



GLOBAL JOURNAL OF MEDICAL RESEARCH: K
INTERDISCIPLINARY
Volume 24 Issue 2 Version 1.0 Year 2024
Type: Double Blind Peer Reviewed International Research Journal
Publisher: Global Journals
Online ISSN: 2249-4618 & Print ISSN: 0975-5888

Transforming Healthcare: Integrating Positive Health Principles for Enhanced Wellbeing and Lifestyle Change

By Sandra van Hogen-Koster & Martine Veehof

Saxion University of Applied Sciences

Abstract- Aim: To provide insight into the importance of nursing and (para)medical competencies to act from Positive Health in order to contribute to greater health, well-being and a healthier lifestyle for patients.

Design: This position paper will describe the aim, the first results and the coming focus of the professorship of Positive Health, Lifestyle and leadership.

Methods: We used several methods, like depth interviews and focus groups with about 30 patients (most cardiology and rheumatology) and about 30 professionals (most nurses and (para)medics in cardiology and rheumatology), and a cardiologic patient journey to determine what is necessary for nurses and (para)medics to act from Positive Health. All studies were approved by the Institutional Review Board, and the attributes, benefits and uses of the studies were explained to all participants, and informed consent was obtained.

GJMR-K Classification: NMC Code: WB 310



Strictly as per the compliance and regulations of:



© 2024. Sandra van Hogen-Koster & Martine Veehof. This research/review article is distributed under the terms of the Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0). You must give appropriate credit to authors and reference this article if parts of the article are reproduced in any manner. Applicable licensing terms are at <https://creativecommons.org/licenses/by-nc-nd/4.0/>.

Transforming Healthcare: Integrating Positive Health Principles for Enhanced Wellbeing and Lifestyle Change

A Position Paper about the L.INT Professorship Positive Health, Lifestyle and Leadership

Sandra van Hogen-Koster ^α & Martine Veehof ^σ

Abstract- Aim: To provide insight into the importance of nursing and (para)medical competencies to act from Positive Health in order to contribute to greater health, well-being and a healthier lifestyle for patients.

Design: This position paper will describe the aim, the first results and the coming focus of the professorship of Positive Health, Lifestyle and leadership.

Methods: We used several methods, like depth interviews and focus groups with about 30 patients (most cardiology and rheumatology) and about 30 professionals (most nurses and (para)medics in cardiology and rheumatology), and a cardiologicpatient journey to determine what is necessary for nurses and (para)medics to act from Positive Health. All studies were approved by the Institutional Review Board, and the attributes, benefits and uses of the studies were explained to all participants, and informed consent was obtained.

Results: There is still too little attention for lifestyle and hardly for sustainable behavioural change. Communication and leadership competencies and multidisciplinary collaboration are essential in this.

Conclusion: Applying Positive Health requires a transformation of the healthcare system and the healthcare professionals themselves. More knowledge is needed about the competencies of nurses and (para)medics to act from Positive Health.

Implications for the Profession and/or Patient Care: A toolbox of tools will be created, based on practice-oriented research with ways to increase the competencies of healthcare professionals and to act more from Positive Health. By encouraging healthcare professionals to think and act differently based on Positive Health, we hope to promote patients' self-management and intrinsic motivation and thus contribute to a healthier lifestyle.

Impact: An unhealthy lifestyle can lead to various diseases. A positive lifestyle change can lead to the prevention, reduction or even disappearance of the disease. It is important that nurses and (para)medics pay attention to lifestyle from a

broad view of health, such as Positive Health. In the professorship we develop tools to increase the competencies of nurses and paramedics to act more from Positive Health and integrate lifestyle into daily care and treatment. And so towards greater health, well-being and a healthier lifestyle.

