

Market Entry Germany - A new pathway ?

Digital Health City Berlin

- Final Report -



Company Workshop: Monday, 15.04.19
Christine Grumbach

Background evaluation project: Digital Health City Berlin

In November 2018 Berlin Senate Department for Economics, Energy and Public Enterprises announced a white paper for a new eHealth strategy in Berlin. Berlin should become a forerunner in eHealth in Germany testing new eHealth solutions. The action plan includes: Central coordination and communication center for the project, test platform for data change and integrated care solutions, Campus for digital health and Digital Health Science & Education Hub. The realization of the Digital Health City Berlin ecosystem is planned during 2019 – 2021.

Scope of the evaluation

- Project overview
- Identification of key players
- Future plans (needs/problems) with real business opportunities (top priority!)
- Influence map: 1. Project investors 2. Beneficiaries (HC providers, insurances, participating companies) 3. Endorser (Government units... 4. Influencers (Associations...)
- Key contacts
- Companies already involved
- Recommendations how Finnish companies could best participate
- Relevance of the Berlin project on national scale
- Relationship/Linkage to other regional projects

Methodology

- Personal interviews with relevant project stakeholders in Berlin/Brandenburg
- Analysis of recent publications
- Preparation and performance of a half day workshop in Helsinki to update Finnish stakeholders

Executive Summary

The appointment of the new Minister of Health Jens Spahn in March 2018 and several research studies performed in the same year underlined the need to streamline the coordination of healthcare digitization in Germany. A review of the existing ehealth strategy is needed and scheduled for autumn 2019. Only then, there is a real chance to improve the position of implemented digitized healthcare solutions compared to other countries and reach the ambitious goal to be one of the leaders in this important future field.

The latest McKinsey study prepared in partnership with the German Managed Care Association (BMC) concluded that up to EUR 34.0 billion savings could have been realized in 2018 if the German healthcare system had been fully digitized. 70 percent of the value could be captured by healthcare providers, primarily doctors and hospitals, with the remaining 30 percent captured largely by health insurers. Electronic health records and electronic prescriptions will have a vital role to play. Their introduction will not only massively and directly increase efficiency, but will also prompt improvements in care equivalent to more than double the value of the direct gains in efficiency. The 26 digital solutions were divided into six solution categories: 1) paperless data, 2) online interaction, 3) work flow / automation, 4) outcome transparency / decision support, 5) patient self-care, and 6) patient self-service. **Finnish companies have an offering in each category but there is still a low awareness in Germany about the ehealth competence of Finland.** Digital health companies from other foreign markets are more active in Germany.

The lack of coordination was identified as a main hinderance to speed up the digitization in healthcare. Therefore, the Ministry of Health took actions to have more direct influence on the developments and welcomed the proposal of the City State Berlin and the region Brandenburg to act as “Test-bed” for new digital solutions, mainly for those that require cross-sectoral cooperation or a centralized approach (e.g. AI with population-based data). Due to the federal structure in Germany, it is much easier for the Ministry of Health if the proposal was initiated by the region. The region Berlin-Brandenburg is ideal, because all important stakeholders have at least a subsidiary there. The region Berlin-Brandenburg managed to keep its reputation as top research location and build up a solid business support system for young companies, especially from IT and biotech sector.

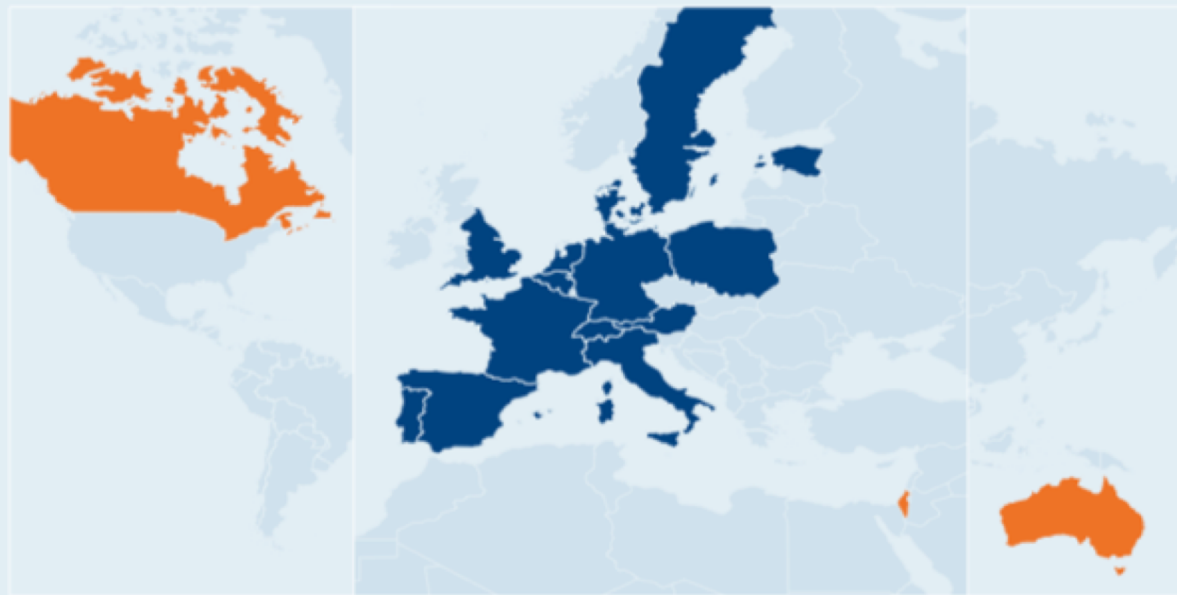
The Digital Health City Berlin-Brandenburg is therefore one very important market entry portal for Finnish stakeholders. Nevertheless, there are alternative pathways to the German market as well. In general, a physical presence is recommended to play an active role now in the digitization of German healthcare. For some activities a team of Finnish companies and experts can join their resources to achieve a better outcome.

Digital Health City Berlin-Brandenburg

1. Current state of Germany's digital health policy
 - ❖ Actual digitization status
 - ❖ Business opportunities
2. Digital Health City Berlin-Brandenburg
 - ❖ Specialities of the Region
 - ❖ Basic structures and key players
 - ❖ Lessons learned & recommendations

Actual Status in Germany

Countries surveyed by #SmartHealthSystems



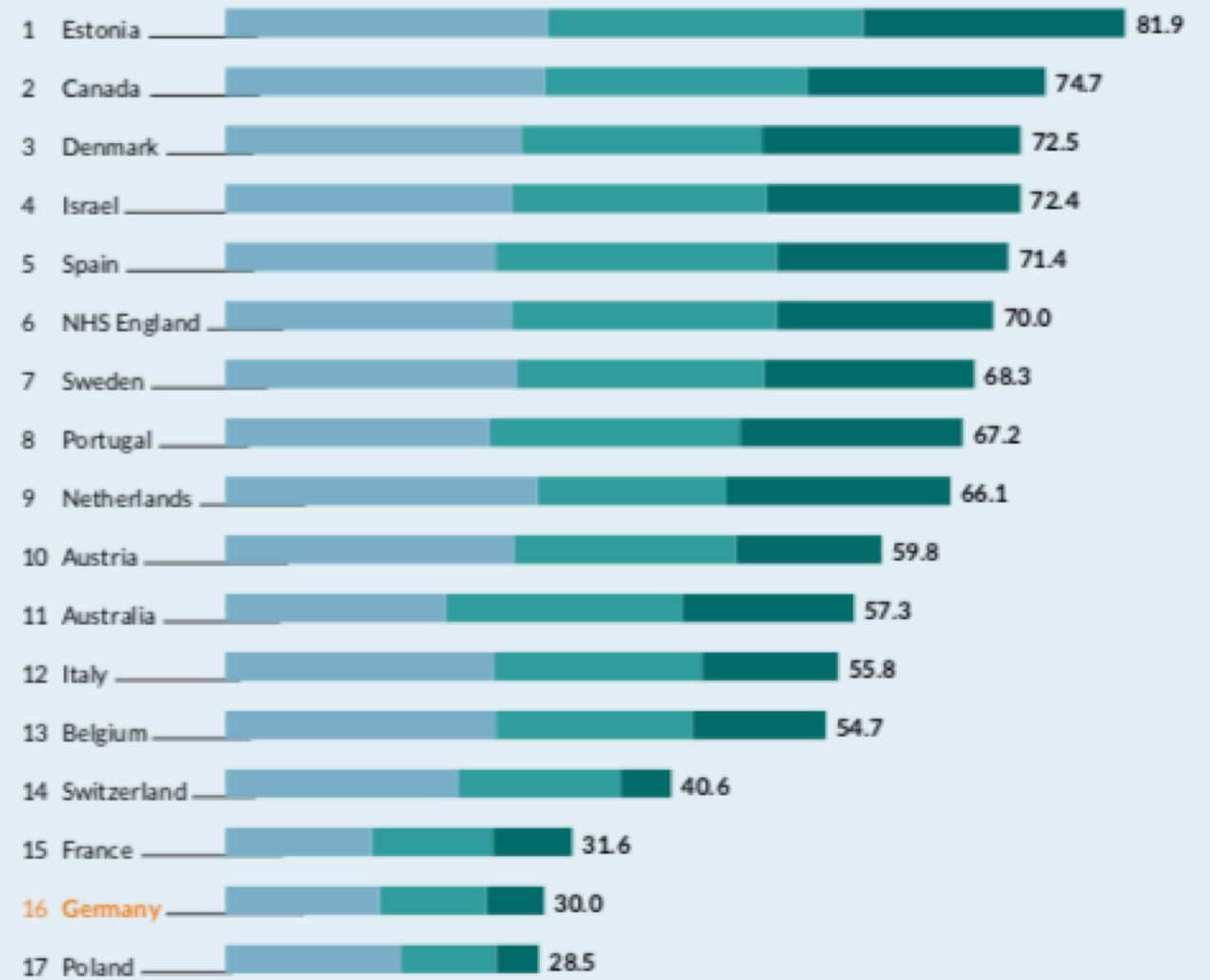
■ EU member states ■ OECD countries
Figure 1 | Source: The authors

