,322	1,262
... core area	127,262	37,367	21,344	10,813	13,305	12,891	10,096
... marginal areas	14,767	4,216	2,554	966	1,506	1,516	1,409
Self-employed	56,579	14,541	9,512	4,326	4,897	6,134	3,906
... Panel Doctors	24,502	6,358	2,998	2,113	2,126	2,720	1,591
... Psychotherapists	3,114	655	486	222	303	269	89
... Dentists	10,024	2,798	1,929	635	937	1,117	728
... Orthodontists	596	159	110	42	70	65	43
... Health Trade Professionals	5,782	1,495	953	481	540	649	494
... Pharmacists	4,751	1,369	828	331	433	544	384
... Natural Health Professionals	7,810	1,707	2,208	502	488	770	577
Health Care Economy	1,069,052	296,651	184,696	69,599	96,975	120,900	77,586

Sources: Bundesagentur für Arbeit, Kassenärztliche und Kassenzahnärztliche Vereinigung Nordrhein und Westfalen-Lippe, Apothekerkammern Nordrhein und Westfalen-Lippe, LIGA NRW, Handwerkskammern Aachen, Dortmund, Düsseldorf, Dortmund, Köln, Münster, OWL und Südwestfalen, Berechnung und Darstellung: Institut Arbeit und Technik

Inhabitants: 1.3 million
Area: 3,526 square kilometres
Population density: 360 inhabitants per square kilometre
Boroughs: Aachen, Düren, Euskirchen, Heinsberg
Urban district: Aachen

Action Fields

- Medical Technology / Life Science
- Second Health Market / Health Tourism
- Employment and (Continuing) Education
- Care Provision
- Cross-boarder Cooperation

Employment

Areas of the health care economy in the Region Aachen	
Clinical and outpatient care provision	51,500
Supplying industry	6,262
Administration and insurances	3,676
Other	8,161
Total	69,599
Turnover (2007): Euro 4.0 billion	

Contact

AGIT mbH
 Technologiezentrum am Europaplatz
 Dennewartstraße 25-27
 52068 Aachen
 Fon 0049 (0)241 963-1040
 info@gesundheitsregionaachen.eu
www.gesundheitsregionaachen.eu

Regarding health care economy, the health region Aachen is one of the leading locations in North Rhine-Westphalia. Together with various stakeholders from science and economy – and in cooperation with Belgium and the Netherlands – the region possesses an outstanding potency for a future-oriented development. Based on these competencies, its long term target is to link all regional players with each other and to identify and accomplish concerted actions regarding the health care economy.

The health region Aachen focuses on five main topics:

1. Medical Technology / Life Science
2. Second Health Market / Health Tourism
3. Employment and (Continuing) Education
4. Care Provision
5. Cross-boarder Cooperation

Responsible bodies for coordinating these five main topics are the institution for regional business development, AGIT mbH, the regional agency Aachen and the REGIO Aachen e.V. They are supported by a managing board consisting of various regional experts.

Regarding **thematic sponsorships**, the health region Aachen is responsible for the multidisciplinary field of “**Medical Technology / Life Sciences**,” which is a core field of the AGIT. In cooperation with the “Aachener Kompetenzzentrum Medizintechnik” (AKM) and the branch initiative “LifeTecAachen-Jülich e.V.,” projects are being set up that are of significant importance for the region as well as for the entire Land. Furthermore, the health region Aachen establishes networks of various disciplines and branches, such as, for instance, medical technologies in health care provision.



In our region, the health care economy is a top-ranking issue. This is due to its considerable importance regarding the labour market and structural policies. Thus, the health care economy is a core element of our regional development strategy. We will continue to concentrate on the development of a future-oriented regional health care economy.

Ulrich Schirowski, AGIT – Aachener Gesellschaft für Innovation und Technologietransfer.

Health Region KölnBonn e. V.

Interlinked Health Competencies in the Rhineland



In Germany, demographic change will have a major influence on health care and economic growth. Precisely in this area, the health region KölnBonn has excellent expertise, capacities and capabilities.

Complementary with actions of other health regions, the local development agency "Health Region KölnBonn e.V." has accepted the **thematic sponsorship "Health for Generations."** Thus, the region is meeting the demographic challenge on a regional level as well as for the entire Land. By doing so, it distinguishes itself as a leading national and international location for knowledge-based health care for senior citizens.

The health region KölnBonn pictures itself as a branch-wide network of relevant stakeholders working across various segments in different fields such as basic research, the production and supply industry, or health care provision.

Its network members combine local and regional authorities, hospitals, care and rehabilitation institutions, health professionals and health craft, companies working in the fields of pharmacy, biotechnology and medical technology, public and private health insurances, associations and chambers of commerce, and institutions for research and education.

