

In the “Trusted Health Ecosystems” project we are creating a concept and a product vision for a national health platform of the future. This text is part of the overall concept which is published at [www.trusted-health-ecosystems.org](http://www.trusted-health-ecosystems.org).

---

# Invest in benefits: Financing models for health ecosystems

Realizing the vision of a national health platform as outlined in the Trusted Health Ecosystems project could generate financial benefits at many different points and help improve the overall economics of the healthcare system. However, this will require a sustainable and independent financing model that can provide the necessary flexibility for the initial development process, ongoing operations, and future updates and expansions. The solution most likely lies in a combination of different financing approaches.

Digital ecosystems can provide benefits in the healthcare sector in a variety of ways. For example, networking all relevant actors and using digital data creates transparency and facilitates personalized care offerings. Fully integrated healthcare offerings improve the user experience. Moreover, simplified procedures and digital support make the work of healthcare staff easier.

A recent McKinsey analysis shows just how great the financial benefits of a digitized healthcare system are likely to be, estimating the economic potential in Germany at around €42 billion per year (McKinsey & Company 2022). Digital ecosystems are not the only means by which to tap this enormous potential, but they could make an important contribution. For example, they could accelerate the digitalization process, while also linking disparate offerings and digital services together in a time- and cost-efficient way.

The OECD has also stated that facilitating access to high-quality health information, as an ecosystem modeled on the product vision outlined here would do, can have cost-saving effects. It estimates that between 3% and 5% of healthcare spending could be saved or used elsewhere through improved health literacy. For Germany alone, this would correspond to a sum of €9 billion to €15 billion per year.

However, depending on the project size, the investment needed to support the initial development, deployment and operation of such health ecosystems can in some cases be quite substantial. Ongoing operations also generate costs. This raises the question of what financing models are suitable for creating such an ecosystem and supporting ongoing platform operations, including future updates and expansions.

## Requirements for national health platform financing models

A variety of financing models are conceivable for health ecosystems, each in turn entailing a number of advantages and disadvantages. In considering these options, it is important to keep in mind the core principles intended to guide the national health platform's operations (see Key Points and Premises):

- **Nonprofit model.** The platform's operation should not produce profits; any revenue generated will instead fund the platform's further development. This has an effect on the potential legal form taken by the ecosystem (see Ownership: Public or private?). Of course, this stipulation applies only to the platform operator. Health information or service providers participating in the ecosystem can certainly function on a for-profit basis.
- **Independence.** The ecosystem should act neutrally and independently of the particular interests of individual actors. This applies not only to healthcare providers and insurers, but also to private-sector companies with commercial interests. In practice, this rules out a number of funding options, such as advertising-supported operations.
- **Sustainability.** The process of building and scaling an ecosystem requires time, and necessarily takes place in an environment of fast-moving technological change. Financing models should accordingly be designed for the long term.
- **Transparency.** Since the digital ecosystem will involve participation by private-sector and public-sector actors, and the ecosystem operator will presumably be acting on the basis of a statutory mandate, financing sources should be transparent and comprehensible to all. This will also increase users' trust in the platform.
- **Open system.** The national health platform should be developed as an open ecosystem that allows for links between disparate health providers. A number of features must be created to enable such functions, which in turn will generate ongoing costs – for example, for the development, deployment and maintenance of APIs and other core components.

## Different financing models conceivable

In selecting suitable financing models, it is advisable to take a differentiated view of the platform's initial development, ongoing operations, and future updates and expansions. Over this time, these separate phases will be associated with different financial requirements, for which different forms of financing are in turn available:

**Initial development costs.** Initial costs are incurred in setting up the basic infrastructure, for example for the IT platform's technical development, for drafting legal and regulatory concepts, and for integrating the first healthcare providers into the ecosystem. Therefore, one-time basic funding is well-suited for this start-up phase – for instance in the form of grants or other funding from foundations, the government or the ecosystem's stakeholders. One example of government support for digitalization can be seen in Israel's National Digital Health Plan. There, the government has allocated a budget of around \$300 million for this initiative, in part to build a big data platform containing anonymized health information relating to nearly all Israeli citizens.

