



### THE DIGITAL HEALTH SECTOR

### **Summary**

Germany is well-known for its innovation-driven pharmaceutical, biotechnology, medical technology and information technology sectors. By bringing traditional experience in the healthcare industry and cutting-edge technologies together, German companies are pioneers in the development of innovative digital health solutions. This has led to a vibrant digital health start-up ecosystem across the country, offering new IT-based health products for many use cases. The industry also benefits from exceptional research facilities in the health and IT disciplines, high-quality healthcare infrastructure with internationally wellknown hospitals, and rigorous data protection standards. Together, they build a strong base that fills the pipeline for digital health innovations.

### EUR 160 bn

turnover generated by the German IT industry



270+
German companies active in digital health

USD 31 bn global mobile health revenues forecast for 2020

> EUR 392 m mobile health turnover in Germany in 2017

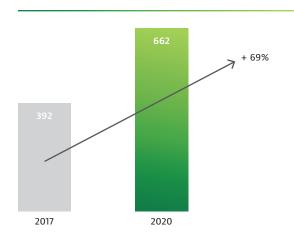
### **Market Data**

Over the last decade, digitalization has been shaping more and more aspects of life and now drives almost all industries. This also holds true for health-related businesses and patient care. Globally, the digital health market is expected to double in volume within the next three years and to exceed USD 200 billion by 2020. The growing mobile health market is one of the main contributors to this forecast trend. By 2020, analysts from the research2guidance consultancy expect the market for mobile health (mHealth) apps to grow by more than 15 percent to USD 31 billion.

Germany's digital health activities benefit from a number of favorable conditions. Firstly, there is a strong domestic mobile health market. In 2017 alone, turnover reached EUR 392 million and is expected to reach EUR 662 million in 2020. This provides digital health companies an attractive foundation for further growth. Secondly, digital health "Made in Germany" is based to a large extent on the country's leading in the global healthcare industry, be it in the pharmaceutical, biotechnology or medical technology sector. Total export volumes for German health-related businesses amounted to EUR 116 billion in 2016. The necessary expertise is provided by the 7 million employees currently working in the German healthcare industry. Thirdly, Germany is home to a strong IT sector. With annual turnover of more than EUR 160 billion, the domestic IT sector is a major pillar of the German economy. Healthcare has established itself as an attractive growth area for German IT companies. These companies

### **Mobile Health Turnover in Germany**

in EUR million



Source: Statista 2017

### **German Health Industry Export Volumes**

in EUR billion



Source: Federal Statistical Office, German Federal Ministry of Health, 2016

increasingly provide solutions for connected services, adapted infrastructures, medical devices, and digital health products. This development is facilitated by vibrant Internet of Things (IoT) clusters established in and around Berlin, Hamburg, Munich and Cologne that connect IT start-ups with the healthcare industry.

Thanks to these excellent conditions, a diverse digital health environment has formed in Germany. Driven by regional governments, companies and clinics, more than a dozen accelerators and local hubs support the foundation of new start-ups (see page 9). In addition, a substantial number of companies - both large and small and medium-sized enterprises - already offer a broad portfolio of IT-based health products. Their services range from video-based doctor consultations and medical records for the smartphone to diagnostics and therapeutic apps for doctors and patients as well as preventive services supporting a healthy lifestyle. In 2016, fitness trackers generated turnover of around EUR 120 million in Germany. Growing digitalization also impacts data storage infrastructures and communication processes across the healthcare sector. Here, German companies are helping to develop more efficient data routes in hospitals, location sites, attending physicians, care and rehabilitation facilities, patients homes, and health insurance companies.

### **Industry Trends**

### Strong mHealth and Quantified Self Demand

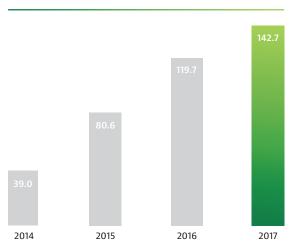
Digital health solutions offered as mobile apps or for mobile devices are in high demand due to the growing number of smartphone and tablet users globally. According to Bitkom, Germany's digital association, almost one in two German smartphone owners also use health apps. As this development is in line with international trends, the country is a perfect test bed and starting point for digital health providers.