Besides its activities in the field "Health for Generations", the health region KölnBonn aims at:

- further developing regional structures of public health by bringing together special interest groups
- improving forms of national and international communication in public health
- supporting regional medical and/or academic institutions and companies in bidding for public funds
- assisting knowledge transfer and cooperation between academic and independent organisations and companies working in health care economy
- improving structural frameworks for health care industry



A growing demand of health care provision for senior citizens in the context of a shrinking labour force will be a core challenge for our societies – not only in Germany, but across the world. Business locations that can meet this challenge will not only provide a better quality of life but also capacities for new employment.
Prof. Dr. Wolfgang Goetzke, Health Region KölnBonn e. V.

Inhabitants: 3.1 million
Area: 4,000 square kilometres
Population density: 807 inhabitants per square kilometre
Boroughs: Oberbergischer Kreis, Rheinisch-Bergischer Kreis, Rhein-Erft-Kreis, Rhein-Sieg-Kreis | **Urban districts:** Bonn, Köln, Leverkusen

Action Fields

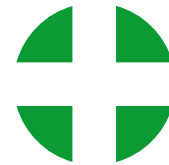
- Health for Generations
- Medical Specialist Staff
- Prevention and Rehabilitation
- World-class Medical Research
- International Guest Patients
- Medical Technology/Telemedicine

Employment

Areas of health care economy in the HealthRegion CologneBonn	
Clinical and outpatient care provision	128,268
Supplying industry	19,253
Administration and insurance	20,722
Other	16,452
Total	184,696
Turnover (2007): Euro 9.6 billion	

Contact

Gesundheitsregion KölnBonn e.V.
 (HealthRegion CologneBonn)
 c/o gewi – Institut für Gesundheitswirtschaft e.V.
 Im MediaPark 4c, 50670 Köln
 Phone 0049 (0)221 973199-95
 info@health-region.de
www.health-region.de



Inhabitants: 1.6 million
Area: 5,939 square kilometres
Population density: 257 inhabitants per square kilometre
Boroughs: Borken, Coesfeld, Steinfurt, Warendorf
Urban district: Münster

Action Fields

- Innovative Provision of Care
- Prevention & Early Diagnosis
- Nano-bio Technology and Analytics
- Telemedicine, Telematics
- Logistics in Health Care

Employment

Areas of health care economy in Münster	
Clinical and outpatient care provision	73,660
Supplying industry	8,519
Administration and insurances	7,437
Other	7,359
Total	96,975
Turnover (2007): Euro 4.9 billion	

Contact

Netzwerk Gesundheitswirtschaft
Münsterland e.V.
Technologieförderung Münster GmbH
Mendelstraße 11, 48149 Münster
Phone 0049 (0)251 9801121
info@gesundheitswirtschaftmuensterland.de
www.gesundheitswirtschaftmuensterland.de

One of the major strengths of the health location Münsterland is the combination of research, care provision and development. Besides the clinical centre of the University of Münster, which is the major institution for research and care provision of the region, a growing number of small medical, bio- and nano technology oriented companies have become well-established and increasingly well-known beyond the boundaries of the region.

Even today, more than 96,000 people work in the health sector in about 3,500 companies, 28 % of whom work in inpatient care while 25 % work in outpatient care. Between 1999 and 2006, there was a regional growth of 9 % in the number of employees in health care economy; while, at the same time, across the entire Land, the total growth was only 4 %.

The region Münsterland stands for:

- an excellent screening infrastructure (e.g. infant hearing screening and the mammography-screening reference centre)
- an invaluable dialogue concerning prevention (e.g. prevention fair, prevention summit NRW 2010, hypertension world day 2009)
- the interdisciplinary “Medical Prevention Centre” project of the University of Münster
- interdisciplinary medical sciences (e.g. ETP Nano Medical Science of the European Union, Center for Nano Technologies, Network Bioanalytik e. V.)

As regional service provider, cluster agency, coordinator, and moderator, the Network Health Economy Münsterland e.V. provides:

- regional networking and supra-regional cluster management
- identification of relevant calls, acquisition of subsidies and innovation management
- setting up, consulting and monitoring of projects – especially within the field of “Medical Prevention”
- public relations and individual support for participation in important fairs throughout Germany

The **thematic sponsorship** of the health region Münsterland is called “**Medical Prevention**”.



The region Münsterland is ready to face the future. This is supported by health-related data of economic growth. Fortunately, in the fields of research, care provision and development, stakeholders closely cooperate which each other – a valuable foundation for a health region. For instance, players from the supply industry and care provision concertededly develop highly innovative projects and solutions. In our region, competition and cooperation take place simultaneously.

