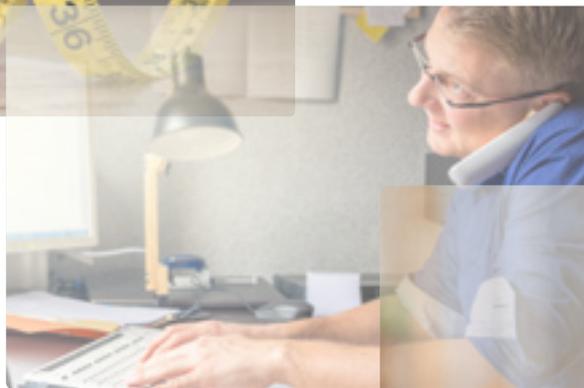




Annual  
review



# Discover the Highlights of 2021





## Organization

#1

# Celebrating continewity



January 26, 2021 was a special day. Noaber is a family foundation, founded by Paul and Mineke Baan. On Paul's birthday - he turned 70 - the parents transferred the board responsibilities to their children, the second generation. This meant that daughter Annelies and son Rutger became board members of Noaber (Rutger already was) and that Paul and Mineke increasingly distanced themselves from the organization. Of course they are both still active and available for giving advice.

In 2021, we also celebrated our 21st anniversary. To mark the occasion, we released a special 'triptych'. In a book, author Edwin Venema, described the history of Noaber. Jan den Ouden provided the design and many of the illustrations. Pianist and composer Armin Seggers was asked to interpret the Noaber Journey musically. Finally, the third part of the triptych is a video featuring key people from the past 21 years, including Paul and Mineke Baan and a few of their children.

The composition, performed by Armin Seggers himself, and the video can be listened to and viewed via:





## Organization

#2

# Culture Compass: NICE to have



In 2021, we took the time to rethink what and how we can summarize our culture in a few clear terms. Words and thoughts that help us 'continew' to navigate and orient ourselves in choices we make and directions we choose. In the end, we chose a compass as our metaphor: our cultural compass. With four 'wind directions': the (magn)ethical north

with the core concept of noaberschap. The enterprising east. The key concept that fits here is entrepreneurship. Then the daring south. This requires courage. And finally, the wild west. The key concept here is innovation.

That's NICE, isn't it? Noaberschap, Innovation, Courage and Entrepreneurship?



## Organization

#3

# A new corporate identity and website

# noaber



Moving with the times, continew! That, too, is a challenge. Sometimes that means changing your logo and corporate identity. We asked Steets, an agency in Veenendaal, for advice. After reviewing our communication wishes, we made a number of decisions. The compound 'oa' had to stay. This so-called ligature has become part of us. A more radical decision was that we would no longer use the word foundation in the logo because we want to emphasize that all our activities are focused

on a unambiguous mission: driving change, improving health. The typeface that was proposed is the Konstant Grotesk. The art-director of Steets slightly lengthened the right leg of the 'n': a small, subtle reference to the fact that we seek depth or, in other words, impact. Finally, at the same time as the introduction of the new logo, our website was also revamped with the possibility of choosing a black (modern) or white (traditional) version.



## Organization

#4

# Moving to Zonneoord Estate



From a villa to a knowledge and innovation campus. From Rosmersholm to the Zonneoord Estate. They are only a few kilometers apart but what a world of difference! After about 20 years we moved into a modern office with all the modern conveniences and many other advantages. Not only do we work in the middle of the woods (healthy!), but we can also use all the facilities of the estate (hospitable!).

In terms of atmosphere we have lost nothing, but efficiency and business quality we have improved. Of course it was a pity that the COVID-19 measures prevented us from making much use of everything from the start, but now that everything has been relaxed in that respect we enjoy it all the more. If you have an appointment at our office - the Estate - we will be happy to show you around!