**Ongoing operating costs.** Once the ecosystem has been established, its ongoing costs must also be covered. This relates to functions such as basic operations as well as maintenance, software licenses, marketing and personnel. These expenses can also be financed through public subsidies derived from taxes or social contributions. However, alternative funding models could also be considered as a means of complementing the independent basic financing. For example, in addition to traditional subscription models, co-op approaches or innovative models such as corporate profit sharing could prove useful.

- **Subscription models:** Subscription models have been offered in the media and online retailing sectors for some time. For a regular fee, subscribers get access to news, streamed TV series or music, or other benefits. Membership fees could make a significant contribution to ongoing service improvements, but at the same time could constitute a financial barrier for users, thus increasing social inequality in access to health information. The consequent downward pressure on user numbers would also undermine the platform's appeal to providers of health-related information and services.
- **Co-op model:** Traditional cooperative financing, which is familiar from the banking, housing and agricultural sectors, is increasingly making its way into the healthcare sector in a modern form. The example of the French Welcoop Cooperative shows how a traditional pharmacists' cooperative has developed into a digital ecosystem for patients, care facilities, hospitals and the pharmaceutical industry. A model of this kind could also create a sustainable and independent funding source for the national health platform outlined here.
- **Innovative financing models:** In models such as brand licensing or corporate profit sharing, a portion of company profits are used to support healthcare

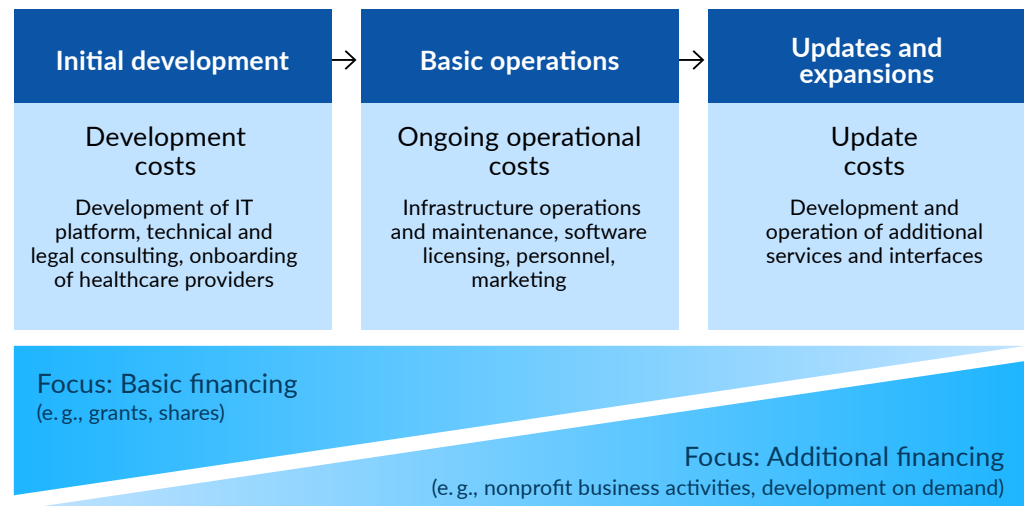
initiatives. Options range from investing in research and development to funding programs that increase access to healthcare. In the context of the national health platform, participating companies could reinvest a portion of their profits into the ecosystem. No matter what legal form the platform ultimately takes, the operator and the company would determine together how these funds would be used, in order to avoid undue influence.

**Update and expansion costs.** Upgrading and expanding an ecosystem includes tasks such as the provision of additional services and interfaces in order to keep the platform appealing to existing users and attract new ones. Financing can be structured in a way similar to that of the initial development and ongoing operation phases (foundations, co-op models), but can also be supplemented by alternative models. The following variants have already been tested in the field:

- **Nonprofit business activities:** The platform could pursue supplemental business models that are not primarily connected to its core business. For example, the platform could use its access to data to provide services to healthcare providers, and then use this revenue to fund its own further development.
- **Development on demand:** Private healthcare providers that have been able to scale up their services through the ecosystem could also participate in funding platform updates. For example, on the Swiss healthcare platform, called Well, several physician networks are working with the operator to develop an appointment booking and check-in system through the Well app. In order to avoid competing with private-sector providers, the ecosystem operator's development services could be limited to the platform infrastructure (e.g., interfaces).
- **Transaction fees:** Alternatively, private healthcare providers could contribute to the funding stream via the use of their services. For example, they could pay a percentage-based fee to the ecosystem operator – as is done on travel and hotel booking portals – as soon as a service is used.