No Patient or Public Contribution

I. INTRODUCTION

In November 2021, the Lecturer Position at Institutes (L.INT) professorship was established by Saxion and Medical Spectrum Twente and as partners physiotherapy practice Pro-F and the Thoracic Centre Twente, with Sandra van Hogen-Koster as a professor. With this, the first Dutch professorship that focuses on the ideas of Positive Health has been launched. Huber et al. (2011) introduced a more dynamic concept of health valuing resilience 'as the ability to adapt and self-manage in the face of social, physical and emotional challenges' (1). Defining health as 'complete physical, mental and social well-being', such as the World Health Organization (WHO) that does is outdated, according to Huber. "If you stated health so rigidly, no one is ever healthy, she said. Everyone is not completely healthy sometimes, so that you should be treated for that. That leads to unnecessary and costly medicalization of healthcare" according to Huber. Positive Health was deliberately not described as a 'definition', but as a 'general concept' intending to be a characterization of a goal to work towards, being enhancement of resilience, overall health and well-being. This concept was further elaborated into Positive Health (PH), which comprises six dimensions: bodily functions, mental wellbeing, meaningfulness, quality of life, participation, and daily functioning(2). These dimensions are derived from the responses from patients and citizens on the question what they perceived to constitute health(2). Positive Health provides insight into what is important to people and often results in (behaviour)change; this desire for change is in turn regularly indirectly linked to a healthier lifestyle. The overarching aim of integrating PH into the healthcare system is to prioritize health over disease and initiate this transformation.

Corresponding Author α: Medical School Twente, Medisch Spectrum Twente, PO Box 50000, 7500 KA Enschede, Professor of Positive Health, Lifestyle and Leadership, School of Health, Research Group Smart Health, Saxion University of Applied Sciences, 7500 KA Enschede, The Netherlands. e-mail: s.koster@mst.nl

Author σ: Medical School Twente, Medisch Spectrum Twente, PO Box 50000, 7500 KA Enschede, The Netherlands.



Applying PH requires a transformation of the healthcare system and the healthcare professionals themselves. A toolbox of tools will be developed to increase the competencies of healthcare professionals to act more from PH. Where is the professorship now after 2 years, what are the first results and what is the focus for the upcoming 2 years?

This position paper describes the urgency of transforming Healthcare: Integrating Positive Health Principles for Enhanced Wellbeing and Lifestyle Change.

II. BACKGROUND

a) *Demographic Trends, Burden of Chronic Diseases, Importance of Lifestyle Factors*

Global demographics has increased rapidly over the last few centuries, with an increasing prevalence of an aging population and chronic diseases, resulting in additional pressure on healthcare worldwide (3–7), including those in the Netherlands (8,9). Chronic diseases nowadays have the highest disease burden worldwide, and the consequences have increased over the past two decades (7,10,11). Globally, approximately one in three of all adults suffer from multiple chronic conditions (7). It has become increasingly clear that the role of healthy behaviour or 'lifestyle' is of great importance in tackling chronic disease (12-17). Lifestyle can be defined as: 'behaviour for which a relationship with good health or with health problems has been established, which includes behaviours about diet, physical activity, sleep patterns, stress management, and social interactions (17). The relationship between lifestyle and health has become increasingly clear in recent years: unhealthy behaviour such as smoking, little exercise, an unhealthy diet and alcohol use is responsible for almost 20 percent of the disease burden (18). An unhealthy lifestyle can lead to various diseases, which are often treated with medication or surgery. Medication and hospital admissions can in turn lead to side effects/complications and increased health costs. A positive lifestyle change can lead to the prevention, reduction or even disappearance of the disease, such as with diabetes mellitus type 2 (19). It is clear that we must prevent illness and care as much as possible by focusing on health and prevention and the ability of people to take control (1,2,12-18).

b) *Introduction of Positive Health*

In light of these challenges Huber and colleagues presented in 2011, in collaboration with the Dutch Healthcare council and ZonMw (Dutch Organisation for Health Research and Development) a new paradigm on health(1) and the framework called: 'Positive Health' (PH) (2) like mentioned earlier in this position paper.