| BertelsmannStiftung

Source: #SmartHealthSystems, 29. November 2018, Bertelsmann Stiftung,

Digital Health Index with sub-indices

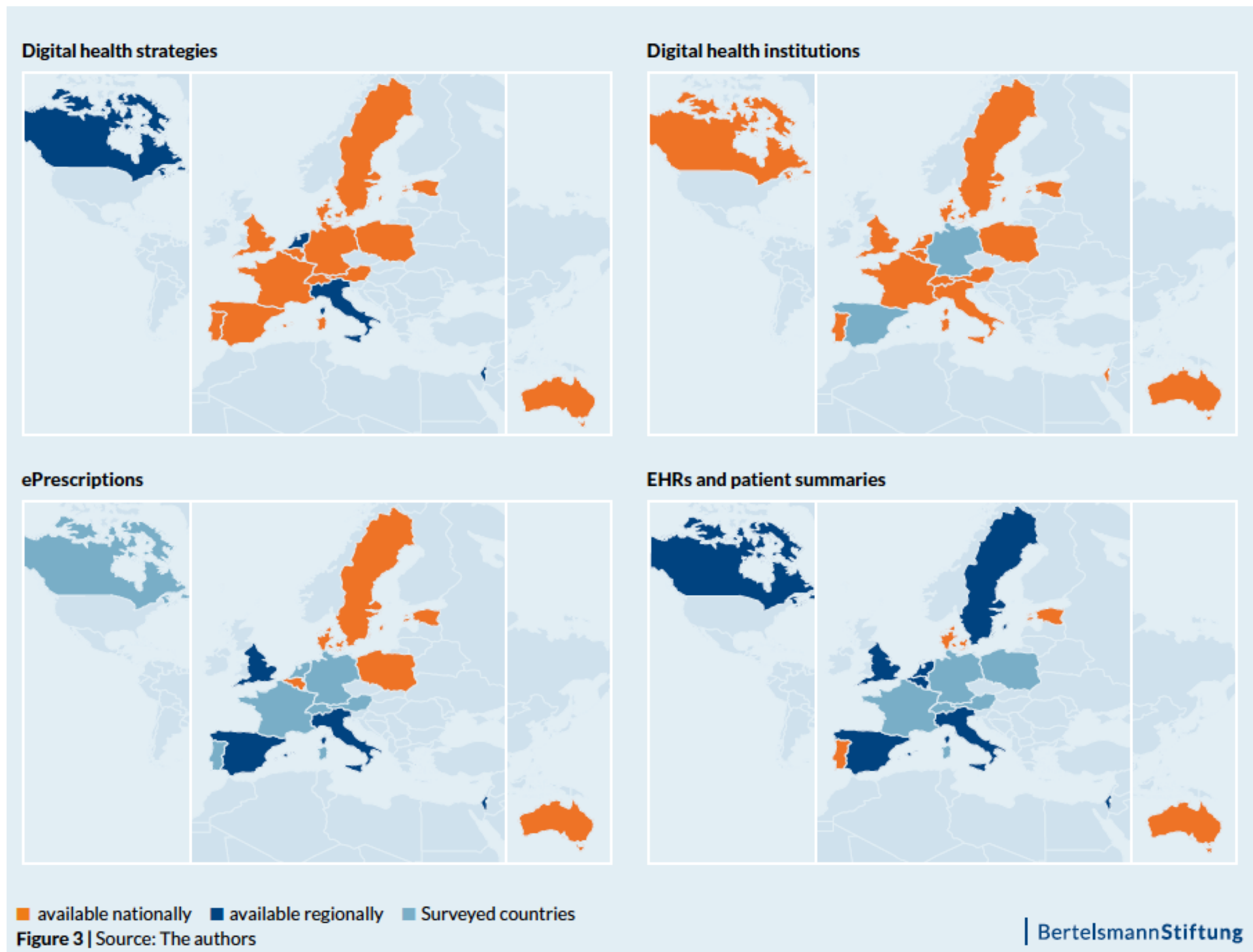
Legend: The three sub-indices of the Digital Health Index are represented as bars. The bars include each sub-index, which are represented by different colors and placed horizontally, side-by-side. The overall index value is obtained by dividing the total length of the bars by three.



■ Policy activity ■ Digital health readiness ■ Actual use of data
Figure 2 | Source: The authors

| BertelsmannStiftung

National strategies, digital health institutions and digital applications: presence and reach



Source: #SmartHealthSystems, 29. November 2018, Bertelsmann Stiftung,

This message alarmed politicians!

#SmartHealthSystems Methodology

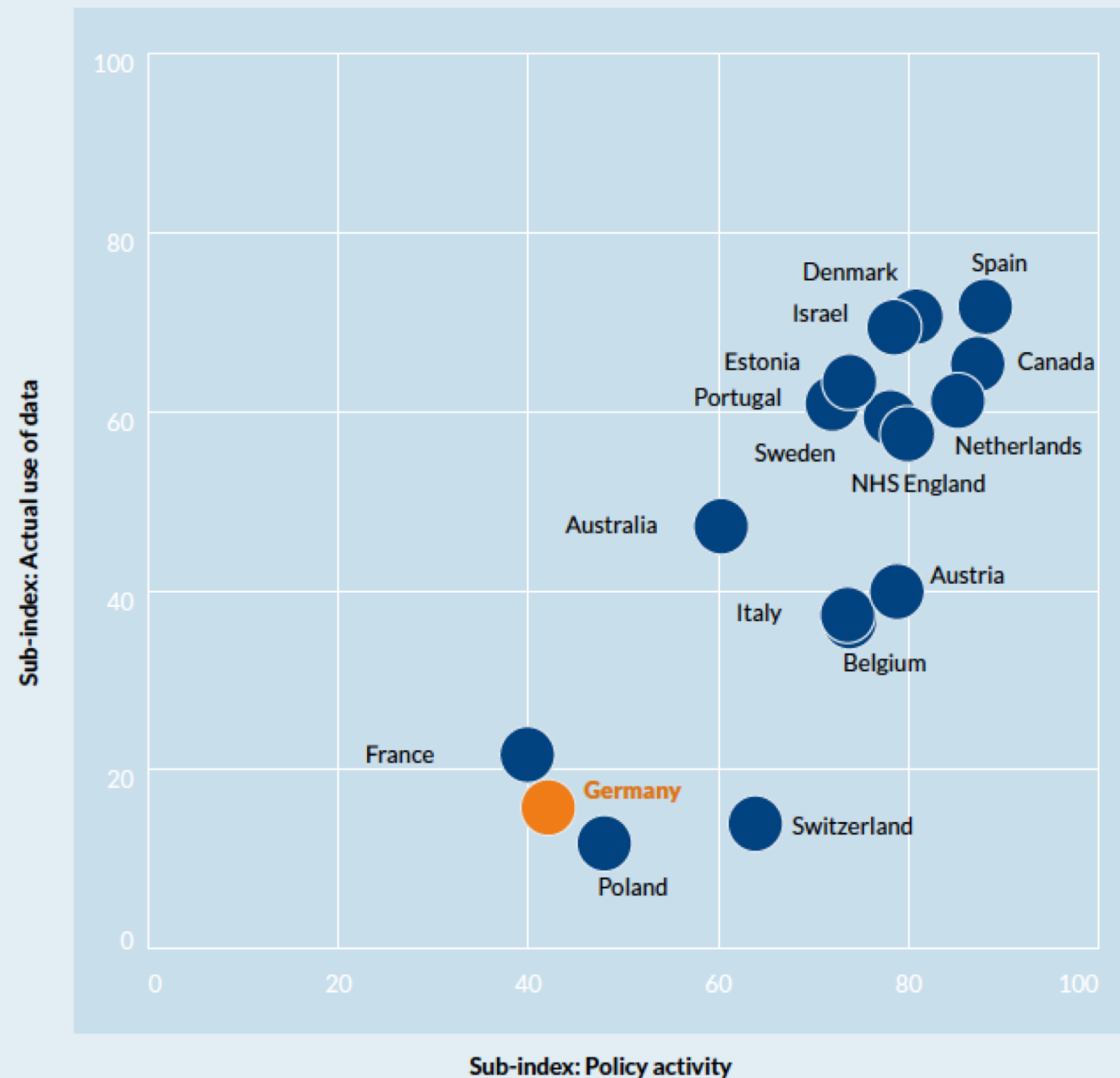
Part I: Digital Health Index

- Digital Health Index comprised of three sub-indices:
 - Policy activity: Political and strategic processes (legal framework, governance, institutions)
 - Digital health readiness: Technical implementation and semantic maturity
 - Actual use of data in the healthcare sector
- Data collection and evaluation by national correspondents in 17 countries
- Questionnaire comprised of 154 questions and 34 indicators
- More than a statistical survey: draws on both qualitative and quantitative data

Part II: In-depth country analyses

- Denmark, France, Israel, the Netherlands and Switzerland
- Additional on-site interviews conducted with representatives from ministries and associations as well as independent experts.
- Focus: Factors contributing to success/failure of digital solutions, lessons learned
- Examination of political preferences as well as economic and cultural factors

Correlation between policy activity and actual use of data



Outcome requires resolute action in health policy!

Expand **political** leadership

Establish a national agency (**publicly-run institution**) with involvement of all relevant stakeholders

Take incremental steps forward (**define focus**)

Promote acceptance (**all stakeholders**)

Include end users in the process (**patients and physicians**)

Germany's healthcare system is not doing enough to foster its digital transformation. It's commonly agreed that the German healthcare system lags far behind on international comparison. The Bertelsmann Stiftung published in November 2018 a research, that described the digitization gap between the German and other systems. Of the 17 countries surveyed Germany ranks 16th. Estonia, Canada, Denmark, Israel and Spain rank at the top of the list, however the sizes, healthcare systems and infrastructure of the leading countries are quite different.

Unfortunately Finland was not selected as benchmark country which indicates that there is a low awareness among German highly influential institutes as Bertelsmann Stiftung for the high digital competence in the Finnish healthcare sector!

