

THE NATIONAL HEALTHCARE PLATFORM

Call for a Digital Delta Plan

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March 2021

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¹ Please note: the authors have written this article in a personal capacity.

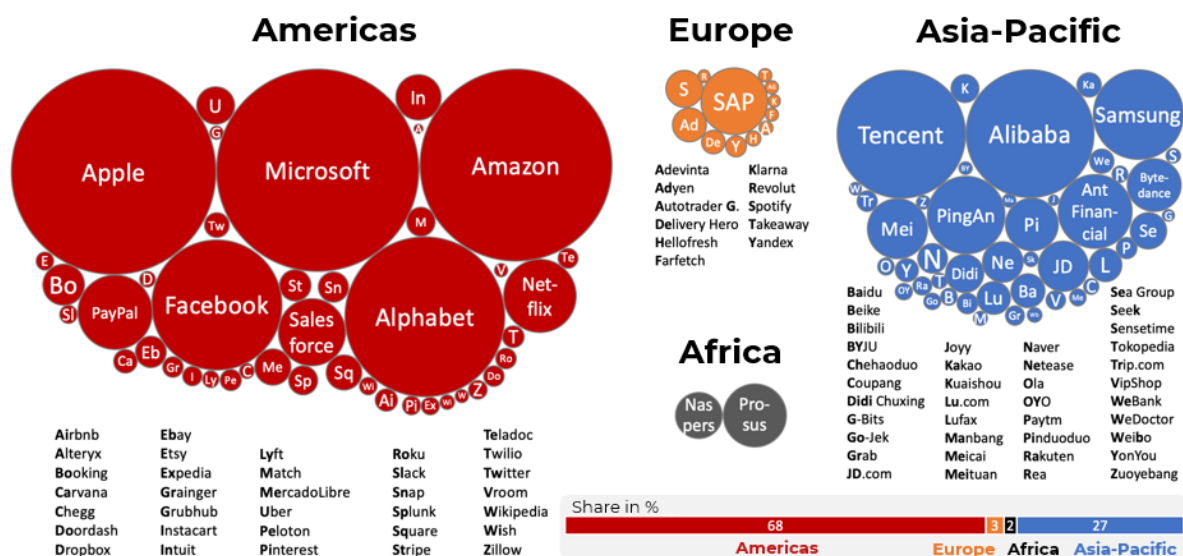
Dutch healthcare has traditionally been among the world's best and is unique in the fact that everyone has access to the same top-quality care, irrespective of their ethnicity, nationality or social status. However, despite the quality of our system, the digital revolution, which has transformed whole sectors of the economy, has so far achieved only limited reach within healthcare. To cite just a few examples: Even if you, as a patient, move from one ward to another in the same hospital, your file is not immediately shared between medical specialists. Every elderly person moving into long-term care faces administrative issues in transitioning from basic healthcare insurance to the conditions that apply under the Long-term Care Act (*Wet langdurige zorg*).

All of this is happening in a world where, with our smartphones, we are personally equipped with supercomputers that enable us to use WhatsApp, videoconference, watch Netflix, e-mail, order food, make payments and do banking, read the newspaper, travel, and order taxis.

These platform services are all provided by American and Chinese tech giants, such as Google, Amazon, Apple, Microsoft, WeChat, Alibaba and insurance company Ping An. These companies owe some of their success to the advantage of a large, uniform domestic market and their innovative data and information services have enjoyed unprecedented global success. The monetization of this data generates hundreds of billions in annual sales and is worth thousands of millions of euros on the stock markets. With its much less uniform domestic market, Europe is lagging behind to an alarming extent. The European tech industry is only slightly larger than Africa's. Although Booking.com and Adyen are living proof that it is possible, Europe is simply not really participating in the world of 'Big Tech'.

Top 100 global platforms (June 2020)

Market cap/Most recent known valuation
Total value USD 10.8 trillion (as of June 2020)



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In healthcare, platform technology is hardly being used at all worldwide. While the world's hotels are all connected to a platform, enabling you to make a choice at the push

of a button, in the healthcare sector, we have still not even managed to link up our personal healthcare information in a small country like the Netherlands.