PH represents a fundamental shift in our thinking of health, moving beyond the traditional focus

on illness prevention and treatment, towards encompassing a broader view on health, that emphasises the resilience, self-direction and adaptability of people, in which the patient has an active position (1, 2). This approach focuses on health and healthy behaviour as a starting point instead of disease and illness (1, 2). PH can contribute to lifestyle change and the prevention of diseases. Stories in MST by lifestyle coaches who work from the ideas of Positive Health have shown that patients really appreciate the broad view of health. They feel more recognized as a person and become more reflective about their own health. For example, a man with diabetes and COPD initially seemed not motivated to work on his lifestyle. Through "the alternative dialogue" he gained more insight and developed intrinsic motivation to eat healthier. His goal was to be able to walk and cycle with his wife again. The lifestyle coach "do not give advice from "themselves, but respond to the patient's wishes. Listening attentively is an essential skill in this. A lot of attention is paid to this skill in the Positive Health" raining.

c) *L.INT Professorship*

The concept of PH requires a change not only from the system, but also from the healthcare professionals themselves. Really leaving control to the other person and focusing on health, instead of illness, and being more in line with what someone finds important. This requires other competencies and leadership. Working from PH can also contribute to experiencing more meaning and enjoyment in work; this is not so much the focus of the L.INT professorship, but an observation that we have made in recent months during focus group meetings and interviews with healthcare professionals. Focusing on meaning and, therefore, future-proofing from this L.INT professorship is important given the decrease in the number of healthcare professionals, fewer students choosing healthcare studies and an increasing number of healthcare professionals who (want to) leave healthcare.

III. PURPOSE OF THE PAPER

To realize the healthcare transformation, healthcare professionals will have to think and act differently. The aim of this paper is to provide insight into the importance of nursing and (para)medical competencies to act from PH in order to contribute to greater health, well-being and a healthier lifestyle for patients. This paper uses the first knowledge gained from the L.INT professorship to show why this is important and how it can be achieved.

IV. METHODS

We used several methods, like depth interviews and focus groups with patients and professionals, and a

patient journey to determine what is necessary for nurses and (para)medics to act from Positive Health.

Ethical Approval

All studies were approved by the Institutional Review Board, and the attributes, benefits and uses of the studies were explained to all participants, and informed consent was obtained.

V. DEFINITIONS AND SEMANTICS

As said, Machteld Huber, the founder of PH and the Institute for Positive Health (IPH), has developed a new approach to health in collaboration with (inter)national experts. The major difference with the 1948 WHO definition is in the emphasis on the possibility of being or becoming healthy, even in the case of illness. PH encompasses the breadth of human well-being, divided into six dimensions and is operationalized in a spider web model as a discussion tool (figure 1). These dimensions are derived from the responses from patients and citizens on the question what they perceived to constitute health (2). It is important that the patient determines his own course for a healthy and longer life.

VI. RESEARCH THEMES L.INT PROFESSORSHIP

To create focus within the L.INT professorship, the focus is on the following three themes:

1. Experiencing Positive Health and wishes for change
2. Positive Health approach in the hospital
3. Effects of applying Positive Health on the individual

See below for a more detailed explanation of these three themes.

1. *Experiencing Positive Health and Wishes for Change*

Before we want to implement interventions to increase health, well-being and a healthier lifestyle, it is important to perform a baseline measurement to determine what the current situation is. How do people experience their own PH, is there anything they want to change or give more attention to and what do they need for that? Because it is important from PH to first consider your own perceived health (20), the research takes place among both: healthcare professionals and patients. A healthcare professional can only take good care of others, if he first takes good care of himself. For this research, the conversation instrument "my positive health"(20) is used, whereby the alternative dialogue is initiated on the basis of the spider web.