Another financing approach familiar from the e-commerce sector is the use of premium models, in which users pay for services that go beyond the basic offerings. However, these are less appropriate in the health setting, because (as noted above) they can limit general access to health information, and thus reinforce social inequality.

## Overview of different types of costs and financing models for a healthcare ecosystem



Source: The authors

 Trusted Health Ecosystems

## Creative solutions for sustainable financing

The vision of a national health platform, as is being developed in the Trusted Health Ecosystems project, promises many benefits. It has the potential to promote health literacy, create personalized care options and ultimately reduce healthcare costs. This great economic potential is offset by considerable financial challenges, because financing an ecosystem of this nature will require substantial investment not only to pay for its initial development, but also to cover the costs of ongoing operations and future updates.

The overall scope of these costs will depend on a variety of different factors. A more precise estimation will be possible only after a detailed planning process (see K-SA-001-t). However, the financing of a national health platform with a strong civil society component will in any case require creative solutions that are shaped by the financial needs arising from the individual development phases, and which will provide the platform with sufficient financial flexibility.

Ultimately, the choice of funding model will depend on the national health platform's specific requirements and goals. These include a focus on the common good, independence from special interests, sustainability, transparency and system openness. An integrative approach that combines different funding sources is likely to achieve the best results, while also supporting the ecosystem's long-term development and ensuring its sustainability.

---

## Bibliography

- Eichler K, et al. (2009). The costs of limited health literacy: a systematic review. *International Journal of Public Health* 54. 313-324.
- McKinsey & Company (2022). Digitalisierung im Gesundheitswesen. Die 42-Milliarden-Euro-Chance für Deutschland. URL: <https://www.mckinsey.de/news/presse/2022-05-24-42-mrd-euro-chance>
- Ministry of Health, State of Israel (2018). The Government has approved a National Program for Promoting the Digital Health Field. URL: [https://www.health.gov.il/English/News\\_and\\_Events/Spokespersons\\_Messages/Pages/25032018\\_2.aspx](https://www.health.gov.il/English/News_and_Events/Spokespersons_Messages/Pages/25032018_2.aspx)
- World Health Organization (2019). Interview with Jens Spahn, Federal Minister of Health, Germany. *Public health panorama* 5 (2), 163-165. WHO. Regional Office for Europe. URL: <https://apps.who.int/iris/handle/10665/327036>



---

### Dr. Sebastian Krolop, Dr. Marko Queitsch

Sebastian Krolop, MD, PhD, MSc, is an expert with 25 years of professional experience as an emergency physician, and is additionally an economist, strategist and innovator. His areas of expertise include the transformation and financing of digital technologies in international health systems. He served as a board member of the Healthcare Information and Management Systems Society (HIMSS) in Chicago, IL, United States, where he oversaw areas including strategy, operations, startups and the company's own digital ecosystem platform, called Accelerate. Previously, he was partner and industry lead for life sciences and healthcare at Deloitte. Krolop is the author of the annual Krankenhaus Rating Report, and has contributed as author and co-author to more than 40 books with a focus on the financing and digitalization of health ecosystems.

Dr. Marko Queitsch studied industrial engineering, and earned his doctorate in business management. He has conducted research as an economist on digital communication issues in healthcare, and has developed digital health portals in the private sector. As head of business development for Weisse Liste gGmbH, a wholly owned subsidiary of the Bertelsmann Stiftung, he designs nonprofit business and financing models. In addition, he supports the Bertelsmann Stiftung's Trusted Health Ecosystems project in the key areas of operating and financing models, as well in data and software architecture issues.

---

#### Legal notice

© Bertelsmann Stiftung,  
September 2023

Bertelsmann Stiftung  
Carl-Bertelsmann-Straße 256  
33311 Gütersloh  
Tel. +49 5241 81-0  
[www.bertelsmann-stiftung.de](http://www.bertelsmann-stiftung.de)

#### Responsible for content

Dr. Sebastian Schmidt-Kaehler

#### Photo credits

Dirk Pudwell, private