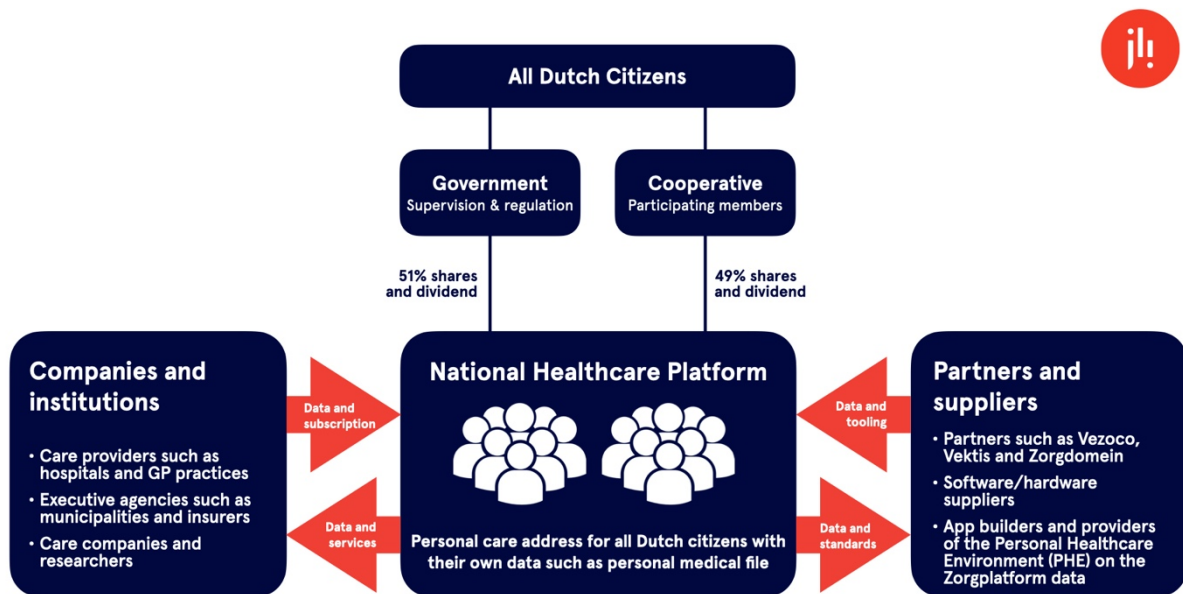
In the US and China, equal access to healthcare for everyone is not the norm. Tech giants have a completely different business model. Their strategy involves dividing people into target groups based on the potential income, rather than being focused on the collective interest. This is problematic enough in terms of the 'market economy'. If it were also to happen in healthcare, it would strike at the roots of the solidarity, collectivity and confidence which are typical to our healthcare system. Much of the current healthcare information is not 'connected' to the patient. However, the information is available at local level, is saved and shared by local care providers and, for example, viewed by healthcare insurance companies in order to assess claims. All of this happens in accordance with a series of laws and intricate national rules and standards, embedded in the democratic system, that have developed over the decades to facilitate the sharing of healthcare information and ensure everyone has access to healthcare. It is an excellent point of departure for innovating healthcare.

We are calling on people to take control and guarantee that healthcare data remains in the hands of all Dutch citizens and at the service of the healthcare system. This will enable the power of data to be used for research, prevention, early diagnosis and to identify the best possible care. We are calling for the establishment of 'The National Healthcare Platform' (NHP): a publicly regulated infrastructure that enables existing and new, private and public parties to jointly take and maintain possession of digital and mobile technology and healthcare data. In this, we aim to continue to guarantee the solidarity and collectivity of the healthcare system. To do that, we will need to move beyond the existing frameworks.