## Programs

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We have adopted a programmatic approach to address the complex and interrelated elements of systemic change in clearly defined intervention fields. We initiate and accelerate programs with the intent to enhance stakeholder involvement and ultimately hand them over to system-level players or enable others to take on this role if they are up to such challenge. By doing this, we seek to remain engaged as long as our involvement results in a meaningful contribution for systemic change towards optimizing health span. The programs are focused on population health, lifestyle

(medicine). A third program is under development'. The theme will be 'social health'. These three areas require change where we could play an enabling role to facilitate the transition towards an active and healthy life.

Given the complexity we plan to remain focused on and actively engaged in these programs for the years to come, while we continually evaluate the need for additional programs that align with the role we want to play and the goal we seek to achieve



## Programs

#1 lifestyle (medicine)

# De eerste 1.000 dagen

(First 1,000 Days)



The Dutch Health funds are committed to curing diseases and providing quality of life for people with chronic conditions. But they are also committed to preventing people from getting sick. “And the younger we start doing that the better,” they write on The Healthy Generation website. The Collaborating Health Funds (SGF) are implementing a multi-year program to realize a “dream and ambition”: the healthiest youth in the world by 2040! Part

of this program calls attention to the first 1000 days of a child because these are crucial for a good start. The health of a child before, during and after birth appears to be an important predictor of problems - both physical and mental - in later life. We are fundraising partners with the Bernard van Leer Foundation for this program because the objective fits with our mission: driving change, improving health.



[gezondegeneratie.nl](https://gezondegeneratie.nl)

#2 lifestyle (medicine)

# Well living lab



The Well Living Lab (WLL) is a laboratory, affiliated with the Mayo Clinic (Rochester MN), that investigates how buildings can contribute to the health of their occupants.

The WLL conducts research, the results of which are incorporated into the Well Living Standard®. Several studies were conducted during 2021 on ventilation and health; partly related to the COVID-19 pandemic. In the coming years, WLL will also conduct a field study in Groningen, in collaboration with the UMCG and the RUG. The Well Living Standard referenced: The WELL Building Standard® is a performance-based system for measuring,

certifying, and monitoring features of the built environment that affect human health and well-being through air, water, food, light, fitness, comfort, and mind.

A number of buildings at the Zonneoord Estate - where we have held offices since 2021 - have earned The WELL Building Standard® (Platinum) in the past year.



[www.welllivinglab.com](http://www.welllivinglab.com)  
[www.zonneoord.nl](http://www.zonneoord.nl)



## Programs

#3 lifestyle (medicine)

# GezondMeten

(Measuring Health)



Lifestyle medicine still has a limited - scalable- revenue model. One of the consequences is that it is difficult to finance large studies. It also doesn't help that there is no standard for measuring (positive) health outcomes. In this project, which is a cross-over with our population health program, a validated basic set of questions is being developed to measure health unambiguously and to make interventions and outcomes

more comparable. GezondMeten is a project consisting of researchers from Leiden University Medical Center (LUMC), Alette Jacobs School of Public Health (University of Groningen), Salut, TNO and Lifestyle4Health. We actively support this initiative, together with the Fred Foundation and the Institute for Positive Health (iPH). The questionnaire has now been developed and published.



[www.gezondmeten.nl](http://www.gezondmeten.nl)



## Programs

#4 lifestyle (medicine)

# Lifestyle dashboard UMCG

*Mrs. Jansen has an appointment in the UMCG. At home she has filled in the questionnaire about her lifestyle via the patient portal again. Last time she visited the dietician she scored red on the nutrition domain. Her sodium excretion was also too high. This showed she was eating too much salt, which increases blood pressure. The dietician helped Mrs. Jansen make small improvements in her diet. She was given many tips about using herbs in cooking and which products contain a lot of salt and which she should therefore avoid. This time Mrs. has an appointment with her doctor. During the consultation the doctor turns his screen towards her. The food domain is now yellow, a step in the right direction! In addition, the overview of the lifestyle measurements shows that her sodium excretion has decreased. For Mrs. Jansen, it is nice to be able to see the results of these small adjustments. It helps her to understand the difference her diet can make for her health.*

In the UMCG a lifestyle dashboard has been developed based on an idea by nephrologists Dr. Paul van der Boog (LUMC) and Prof. Dr. Gerjan Navis (UMCG). The lifestyle dashboard gives healthcare providers insight into the lifestyle domains of patients and their lifestyle-related medical measurements. These data form the basis for a quality lifestyle system. Noaber was involved in the development of the dashboard.