The study showed that success in the digital transformation of healthcare requires the presence of an effective strategy, compelling political leadership and a centralized institution with the political mandate to coordinate the digitization. The clear message was, that those responsible for health policy must adopt a more pro-active approach and take a leading role in determining the process.

The study used a new methodology to benchmark and compare the digital health status of the selected countries (see slide 7) to avoid the typical excuses why digital goals can/cannot be achieved under specific circumstances. Therefore the study managed to highlight a few typical success factors that differentiate successful countries from the others. They are highlighted on slide 9.

Although none of the countries surveyed have fully realized digitization, most of them are far ahead of Germany in their efforts in all three areas examined: policy activity and strategy, technical implementation and readiness and the actual use of data. The result has nothing to do with lack of technology or innovation potential. Germany did a number of successful digital projects, but failed to roll them out. The existing eHealth Act name some strategic elements, but compared to the majority of the countries (15 out of 17) a coordination unit for all aspects of digital health is missing.

As a consequence, Germany is not leveraging the benefits of digitalization – the country's potential to improve quality and efficiency in its provision of healthcare is untapped. Most of the German citizens are not able to view their examination results, vaccination status and emergency health data on an electronic patient summary.

In November 2018, the German government started catching up. They decided for example to build a medical data integration platform for research issues, funded with 150 million EUR. Also innovative care assistance are highly welcome; a special national fund with 20 mill. EUR until 2022 was agreed.

The development of the basic data infrastructure (telematic infrastructure, TI) will be further pushed. End of March 2019 about 65.000 panel doctors (office-based physicians, dentists) are connected. The total number of panel doctors and hospitals are around 170.000. A clarification of the integration of patient care and senior care to the TI will follow in 2019/2020.






Source: Digital McKinsey, October 2018

Identified Business Opportunities







26 digital solutions can generate EUR34 billion savings in German healthcare **if** 100% implemented

Estimated potential value, EUR billions

 Paperless data	 Unified electronic health record/exchange	6.4
	 E-prescribing	0.9
	 Intranospital staff communication	0.9
	 Clinicians' virtual assistants (AI)	0.8

Total EUR 9.0 billion

 Online interaction	 Teleconsultation	4.4
	 Remote monitoring of chronic disease patients	3.3
	 E-triage	1.2







Total EUR 8.9 billion












 Work flow/automation	 Nurse mobile connectivity	2.1
	 Barcoding medication administration	1.1
	 RFID tracking	1.0
	 Vital parameter tracking (eICU)	0.8
	 Hospital logistics robotics	0.5
	 Process automation through robots	0.4
	 E-referrals	0.2



Total EUR 6.1 billion

Source: Digital Mc.Kinsey, Oct. 2018

26 digital solutions can generate EUR34 billion savings in German healthcare **if** 100% implemented

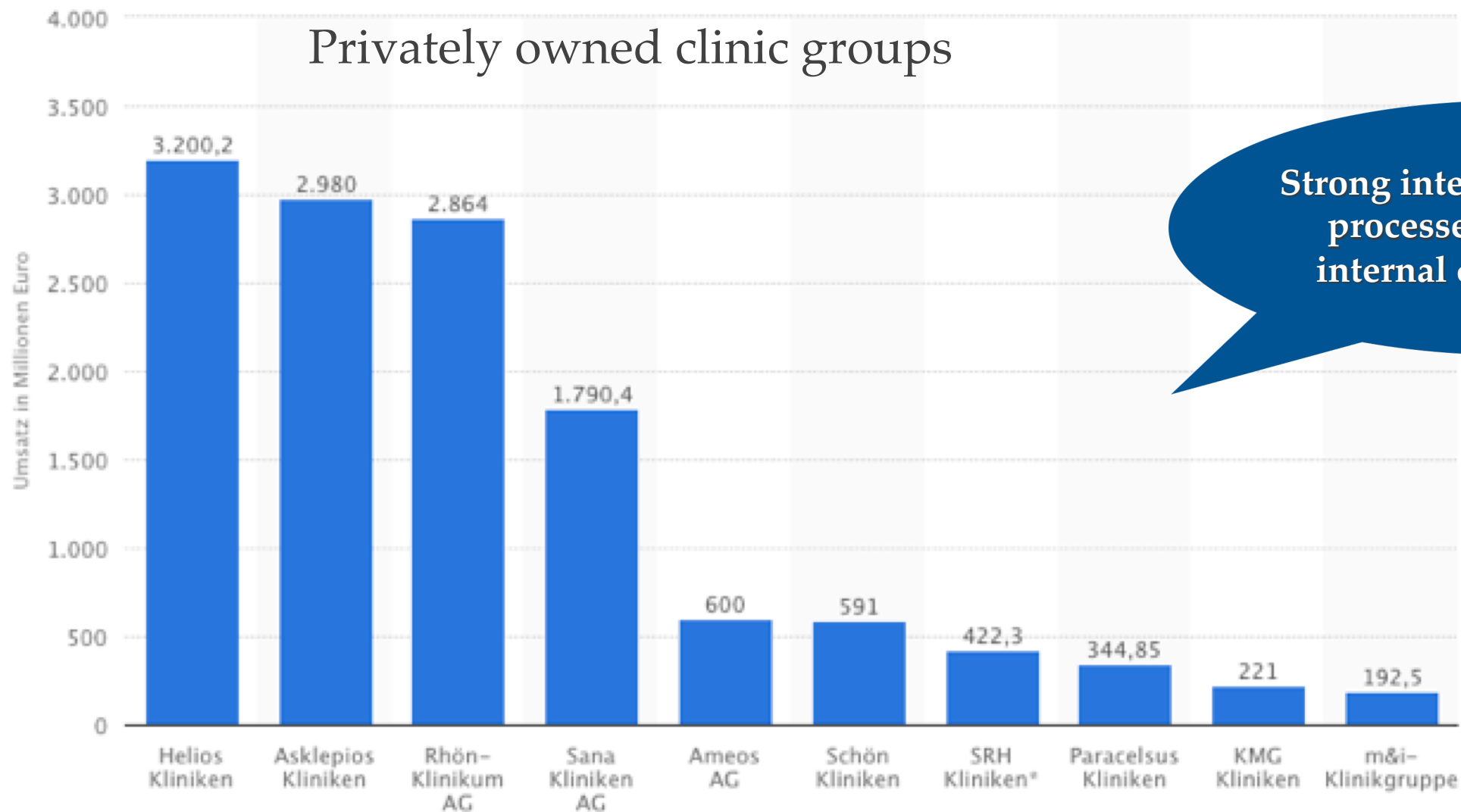
 Outcome transparency/decision support	 Performance dashboards	2.0
	 Patient flow management	1.7
	 Clinical decision support	1.4
	 Advanced payor analytics	0.5
	 Genetic testing	0.1
Total* EUR 5.6 billion		<small>* Due to rounding, figures do not add to EUR 5.6 billion</small>

 Patient self-care	 Chronic disease management tools	2.0
	 Mental health	1.1
	 Diabetes	0.5
	 Respiratory diseases	0.3
	 Cardiovascular diseases	0.1
	 Medical chatbots	1.0
	 Disease prevention tools	0.4
	 Patient support networks	0.3
 Digital diagnostic tools	0.1	
 Virtual reality for pain management	0.0*	
Total EUR 3.8 billion		<small>* Adjusted for rounding = 0.04</small>

 Patient self-service	 E-booking (electronic appointment system)	0.5
Total EUR 0.5 billion		

Source: Digital Mc.Kinsey, Oct. 2018

Clinic Groups are forerunners in digitization



Strong interest to harmonise processes and enhance internal communication

Source: Statista 2016

Largest community group: Vivantes (865 Mio € TO in 2011)

Largest confessional groups: Agaplesion (520 Mio € TO in 2011) and St. Franziskus Stiftung, Münster (624 Mio € TO in 2011)

The latest McKinsey study prepared in partnership with the German Managed Care Association (BMC) concluded that up to EUR 34.0 billion savings could have been realized in 2018 if the German healthcare system had been fully digitized. Germany's aging population and expensive treatment methods are driving the rise in health spending (+4,5% p.a.). Because of this, savings would be welcome.

For this study the authors analyzed more than 500 research papers, observations and learning from previous projects, and interviews with leaders in healthcare to assess the impact of each digital solution-

Beyond determining the value of each digital solution, the analysis also checked which care sector would benefit most and discovered that 70 percent of the value could be captured by healthcare providers, primarily doctors and hospitals, with the remaining 30 percent captured largely by health insurers.

The study also showed that electronic health records and electronic prescriptions will have a vital role to play. Their introduction will not only massively and directly increase efficiency, but will also prompt improvements in care equivalent to more than double the value of the direct gains in efficiency.