Sector analysts estimate that there were around 325,000 different mHealth apps available globally in app stores in 2017; of which around 100,000 focus on a German-speaking market. According to the "mHealth App Developer study" by research-2guidance, app developers in Germany benefit from the third most attractive conditions in terms of market size, doctors' acceptance of apps and access to investors in Europe. This has driven companies to develop new products. Today, highly diverse services are offered, covering everything from brain jogging and fitness monitors to pregnancy monitoring and medication reminders.

Most of these products target the "Quantified Self" movement which aims to record, analyze and evaluate personal health-related data in everyday activities. This demonstrates the high potential for mobile health in the preventive area.

### Fitness Tracker Turnover in Germany

in EUR million

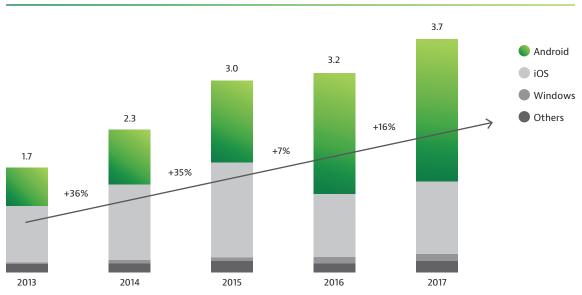


Source: GfK 2017

Many German start-ups are specialists in preventative healthcare and work closely with national insurance companies and sporting goods manufacturers. Some applications have received certification as medical products, particularly where the app supports medical diagnostic settings, disease management or therapeutic treatment. According to research2guidance, around 53 percent of digital health stakeholders expect health insurers to be the future distribution channel with the

#### **Global Health App Downloads\***

in billion downloads



Source: research2guidance, 2017; \*estimated

best market potential. In Germany, some start-ups have already been reimbursed for apps that target patients with tinnitus and children with ophthal-mologic diseases such as amblyopia.

### **High Level of Telemedicine Expertise**

Telemedical devices connecting the in-patient and out-patient sector as well as home care are another digital health trend. German researchers, hospitals and companies have developed a number of telemedicine platforms for specialized use cases - such as monitoring patients with cardiac pacemakers and digital home care services as a follow-up to clinical rehabilitation in orthopedic indications. The German telemedicine portal initiated by the German Federal Ministry of Health offers an overview of ongoing telemedicine projects in Germany. For 2017, some 160 projects involving companies, health insurance providers, hospitals, and other stakeholders were listed.

### **Health System Transformation**

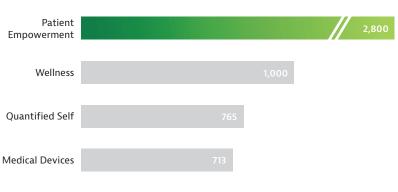
The disruptive nature of digital health innovation is dramatically changing the structure of traditional health systems worldwide. Today, patients not only increasingly monitor their own health they also use online platforms to obtain information – enabling them to make more independent decisions than ever before. German companies support these more active patient behaviors with various products and services. They are establishing online patient forums where people can share their experiences and review medication, doctors and clinics. Some companies are building videoconsultation platforms that allow doctors and patients to communicate in ways beyond faceto-face meetings in the doctor's office. Since 2017, the German statutory health insurance companies have started to pay for online-based video communication with the result that there is a supportive environment for the further establishment of similar services in Germany.

### **Artificial Intelligence and Smart Sensors**

The German digital health sector also benefits from Germany's strong standing in the engineering and information technology fields. It is home to large IT, engineering and telecommunication companies such as SAP, Siemens and Deutsche Telekom. Companies sell and distribute new software tools, smart sensors for implants, cloud computing technologies, blockchain systems, and wearables. Germany's IT research facilities also

### Top Global Digital Health VC Investment Areas

in USD million



Source: Startup Health, 2017

enjoy an excellent international reputation. Many pilot projects with hospitals explore the potential of machine learning tools in clinical applications. Experts forecast that artificial intelligence (AI) and deep learning algorithms, for instance, will improve treatment outcomes at lower costs. First applications from German companies with deep imaging – which turns medical images into biomarkers – demonstrate that doctors' decisions could be strongly supported with integrated imaging information to implement more precise therapies for patients with cancer or skin diseases. Other German enterprises focus on using AI-based strategies in R&D processes, drug research and simplifying diagnostic methods.