2. *Positive Health Approach in the Hospital*

A gap analysis is carried out to provide insight into the current and required competencies of healthcare professionals who contribute to greater health, well-being and a healthier lifestyle and self-management of patients. Methods, such as a patient journey, a scoping review about skills to act from a Positive Health approach and Shared Decision-Making,

to dept-interviews and surveys among healthcare professionals, provide insight into the current and desired competencies of healthcare professionals. Interventions, such as interactive training with reflection moments, are then used to promote the competencies of healthcare professionals (from current to desired situation). A toolbox of tools will be developed to increase this competencies and to act more from PH. It will then be investigated whether the interventions contribute to increasing the competences of healthcare professionals to act from PH. Nowadays little attention is given to the specific requirements, skills or competencies that (future) healthcare professionals need to use the PH approach. Therefore we are currently conducting a review, to obtain an overview and comparison of current PH and SDM skills for healthcare professionals, to identify the skills needed to pursue a PH approach.

3. *Effects of Applying Positive Health on the Individual*

In theme 3 we investigate the effect of approaching PH on the individual. For example, we investigate the effect on lifestyle when a patient is approached from PH. In addition, we investigate what influence this approach has on the intrinsic motivation of patients to work on their own health and well-being. The outcome measures vary per research population. For example, quality of life is taken into account, but also vitality and grip strength.

VII. ANCHORING WITH OTHER THEMES/PROGRAMS

PH is an approach and not a "trick" or separate tool to use. PH can be applied in existing programs, such as Shared Decision Making and can strengthen the effect of these programs.

Positive Health and Shared Decision Making

With Shared Decision Making (SDM), patients work with a healthcare professional to find the treatment or care that suits him or her best. What suits best depends on what someone finds important. SDM takes place in one or more conversations. In it, the patient and the healthcare professional discuss all the options and what they mean for someone's life. PH can be of value in the first structured steps of SDM; especially when it comes to connecting the patient's perspective with the healthcare professional perspective in decision-making (21). SDM can also be applied when it comes to desired and sustainable lifestyle changes: do not lose weight because the doctor says so and it is good for you, but because you want to feel fitter and be able to play football with your grandson again. Or because you would like to pick up the grandchildren from school yourself, 500 meters away. Intrinsic motivation can be stimulated and become a sustainable pattern.

Positive Health, Sustainable Behavioural (Lifestyle) Change and Intrinsic Motivation

Lifestyle is an individual's way of life, in which six pillars influence physical and mental health: nutrition, exercise, interaction, substances, sleep and relaxation (17). Currently, healthcare professionals often provide information and patients are referred to websites to collect information online. These interventions have only limited effect (22). It is important to determine what a patient can and wants to do to achieve a healthier lifestyle and what the patient needs to achieve this (23); PH can be of added value in this. Intrinsic motivation is important for sustainable behavioural change. Knowledge is needed on how to positively influence lifestyle and research must be conducted into which interventions are effective (per patient). An instrument that is in line with PH and provides the patient with tools to determine the right course for a healthy lifestyle is the Lifestyle Wheel (figure 2). As with PH, self-management is central: the patient has the wheel in hands and can make adjustments when he or she sees fit (17). One of the healthcare professionals within the lifestyle portal emphasizes the importance of initially paying attention to what a patient considers important (personal goal). A healthier lifestyle can then emerge from there. For example, a patient with obesity indicated that he missed contact with his neighbour since COVID. His personal goal was not to lose weight, but to pay more attention to social contacts. By resuming contact with his neighbour, they went for coffee and walks together, which improved his condition. As a result, he also recognized the importance of resuming healthier eating habits, leading to some weight loss.

VIII. FIRST RESEARCH RESULTS

To act from PH not only leadership ("distributed", "shared" and "adaptive" leadership) is needed; it also requires other competencies, mainly focused on communication (23). Working from PH requires a different deployment of competencies from healthcare professionals. Leaving control with the other person and allowing choices to come from the other person is not self-evident; in addition to communication skills, this also requires leadership. A healthcare professional is often still trained to help someone else, to provide solutions and to use and transfer his or her expertise to the other person. Healthcare professionals provide a lot of (well-intentioned) advice that the patient does not always need. Practice shows that this does not always produce the desired effect when it comes to lifestyle changes. In April 2023, we conducted a cardiology patient journey, consisting of an in-depth interview with a patient and an additional focus group with 11 healthcare professionals. This patient journey showed that control still often lies with the healthcare