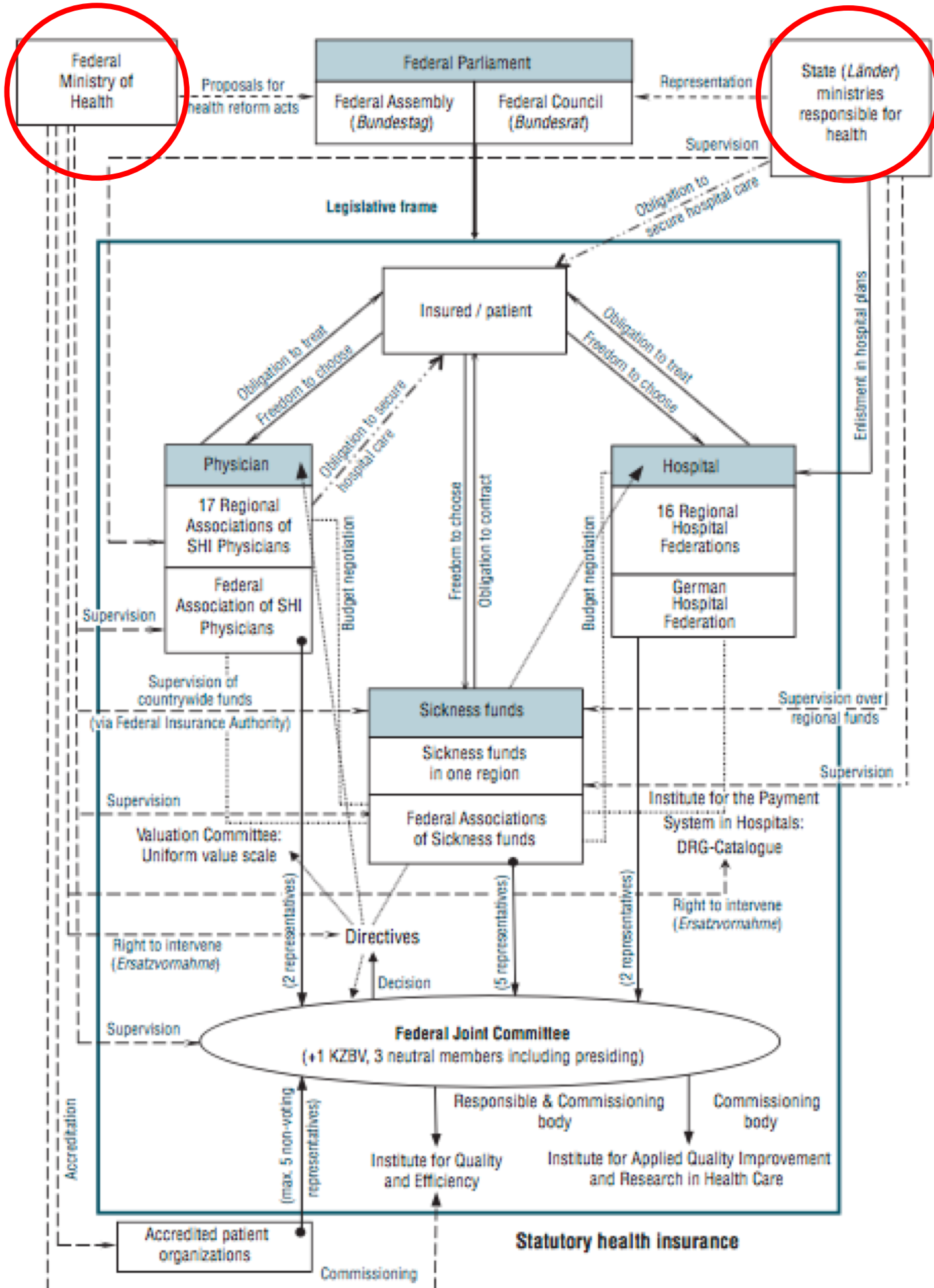
The 26 digital solutions were divided into six solution categories: 1) paperless data, 2) online interaction, 3) work flow / automation, 4) outcome transparency / decision support, 5) patient self-care, and 6) patient self-service (slide 11, 12).

During the workshop with Finnish companies, we focused mainly on those solution that match with the offering of the participants (see following slides).

Forerunner in digitization are clinic groups. The study showed that most of the value will be generated in inpatient hospital care (EUR 16.1 billion). Slide 13 shows the most important players in Germany. Helios for examples own over 130 hospitals in Europe, most of them in Germany. In addition, the company is an active player in out-patient care. The privately owned Asklepios Group runs 160 hospitals and clinics. They search actively for innovative digital solutions and partly run their own innovation hubs. To get in business relationship with them is a big step to a successful market entry because they are rather independent in decision making, have a strong pressure to perform in the competition with other health service providers and need to show profitable results for the owners.

What hindered the full implementation so far?



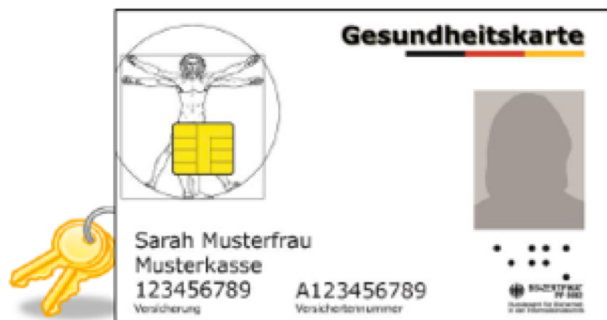
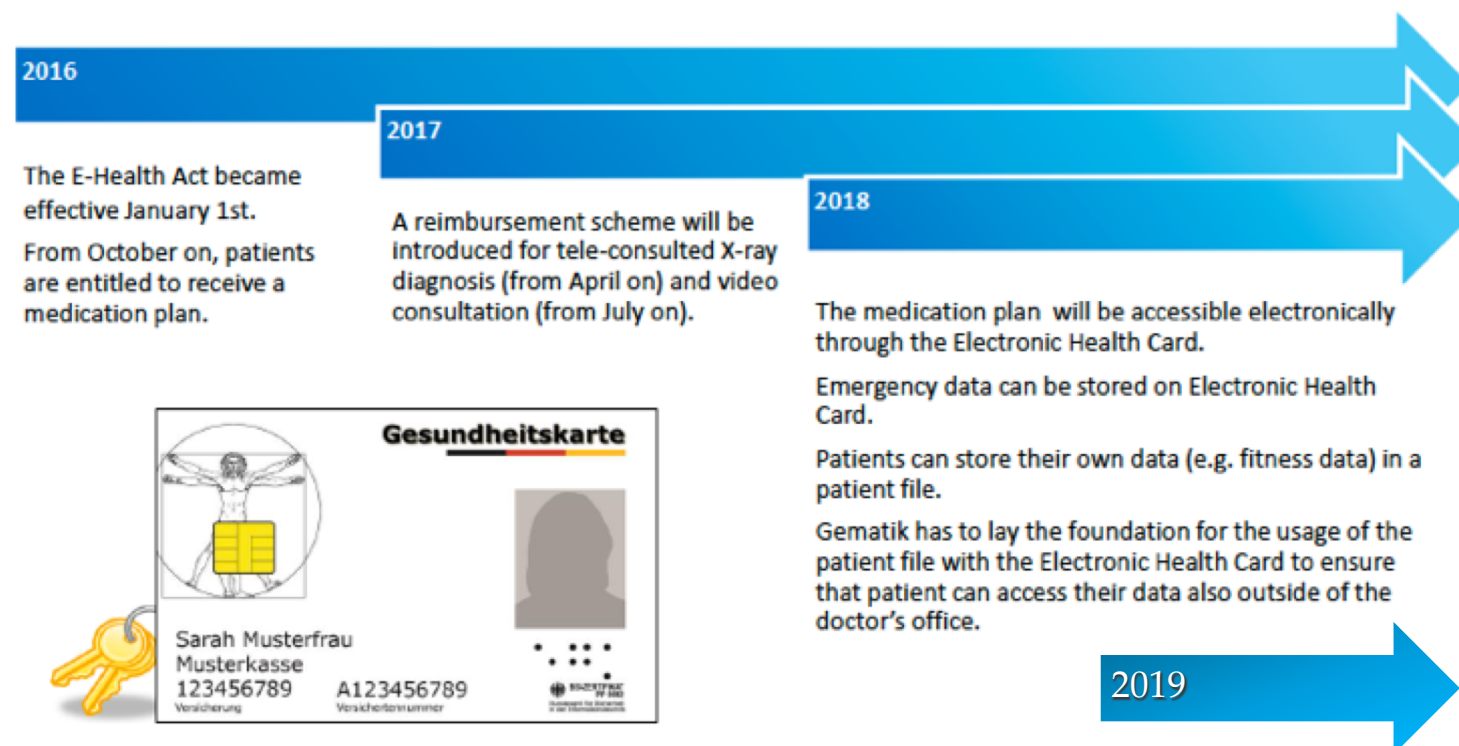


Conflict of interests & lack of coordination

New laws with deadlines push the digitization in Germany now!

E-Health Act 2016

Secure Digital Communication and Applications in Healthcare



Source: Bundesverband Gesundheits-IT – bvitg e.V. 2016, gematik GmbH 2016



„If digitization fails, it's our fault anyway. And if we are blamed, then at least I want to be guilty.

Jens Spahn, Minister of Health Germany

Opening DMEA exhibition, 09.04.2019

The highly fragmented German healthcare system with its self-governing and powerful interest groups slowed down the digitization in the past.

The Federal Ministry of Health (BMG) is responsible for policy-making at the federal level. Its tasks include developing laws and drawing up administrative guidelines for the self-governing activities within the health care system. The Ministry of Health directs a number of institutions and agencies responsible for dealing with higher-level issues of public health, such as the Federal Institute for Drugs and Medical Devices and the Paul Ehrlich Institute (PEI). The Federal Institute for Drugs and Medical Devices makes decisions concerning the approval of pharmaceuticals. The Paul Ehrlich Institute is responsible for approving vaccines.

When it comes to matters concerning statutory health insurance, the **Federal Joint Committee (G-BA)** is the highest decision-making body within the self-governing health care system. It includes members representing doctors, dentists, psychotherapists, the statutory insurers, hospitals and patients. As the central entity of federal-level self-governance, the Federal Joint Committee makes decisions concerning which medical services will be covered by the statutory insurers and what form that coverage will take.

While the German state sets the conditions for medical care, the further organization and financing of individual medical services is the responsibility of the self-governing bodies within the health care system.

The new Minister of Health, Jens Spahn (since March 2018) can be regarded as a 'game-changer'. He took the main ownership of the Gematik GmbH to his responsibility area, initiated new laws to push digitization and is not afraid to fight with the self-governing system for the best solution.

Slide 17 shows the newest legal initiatives of the BMG and the parliament. They will push the digitization further, open new opportunities for health insurers and shift more implementation power to the Ministry of Health.

One important milestone was that the Ministry took over the majority of the Gematik GmbH, the main responsible entity to safeguard the Telematik Infrastructure (TI) among the various stakeholders (Spitzenverband der Gesetzlichen Krankenkassen-GKV-SV, Deutscher Apothekerverband – DAV, 4 Associations of Physicians & Dentists (Bundesärztekammer-BÄK, Bundeszahnärztekammer BZÄK, KBV and KZBV), Deutsche Krankenhausgesellschaft-DKG).