Nine domains of the patient are mapped which are colored red, yellow or green. The domains are: addictive substances, mental well-being, social network, quality of life, sleep, vulnerability, points of attention, nutrition and exercise. This information can be combined with lifestyle-related measurement data such as blood pressure, cholesterol, weight, malnutrition scores, etc. In this way, information reported by the patient is placed alongside objective measurements, creating a feedback loop.

In 2021 the UMCG started to implement the Groningen Lifestyle Intervention Model (GLIM) in four departments. The lifestyle dashboard is used for registration of lifestyle factors in the electronic patient record (EPD). Over a period of three years, working groups of healthcare providers from various specialties, domain experts and technical support from the business intelligence and information management departments have worked to create broad support for the lifestyle dashboard.

We are involved in this development because we expect the impact to be significant when other hospitals start using the dashboard.



## Programs

#5 population management

# HealthKIC



The HealthKIC Foundation was created at the initiative of Noaber and is now also facilitated by Menzis, PGM, Alles Is Gezondheid, the Bernard van Leer Foundation and the Ministry of Health, Welfare and Sport.

Our health care system is designed to treat illness. As a result, we lack structural funding for programs that keep people healthy. Moreover, we do not sufficiently measure what does and does not work in the field of health interventions and we lack organizational power. This is why HealthKIC has developed the 'Kavelmodel'. It adds a number of important and necessary preconditions to the current system. Moreover, it is a model that does not cause a revolution,

but gives an evolutionary nudge in the necessary direction. In 2021 a start was made to prepare two 'kavels': the Achterhoek (the Eastern part of the Gelderland Province) and the municipality of Ede.

Leonie Vorigen and Carl Verheijen were guests in the SlimmeZorg podcast in which Arno Rutte talked with them about the Kavelmodel. In the podcast they talk about how regional care can be organized differently and innovatively. The focus is on improving health within the regional context and working together with all stakeholders in the care and welfare sectors. That means that there is no room for non-commitment.

[Listen to this episode on your favorite platform!](#)

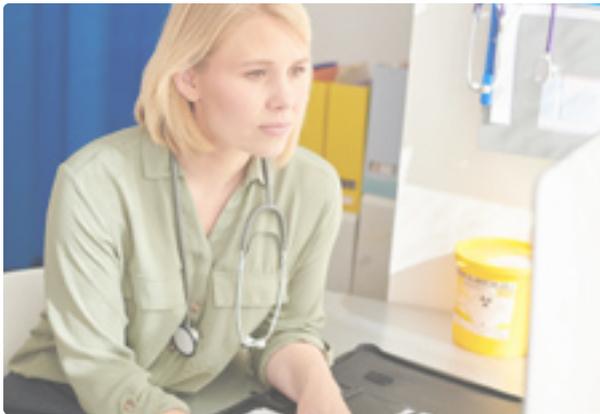




## Programs

#6 population management

# Validation of risk stratification



Within the Dutch healthcare system the focus is shifting from a disease-oriented approach to a more population-oriented approach. Since all residents in our country are registered with one general practice, this offers a unique opportunity to perform Population Health Management analyses based on data from general practitioners.