professional rather than with the patient. There is still too little attention for lifestyle and hardly any for sustainable behavioural change. The differences between healthcare professionals are large. To really achieve a transformation, everyone must be on the same page and providing feedback to each other in a positive way is essential. This does not necessarily require new competencies, but demands a different utilization of existing ones. Practice shows that this rarely happens. Communication competencies are essential in this. It is important that the patient feels trusted and that the healthcare professional listens carefully, without judging. This way you gain insight into what a patient really finds important. You can then connect to that.

In addition to communication and leadership, multidisciplinary collaboration is important. The connection with the general practitioner (GP) and healthcare professionals in the home situation is also important. A patient journey can contribute to strengthening multidisciplinary collaboration. The focus group itself provided valuable insights into everyone's role during the patient's journey. One of the participants of the patient journey stated afterwards: *"The patient journey was a great way to step away from one's own 'islands', to gain understanding for each other's perspective and to see why a process sometimes gets stuck"*.

Next to the patient journey, two focus groups were conducted (February 2023): one with patients (N=3) who visited the MST lifestyle portal and another with health care professionals (N=3) from this portal. From these focus groups, it became clear that the PH approach provides a broad and human-oriented perspective that gives the patient valuable insights. For example, one patient indicated: *"It is not my illness, but I as a person that is central, which is a relief"*. The 'alternative dialogue' ensures that the patient also takes a broader view and sometimes comes to different insights. One patient, for example, thought he wanted to work on the physical dimension, but it turned out that he actually wanted to work more on finding meaning: *"The dialogue gave me insight, it surprised me in a positive way"*.

Based on the patient journey and the focus groups important points regarding lifestyle emerged:

- Create awareness about the benefits of self-management, motivate and encourage self-management;
- Sustainable behavioural change (setting personal goals and paying attention to these in all disciplines);
- Involving social network (for example regarding adjustment of diet and exercise);
- Personalized approach;
- Use of (personalized) technology based on personal goals.

IX. PATIENT JOURNEY METHODOLOGY

During a patient journey from PH, when asking about patients' experiences, the emphasis is on experiencing self-management. To what extent can someone make own choices during the journey? To what extent was attention paid to one's own wishes and needs and what is important to someone? A patient journey based on PH with a focus on health, well-being and self-management could be an innovative intervention (one of the tools in the toolbox) to provide insight into points for improvement and to allow improvements to be made in patient care, with the needs of the patient as a starting point. It has proven to be a useful instrument for mapping current and desired care and promoting the PH approach. The patient journey is an instrument that can be used to map the patient's journey within a care process (24). There are different methods to conduct a patient journey; standardization in this would be desirable (24). No studies have yet been conducted into the effects/effectiveness of a patient journey (25). The effectiveness of the patient journey can also be taken into account in a follow-up study. Finally, it can be investigated to what extent the patient journey contributes to promoting the competencies of healthcare professionals to work from PH and contribute to greater health, well-being and a healthier lifestyle.

The cardiologic patient journey of April 2023 was divided into three phases: (1) first complaint(s) (2) admission to hospital and (3) situation at home after discharge. The following steps were completed in this journey:

1. Interview with the patient to find out what the experiences are during "the journey", where self-management, lifestyle and PH are central (including transcription, coding and selection of 3 video fragments of the interview);
2. In conversation with all healthcare professionals involved in the patient journey (healthcare professionals in the hospital and at the GP), based on the results of the patient interview and selected video fragments, and jointly formulating points for improvement (focus group).