Electronic Health Record (eGA) – 3 Pioneers but...




Technology partner:
IBM, Forecare, Nexus, RZV, Visus

Insurance-Partner:
Central, DKV, Signal Iduna

Hospital-Partner:
Agaplesion, Helios, Contilia, Schmerzklinik Kiel, University Clinics in Aachen, Essen, Hamburg, Heidelberg, Nordblick

Interoperability to out-patient sector via KV-connect

Potential: 10 Mill. TK insurees; Actual: 30.000 Users



Start-up based in Berlin (mainly owned by Allianz)

Insurance-Partner:
DAK, IKK Nord, Allianz, Barmenia and other 13 smaller health insurers

Technology partner:
Medatixx (22.300 physicians); Bitmarck IT (90 insurances)

Interoperability to out-patient sector via KV-connect in 2019

Potential: 13,5 Mill.- 20 Mill. insurees

Actual: not defined



Technology partner:
InterComponentWare (ICW), soffico GmbH, x-tention GmbH

Status: Under construction

Potential: 25 Mill. AOK insurees

Actual: Piloting in Mecklenburg-Vorpommern 2018; Berlin 2019

...90 health insurers are afraid that actual offering and time pressure may lead to a disappointment and loss of money!





Barmer tenders **now** Elektronische Health Record (ePA)



Source: barmer

- No. 2 of legal health insurer: 9,1 mill. insurees
- Publication of the tender – **end of April** for about 6 weeks; contracting planned for October 2019
- Mandatory functionalities: electronic referral letter, personal emergency file, medication plan
- Optional: medication plan for OTC; tool for side effects, interactions
- Nice-to-have: Vaccination diary with memory function; electronic patient receipts

„Now it is the right moment to run such a tender“

Prof. Dr. Christoph Straub, Chairman Barmer

Source: www.aerzteblatt.de; 10.04.19



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The number of the legal health insurers is continuously decreasing in Germany. Nevertheless, in 2019, there are still 109 different of them plus 45 private health insurers. Around 90 % of the Germans are member of a legal health insurance, the rest are private insured.

The leading legal health insurance companies in respect of insuree numbers are: AOK with its regional branch offices, TK, Barmer, and DAK. The smaller ones sometimes are competing with extra services for its customers and flat bureaucracy.

In general, we see a tough service competition among all of them because the membership fees are legally fixed. In respect of digitization, TK, DAK and AOK can be regarded as pioneers. All of them have recently introduced a solution for an electronic health card. Slide 20 shows with whom they cooperate in this sector. The biggest players favourite an own solution which they developed with specialized technology partners.

DAK and a few smaller insurers decided to offer their insurees “Vivy”, an app-based electronic health folder. Vivy is a start-up founded in 2016 in Berlin with Allianz insurance as main owner.

All technology providers and partners are physically based in Germany to safeguard a close access to the market and follow the rapid changes in the digitization of healthcare!

Barmer , the number 2 of Germany’s legal health insurers just published its tender for the electronic health card (ePA). Due to the competition situation, they will not purchase an existing solution but develop an own solution with the winner of the tender. The contracting is planned for autumn 2019. **It is a very attractive business opportunity for a consortium of Finnish companies who can provide such a tool or components for the solution.**

Further business opportunities occur by the allowance that legal health insurers can offer their members tools for better management of chronic diseases. Until now such services were hindered by the associations of panel doctors who regarded the prevention and care of such patients as their business only. Some Finnish companies offer such tools since years. Now they should be active and get in contact with the insurers or their technology partners.



E-prescription



- Signed a letter of intent to define nationwide standards that are inline with German Telematik Infrastructure (TI)!
- Piloting planned in 2019

„We are not a closed Club – Pharma Accounting Services and Software provider are invited to join....“ *Friedemann Schmidt, ABDA President*

Source: vdarz.de 13.07.2018



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Decision Support Systems



06.02.2019 Public Announcement:

AWMF started now the digitization of the evidence-based medicine guidelines...The work should be ready in 2022.

Source: www.idw-online.de



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New types of digital patient services

Appointment support systems

- Doctolib recently opened an innovation center in Berlin and plans its further growth in Germany
- Competitors: KBV, Jameda, Doctena, Terminland, Arzttermine, Samedia

Source: berliner-zeitung.de, 22.02.2018

Telephone/Video Consulting

- Medi24 attracts first German patients with free consulting

Source: ärztezeitung.de, 23.03.2019

- Rhön Clinic Group cooperates with Medgate (Swiss) – Joint venture
- Competitors: DrEd; TeleClinic (Partner of ‚DocDirect‘ (KBV))
- Pioneer region: KBV Baden-Württemberg; Berlin will follow



The Ministry of Health announced that the law for improved Safety in Medication (GSAV) with the obligation to establish e-prescription will pass the parliament mid of 2019.

The responsible association reacted promptly (see slide 23) and invited technology providers to join. As e-prescription is practiced in Finland since years, it is a concrete business opportunities for respective technology companies to partner up with one of the member companies.

Slide 24: Another long expected move towards digitization is the announcement of AWMF that its plan is to have the evidence-based treatment guidelines ready in digital form by 2022. AWMF consolidates the interests of 179 expert groups and consults the GBA. It is responsible to work out and update the treatment guidelines for all diseases. The idea of the digitization is to provide the content also for new medical apps, education platforms and information systems of the physicians. **Finnish companies as e.g. Duodecim could use this business opportunity.**

Competitors from other foreign countries are more active now in Germany

The German digital healthcare market raises more and more interest of new players who would like to get their share of these attractive business opportunities. They are ready to invest significant amount of money and form partnerships with existing German players changing healthcare ecosystem. They are additional markers about the changing healthcare ecosystem towards digitization. Slide 25 lists a few examples:

Doctolib: The French-German cooperation, started in 2016 and targets to benefit from the long waiting time for specialist appointments in some regions. Main difference to the listed competition: no rating of the doctors is possible! This is not allowed in France.

Medi24: A Swiss Company and part of Allianz Group offers Medical-Consulting 24 hours. It works with 80 medical experts and 30 specialists from 13 disciplines. It includes assessment of emergency , general medical consulting , advices for self treatment and individual medical consulting if needed. FOC-consulting only in the market entry phase for a few months.

Rhön Clinic formed a joint venture with Swiss Medgate. It estimates that 30% of all out-patient services will be handled via Telemedizin in the near future.

DrEd (now ZAVA) based in UK was the pioneer with clear focus on selected diseases as e.g. fertility disturbances and offered since 2011, 2 Mill online consultations; 400.000 for German patients. In those days tele-consulting was not allowed in Germany and he moved to UK. For the consultancy, he charged about 30 EUR.

TeleClinic established 4 years ago, has meanwhile a solid market share among the private health insurers. It is now also partner of the panel doctor association and offers as the only company eprescription and certificate of work inability.

AI – Healthcare defined as one focus area

- 3 bill. EUR investment until 2025 in AI research by the government
- Bilateral AI-clusters planned (e.g. with France)
- Healthcare is one focus sector
- Berlin selected as ‚testbed‘ for first applications (start 2020)
- Charité will have a leading role
- Berlin Mayor Müller announced “Healthcity Berlin 2030“ with own expert team
- Challenges: Interoperability, no SNOMED-CT membership, lack of a national institute for digital medicine

Sources: berliner-zeitung.de, 22.02.2018; aerzteblatt 2018, expert interviews



How can Finnish companies benefit?

- ❖ Clear management decision about your market entry
- ❖ Consider a German task force incl. physical presence
- ❖ **Team-up with others**
- ❖ Become an active partner in the digital change process (Buddy Healthcare 😊)
- ❖ Don't give up too early



Take the opportunities before
they disappear !

Picture: dpa



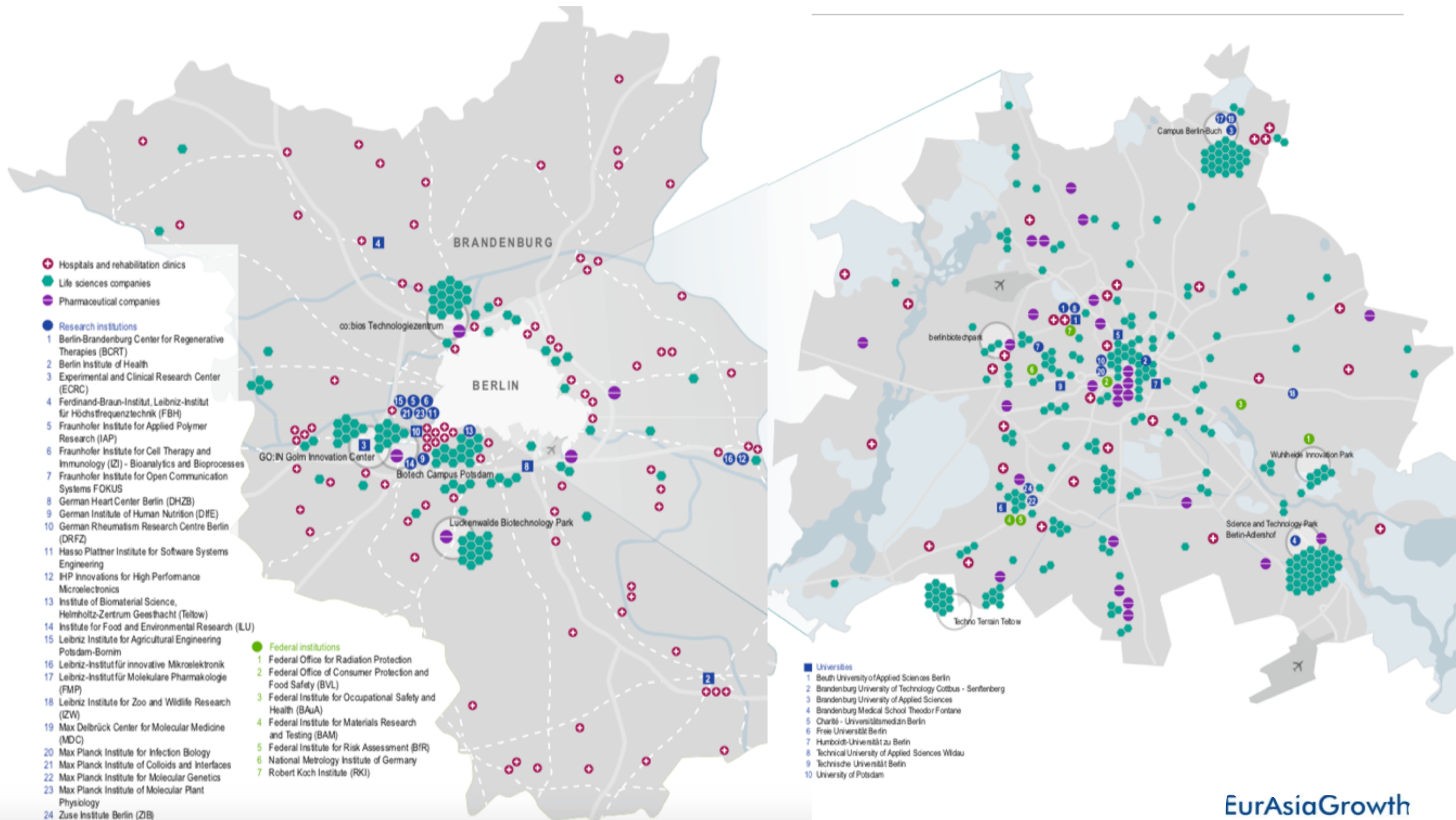
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Digital Health City Berlin – A new pathway for Finnish stakeholders ?