Sascha Akmann, Netzwerk Gesundheitswirtschaft Münsterland e. V.

Health Region Ostwestfalen-Lippe

Partnerships in the Health Care Economy

For the entire health care economy, care for older and chronically ill persons is of increasing importance. By closer linking science, care providers and cost-bearers, the health region Ostwestfalen-Lippe aims at identifying synergetic potentials for a future-oriented health care provision. In Ostwestfalen-Lippe, the share of senior citizens is estimated to rise up to 70 % by 2025. This will lead to a growing demand for innovative, care-oriented, medical and technical services. In this sense, the region has already established itself as a leading health location for care provision.

Its **thematic sponsorship “Interlinked Care Provision”** will be implemented within the scope of four projects:

- Regional Care Management in Geriatrics: one-stop patient-oriented care provision
- Future of Rehabilitation – building bridges across care provision sectors of hospitals, institutions of rehabilitation and providers of outpatient care
- Initiative Telemedicine NRW: implementation of telemedical processes of care provision into mainstream services
- Care at Home: technical support for patients, family members and caring staff

Core Competencies Research and Care

Outstanding research institutions of the OWL region include the “Faculty for Public Health,” which is unique nationwide, and the “Cognitive Interaction Technology” cluster, funded by the Initiative of Excellence, both of which are located at the University of Bielefeld. Further examples are the “Heart and Diabetes Centre NRW” in Bad Oeynhausen and the internationally renowned “Centre of Epilepsy Bethel” in Bielefeld. Additionally, the region OWL, known as the “Healing Garden of Germany,” is characterised by a high density of spas and therapeutic baths, as well as by comprehensive competencies and infrastructure in the fields of prevention, care and rehabilitation.



For more than ten years, Ostwestfalen-Lippe has developed partnerships in health care. Over the years, excellent services in medical care, prevention and rehabilitation for old and chronically ill people have become a trademark of the region. Rural care provider structures need interlinked and smart solutions, for instance by implementing telemedical applications. With its excellence in research and existing cooperations between providers, industry and science, the region is well prepared for this task.

Uwe Borchers, Manager ZIG – Zentrum für Innovation in der Gesundheitswirtschaft Ostwestfalen-Lippe

Inhabitants: 2.1 million

Area: 6,519 square kilometres

Population density: 317

inhabitants per square kilometre

Boroughs: Gütersloh, Herford, Höxter, Lippe, Minden-Lübbecke, Paderborn

Urban District: Bielefeld

Action Fields

- Care Network Geriatrics
- World-class Medical Science “for heart and brain”
- Initiative Telemedicine NRW
- Rehabilitation and Prevention
- Knowledge Transfer & Cluster Development

Employment

Areas of health care economy in the Region OWL	
Clinical and outpatient care provision	94,965
Supplying industry	10,096
Administration and insurances	7,108
Other	8,731
Other	120,900
Turnover (2007): Euro 6.3 billion	

Contact

ZIG – Zentrum für Innovation
in der Gesundheitswirtschaft OWL
Jahnplatz 5
33602 Bielefeld
Phone 0049 (0)521 329860-0
borchers@zig-owl.de
www.zig-owl.de

Inhabitants: 5.3 million
Area: 4,435 square kilometres
Population density: 1,185 inhabitants per square kilometre
Boroughs: EN, RE, UN, WES
Urban districts: BO, BOT, DO, DU, E, GE, HA, HAM, HER, MH, OB

Action Fields

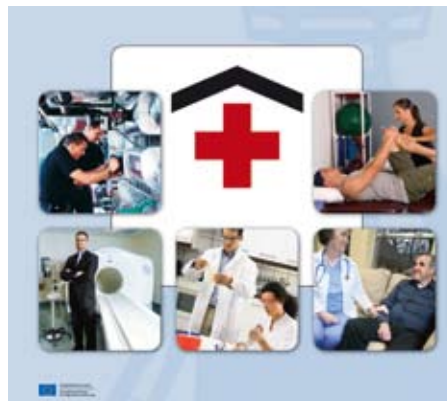
- Clinical Economy and Integrated Care Concepts
- Prevention and Rehabilitation
- Health Care and Demography
- Life Science and Medical Sciences

Employments

Areas of health care economy in the Ruhr Metropolis	
Clinical and outpatient care provision	218,406
Supplying industry	22,841
Administration and insurances	31,939
Other	23,465
Total	296,651
Turnover (2007): Euro 16.1 billion	

Kontakt

MedEcon Ruhr e.V.
 Universitätsstraße 136
 44799 Bochum
 Phone 0049 (0)234 97836-0
 info@medeconruhr.de
www.medeconruhr.de