A patient journey is a challenge when it comes to the commitment it requires from professionals, as well as the differences between patients. Nevertheless, it is extremely educational to really look from the patient's perspective and to examine your own and each other's actions during the journey. The patient journey has made it clear that more attention is needed for lifestyle, self-management and prevention. Technological support can contribute to lifestyle change. More communication is required between healthcare professionals and organizations. In general, the patient journey created interdisciplinary connections and the patient journey itself raised awareness for healthcare

professionals to act more from PH. This makes the patient journey one of the tools in the toolbox for healthcare professionals to act more from PH.

X. CONCLUSION

The aim of the L.INT research program is to achieve greater health, well-being and a healthier lifestyle from the perspective of PH. To achieve this, not only a transformation in the system is required, but also a transformation of the healthcare professional. Promoting patient self-management and intrinsic motivation is hereby very important and requires different skills from professionals. Within the professorship, a toolbox of tools, such as training on listening skills, use of lifestyle tools, patient journeys, will be created, based on practice-oriented research with ways to increase the competencies of healthcare professionals and to act more from PH. We use this toolbox in the education of existing healthcare professionals and in training of students within the healthcare academy of Saxion University of Applied Sciences. We have included a lesson about the patient journey in our nurse specialist training of Saxion. This lesson provides insight into different work settings and disciplines and can thus contribute to a broader view of health. The first experiences with this lesson are very positive. Students found this very educational and plan to apply it in their own practice. The patient journey is one of the tools included in the toolbox because it gives healthcare professionals more awareness to act from PH with more attention to lifestyle and self-management. In the coming years we will conduct more patient journeys, among others within pulmonary medicine and gastroenterology, and further research into other tools for the toolbox. We also want to develop a training module on PH that shows scenarios in which PH is acted upon and where it is not, and what the effect of this is on the patient. By encouraging healthcare professionals to think and act differently based on PH, we hope to promote patients' self-management and intrinsic motivation and thus contribute to a healthier lifestyle.

ACKNOWLEDGEMENT

All the authors wish to thank all of the participants, and Carlinde Schoonen for the support and encouragement in the dissemination of this position paper.

Conflict of Interest

None of the authors have a conflict of interest to disclose.

REFERENCES RÉFÉRENCES REFERENCIAS

1. Huber M, Knottnerus A, Green L, Van Der Horst H, Jadad A, Kromhout D, et al. How should we define health? *BMJ* (Online). 2011;343(7817):1–3.