As far as uniform standards in the basic architecture are concerned, the Netherlands can look to Denmark and Austria for inspiration. But the NHP is about more than just standardization. We propose setting up the NHP with two key shareholders: the Dutch government and a cooperative association of which all citizens are members. Under the control of these shareholders, the NHP can be established as a platform that provides all citizens with access to their own healthcare data through their personal 'healthcare address'. This healthcare address should be seen as a unique virtual space on the platform defining all the rules for connecting an individual's healthcare data. Based on an open architecture and the linking and use of existing standards and databases, this platform and this healthcare address will bring together information from healthcare institutions, healthcare expenditure, referrals, long-term healthcare, government social support and parties such as Statistics Netherlands (CBS). People will also be able to add additional data themselves, possibly from wearables, their own DNA profile, mobile phones, personal health examinations and e-health apps. Via the healthcare address, the different datasets will be accessed at individual level, generating a personal picture of the patient's care history. This can be used to flag up incipient healthcare needs at an early stage and to help identify the right treatment plan and, when it becomes necessary, the most appropriate physician or the decision not to proceed with treatment.



The NHP will have a corporate structure with a Board of Directors and Supervisory Board in order to enable it to operate effectively. Because it will be publicly regulated, it will have the authority to take effective control in the fragmented healthcare sector. This will give the NHP a similar structure to the NS (Dutch Railways) and Schiphol airport: infrastructure companies that are publicly regulated and also able to operate effectively as businesses.



The NHP will open up huge opportunities for using healthcare data and can form the backbone for integrating existing initiatives. An example of something similar is Health-RI's healthcare infrastructure for research and innovation, developed partly at the initiative of the university medical centers and expanded to include a large number of public and private parties. This integrated healthcare data infrastructure enables the Netherlands to make optimum use of medical data, samples and knowledge in order to develop better care and innovation and new solutions for diagnosis, treatment and prevention. It is also a technological basis for AI applications.

In the fragmented healthcare and research sector, there are no regular forms of funding for a healthcare data infrastructure like Health-RI, which is now in the process of a funding round.

The NHP will enable healthcare providers and healthcare companies to use anonymized and amalgamated data for an appropriate charge in order to provide and develop better and more personalized care.

The NHP opens up numerous possibilities, including developing and offering specific lifestyle interventions to improve the health of people with chronic diseases, such as

diabetes, COPD or heart failure. Data can be used to provide a rapid, granular understanding of epidemics, for example on where people have become infected with the coronavirus. It could also be used, for example, to enable access to official coronavirus test results, making it possible for someone to use their mobile phone to 'prove' their negative status when entering an aircraft or an event.

As shareholders, the government and citizens will task the NHP with the responsibility to coordinate the platform's infrastructure and development, the platform rules for users and the use of healthcare data on behalf of Dutch citizens. The NHP will be set up as an innovative healthcare enterprise in order to attract and retain the best talent and apply it for the public good.

There are some players in the healthcare landscape who are already fulfilling parts of this task. Most people have never heard of these organizations, such as Vecozo, Vektis and Zorgdomein. They are superbly efficient at processing healthcare claims at national level, managing and analyzing almost all Dutch patients' claims data and referrals. These players would make obvious partners who could help by supplying their data to the NHP in exchange for payment. The university medical centers will also be able to play a central role in developing new care concepts and the NHP can help to accelerate their existing initiatives. It also offers a huge opportunity for taking advantage of the potential of smartphones, fitness trackers and e-health applications.

According to European and Dutch regulations, it is compulsory to provide patients with access to any medical data they request. This opens up even more possibilities for encouraging parties to become involved in the NHP. The important MedMij initiative (which aims to provide citizens with access to their healthcare data and is yet to really take off) will benefit from this because all individual parties can be compelled to cooperate. These regulations can also be used to compel the international tech giants and similar players, such as organizations introducing hospital automation, to provide public access to their data via the NHP. Public and private organizations will then be able to access the amalgamated data, within the framework of the law and in exchange for payment. The revenue from this data will then feed back to the shareholders – the state and its citizens. This will ensure that it is not private foreign parties who benefit from the value of the data, but individuals and the wider collective.