### Vibrant Start-up Scene

Start-ups operating in the IT and health fields are increasingly attractive to the private capital market thanks to the technological progress, short development cycles and earlier ready-for-market status of software solutions. At an international level, early stage investors spent approximately USD 5.4 billion on digital health start-ups in 2016 with further growth expected. Major investment areas include patient engagement, wellness applications, quantified self, medical devices, workflow, and big data. German companies have benefited from the growing interest of investors, raising several significant investment rounds in 2016 and 2017.

### **Sector Structure**

The German digital health sector makes use of a broad foundation of healthcare expertise available in the country. This means that companies from different industries, offering a diverse portfolio of digital health solutions, are active in the market. These include:

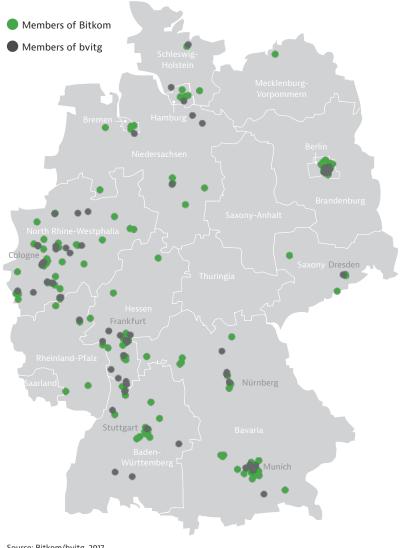
- · pharmaceutical companies aiming to provide digital companionship for therapies to improve patient management and patient empowerment or to accelerate and improve complex R&D processes in drug development;
- · medical technology companies providing ITbased devices for hospitals, computer-assisted operation tools, IT-assisted mobile devices/wear-

- ables for rehabilitation and patient care, intelligent diagnostic sensors, and implants;
- · biotechnology companies offering molecular biology expertise in conjunction with bio-IT expertise to generate intelligent therapeutic or diagnostic solutions based on big data;
- information technology companies targeting technological areas such as IT infrastructure, hardware and software, machine learning, data storage and sharing, blockchain, cyber security, and digital interfaces between different medical devices and sites;
- · digital health companies combining any of the above-mentioned disciplines to efficiently target the specific needs of hospitals, physicians, patients, and other health businesses.

All of these companies belong to highly exportoriented industries. The German pharmaceutical, medical technology and IT sectors are all wellknown for export volumes higher than 60 percent of their annual turnover. Digitalization opens further growth potential by providing new product functionalities - such as mobility, data sharing, data protection and data security - to address global needs. Companies also benefit from the fact that digital tools and services generally have a shorter time-to-market compared to the long product cycles in traditional health-related industries. The digital health market offers German pharmaceutical, medical technology and IT enterprises as well as fully digital health companies plenty of activity areas along the healthcare value chain.

· Preventive medicine: The characterization of illness is a dynamic process and many diseases begin before individuals realize they are affected. Digital diagnostic services will fundamentally change disease prevention. A number of German companies, mainly with an IT background, offer solutions for monitoring physiological data as a form of advanced wellbeing in fitness, wellness and healthy nutrition contexts. In addition, Germany's strong medical biotechnology sector provides a rapidly growing toolbox of digital health services based on modern molecular biology and microbiome research. This enables researchers, clinicians and patients to identify the causes of many diseases - such as inflammatory diseases, cardiovascular diseases and gastroenterology - before symptoms are recognized.

