



**Cluster Healthcare Industries
Berlin-Brandenburg**
HealthCapital

THE GERMAN CAPITAL REGION
excellence in life sciences & healthcare

One cluster – Many participants

Healthcare industries, healthcare services, and life sciences: The Berlin-Brandenburg region is one of the leading business locations in the world when it comes to health. Above all, what makes this region strong is its unique focus and especially close collaboration between science, hospitals and business.

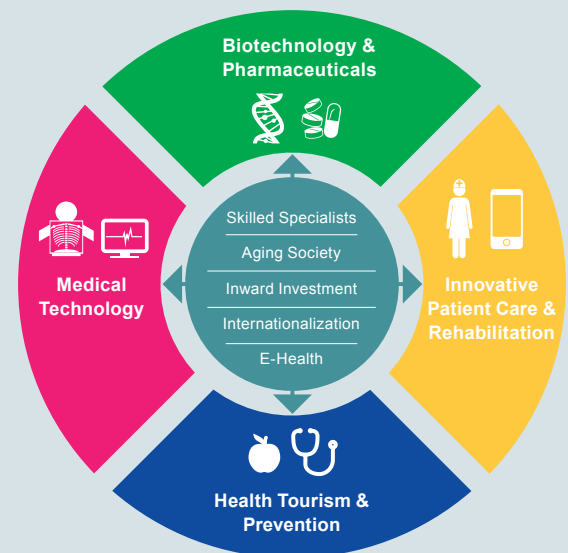
Numerous technology parks and networks, particularly in the fields of biotechnology and medical technology, create the ideal infrastructure for rapidly transforming the latest scientific findings into innovative products for the healthcare sector. This benefits both regional patients and international guests who come to our region for medical treatment as well as people in other regions of the world, as evidenced by the high export rate.

A professional cluster management was established in 2010 to unite the great potential of the Healthcare Industries Berlin-Brandenburg cluster. Since then, it has worked together with many regional players from life sciences, healthcare industries and patient care under the umbrella brand HealthCapital. The goal is clear: The greatest achievements for the regional and global healthcare industry are to be continuously expanded.

One cluster – One vision

It is our aim to strengthen the capital region as one of the world's leading healthcare sites. Our vision is clear: To be among the international trailblazers in research and development in life sciences and for new healthcare solutions.

This is based on the Berlin-Brandenburg Healthcare Region's master plan, "Building Innovation Together", which has been endorsed by the governments of both federal states. It defines the strategic goals and key thematic areas in four focal areas and five complementary integrative topics (see diagram below). All strategic measures are combined in these operational fields. Numerous experts support the cluster management in a voluntary capacity, allowing goals to be achieved in an optimal fashion.



One cluster – Many benefits

Today, the Berlin-Brandenburg region, with Berlin as one of the most attractive cities in the world, is a magnet for many international researchers, creative minds and founders. In addition, the region also appeals to highly skilled specialists and executives, scientists and of course companies who consider the region as an attractive place to establish themselves.

- ▶ A high density of renowned research institutions and institutions of higher learning
- ▶ Startup capital of Germany and top investment location in Europe
- ▶ Unique hospital landscape, including the Charité – one of the largest university hospitals in the world
- ▶ Synergies from extensive networking structures and political support
- ▶ Highly qualified workforce and talents from around the world
- ▶ Best conditions for production
- ▶ Favorable commercial spaces and office property in attractive locations
- ▶ Very good funding conditions
- ▶ Seat of parliament, government and top associations
- ▶ High quality of life in one of the most attractive metropolitan regions in the world

One cluster – A true success

The healthcare industry with its more than 21,000 companies and approximately 354,000 employees has a particularly high impact on the capital region. It is both an engine for growth and employment, as well as a guarantee for the highest quality healthcare.

The annual growth ranges from three to five percent. More than 100 startups founded in the recent years bear testimony to the innovative capacity of the industry.

Healthcare industry companies have the opportunity to cooperate with research institutions in Berlin-Brandenburg to a degree that is unmatched anywhere else. The region's scientific landscape measures up to the best in the world: 35 large research institutions and institutions of higher education specializing in life sciences and approximately 200 programs of study, renowned institutes and facilities of the Fraunhofer, Max Planck, Helmholtz, and Leibniz institutes are located here. These also include Europe's largest university hospital, Charité, along with many other hospitals and excellence centers. Cutting-edge research and medicine have been the norm here for more than 300 years with renowned scientists, such as Rudolf Virchow, Robert Koch, Ferdinand Sauerbruch and Emil von Behring.



Focal area 1

Biotechnology and Pharmaceuticals

Biotechnology is a key driver of innovation in the region. The industry has recorded steady growth and a high level of startup dynamics; many of the biotech companies were established on site from local universities and research institutions. This is especially true for "red" biotechnology, which deals with medicine: Of the more than 240 biotechnology companies with approx. 5,000 employees, about 90% are active in biomedicine. They develop innovative therapeutic and diagnostic procedures to treat cancer, cardiovascular diseases and diabetes, and benefit from the strong scientific background and excellent infrastructure for clinical studies in the region. The know-how and local opportunities make the capital region attractive for global pharmaceutical companies: They can develop and produce innovative medicines here.