In this, we can take inspiration from a well-known Amsterdam-based physician: Samuel Sarphati. In order to improve hygiene and public health in the nineteenth century, Dr Sarphati started up a waste collection service in Amsterdam that funded itself from the sale of waste as fertilizer. This made it possible for the public amenity to be provided for the municipality at a cost of zero guilders. We propose doing the same with the NHP. Data is a goldmine for highly profitable tech companies. If data is used for the public good, the NHP can be self-funding and cover its costs by demanding payment from healthcare providers and companies that use the data. These payments will then return to the healthcare sector and citizens in the form of better and more affordable healthcare and, in the longer term, could even subsidize healthcare insurance premiums.



Privacy is important and a cause worth fighting for. We need to realize that a lot of personal data is now already being shared in order to safeguard the public interest. This sharing of information needs to reflect today's digital world. It is a subject that causes real division. On the one hand, there are people who categorically refuse to allow their data to be used by third parties, whatever the conditions. On the other hand, there are people who have no problem with this, providing that security and privacy are safeguarded, and the statutory requirements are observed. The NHP will provide us with an opportunity to introduce a mechanism that enables society to advance this discussion towards a solution that works for both camps. For people who do not wish to share their data with third parties, a minimum membership will be created. This will mean that their data will be used solely for them, in order to support their own treatment. Apart from that, their data will not be used or amalgamated.

Consistent regulation relating to data infrastructure will also be necessary to enable public and private parties to develop, improve and deliver healthcare services and, in doing so, to strike the right balance between the public and private interests. The Apple Store can serve as inspiration in this, with private parties able to innovate and offer services on the platform within predefined parameters. In this case, however, it will not be Apple that sets the rules, but the government and the cooperative owners of the NHP.

The issue outlined above is international and is not limited to the Netherlands. But the Netherlands is ideally suited to take the lead in this thanks to its unique tradition, in which public systems are realized by private players. If we prove capable of transforming the healthcare sector over the longer term, putting digital technology to optimum use in creating value for both the individual and the collective, we will be able to use this model as a blueprint for exporting to other countries. This could start in Europe but also go beyond, to such countries as Africa.

The NHP will provide the Netherlands with an institute that is itself an actor in digitizing the healthcare sector. As such, we will be able to develop regulations around healthcare and information in the digital and mobile world not only from a reactive and regulatory perspective but based on a role as an active and innovative player. We currently spend almost €100 billion on healthcare every year and it is time that we also spent money on a national digital highway for healthcare. Coordination can be much better, healthcare itself can be smarter, cheaper and more personal and alternative business models for society as a whole are relatively easy to achieve with today's technology. As a result, the Netherlands can once more play a leading role in the development of a technologically advanced healthcare system that safeguards the public interest, rewards public initiative and, most importantly, provides affordable world-class care for all. By extension, this development can also lay the groundwork for the development of high-quality employment in the Netherlands, enabling us once more to play our role in the world of big tech.



ABOUT THE JOEP LANGE INSTITUTE

The Joep Lange Institute (JLI) was founded in 2016 in memory of Prof. Dr Joep Lange. He was one of the world's pioneers of HIV AIDS treatment, particularly in Africa. The JLI supports initiatives aimed at giving everyone in the world access to better care through the use of mobile telephones.

ABOUT THE AUTHORS

Jan van den Berg is in the supervisory board of several companies, including as the incoming chairman of the supervisory Board of Achmea, and is an advisor to the Singapore Ministry of Health. Jan has more than twenty years of executive-level experience in the international insurance market. He has previously worked at Nationale Nederlanden, AXA and Prudential Financial, where he was CEO for Asia until 2017.

Gerard van Olphen has had a career with various financial institutions and insurance companies, was CEO of the insurance company Vivat and, until 1 March this year, was chairman of the board of directors at APG, the Netherlands' largest pension provider.

Onno Schellekens is chair of the Joep Lange Institute. He also co-authored the book "Scaling up affordable health insurance" published by the World Bank and is the director of CarePay. CarePay offers millions of people in Africa a health benefit wallet on their mobile phones.

Margriet Schneider has been chair of the executive board at UMC Utrecht since 1 November 2015, has chaired the Netherlands Federation of University Medical Centres (NFU) since 1 June 2020 and takes a particular interest in achieving innovative and future-proof care through multidisciplinary cooperation in care networks.