#### **Digital Health Companies in Germany**



Source: Bitkom/bvitg, 2017

- · Diagnostics and therapeutic treatments: Digital solutions have advanced modern medicine so that personalized treatments such as individual dose volumes, time schedules and reminders can easily be implemented. Moreover, digital tools support patient empowerment and maintenance of treatment which are essential for ensuring efficient therapies. This is particularly relevant for patients with chronic diseases including cardiovascular diseases, chronic respiratory disease and diabetes. Many German companies from the biotechnology and IT sectors have accordingly developed new solutions in those fields. These include, for instance, tools that help patients maintain a diabetes diary by automatically storing insulin units and blood glucose readings. Other devices help establish remote monitoring of patients at risk of stroke, respiratory diseases and cardiac arrhythmia. The strong German diagnostics sector provides the additional advantage of combining different leading technologies and traditional market expertise with the potential of new IT-based devices.
- · Rehabilitation and patient care: In the hospital rehabilitation setting, physiotherapists commonly treat patients who have had amputations, spinal cord injuries, strokes, traumatic brain injuries, and other debilitating injuries. For these indications, robot-assisted wearable systems that are connected to other digital mobile devices pave the way for innovative gait training. Some companies in Germany focus on this area in particular, and thanks to the high-quality standards that prevail within rehabilitation centers, these sites are frequently chosen for a first-of-its-kind use. Online-based therapy tools for chronic diseases such as diabetes, mental illnesses and neurodegenerative diseases as well as IT-based robotic care systems are other services developed by German experts to support patient care. Many of these digital health products also improve homecare which is becoming increasingly important in out-patient care. They assist elderly people, for instance, in their everyday life at home, by preventing falls or supporting communication in emergency situations.
- Health IT infrastructure and data handling: The sheer quantity of data accumulated in healthcare systems means that efficient medical information systems – as well as data storage and data-sharing interfaces – are imperative for

### MEDICAL BIOTECHNOLOGY



Medical Biotechnology is one of the most innovative healthcare fields in Germany. This publication provides an industry overview.

effective treatment decisions and doctor-patient communication in in-patient and out-patient care scenarios. Digitalization is a key driver for powerful infrastructure with strong functionality and high data protection levels. German IT and medical technology companies are well-known for providing high-quality competencies in these fields. They are in high demand, particularly in emerging countries where old hospitals are being modernized and new hospital infrastructure is being built.

The 270 companies of the German Association of Health IT Vendors (bvitg) and Germany's digital association BITKOM (see map on page 6) have a strong standing in all of these areas along the healthcare value chain. An excellent infrastructure enables them to offer innovative digital health products for medical treatments, diagnostics, rehabilitation, home care and other IT-related services.

### PHARMACEUTICAL INDUSTRY



The pharmaceutical industry is the largest sector within the German healthcare industry. This publication highlights its strengths and international partnership opportunities.

# The Digital Health Landscape in Germany

### High-quality Healthcare Infrastructure

Germany's export-oriented health industry profits from a strong, innovation-driven home base with a high-quality healthcare system. It provides a unique infrastructure for implementing and exporting digital health solutions. The country is one of the world leaders when it comes to offering the best possible in-patient and out-patient care. Every year, Germany's 1,900 hospitals and their 800,000 employees, take care of around 19 million patients. There are also some 1,400 rehabilitation centers as well as 13,500 nursing homes and a further 13,300 nursing services in Germany. Since 2005, the annual costs of the German statutory health insurance invested per capita for in-patient and out-patient care increased by 40 percent to EUR 2,000 (in-patient) and EUR 1,500 (out-patient). The majority of hospital costs are spent on the treatment of patients with cardiovascular diseases (EUR 46 billion), followed by mental illnesses (EUR 44 billion) and diseases of the digestive system (EUR 41.6 billion). Around EUR 34 billion was invested in medical products.