The health region Metropole Ruhr is Europe's top-ranking region in regards to its size, concentration and diversity of its clinical landscape. Approximately 130 clinical centres generate an annual turnover of more than 5 billion euros. In regard to its participation in clinical studies, the region ranks first in Germany. It has a leading role in world-class clinical research and care provision. Furthermore, the region ranks first in the realisation of integrated care provision concepts in cooperation with gener-

al practitioners, nursing homes, outpatient care services and pharmacies. Thus, the region's clinical landscape is not only a huge sales market, but also a highly challenging reference market. An excellent example is the health-related IT sector: In this area and in numerous model projects, local clinical centres and their partners work together with relevant stakeholders of the health-related IT industry.

The "total system of clinical services" stands at the centre of chains regarding medical and care provision and the supply industry. This is an important factor for regional economy. The most important objective of "MedEcon Ruhr," the regional development agency, is to develop the "Clinical Cluster of the Future" in a metropolitan economic market and health region that is dominated by sustainable provision and supply networks.

Central elements are: hospital engineering (bridging facility management to logistics and IT), neighbourhood-centred clinical centres, and medical-technology-oriented development partnerships between hospitals and industry. In a large-scale approach, this aim will be prototypically and uniquely realised in the Ruhr region.

The **thematic sponsorship** of the health region Metropole Ruhr is called "**Clinical Economy**".



Clinical centres will continue to open up their services – towards care provision and treatment in the neighbourhood as well as towards developing partnerships with science and industry. In 2015, the "open hospital" will be located in the Ruhr area and will be the centre of intelligent urban health care provision. It will be a junction of social life in the city and a motor of regional economic growth.
 Jürgen Hellmann, MedEcon Ruhr e. V.

Health Region Südwestfalen

Finding Complex Solutions Together



Brancheninitiative
Gesundheitswirtschaft
Südwestfalen

The health region Südwestfalen holds a top-ranked position in developing senior friendly and handicapped accessible products, as well as in the supply industry. Under the roof of the branch initiative Gesundheitswirtschaft e. V., capable companies bring together their manifold competencies. The companies are from various areas such as medical and dental technologies, metal and plastic material manufacturing, materials testing, surface technologies and prototyping. They manufacture products for medical technologies and act as important suppliers for the health market. In close cooperation, those companies develop and implement complex solutions for their customers. Intensive cooperation between universities and institutions working in the fields of research and development guarantee a high level of innovation. Another advantage for customers is the close proximity of companies. Thus, short routes, fast reactions and flexible capacities to act are guaranteed.

Numerous specific and classical organisations are another characteristic of this region. They offer continuing education in the fields of care and therapy, degree programmes in medical technologies, bio and nano technologies at the University of Applied Studies of Südwestfalen, the University of Siegen, the Academy for Emergency Care, and the Academy Foundation Hellweg in Soest.

Health services in the fields of medical rehabilitation and prevention as well as its famous spas and health resorts are another feature of the region Südwestfalen. Furthermore, an outstanding spectrum of specialised clinics in public and private sponsorship can be found. Thus, all sectors of contemporary and future sectors of the health care economy are available in this region.

Regarding **thematic sponsorships**, the health region Südwestfalen is responsible for the field of **“Materials and Medical Technology”**.



A long industrial tradition in most leading and growing branches in Germany characterise the region Südwestfalen. Its numerous small and medium-sized companies are a special feature of its economy. The branch of medical technologies in NRW can benefit from our very strengths: compacted local know-how of the supply industry that focusses on medical technologies!
Nadine Möller, Brancheninitiative Gesundheitswirtschaft e. V.

Inhabitants: 1.45 million
Area: 6,488 square kilometres
Population density: 235 inhabitants per square kilometre
Boroughs: Märkischer Kreis, Kreis Soest, Hochsauerlandkreis, Kreis Siegen-Wittgenstein, Kreis Olpe

Action Fields

- Applied Medical Technology/
Suppliers of Medical Technology
- Medical Care Provision/
Rehabilitation and Prevention
- (Continuing) Education in Health
Economy
- Health Tourism

Employment

Areas of health care economy in the region Südwestfalen	
Clinical and outpatient care provision	60,652
Supplying industry	5,711
Administration and insurances	5,184
Other	6,039
Total	77,586
Turnover (2007): Euro 4.5 billion	

Contact

Brancheninitiative
Gesundheitswirtschaft e.V.
Lindenstraße 45
58762 Altena
Phone 0049 (0)2352 92720
info@gesundheitswirtschaft.net
www.gesundheitswirtschaft.net