In addition to drug development, bioanalytics and diagnostics, the Berlin-Brandenburg region has also become one of the most important centers for regenerative medicine with outstanding research in the fundamentals of biomedicines and biomaterials in Germany. The Berlin Institute of Health (BIH) has emerged as an internationally visible research and translation center that sets new standards in systemic medicine thanks to the increasingly close collaboration between the Charité – Universitätsmedizin Berlin and the Max Delbrück Center for Molecular Medicine.

Strategic goals

- ▶ **Develop the capital region into one of the leading European sites for biotechnology and pharmaceuticals.**
- ▶ **Lead the way for the design of joint research and development activities.**
- ▶ **Strengthen the transfer of technology.**
- ▶ **Open up new areas of growth in the life sciences.**

Main fields of focus

- ▶ Drug development
- ▶ Diagnostics
- ▶ Regenerative medicine
- ▶ Glycobiotechnology
- ▶ Industrial biotechnology

At a glance

- ▶ 30 pharmaceutical companies with approx. 10,000 employees
- ▶ Approx. 240 biotech companies with around 5,000 employees
- ▶ High level of startup dynamics
- ▶ 9 technology parks focusing on life sciences
- ▶ Excellent conditions for clinical research
- ▶ Interdisciplinary cooperation in the areas of biotechnology, diagnostics, pharmaceuticals, medtech, photonics and IT
- ▶ Cooperation as part of industry networks
- ▶ Good access to skilled specialists



Focal area 2

Medical Technology

Medical technology is one of the cluster's mainstays. This region is home to medium-sized companies with great innovative capacity – among them world leaders. Their revenue has continued to grow in recent years as has the number of their employees. The high growth rates in the industry can be attributed to a successful transfer of technology: Close cooperation with academic research results especially rapidly in competitive products for medical supply.

The dynamics of the medical technology sector is reflected in the high number of startups, many training and study opportunities and the extensive network structures of the industry. Numerous universities and colleges offer medical technology programs of study. Several networks work together to support the interdisciplinary exchange of information. The cluster, being at the interface of the agile IT industry, provides the best conditions for the development and application of digital processes and products for the global health market.

Medical technology products and services in the Berlin-Brandenburg healthcare industries cluster focus particularly on the medical areas of application for geriatric medicine, cardiovascular diseases, neurology, oncology and orthopedics.

Strategic goals

- ▶ **Develop the capital region into one of the fastest-growing medical technology locations in Europe.**
- ▶ **Consistently develop cutting edge technologies.**
- ▶ **Remove translation barriers; more closely to link up research, development and supply.**

Main fields of focus

- ▶ Imaging diagnostics
- ▶ E-Health technologies/medical informatics
- ▶ Endoprosthetics
- ▶ Cardiovascular medical technology
- ▶ Minimally invasive medicine

At a glance

- ▶ Approx. 300 medical technology companies with around 12,600 employees
- ▶ Many small and medium-sized companies, among them world leaders
- ▶ Stable industry with constantly increasing growth rates
- ▶ High export rate
- ▶ Well-developed industry interfaces for biotechnology, pharmaceuticals, photonics, microsystem technology and IT
- ▶ Established industry networks
- ▶ Good access to skilled workers resulting from the many programs of study, advanced training and further education

Healthcare Industries – HealthCapital

Facts and figures (as of 2016)

> 21,000 Companies

≈ 354,000 Employees

≈ 21,6 billion Euros in revenue

≈ 30 Pharmaceutical companies with

≈ 10,000 Employees

≈ 240 Biotech companies with

≈ 5,000 Employees

≈ 300 Medtech companies with

≈ 12,600 Employees

> 130 Hospitals with

> 35,000 Beds

Charité – Universitätsmedizin Berlin

Largest university hospital in Europe

9 Technology parks focusing on life sciences

≈ 35 Large research facilities and institutions of higher learning focusing on life sciences

≈ 200 Health-related programs of study



Focal area 3

Innovative Patient Care and Rehabilitation

From primary healthcare to specialized high-end medicine: Anyone searching for medical services in the Berlin-Brandenburg region will find qualitatively excellent medical care, including rehabilitation and nursing. This includes service-oriented hospitals, such as the Charité – Universitätsmedizin Berlin; Vivantes, the largest local group of hospitals in Germany; the Ernst von Bergman Hospital Postdam; the Carl Thiem Hospital Cottbus; the heart centers in Berlin, Bernau and Cottbus; and the Trauma Hospital Berlin. Acute care hospitals and rehabilitation centers of Berlin and Brandenburg cooperate in providing healthcare for the population of the whole region.

The capital region will continue to be a source of all topics and issues related to a future-oriented healthcare landscape. These include ensuring sustainable, comprehensive healthcare in rural regions and providing adequate services for the growing number of elderly people. New concepts have to be developed and integrated care models have to be implemented across the hospital and the ambulatory care sector – also with a view to the increasing lack of skilled employees. The intensive cooperation between inpatient and outpatient facilities and the use of new technologies, such as telemedicine, are becoming even more important. The Berlin-Brandenburg region has become a pioneer in this area.