#### **R&D Excellence**

Germany's clinical infrastructure is embedded in strong R&D and industry networks throughout the country. Since the late 1990s, some regions have become established as Europe's leading health clusters and R&D hubs; paving the way for interdisciplinary collaboration between research institutes, universities, hospitals, and companies from

the pharmaceutical, biotechnology and medical technology sectors. Many of them laid the foundation for subsequent digital health accelerators and hubs – with particularly strong activities in Berlin and Munich (see map on page 9). The Digital Hub Initiative, launched by the Federal Ministry for Economic Affairs and Energy, promotes cooperation between companies and business start-ups within a confined area. Of the 12 digital hubs financed by this initiative, two hubs have a specific healthcare sector focus. They are located in Nürnberg/Erlangen and Mannheim/Ludwigshafen.



The Digital Hub Initiative www.de-hub.de/en

Significant R&D spending in the German healthcare industry also highlights the major role of innovation in the sector. For instance, total R&D spending by the pharmaceutical industry reached EUR 5.4 billion in 2015 – equivalent to 13.2 percent of revenue. Within the medical technology sector, nine percent of annual turnover is invested in R&D. Experts conclude that digitalization is among the most important R&D topics in all of these sectors. This also holds true for the biotechnology sector. Since 2000, there have been rapid increases in bio-IT solutions and services. Improved analysis tools for big data have fueled the progress made in molecular biology. A growing number of German companies have established their expertise in this field.

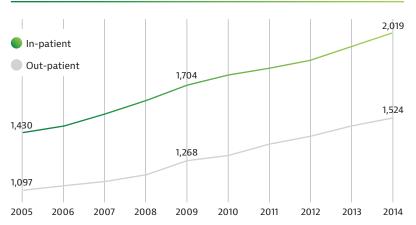


Company Directory: Bio-IT and Digital Health www.health-made-in-germany.com

Germany also promotes the improvement of data exchange between different hospital sites and biomedical research institutes. The German Federal Ministry of Education and Research is funding the establishment of data integration centers at German university hospitals with EUR 150 million for the period 2017 to 2021. Germany enjoys high levels of data protection thanks to the National Data Protection Law (Bundesdatenschutzgesetz – BDSG). All recorded health data is given special protection. Any stakeholders dealing with electronical medical records must comply with these exacting standards. They are also well prepared to adapt to the new European General Data Pro-

### In-patient and Out-patient Care Expenditure in Germany

per Capita in EUR



Source: Federal Statistical Office, German Federal Ministry of Health, 2016

tection Regulation (GDPR) which will come into effect in May 2018. German digital health experts in science and business have extensive knowledge in setting up safe digital data exchange infrastructures based on high-level protection standards. Several hospitals sites in Germany are leaders in implementing these solutions together with the health IT industry.

#### **Gateway to German Start-ups**

Most German digital health companies have a global strategic perspective and look for cooperation partners in international markets. This is not only true for large corporations in the traditional healthcare industry, but also for smaller businesses. For German digital health start-ups looking to move into the US market, the German Accelerator IT and the German Accelerator Life Sciences offer well-established structures financed by the German Federal Ministry for Economic Affairs and Energy. Companies taking part in those programs benefit from mentoring workshops, US office workspace and contact assistance with VC investors and possible clients in the USA. US-based health companies can make use of this infrastructure to establish contact with German start-ups.

#### Digital Health Activities in German Clusters, Networks, Hubs and Accelerators



#### **Health Hubs & Accelerators**

- 1 Health-i Initiative of Techniker Krankenkasse
- 2 Philips Start-up Campus
- 3 Healthy hub, Hanseatische Krankenkasse
- 4 Healthcubator
- Grant4Apps Programm of Bayer AG
- 6 Startupbootcamp
- 7 Flying Health Incubator
- B Healthcare Hub Berlin, Pfizer
- German Accelerator Life Sciences/IT
- 14 Digital Hub Initiative Nürnberg/Erlangen
- (I) German Accelerator Life Sciences/IT
- 16 Healthy hub, Siemens Betriebskrankenkasse
- Digital Health Accelerator, Munich
- 20 Digital Hub Initiative Ludwigshafen/Mannheim
- 21 Healthy hub, mhPlus Krankenkasse
- 22 Merck Accelerator
- 23 Digital Lab "BI X"
- 24 Healthy hub, IKK Südwest
- 25 I/E-Health NRW
- 20 Healthy hub, BIG direkt