The Johns Hopkins Adjusted Clinical Groups (ACG) system is an internationally used method for predictive population analyses. The model categorizes individuals and maps their health risks based on their health profile, taking into account age, gender, diagnoses and medications. However, the ACG system was developed with non-Dutch data. Therefore, for wider implementation in Dutch general practice, the system needs to be validated within the Dutch health care system. A study to this end was conducted by Shelley-Ann M. Girwar and Marc Bruijnzeels et al. In 2021, [they published an article](#) showing the results of the first use of the ACG system on Dutch GP data. The aim of this study was to investigate how well the ACG system can distinguish between different levels of GP use. The population for this pilot analysis

consisted of 23,618 individuals admitted to five participating GP practices within one region in the Netherlands.

Although the use of the ACG system usually recommends the use of both primary care and hospital care data, this study shows that the ACG shows promise when used with only primary care data, especially in a primary care system with mandatory GP list. “All in all, applications such as the ACG hold great promise for health care systems, as the ability to predict future health use may be beneficial for person-centered health intervention strategies, such as screenings for care management interventions, as well as for local, regional, or even national care management.”



[www.bmchealthservres.biomedcentral.com](http://www.bmchealthservres.biomedcentral.com)



## Programs

#7 new program

# Social health: the development of a new program

In 2021, work began on preparing a new program. This program will be launched in 2022. To define the program, we worked with external experts, including Verwey-Jonker Institute.

### Analysis

Our social functioning in relation to health deserves more attention and awareness. Because various literature studies show that social health is closely related to both physical and mental health. People with satisfying social connections live longer, (positively) healthier and happier lives.

However, as a result of the individualistic tendency in our society, social relationships and social support are under pressure, both in the known risk groups and in our society as a whole. Moreover, the importance of the social context in which we find ourselves is systematically underestimated, by citizens but especially in the provision of care and support. The dominant biomedical model gives little room to the social perspective and there is no infrastructure to effectively increase social health.

### Wicked problem

At the same time, the issue is complex and we note a lack of a clear vision of what is needed in policy to help realize the importance of people's social relationships on an effective scale and with impact. However, there is scientific evidence to support the hypothesis that social relationships have a positive impact on mental and physical health. In addition, we have the impression that there is a lack of support for securing these ideas, in part because the evidence is ambiguous. Finally, we believe that there are not enough proven concepts available to work with here in practice and that knowledge and action perspectives are lacking within the social domain but especially within the medical domain.



## Programs

#7 new program



### Decision-making

As a result, it is proposed to the board to carry out a three-year development program starting in 2022 with the aim of raising awareness, inspiring and building an infrastructure and foundation to increase social health in the Netherlands. This important theme suits us because we consider it a white spot within the health perspective in the Netherlands. The potential that we see is great and we believe that our efforts can add much to this unexplored playing field.

Driving change, improving (social) health  
Our role will be driving change by entering into dialogue, unlocking knowledge, tapping into energy, stimulating and connecting parties. In short, our role is to take the initiative to create a breeding ground for transition in the longer term.

This development program will: stimulate (potentially) successful initiatives that respond to social connection, demonstrate that a social perspective yields positive health gains and that the consumption of care can be reduced and/or used more effectively and generate broad support and publicity for this message.

