



How can wider collaboration help drive better health outcomes for patients?

Many countries across the world are trying to respond to the challenges of managing public health care costs. In Finland, forthcoming changes in the structure of health care delivery and a desire to develop more preventative and personalized care, have created opportunities for more innovative approaches across the health care ecosystem. Sitra, the Finnish public innovation fund, has been working with EY to explore the potential of greater collaboration between academia and business, with promising results.



Authors

Ville Koiste
Capacity for Renewal, Sitra

Sakari Helminen
Partner LL.D., Transaction Law Services,
Ernst & Young Oy (EY), Finland

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The Finnish innovation fund Sitra exists to explore and fund sustainable development initiatives in society. Sitra has been active in the health care field for several years, for example supporting digital self-care solutions, utilizing genome information and strengthening the Finnish health and life science ecosystem. This ecosystem approach has been identified as particularly important, and Sitra is encouraging greater collaboration between different stakeholders, especially academia and business, as historically these sectors have operated in silos.

With this in mind, Sitra asked EY to help produce a Medical Research Map report that would:

- ▶ Explore the key medical research areas and methods from the perspective of both the global pharmaceutical industry and Finnish universities
- ▶ Identify ways to strengthen public-private cooperation
- ▶ Discover the most attractive opportunities for Finnish medical research
- ▶ Recommend action to enhance the productivity of the Finnish medical research sector

In the report, the respondents represented all the university medical faculties and three-quarters of the pharmaceutical industry in Finland. It identified that in Finland, there has been a huge change in the last few years, which has led universities to seek additional funding from beyond

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public institutions, and faculty deans are more open to collaboration with companies big and small and new and established. Every stakeholder understands that without a network of high quality assets – whether facilities, software or know-how – they cannot do everything. Both academia and business need new partners so they can be agile in the changing landscape.

Sitra has already funded several collaborative pilot projects, including CardioCompass, which is a joint venture between Molecular Medicine Finland (FIMM), the Finnish Red Cross Blood Service and Sitra. CardioCompass is a web-based service that provides patients with an analysis of their risk of developing a cardiovascular disease. The results could be used to explain the hereditary risk of developing heart disease – both to the patient and to their physician. It was piloted by 176 people whose hereditary risk of developing atherosclerosis was assessed

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on the basis of some of the most significant genomic variants prone to cardiovascular disease. Participants could also key in other factors related to their health, such as blood cholesterol level, high blood pressure and smoking, to understand how they might impact upon their likelihood of contracting a cardiovascular disease.

Exploring future potential: Project Way Forward

The positive outcomes of the Medical Research Map report encouraged Sitra and other public institutions to explore in more detail the potential for nurturing a collaborative ecosystem that would connect and benefit as broad a group of stakeholders as possible.

Working with its client, the public sector business support body Finpro, EY offered to support this wider conversation by facilitating a series of workshops and seminars involving multiple partners. The invitees represented a broad spectrum of health care stakeholders: pharmaceutical companies, medtech, start-ups in the wellness and health sphere, industry associations, national institutes, health care providers, insurance companies, mobile operators, and bio banks.

Big changes in health care delivery

Collaborative research and activity is motivated in part by the large reforms to social and health care currently being introduced in Finland, in which management will shift from a municipality- to county-based system.

In brief, the reforms will:

- ▶ Bring health care and social services together at all levels in a more customer-orientated way
- ▶ Simplify the financing structure and give people more freedom of choice in their services
- ▶ Reduce inequities in wellbeing and health between people
- ▶ Manage costs

This opens up many potential opportunities for health providers, including the private sector, to deliver more innovative systems of care, particularly utilizing technology.





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The sessions solicited many different points of view from the more than 100 stakeholders, but four core themes emerged as both strengths and priorities:

► **Disease pathways**

Finland has globally recognized knowledge and researchers in certain disease mechanism areas, such as metabolic, neuroscience, oncology and cardiovascular, which is the primary source of new drug and diagnostics development – and hence offers considerable commercial potential for the ecosystem.

► **Technology and engineering**

The country has strong capabilities in many technological application areas, such as wearable devices and sensor technology, in vitro diagnostic (IVD), and monitoring and imaging, supported by information and wireless technology. A mature digital infrastructure, a lively start-up environment and established capabilities in medical technology and engineering provide a strong basis for the development of digital health solutions.

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► **Health data**

Finland is one of the first countries in the world to set up a national digital patient data repository covering both the public and private health care sectors – all 5.5 million citizens have online access to their health records and their e-prescription history.¹ Finland also has a unique ability to combine biological sample data into patient records, national registries and other phenotype data.

► **Accessible health care system**

A high-quality care system with its uniform standards and universal access offers a strong platform for product development, testing and clinical evidence gathering in real-life environments. There is a significant diversity of stakeholders suitable for collaboration and solutions developed will likely be applicable to a wide range of service providers worldwide.

Technology is arguably the core theme that unites opportunities in the health care ecosystem in Finland: there are many tech-savvy people who are very happy to use technology, such as smartphones and eHealth solutions. The ability to gather real-world data is also one of the hottest topics in health care, and Finland could help lead the way in preventing illness.

This view is already supported by some global players: according to IBM, Finland is among the leading countries for digitized health care, and the company has announced it will make several strategic investments in Finland to establish the Watson Health Centre of Excellence for developing artificial intelligence services for health care and wellbeing, as well as the first Imaging Centre of Excellence in its category outside the US.²

Project Way Forward helps activate an even larger pool of organizations and bring their contribution to the future of health care.

Collaborations across the ecosystem

Sitra has been leading the way in collaborative projects for several years – but Project Way Forward is among the first major health care ecosystem-based initiative to exploit the willingness of stakeholders to discuss collaborating and actually translate it into action.

Focusing on new innovation and investments, Sitra is already supporting and accelerating national collaboration in certain areas, especially around health data. For example, EY helped Finpro make over 80 recommendations following Project Way Forward, and the organization has now received financing for the next steps, to action some of the key recommendations.

In the future, the Finnish Government will hopefully continue to explore funding for collaborative activity resulting from Project Way Forward, with further workshops to explore certain issues and identified gaps.

Conclusion

Overall, the legacy of Project Way Forward is to stimulate growth opportunities for Finnish companies and attract foreign direct investments in the field, making Finland one of the key hubs for health care innovation globally. This is a once-in-a-lifetime opportunity for Finland: without collaboration, the preventive health care system that so many stakeholders want to see is not going to happen. For the future of the life sciences ecosystem, willingness and openness is needed more and more. It's all about engagement.

Stage one of Project Way Forward is now finished, and stakeholders are closely involved in developing a second stage that will catalyze multiple initiatives to deliver on the expectations and potential suggested.

It is hoped that Project Way Forward will serve as an example for other countries to follow in their approach to innovative, proactive and economical health care solutions. ■

1. "World class digital health comes from Finland," *Finlandcare*, www.finlandcare.fi/web/finlandcare-en/-/world-class-digital-health-comes-from-finland, accessed March 2017.
 2. "Why did IBM select Finland as the cradle for its artificial intelligence?" *Sitra*, www.sitra.fi/en/blogs/why-did-ibm-select-finland-cradle-its-artificial-intelligence/, accessed March 2017.