2. Huber M, van Vliet M, Giezenberg M, Winkens B, Heerkens Y, Dagnelie PC, et al. Towards a “patient-centred” operationalisation of the new dynamic concept of health: a mixed methods study. *BMJ Open*. 2016 Jan 12;6(1):e010091.
3. World Health Organization. Ageing and health [Internet]. 2022 [cited 2023 Sep 12]. Available from: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health>
4. World Health Organization. Noncommunicable diseases. 2022.
5. James SL, Abate D, Abate KH. Global, regional, and national incidence, prevalence, and years lived with disability for 354 diseases and injuries for 195 countries and territories, 1990–2017: a systematic analysis for the Global Burden of Disease Study 2017. *Lancet*. 2018; 392 (10159): 1859–922.
6. GBD 2019 Disease and Injuries Collaborators. Global burden of 369 diseases and injuries in 204 countries and territories, 1990–2019: a systematic analysis for the Global Burden of Disease Study 2019. *Lancet*. 2020; 396 (10258): 1204–22.
7. Hajat C, Stein E. The global burden of multiple chronic conditions: A narrative review. *Prev Med reports*. 2018 Dec; 12: 284–93.
8. Hilderink HBM, Plasmans MHD, Poos MJCR, Eysink PED, Gijsen R. Dutch DALYs, current and future burden of disease in the Netherlands. *Arch Public Health*. 2020; 78: 85.
9. OECD, European Observatory on Health Systems and Policies. State of Health in the EU, The Netherlands, Country Health Profile 2021 [Internet]. 2021. Available from: https://health.ec.europa.eu/system/files/2021-12/2021_chp_nl_english.pdf
10. Hoeymans N, van Loon J, Achterberg P, Den B, MM H, Den H, et al. A healthier Netherlands. Key findings from the Dutch 2014 Public Health Status and Foresight Report. 2014.
11. Johansen F, Loorbach D, Stoopendaal A. Exploring a transition in Dutch healthcare. *J Health Organ Manag*. 2018 Nov 1; 32.
12. Lemmens L, Beijer M, de Bekker A, de Klijne A. Het toepassen van brede gezondheidsconcepten: inspirerend en uitdagend voor de praktijk. Ervaringen uit drie regio's [Internet]. 2022. Available from: <https://www.rivm.nl/publicaties/toepassen-van-brede-gezondheidsconcepten-inspirerend-en-uitdagend-voor-praktijk>
13. Beaglehole R, Bonita R, Horton R, Adams C, Alleyne G, Asaria P, et al. Priority actions for the non-communicable disease crisis. *Lancet (London, England)*. 2011 Apr; 377 (9775): 1438–47.
14. Kushner RF, Sorensen KW. Lifestyle medicine: the future of chronic disease management. *Curr Opin Endocrinol Diabetes Obes*. 2013 Oct; 20 (5): 389–95.
15. Loef M, Walach H. The combined effects of healthy lifestyle behaviors on all cause mortality: A systematic review and meta-analysis. *Prev Med (Baltim)* [Internet]. 2012; 55 (3): 163–70. Available from: <https://www.sciencedirect.com/science/article/pii/S0091743512002666>
16. RIVM. Leefstijlmonitor [Internet]. Available from: <https://www.rivm.nl/leefstijlmonitor>
17. Arts & leefstijl. Arts & leefstijl: over ons [Internet]. n. d. [cited 2023 Oct 23]. Available from: <https://www.artsenleefstijl.nl/over-ons>
18. RIVM. (z.d.). Gezonde leefstijl. Geraadpleegd 15 december 2023, van <https://www.rivm.nl/gezonde-leefstijl>
19. van Ommen B, Wopereis S, van Empelen P, van Keulen HM, Otten W, Kasteleyn M, Molema JJW, de Hoogh IM, Chavannes NH, Numans ME, Evers AWM, Pijl H. From Diabetes Care to Diabetes Cure-The Integration of Systems Biology, eHealth, and Behavioral Change. *Front Endocrinol (Lausanne)*. 2018 Jan 22; 8: 381. doi: 10.3389/fendo. 2017.00381. PMID: 29403436; PMCID: PMC5786854.
20. IPH. Geraadpleegd 4 februari 2024. <https://www.iph.nl/>
21. Vilans. Geraadpleegd 15 december 2023. <https://www.vilans.nl/actueel/verhalen/positieve-gezondheid-en-samen-beslissen-combineren>
22. Hallsworth, K., Dombrowski, S.U., McPherson, S., et. al (2019). Using the theoretical domains framework to identify barriers and enabling factors to implementation of guidance for the diagnosis and management of nonalcoholic fatty liver disease: a qualitative study. *Translational behavioral medicine*
23. Koster, S. (2021). LINT aanvraag Leiderschap in Leefstijl: Een Positieve Gezondheidsbenadering
24. Davies, E. L., Bulto, L. N., Walsh, A., Pollock, D., Langton, V. L., Laing, R. E., Graham, A., Arnold-Chamney, M., & Kelly, J. (2022). Reporting and conducting patient journey mapping research in healthcare: A scoping review. *JAN, Leading Global Nursing Research*; 79; (1); 83-100 DOI: <https://doi.org/10.1111/jan.15479>.
25. Van Schalkwijk, D.L., Widdershoven, J.W.M.G., Elias-Smale, S., MD, Hartzema-Meijer, M., Den Oudsten, B. L., & Slatman, J. (2022). ShareHeart: A patient journey map of patients with ischemia and non-obstructive coronary artery disease based on qualitative research. *Journal of Clinical Nursing*. 32; (13-14); 3434-3444. <https://doi.org/10.1111/jocn.16409>.