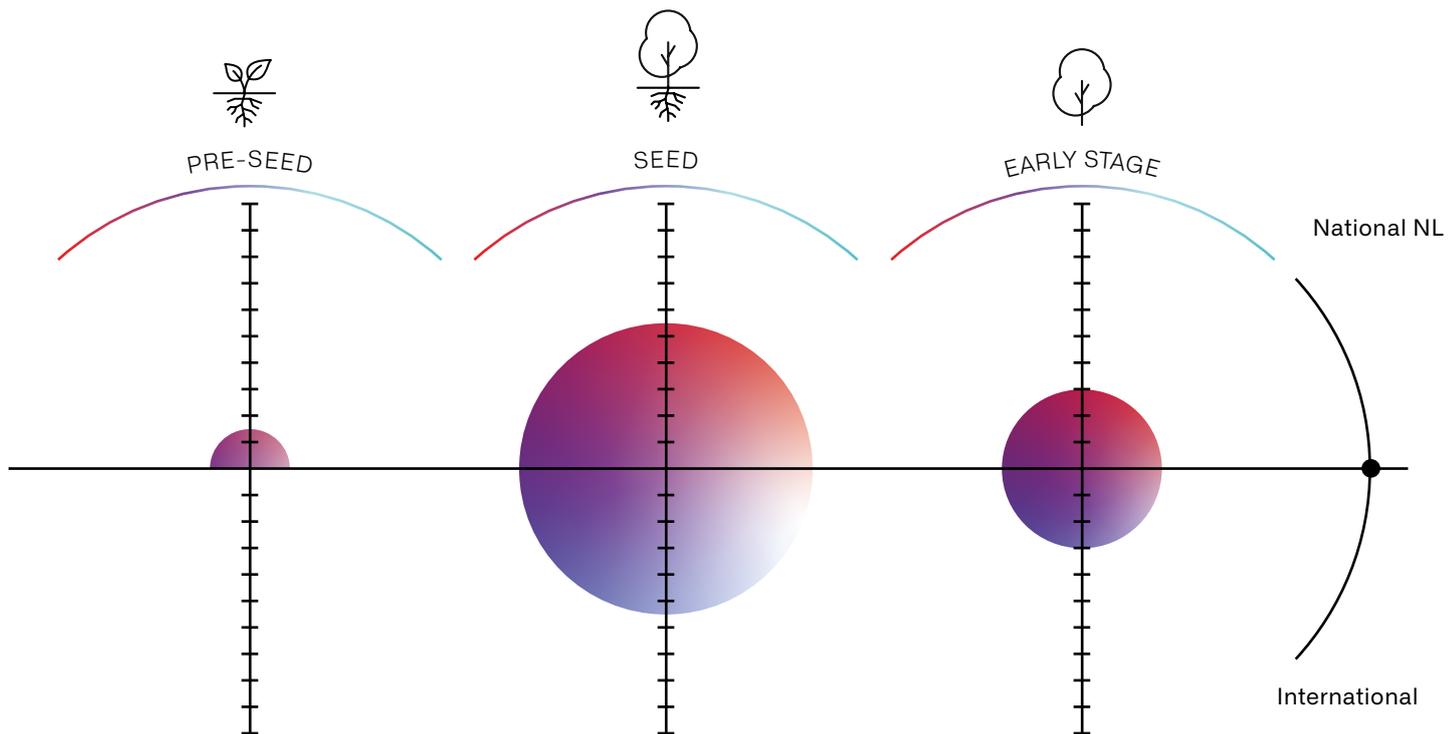
### Finger exercises

A number of exploratory projects were funded in the 2021, including with Join Us and Nutrition Lives.

The collaboration with Join Us involves the creation of a professional structure for equipping professionals on how to effectively combat loneliness among young people.

With Nutrition Lives, we are investigating whether and how awareness and action perspectives on social health can become a part of their lifestyle programs and what the effect is.

# Investments



- Innovation/product development
- Primarily NL
- 10 companies/funds

- Product development/ market entry
- National and international
- In NL via NxG II fund
- 10-12 companies/funds

- Market entry/market expansion
- National and international
- 5 companies/funds

Our investments are primarily on (pre-)seed impactful healthcare technology ventures that contribute to a healthy, active life and quadruple aim. Core focus areas include health activation, early screening and diagnostics, smart chronic care management and health systems. Early-stage investments are limited to follow on investment within the current portfolio or co-investments with strategic partners and funds. Generally, we are the first professional investor in a venture. Pre-seed investments are done through partners.

Noaber Ventures' portfolio includes 16 direct investments and 8 indirect (fund) investments. Through the fund-in-fund strategy, a total of 55 healthtech companies are supported.

Through Rockstart (29), Amino Collective (14), Blue Sparrows (5) and NLC (16), the majority of these companies are in the pre-seed phase.



