Health Data Futures project

Creating a network of trust

In the three-nation project "Health Data Futures", stakeholders and experts from Germany, France and Switzerland have launched a series of patient-centred innovations. Using various future scenarios, the project partners may be able to come up with even more scenarios.

How can we promote the targeted use of health data? These, and other questions, were the driving force behind the three-nation project "Health Data Futures". The project was initiated by the DayOne healthcare innovation hub and was launched in 2020 in cooperation with partners from Germany and France (see also interview: "Health data scenarios - many possibilities for the future?"). After three years, the project has now come to an end and the cross-border multi-stakeholder network can provide an answer to this and come up with further ideas.

Yana Yoncheva, Project Manager at DayOne.
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"Our major goal was to bring together the healthcare ecosystem of the three countries and to strengthen their cooperation in the field of innovation. We opted for scenario modelling in order to examine a range of potential futures and focus our activities on the scenario with the highest potential," said Yana Yoncheva, Project Manager at DayOne, explaining the objectives of the project.

The project started off with the development of four possible future scenarios. These scenarios were then assessed by a number of experts (see figure below).
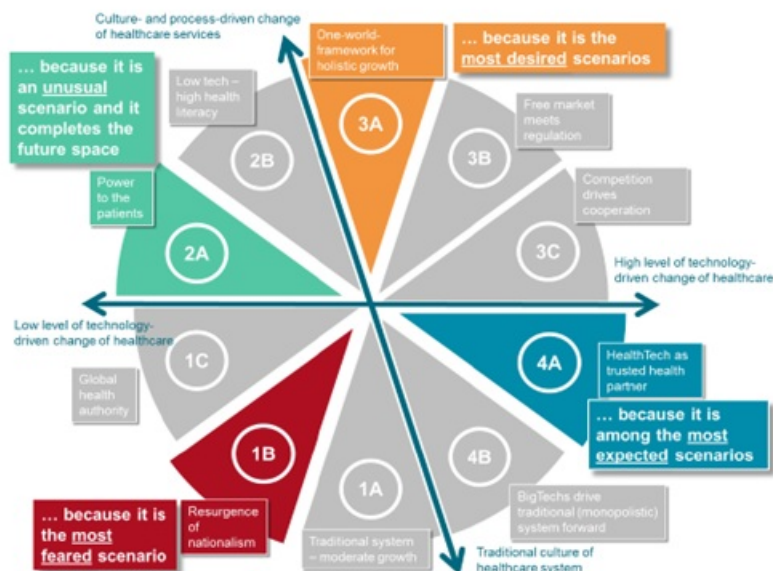
What are the optimal conditions for innovation?

In a subsequent analysis, a number of different stakeholders looked at the scenarios both from the perspective of patients and with a view to creating the best possible conditions for innovation. "Innovation tends to be most efficient when it is moderated and orchestrated. That's why this project was so important. The three-year project brought together over 100 stakeholders for discussions," said DayOne's Yoncheva, who studied international science.

In 2021, BIOPRO Baden-Württemberg joined the team as a project partner with the goal of bringing experts from Baden-Württemberg into the project and also to increase the visibility of the project. Dr. Barbara Jonischkeit, Head of Strategic Communication and Innovation at BIOPRO explained: "The project found that the healthcare of the future will be patient-centred, value-oriented and sustainable. The project also found that digitalisation and the implementation of artificial intelligence have the potential to realign healthcare and make it more predictive, preventative and precise. This can only be achieved through access to well-structured and high-quality health data and the use of transparent yet secure processes that ensure the health and well-being of patients of all ages in a healthcare system that is built on trust.

The project was also supported by the following organisations from Baden-Württemberg: bwcon GmbH, Freiburg Wirtschaft Touristik und Messe GmbH & Co. KG, the Pfizer Healthcare Hub in Freiburg and the University Medical Centre Freiburg.

Among other things, DayOne and its cooperation partners identified the main challenges for innovation using what is known as gap analysis: "The biggest technical problems lie in interoperability of the systems used and the data ownership rights," explained Yoncheva. As the project involved many people from three different countries, building trust was another challenge that had to be dealt with. Another hurdle to innovation was seen in the closed and fragmented healthcare systems of the countries involved. Yoncheva believes that this can only be solved through ongoing dialogue between the various parties. Despite these technical problems, the experts in the "Health Data Futures" project believe that it will be the consumers that will significantly change the healthcare system. The scenarios will also be made available to interested researchers and companies after the completion of the project.

Possible future scenarios: Scenario cluster 1 "Flat market" - government drives innovation (red), scenario cluster 2 "Buyer's market" - consumer behaviour drives innovation (green), scenario cluster 3 "Ecosystem-driven market" - innovation is driven by the democratisation of technology and data access (orange), scenario cluster 4 "Supplier's market" - technology-focused innovation is driven forward by companies and capital (blue).
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Role of patients

"Ideally, patients play a central role in a healthcare system. I am encouraged by the growing trend towards patient-centered innovations in recent years and the role we have played in this trend. Many start-ups begin their innovation process by identifying a patient problem and devising solutions for it. This is crucial, particularly in the context of chronic diseases, and even more so when dealing with data related to rare diseases, given the considerably smaller amount of available information in the healthcare system compared to more common conditions," stated Yoncheva, going on to say that this underlines the importance of involving patients at the earliest stages of solution development.

AI as a driver of innovation

Artificial intelligence (AI) plays an increasingly important role in health innovations. "AI is almost ubiquitous in all areas of innovation in the healthcare sector. We see AI as playing a supporting role, rather than replacing human innovation. The main focus of the project was on health data, and AI cannot exist without good data. Therefore, it has always been important for us to maintain a connection between the implementation of artificial intelligence, the proper use of data, as well as ownership of the data," said the innovation expert, clarifying their approach. The experts unanimously agreed that AI will play a significant role in clinical decision support and remote patient monitoring in the future. Ethical principles, such as a focus on human wellbeing and high transparency, are prerequisites for the use of AI.

Forming teams with patients

In May 2023, the partners reconvened for a DayOne Health Hack. "The concept was that patients would serve as idea generators and be supported by developers. The May 2023 Health Hack was attended by four medical doctors from Switzerland and Germany and they addressed and discussed various challenges together with the patients in the teams they were part of," reported Yoncheva.

As part of the ten-day Health Hack, teams comprising of both patients and industry representatives, developed projects aimed at addressing various challenges. These challenges included aspects such as access and interoperability of health information, data security, the implementation of digital tools, and the involvement and empowerment of patients. The teams had access

to numerous experts in areas such as economic development and regulations. Three projects were given an invitation to participate in the Innovation Booster Digital Health Nation, organised by Innosuisse. This invitation served as the initial step towards securing funding as part of the DigiHealth funding initiative in Switzerland. Yoncheva explained: "The intention was for the winners not only to have innovative ideas but also to have the opportunity to directly pursue the realisation of their ideas."

Goal achieved

"Health Data Futures" has succeeded in bringing together many different stakeholders from various healthcare systems. Trust between partners and participants has grown over the three years of collaboration, resulting in various ideas focussed on patients being available at the end of the project. Despite many good ideas, the development of an innovative product in the healthcare sector takes a very long time. It is therefore difficult to assess whether the current ideas that have emerged from the Health Hack will really be successful. Yoncheva concluded: "We continue to support the projects. The major success we have achieved is that we have managed to bring together many experts and stakeholders for such important work. This networking can continue even without active support. Our major goal of the collaboration has thus been achieved."

Further information

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