Health Capital Region Berlin-Brandenburg

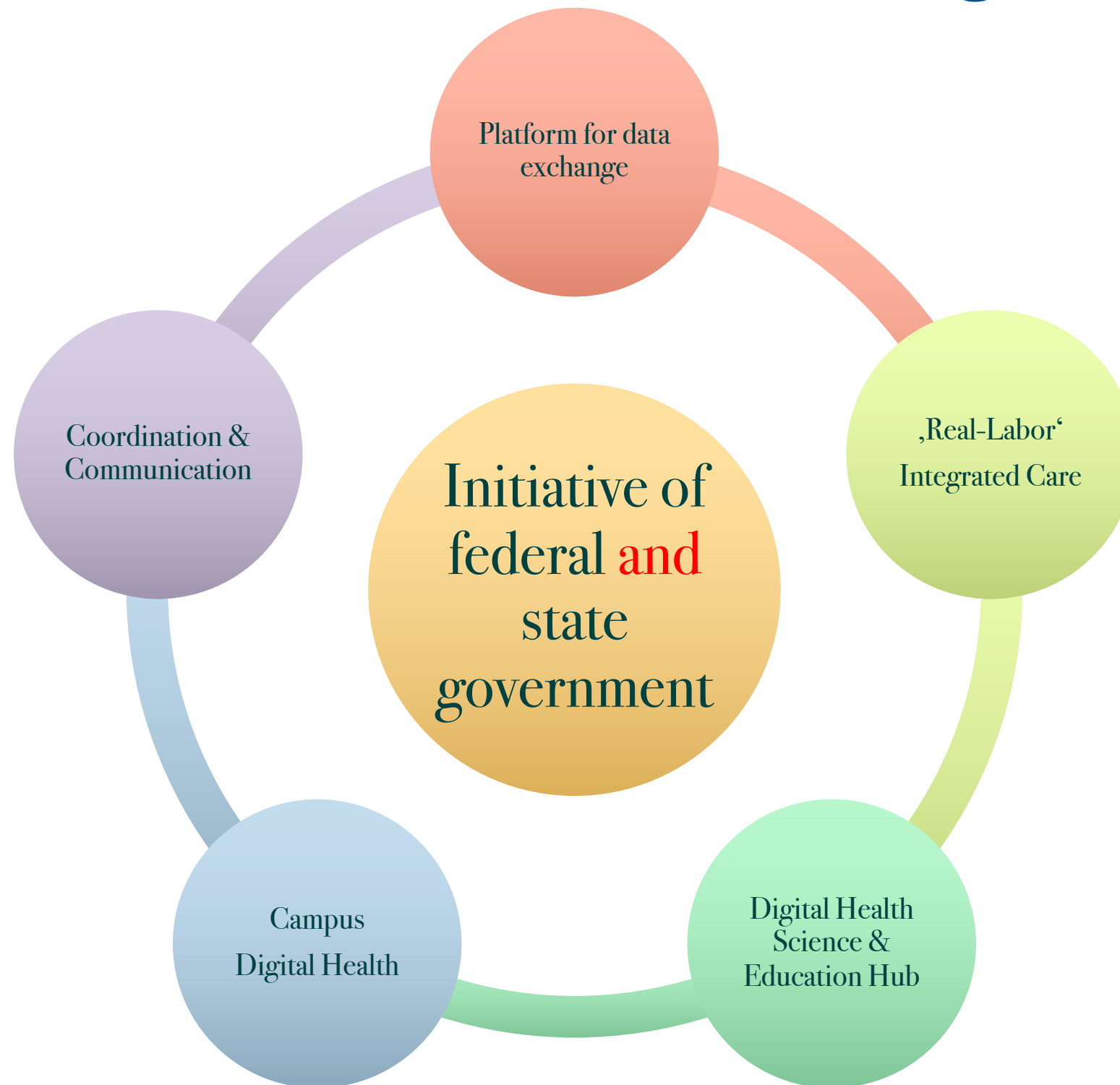


Advantages of the Capital Region Berlin-Brandenburg

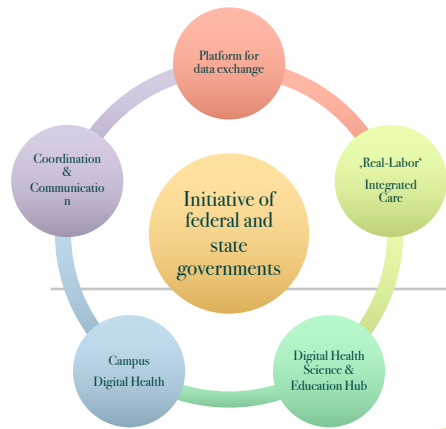
- ❖ All types of service providers are present
 - ❖ 130 hospitals incl. University clinics, plus 70 rehabilitation centers
 - ❖ 9.500 out-patient care physicians
 - ❖ 770 nursing homes, 1.200 ambulatory care services
- ❖ Hotspot of lobby groups, including top-level health insurance industry association
- ❖ Various types of healthcare research institutions
- ❖ Mature Health-IT companies plus many startups generate
 - ❖ specified Accelerators/Incubators >15
 - ❖ funding system (e.g. VC)



Structure of the Digital Health City Berlin-Brandenburg



Responsibilities & main actors



Initiative of
federal and state
governments

Coordination &
Communication

- Senate Department for Economics, Energy and Public Enterprises (sector: health economy)
- Senate Department for Health, Care Provision and Equal Rights
- Health Cluster Berlin-Brandenburg

- Ministry of Health
- New expert team established 31.03.19 (Team leader: Prof. Dr. Debatin)

Activities

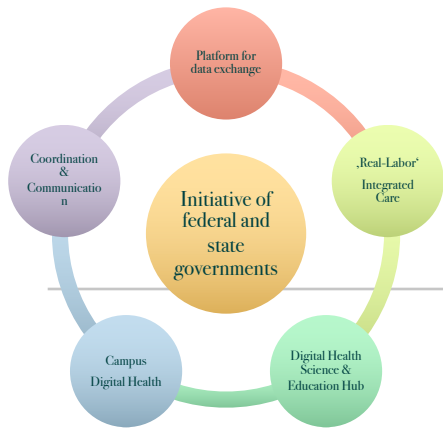
- Establish the central organisation for coordination and communication
- Planned milestone: 1. September 2019

The lack of coordination was identified as a main hinderance to speed up the digitization in healthcare. It has to be stressed, that also in the future the Ministry of Health and its administration will not directly influence the purchasing decision of hospital groups, panel doctors, physiotherapists etc. but a better infrastructure to test and push the digitization will improve the situation a lot.

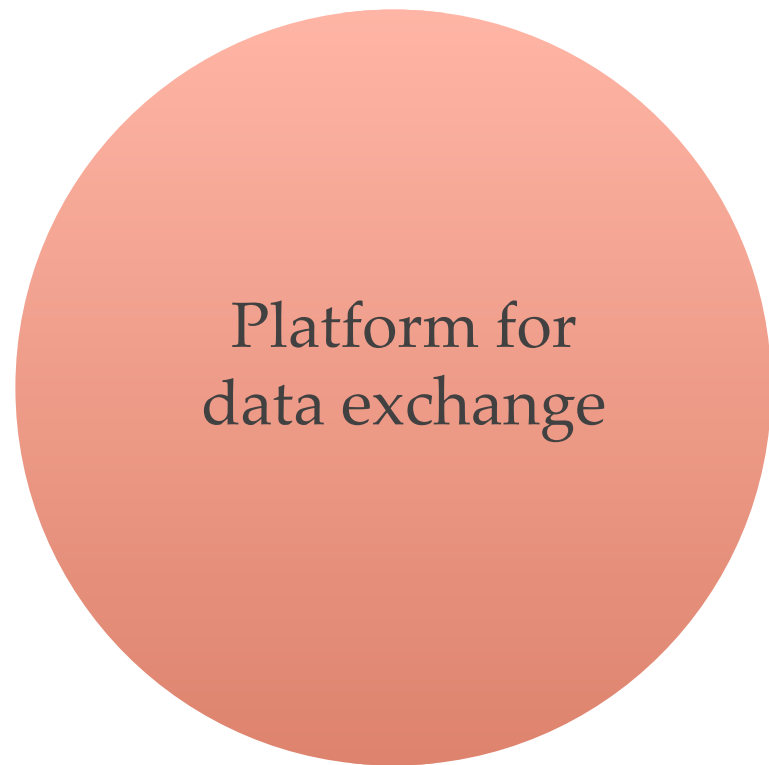
Therefore, the Ministry of Health took actions to have more direct influence on the developments and welcomed the proposal of the City State Berlin and the region Brandenburg to act as “Test-bed” for new digital solutions, mainly for those that require cross-sectoral cooperation or a centralized approach (e.g. AI with population-based data). Due to the federal structure in Germany, it is much easier for the Ministry of Health if the proposal was initiated by the region.