## Investments

#1

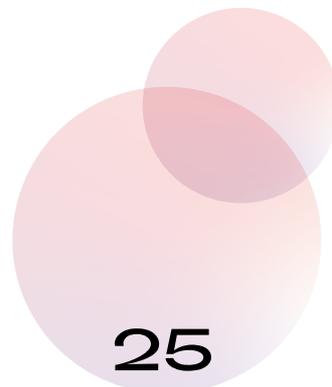
# Investment Advisory Committee



The role of the Investment Advisory Committee (IAC) is to build up a portfolio of Noaber Ventures investments based on the investment strategy set by the board. The main focus is on new (pre-)seed investments because we expect them to realize the greatest impact.

It concerns both Dutch companies and international companies. Companies within specified domains are actively approached on the basis of market analyses. In addition, we look at propositions that are put forward from

our network of investors and entrepreneurs who have worked with Noaber Ventures before. All companies are checked against the strategy and general criteria for investments.



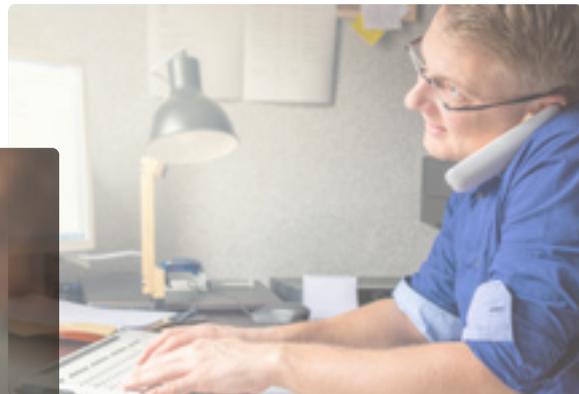
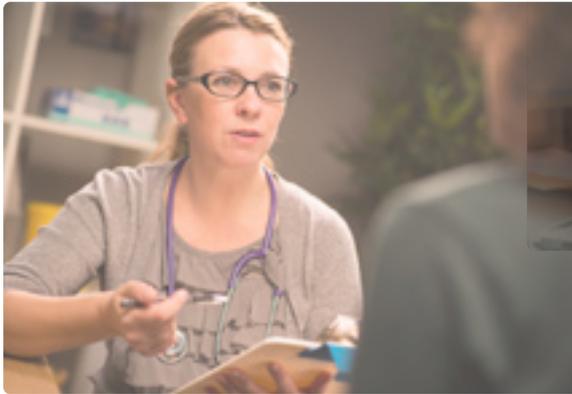


## Investments

#2 direct investment

# Buurtdokters

(Neighborhood Doctors)



General practitioners (GP's) have less and less time for the core task of being a doctor for their patients. Healthcare is changing and practices are under pressure, while appropriate GP care remains very important for patients. It is defined by access to a doctor in the neighborhood who knows the patients' lives and is available for the long term. Buurtdokters is a network for and by GP's. Together they work on their mission: easily accessible, long-term and appropriate GP care for everyone. This starts with a committed team and a

well-organized practice. Applying integrated solutions, overview is created and the GP is given time and flexibility, so that being a practice owner becomes manageable and attractive. The team is relieved, work processes optimized and, if necessary, IT systems adapted. Follow-up, modernization, training and guidance will be provided. Everything that is deployed is aimed at improving practice. And all this stems from a future-proof vision and in cooperation with care partners in the immediate vicinity.