### Non-Health speficic Hubs & Accelerators

- Axelspringerplugandplay
- 11 P751-Accelerator
- 18 P751-Accelerator
- 19 TechFounders

### **Clinical Infrastructures Supporting Start-ups**

- 12 Helios.hub
- 13 Digital Health Accelerator, BIH
- 23 Digital Hub Aachen/mHealth Division, RWTH Aachen

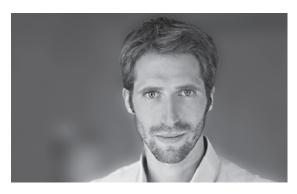
### German Expertise

German digital health companies offer a diverse portfolio of high-quality IT-based products for national and international clients. Foreign markets appreciate the innovative technologies, high data protection standards and professionalism of German health-IT companies. International business strategies play an important role for both large corporations and SMEs active in the digital health sector. Here, the CEOs and management representatives of three German health-IT companies report on what makes their expertise so interesting for international partners and why global alliances and strategic partnerships are the key to successful business development.

Hamburg-based connected-health.eu GmbH was founded in 2014. The start-up developed a communication solution which allows doctors and patients to easily exchange medical records via smartphone app. Connected-health.eu successfully raised two financing rounds and has 28 employees.

VISUS Health IT focuses on digital medical imaging and started as a technology spin-off from the University of Witten/Herdecke in 2000. The portfolio covers various products such as systems for departmental image reviewing as well as hospital-wide and distributed image communication solutions. The company operates in Germany as well as in international markets with clients in Northern and Eastern Europe, Switzerland, China, and North America.

"Systemanalyse und Programmentwicklung" ("System Analysis and Program Development"), better known today as SAP, was founded in 1972 by five former IBM employees who wanted to develop standard application software for real-time processing. The IT multinational now has more than 88,500 employees in over 130 countries and annual turnover of around EUR 22 billion. It offers a large software portfolio to several industries. For healthcare clients, SAP aims at enabling real-time information sharing between care providers and patients as well as supporting more personalized patient interaction from prevention to diagnosis and treatment.



**Dr Johannes Jacubeit**CEO, connected-health.eu GmbH,
Hamburg

### What do international investors and business partners appreciate most about your expertise?

With our LifeTime app, we provide a very simple and elegant solution for healthcare professionals to transmit data directly to the patient. Printing something on paper so that it can be handed over to someone else is a ubiquitous and recurring process in medicine. We have a solution for replacing the paper-based data exchange with a digital version while keeping the process the same (instead of printing on paper, we print directly to a smartphone).

## What do you believe is the basis for successful international cooperation and expansion?

The healthcare industry offers a global growth opportunity where our in-depth, sector-specific knowledge is key. Being compliant with German data privacy law and subscribing to the data privacy idea is our important asset. For our partnerships, we have a clear vision of digital medicine where physicians and patients are guided by artificial intelligence based on huge amounts of data.

# Which export markets and international activities play a crucial role for your company development?

We have started operating in the German-speaking area, addressing countries such as Austria and Switzerland besides Germany. In the long-term, we are open to other international markets should there be a need for our solution.





**Guido Bötticher** CEO, VISUS Health IT GmbH, Bochum

## What do international investors and business partners appreciate most about your expertise?

Our international distribution partners mainly appreciate our collaborative working relationship. As a medium-sized company with a focus on IT-based health, VISUS offers professional, high-quality products. By following only worldwide standards (IHE, DICOM, HL7), our JiveX product portfolio can be widely used on an international level. Among the services offered are a full-featured, high-performance Enterprise PACS and a scalable healthcare content management system which globally consolidates IT systems in hospitals. Both products are medical products and FDA certified.

## What do you believe is the basis for successful international cooperation and expansion?

The basis is always a trusting partnership between companies on an equal footing. Of course, JiveX customers worldwide appreciate our product quality and services. An international partner must therefore be able to offer the same level of service as that which VISUS offers its customers in its own markets. Well-trained staff are therefore an essential requirement for a VISUS partner that supports JiveX products.