Strategic goals

- ▶ Create optimal supply structures through coordination and networking.
- ▶ Initiate innovative healthcare concepts across sectors.
- ▶ Ensure a high and qualitatively consistent standard of healthcare in Berlin and Brandenburg.

Main fields of focus

- ▶ Developing innovative forms of care
- ▶ Concepts for coping with the lack of skilled specialists
- ▶ Improvement of healthcare using IT
- ▶ Integrating rehabilitation into new forms of care

At a glance

- ▶ More than 130 hospitals with approx. 35,000 beds
- ▶ 70 rehab centers
- ▶ Approx. 10,000 registered physicians
- ▶ 800 nursing homes
- ▶ 1,200 outpatient care services
- ▶ Training in 60 health professions
- ▶ Location of umbrella organizations for health insurance companies and service providers



Focal area 4 Health Tourism and Prevention

Efforts to prevent diseases and to support overall health are as important as to provide medical care for people who are already sick. The capital region provides a varied spectrum of health-related and preventative measures, including public health services from institutions, such as insurance companies, accident and pension insurance, sports clubs, physicians, companies, schools and daycare centers. In particular, the operational management of healthcare is also becoming increasingly important in the cluster.

Both patient tourism and spa and wellness tourism have provided excellent opportunities for growth in the capital region: More and more people from around the world are combining vacationing and healthcare when they travel to Berlin and Brandenburg. The reason for this is the region's comprehensive and high quality of hospitals across the treatment spectrum, which provide a variety of health-related services, local recreation areas and tourism opportunities.

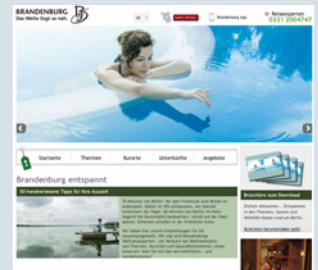
Strategic goals

- ▶ Improve and expand health promotion and prevention in the capital region.
- ▶ Lead the way in promoting occupational health.
- ▶ Further develop the potential of medical tourism.
- ▶ Strengthen the image of an attractive destination for medical tourism.

Information for medical tourism



www.health.visitBerlin.com



www.brandenburg-entspannt.de

Main fields of focus

- ▶ IT-supported prevention and care concepts
- ▶ Health promotion in urban and rural areas
- ▶ Occupational health management
- ▶ Prevention-oriented tourism and wellness
- ▶ Special offers for international patients

The following are important for all focal areas:

Integrative topics

Integrative topics describe issues that represent success factors for all focal areas. Therefore, they are actively addressed by cluster management.

Qualified staff

The healthcare industry can only grow, if there is a sufficient number of qualified staff to employ. Thus, many efforts aim at attracting and retaining qualified personnel.

Inward investment and regional development

Many healthcare industry companies have relocated to Berlin-Brandenburg in previous years – this is a trend that needs to be promoted. At the same time, companies located in the region as well as startups shall be supported in their growth and expansion.

Internationalization

The German capital region is internationally known for its excellence in medicine and healthcare. The cluster management aims at pushing ahead with internationalization and thus at strengthening the global position of the Berlin-Brandenburg healthcare industries.

E-Health

The integration of e-health will have a decisive impact on the future development of the healthcare industries. The Berlin-Brandenburg region provides ideal conditions for the development and implementation of digital services.

Aging society

The percentage of elderly people is increasing in the population. To ensure the healthcare of older generations in the city and in rural areas, the capital region wishes to take a pioneering role in overcoming challenges related to this demographic shift.



The cluster management

The cluster management supports and connects industry, science, healthcare and politics. It also advises companies that wish to locate themselves in the capital region. A honorary cluster spokesman and groups of experts advise on strategic decisions and assume representational duties. The Berlin Partner for Business in Technology and the Brandenburg Economic Development Board have joint responsibility for managing the cluster.

Cluster management – active at the interface between industry, science and hospitals

- ▶ We will support your relocation projects and will help you search for a suitable location.
- ▶ We will inform you about funding opportunities, financial instruments and investors.
- ▶ We will aid you in searching for suitable partners for your project.
- ▶ We will provide you with the contacts at the authorities, banks, chambers, associations and networks you will need to expand your company.
- ▶ We will help you to recruit qualified, trained personnel.
- ▶ We will provide assistance in creating business plans.
- ▶ We will give you visibility at national and international fairs and events.
- ▶ We will provide you with facts, figures and information about the Berlin-Brandenburg healthcare region.

Healthcare Industries Cluster Berlin-Brandenburg HealthCapital

Become a part of our unique healthcare region and benefit from the internationally acclaimed innovation and best-networked site in the heart of Europe!

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You will find detailed information about the cluster in the publication, "Building Innovation Together – Master Plan for the Berlin-Brandenburg Healthcare Region" and at www.healthcapital.de





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