## Investments

#3 direct investment

# Follow on investments

### Elsa (Sweden)

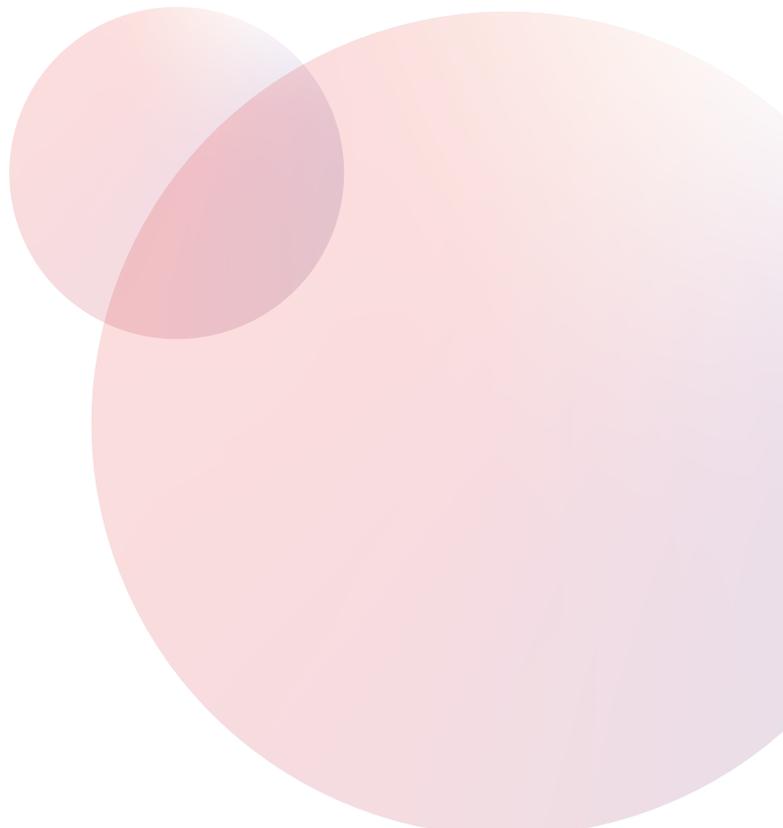
The Elsa Digital Companion Application is developed to support people diagnosed with Rheumatoid Arthritis to reach a new normal faster and live life to its fullest. Users can track and follow up on symptoms, habits and medications to better understand how these correlate. After setting up a personal plan, Elsa will guide the user through everyday life. With software-driven Cognitive Behavioral Therapy interventions we have designed health programs, endorsed by health-care professionals. The programs offer support with self-management techniques to better cope with the illness.

### Solve (Netherlands)

Solve's mission is to contribute to future-proof healthcare: accessible, personalized and affordable. Whether you're a patient, caregiver or care manager. Solve's solution is MediMapp, a digital platform, where patient and caregiver navigate along valuable, relevant, data- and care path driven information, in all phases of the care process. Before, during and after treatment. Solve offers a way of working that provides insight into care (processes). Insight unburdens everyone in the healthcare organization. Including the patient.

### M-sense (Germany)

With the headache diary of M-sense Migraine a patient can discover his individual headache pattern by documenting attacks, track medication intake and effects, and find out what triggers the migraine. Future migraine attacks are avoided with validated non-drug therapy methods derived from clinical practice. During an attack, the app provides exercises conceived to soothe pain. A doctor's report, developed by specialists, serves as the foundation of information for the medical consultation. It provides the patient's physician with a brief, concise overview attack and symptom history, enabling him or her to tailor their treatment.



#4 indirect investments

# NextGen II: first investments

NextGen Ventures is a Noaber initiative. There are two funds. In 2021 NextGen II did its first investments.

Manomatrix uses 3D technology to make braces that fits a hand perfectly. Not only the form is personalized, but the support and stiffness of the brace are also tailored to the life and needs of patients.

SmartLockr is a secure and easy-to-use data sharing solution. The company's solution can be integrated into widely used work environments, such as Outlook (plug-in and in the browser), Gmail and cell phones.



## ↳ Funds

#5 indirect investment

# NLC



NLC is a 'venture builder' that sets up new ventures based on technology innovations from a network of universities and university medical centers.

At the moment the focus is mainly on medtech. About 40 companies have now been started from NLC, with shares in the organization acquired. Noaber Ventures

gets the opportunity to continue investing in these companies. This helps us to increase the number of opportunities in the field of digital health.