The region Berlin-Brandenburg is ideal, because all important stakeholders have at least a subsidiary there. All relevant associations and some top health insurers are present in Berlin too. After the reunification the city of Berlin decided to focus on start-up companies and new types of business because all the other industry sectors were already more or less positioned in other regions. The close cooperation with Brandenburg was decided as well. The region Berlin-Brandenburg managed to keep its reputation as top research location and build up a solid business support system for young companies, especially from IT and biotech sector.

It seems that the Ministry of Health will have a much stronger role compared to the past. In March 2019, Minister Spahn formed a new digital expert team and appointed Prof. Dr. Debatin as team leader. He is the former head of the University Hospital Hamburg-Eppendorf and changed it to the first and most paperless hospital in Germany. During the last years, Prof. Debatin worked for GE. He will head as well the “Health-Innovation-Hub Berlin” which belongs to BWI IT GmbH, an IT service provider who also serves the Ministry of Defense.



‘Must have’ to enable seamless care and AI

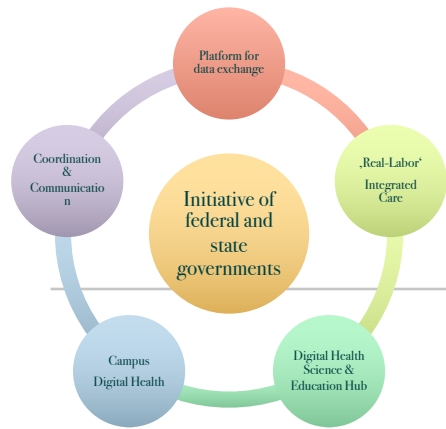


- Gematik (telematik infrastructure, national and international standards)
- Ehealth records of health insurers (113 public + 42 private)
- Berlin Institute of Health (BIH)
- Hasso-Plattner-Institute (HPI), Potsdam

Activities

1. Innovation project: **Digital Health Platform**
www.aok-gesundheitsnetzwerk.de;
 Partners: AOK-BV, AOK Nordost, Vivantes Netzwerk für Gesundheit, Sana Clinics
2. Innovation project: **BigMedilytics**
www.bigmedilytics.eu ; EU-based; 35 Partners;
 12 pilots/ countries (chronical diseases)
 Partner: Charité, AOK, DFKI, HPI, ect. including **VTT** (breast cancer, diagnostic)





Improvement of Digital Health Competence

Digital Health Science & Education Hub

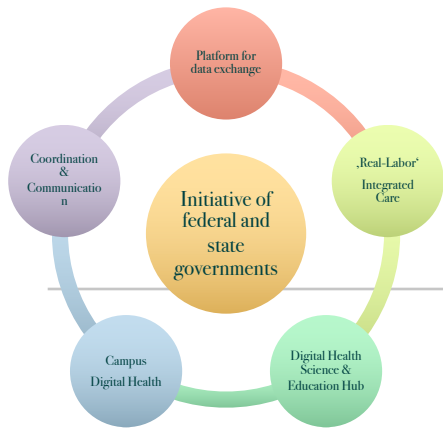
- Establishment of a new professorship for digital health
- Additional further education system
- Humboldt University, Freie Universität Berlin (Charité University Clinic)

Pioneer

Hasso-Plattner-Institut for Digital Engineering, Potsdam (HPI): **Master „Digital Health“** since 2018
www.hpi.de/studium/studienangebot/master/digital-health.html



Testbed for cross-sectoral care pathways



‘Real-Labor’
Integrated Care

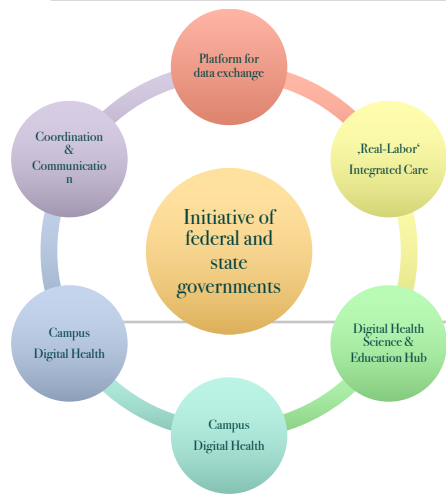
- Networking workshops of stakeholders in-patient and out-patient care, insurers, patient association
- Adaptation of the legal framework in the region
- Establishment of an own project management team
- Benchmarking foreign model projects (US, UK, Spain)

Examples/Pioneers

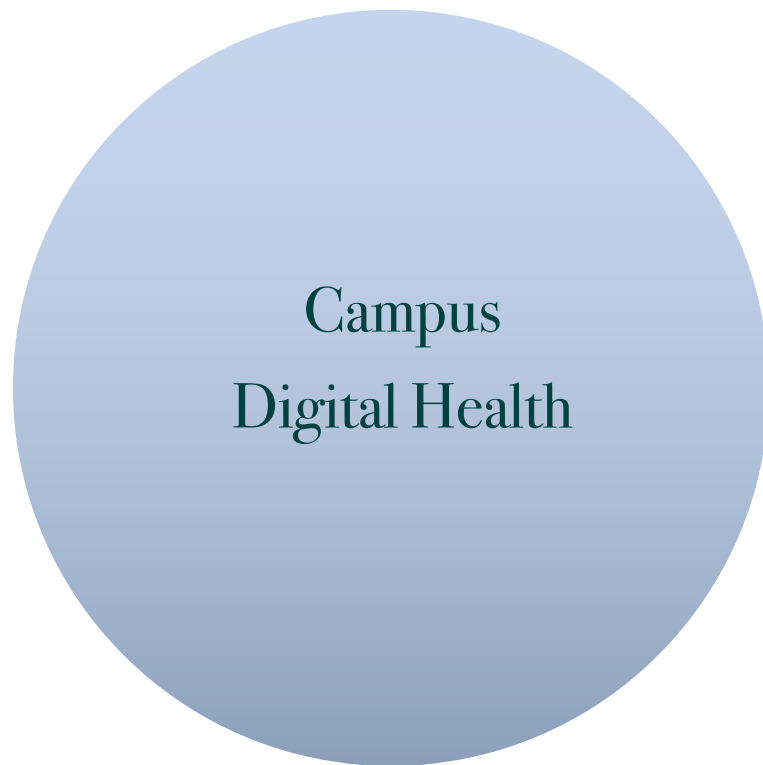
1. Innovation project: **Population Health Management**

www.cerner.com/de/de/loesungen/population-health-management ; Partner: AOK-BV, AOK Nordost, Vivantes Netzwerk für Gesundheit, Sana Clinics





Support for digital health companies



- **Virtual** or **physical** campus not defined yet!
Campus candidates: Charité, Technology park Adlershof
- Mentoring program
- Fast-track-Innovation Funding Berlin under discussion
- Health Innovation Fund will continue
- Special role of ‚Health-Incubators‘ (>15)