# Which export markets and international activities play a crucial role in your company development?

Apart from the German-speaking market, VISUS also has long-standing partnerships and numerous customer relationships throughout Europe. The Middle East, South Africa and Asia are also important growth markets.





**Dominik Bertram**Vice President, SAP Health Innovation Hub, SAP,
Potsdam

## What do international investors and business partners appreciate most about your expertise?

Business partners appreciate that SAP has been solving very complex enterprise IT issues for international customers for decades and thus possesses profound experience that is applicable to healthcare IT around the world. Customers know us as a reliable and trustworthy partner, particularly in the area of data privacy and compliance with industry regulations concerning data usage.

## What do you believe is the basis for successful international cooperation and expansion?

Understanding the specifics of different health-care systems and markets is very important. SAP collaborates with customers and partners on co-innovation projects that allow us to learn about our international customers' needs first-hand and ensure that our solutions are a good fit. For example, we completed a successful project named CancerLinQ (cancerlinq.org) with the American Society of Clinical Oncology in 2016. It enabled us to develop a comprehensive platform for sharing healthcare data for research and quality management purposes.

# Which export markets and international activities play a crucial role in your company development?

The healthcare system in the USA is a frontrunner in the transition to value-based healthcare which presents particularly interesting challenges. In addition, emerging markets like South America, South Africa and Southeast Asia are important because they have a high need for IT solutions.



www.sap.com

### **Industry Associations**

The German digital health sector is represented by a number of industry associations that lobby for improvements for their member companies. HEALTH MADE IN GERMANY works closely together with them to provide support for international companies seeking collaboration and partnerships with German companies active in the digital health sector. To further enhance sector visibility, we facilitate the presence of German players at relevant industry events and provide a platform for connecting with international partners.

### conhIT - Connecting Healthcare IT

The annual Connecting Healthcare IT (conhIT) conference held in Berlin is a major event in the digital health events calendar. Targeting an international audience, the three-day event is equal part trade fair, congress, networking event, and academy. Current and future health IT developments, IT security and regulation issues as well as mobile health, robotics and healthcare opportunities arising from the Internet of Things are all discussed at the event. Launched in 2008 by the German Association of Health IT Vendors (bvitg) as a meeting platform for the healthcare IT industry and organized by Messe Berlin, conhIT now attracts more than 9,500 visitors. In 2017, around 500 companies of all sizes from 19 countries presented their IT-based health solutions. For the second time Germany Trade & Invest (GTAI) and HEALTH MADE IN GERMANY are hosting the "International Networking Lounge" in 2018 which is tailored to international visitors. Here, industry experts provide information about the German digital health market, cooperation opportunities and industry access.





### Bundesverband Gesundheits-IT - bvitg e.V.

The German Association of Health IT Vendors (Bundesverband Gesundheits-IT - bvitg e. V.) represents the leading health IT companies in Germany. The products of 70 current member companies are used in 90 percent of out-patient and in-patient care activities (including rehabilitation, nursing and social institutions according to segment). Seventy percent of association members operate internationally. The companies produce solutions for the various health IT segments, ranging from hospital information and other in-patient systems to the out-patient market, archiving and communication systems, electronic health records, drug safety, clinical decision support, remuneration, and coding software. The bvitg works closely with the German government and non-governmental institutions to foster health IT in German healthcare. Its most pressing issues are currently standardization and terminology in addition to electronic patient records, interoperability, data security, telemedicine and telematics infrastructure. In 2008, the bvitg and its member companies initiated and launched the conhIT - Connecting Healthcare IT conference - in Berlin as a crosssector, networking health IT event. It is designed to showcase existing IT solutions and demonstrate how they are used as well as presenting future prospects and innovations in health IT.





### Netzwerk für eHealth Systeme und Telemedizin

The National Association for eHealth Systems and Telemedicine (Netzwerk für eHealth Systeme und Telemedizin - NEST) is an amalgamation of companies, research institutions, hospitals, organizations and individuals. The network's aim is to use innovation to improve patient care and make healthcare more effective. This is achieved by developing, manufacturing and jointly marketing products and services. New applications for innovative technology and standardization processes play a decisive role in the eHealth and telemedicine sector. This facilitates simultaneous orientation towards national and international markets. Abroad, NEST is mainly active implementing projects and research joint ventures in the Arabspeaking world, the Balkans and the former Soviet republics.



www.nesttelemedizin.de



### Bundesverband Informationswirtschaft, Telekommunikation und neue Medien -Bitkom

Bitkom is Germany's digital association. It represents more than 2,500 companies of the digital economy, including 1,700 direct members. Members generate a domestic annual turnover of EUR 190 billion from IT and communication services alone. Among these members, there are 1,000 small and medium-sized businesses, over 400 start-ups and almost all of the global players. They offer a wide range of software technologies, IT services, telecommunications, and internet services or are affiliated with the digital economy in other ways. Bitkom promotes the digital transformation of the German economy and of German society. A strong European digital policy and a fully integrated digital single market are at the heart of Bitkom's concerns, as well as establishing Germany as a key driver of digital change in Europe and globally.





#### Deutsche Krankenhausgesellschaft

The German Hospital Federation (DKG) represents all public, private not-for-profit and private for-profit hospitals in all decisions relating to healthcare policy. It is a partner for policymakers and authorities, the German healthcare system's self-administration infrastructure, other associations and the scientific community. At the organization's headquarters in Berlin, 80 people work in ten departments, answering the full range of questions associated with hospitals. All hospital-relevant policies of the EU, crossborder healthcare in the EU, medical tourism with third countries, and the healthcare economy are among the issues addressed by the "EU policies, international affairs, health economy." Mandated by law, DKG is part of the "National contact point" for EU patients, which provides comprehensive information on hospital care to foreign patients:



www.dkgev.de



www.german-hospital-directory.de

### HEALTH MADE IN GERMANY

Germany is one of the world's most important providers and exporters of healthcare products and services. The country's innovative medical products set international standards for quality, safety and reliability. German manufacturers and service providers in all health and life sciences segments attract overseas customers and partners and deliver leadership in healthcare innovation.

HEALTH MADE IN GERMANY is the export initiative for the German healthcare industry. It supports international companies and organizations that are interested in establishing contact with potential German partners and suppliers. Set up by the German Federal Ministry for Economic Affairs and Energy (BMWi), the initiative bundles expert market intelligence for easy industry access. One of the initiative's main goals is to promote the German healthcare sector through international networking activities for the mutual benefit of international partners and German companies alike.

HEALTH MADE IN GERMANY does this by providing proactive support (including market and regulatory insight), introductory services, and networking platforms including trade events at home and abroad. The initiative serves four major industries active in the international medical market: pharmaceuticals, medical technology, medical biotechnology, and digital health care.

HEALTH MADE IN GERMANY also works closely with 16 major German industry trade associations and is part of the BMWi's MITTELSTAND GLOBAL umbrella program for small and medium-sized enterprises. The initiative is ideally placed to provide access to German healthcare market information and to help overseas businesses identify potential German partners.

The HEALTH MADE IN GERMANY initiative is implemented by Germany Trade & Invest, the economic development agency of the Federal Republic of Germany, on behalf of the BMWi.



For more information: www.health-made-in-germany.com

### Our support for your business:



We publish market briefs and in-depth market studies of the German healthcare industry and its different sectors.



Our calendar is regularly updated with the latest industry events in Germany and overseas.



We take part in leading healthcare trade fairs all over the world, organize networking events and enjoy ongoing dialogue and exchange with international health policymakers.



Our directories of German companies and research facilities with direct contact details help international businesses to identify contacts in Germany.



Visit www.health-made-in-germany.com for more information about the German healthcare industry and all HEALTH MADE IN GERMANY activities.

### **Expert Advice**



Stefanie Zenk is the senior manager responsible for the medical technology and digital health industries at HEALTH MADE IN GERMANY. She is your point of contact for expert advice in those fields and looks forward to receiving your inquiries and requests.

Get in touch with us to learn more about what HEALTH MADE IN GERMANY can do for you.

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