Some good examples

Flying Health Inkubator

www.flyinghealth.com

Helios.hub & Smart Helios

www.smarthelios.de

Bayer Grants4Apps

www.g4a.health

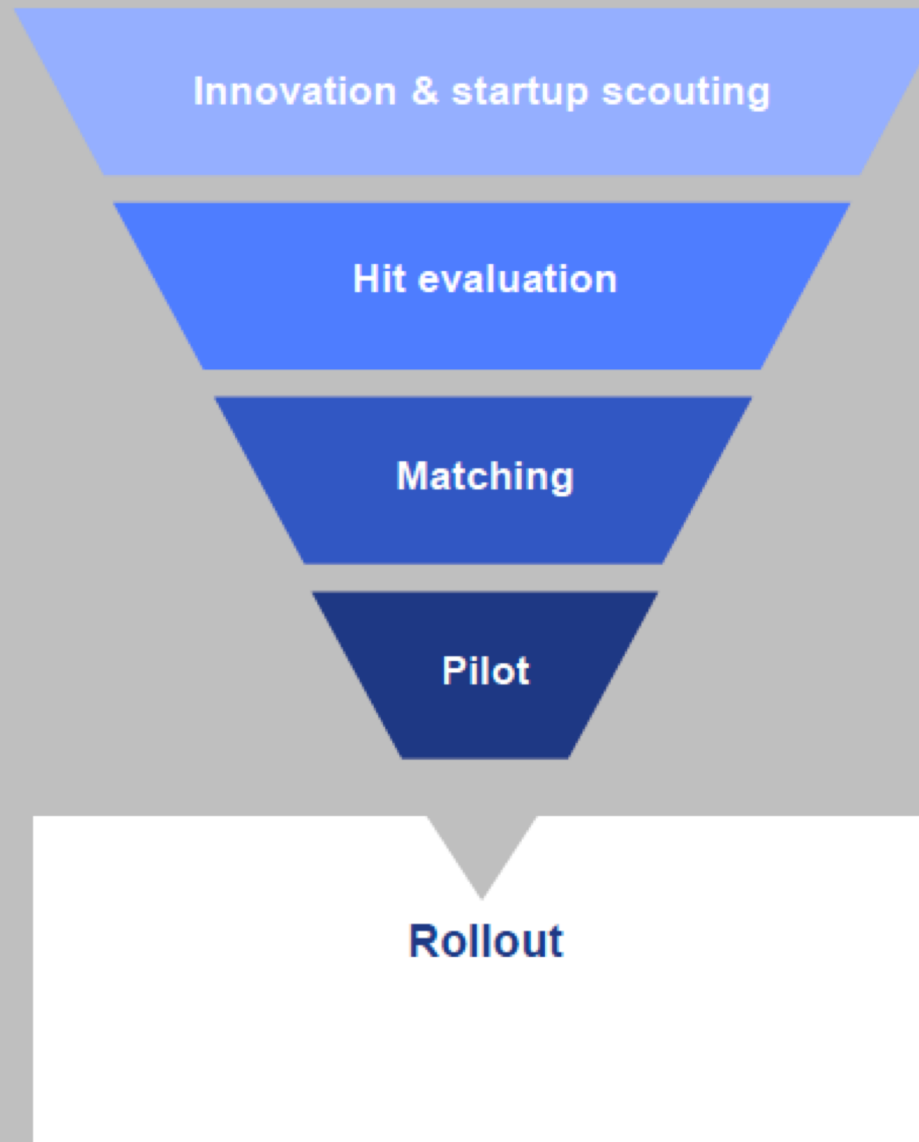
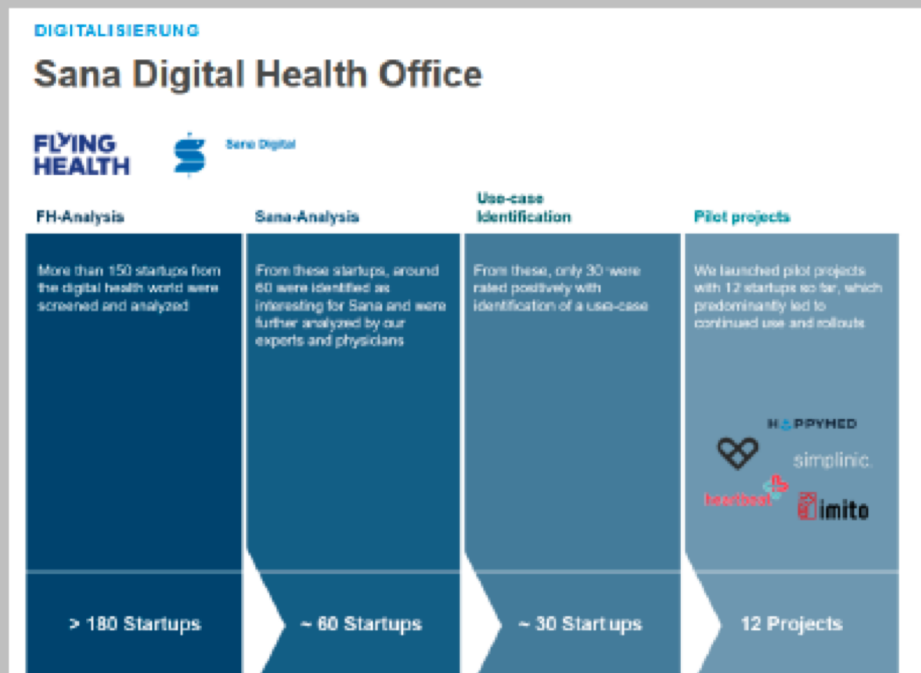
Flying Health Inkubator - One ecosystem for digital health innovations

‘Real-Labor’
Integrated Care



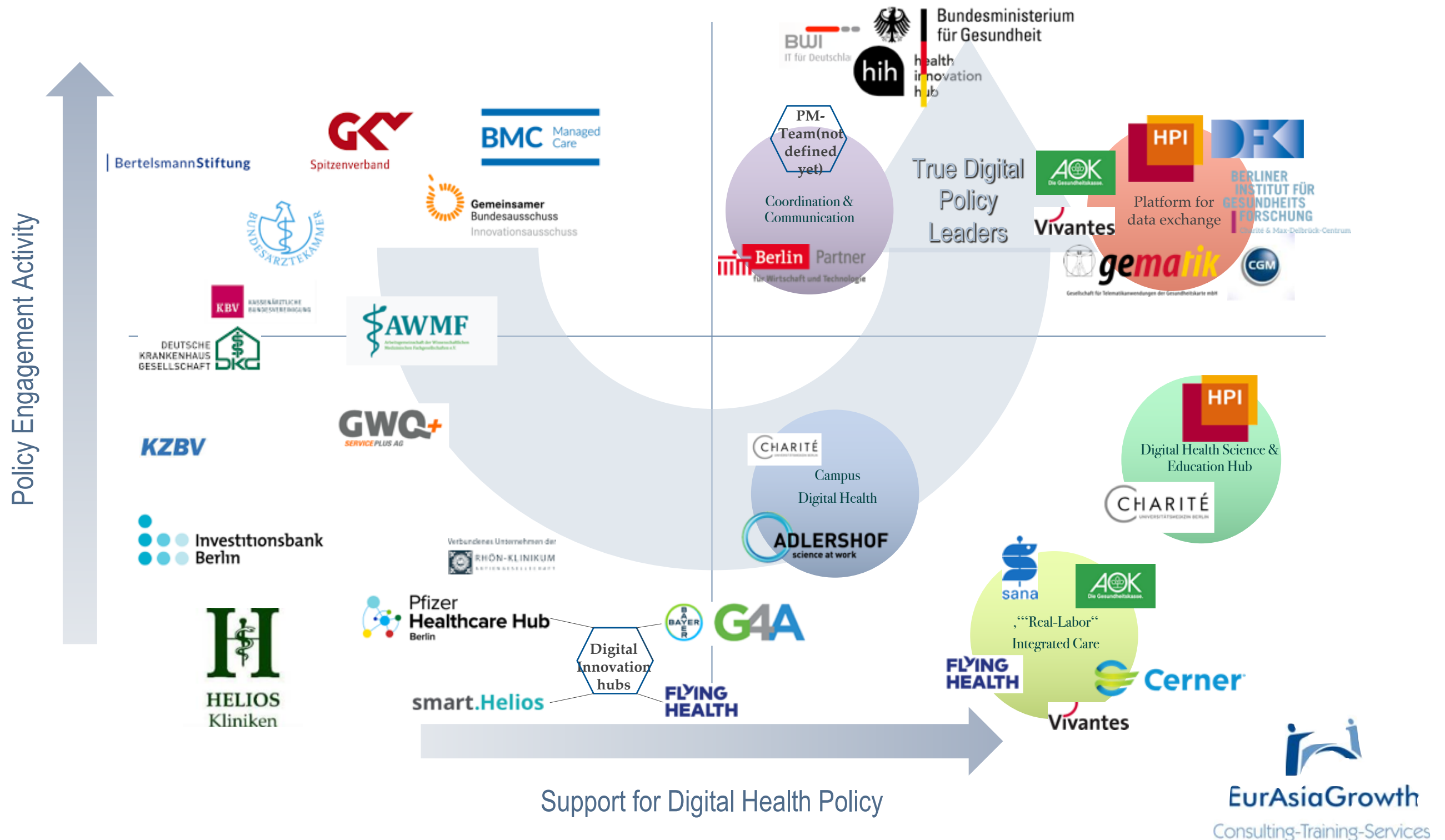
Example: Innovation Scout for Sana Digital

Flying Health Case Study: Sana Digital



Flying Health has set up the Sana Digital Health Office in 2016. Starting with a strategy process, Flying Health and Sana developed a roadmap for positioning Sana Kliniken as a thought leader in digital health. Therefore, Flying Health has build a structured process to bring digital innovation into the clinics – starting from a broad scouting and initial evaluation of startups and products, heading to match making, intensive evaluation regarding the unmet medical need, data security and integration effort as well as project planning and business case identification.

Influence Map – Digital Health Germany with special focus on Digital Health City Berlin-Brandenburg



The details of the various elements of the Digital Health City Berlin-Brandenburg are still not defined yet. The most important role will have the project management team who coordinates the structure and allocates the necessary resources.

The influence map on slide 41 describes the main stakeholders relevant for the initiative.

The players in both upper sectors should be addressed by Finnish representatives of the institutional and political sector. They are the right entities to discuss a cross-country cooperation on larger scale as for example the option to for a bilateral AI cluster for health. Healthcare is one of 12 topics in the German AI strategy plan.

Some players as e.g. Charité have a strategic role and are of interest as business partners. A joint approach of Finnish health experts and selected companies could be very fruitful.

The players in the lower sectors of the map with their networks and support services are important for the practical market entry steps of the Finnish companies.

It has to be mentioned that the map cannot list all relevant stakeholders. Many health insurers, big health service providers, med-tech and IT companies active in Berlin as well are missing.

Our recommendation is that each team of companies for its own influence map based on the targets, offering and business approach.

Lessons learned & recommendations

- ❖ Finland is still ahead in digitized healthcare
- ❖ German stakeholders are not fully aware about the Finnish excellence and offering in the digital health sector
- ❖ Finnish companies have good prerequisites for success with appropriate actions
- ❖ Other foreign players utilize the opportunities more actively
- ❖ Establish your own German business ecosystem
- ❖ Digital Health City Berlin-Brandenburg is one but not the only market entry portal



Source: shutterstock

- Kiitos -
Welcome to Germany !



„Brain surgery? I have an app for that!“



EurAsiaGrowth

Consulting-Training-Services

Additional Picture Source Directory

- ❖ Slide 5, 6, 7: #SmartHealthSystems, 29. November 2018, Bertelsmann Stiftung
- ❖ Slide 11, 12: Digital Mc Kinsey, Oct. 2018
- ❖ Slide 15, 43; licenced from shutterstock
- ❖ Slide 18: https://d146hcqz7izbhz.cloudfront.net/wp-content/uploads/2018/07/18141730/dts_image_12567_krqsnihbtc_315_1200_845-1024x721.jpg
- ❖ Slides 20, 21, 23, 24, 25, 27 <https://www.contractorselling.com/members/images/1223.jpg>; Slide 21: www.barmer.de
- ❖ Slide 28: Picture dpa
- ❖ Slide 30: Life Sciences Report 2017/20; www.berlin-partner.de
- ❖ Slide 39, 40: Flying Health, company presentation
- ❖ Slide 44: Picture Physician's weekly