



eHealth-monitor

Together we can do it!

eHealth-monitor 2019

eHealth is an indispensable part of healthcare

The eHealth-monitor has been measuring the availability and use of eHealth in the Netherlands since 2013. Its reports over the years illustrate the developments in the area of eHealth. From experimental novelties in healthcare - *about* and later *with* the patient - to the increasingly targeted integration of eHealth in the patient care process.

Initially, eHealth was primarily thought of in terms of digitalisation: converting existing information and regular processes into digital format.

Healthcare providers were especially enthusiastic about digitalisation efforts that supported the primary care process and did not get in the way of that process. Today in 2019, healthcare providers are very much aware that eHealth can be used to provide smarter, better patient care, especially if the applications are tailored to the needs of the end users. This requires a digital transformation in which the digital possibilities and the healthcare processes are aligned with each other. The technology needs to be both user friendly and compatible with patient care processes *within* and *between* healthcare institutions. To make optimal use of eHealth, patient care processes need to be 'redesigned' and/or tasks need to be assigned differently.

Care partners and the government recognise the need for a transformation to 'the right care at the right time

with the right information in the right place' in programmes and general agreements. Increasing workload, staff shortages and high administrative burden are additional incentives for accelerating the process towards smart, targeted, digitally supported healthcare. A sense of urgency has developed, which has contributed to making eHealth an indispensable part of healthcare.

The objectives of Minister Schippers

In 2014, the eHealth-monitor started monitoring the objectives of then-Minister of Health, Welfare and Sport (VWS), Edith Schippers. This eHealth-monitor explicitly focuses on the realisation of these objectives.

The first objective of the Ministry of VWS concerns the digital release of medical data to the patient: 'online access'. Due in part to various incentive programmes, there has been an increase on the supply side over the course of the years. However, only a small percentage of healthcare users and people with a chronic condition are aware of the options for online access and the level of online engagement remains low.

The second objective of Ministry of VWS concerns 'self-monitoring and telemonitoring'. Today in 2019, four out of ten patients with a chronic condition are self-monitoring health values. In addition, healthcare users are increasingly keeping track of their digital

health data themselves, via automated processes or otherwise. Medical specialists are also saying that the use of telemonitoring is on the rise. This is not the case for general practitioners and elderly care nurses. Self-monitoring, telemonitoring as well as apps and websites enable patients to be more self-sufficient, they are convenient and they improve the quality of patient care.

The third objective of Ministry of VWS concerns 'telemedicine and home automation'. The purpose of these is to enable people to live independently and safely and stay in their own homes longer. Analyses show that the growth in the availability of video conferencing we have seen over the past few years has not persisted and that user levels remain low. There has been an increase, however, in the use of alternative applications that may help people to live independently and safely and stay in their own homes longer. The availability of consultations via app or email is on the rise as well. This gives healthcare providers more options for digital contact.

Create the right conditions

This issue of the monitor shows that the use of online access, video conferencing, apps, telemonitoring and other IT applications can be improved by embedding these applications more effectively in the (integrated) healthcare processes. This requires efficient ICT systems with good compatibility, and the ability to exchange medical data between institutions, both regionally and

beyond is a precondition. However, the difference in availability and (potential) use also indicates that there is not enough awareness yet in the area of patient care about the possibilities offered by eHealth. It is important to keep working on education, communication, training and implementation to make eHealth an effective tool for providing 'the right care at the right time with the right information in the right place'.

Conclusion

This issue of the monitor shows that healthcare providers are predominantly enthusiastic about eHealth. However, the supply still exceeds demand. This is true for both healthcare providers and healthcare users. Too often, healthcare providers still notice that the technology is not always as effective as it could be. They also see that eHealth is not always embedded correctly in the healthcare practice. In those cases, eHealth actually results in more work rather than less. The enthusiasm of healthcare providers for eHealth is valuable. It is important for stakeholders to take practical steps together to further embed eHealth in healthcare. This means: working together to find ways to integrate eHealth in the healthcare practice and finding solutions for existing barriers.

Nictiz and Nivel have been publishing the annual eHealth-monitor since 2013 at the request of the Ministry of Health, Welfare and Sport (VWS). The monitor describes the current state of affairs with regard to eHealth in the Netherlands. The question addressed in the eHealth-monitor is: What developments have there been in the use of eHealth in the Netherlands? This question is explored in more detail in the following sub-questions:

1. To what extent do healthcare users and, more specifically, people with a chronic condition and healthcare providers, have access to eHealth applications?
2. To what extent do they take advantage of the eHealth applications that are available to them?
3. What developments have there been over time in terms of the availability and use of eHealth?
4. What effects do healthcare providers and healthcare users experience/expect from the use of eHealth applications?
5. To what extent do healthcare users and healthcare providers experience problems in healthcare? (in 2019)
6. To what extent can eHealth contribute to alleviating these problems? (in 2019)
7. To what extent can eHealth applications help healthcare users gain more insight into their own health? (in 2019)

Themes

This eHealth-monitor focuses specifically on the theme 'Necessity and added value' in addition to the familiar themes from previous issues of the eHealth-monitor. The theme 'Self-management and online treatment' has been changed this year to 'Self-management and telemonitoring'. And the new theme 'Online access and contact' replaces the old themes 'Online access to medical data' and 'Ease and service for healthcare users'. Within each theme, the most important results regarding the availability and use of eHealth applications are presented. Where relevant, the results for different disciplines are compared. The five themes are described as follows:

1. Necessity and added value

Through the years, we have become more aware that a sense of urgency, an understanding of the added value of eHealth, plus the ability and willingness to change processes tend to be the aspects that promote the use of eHealth.

2. Online access and contact

This theme explores the availability and use of online access to medical data. In addition, this theme also focuses on the different forms of online contact and communication between healthcare users and healthcare providers. For example, we take a look at making appointments online and contacting healthcare providers via digital channels to ask questions (e-consult).

3. Self-management and telemonitoring

This theme comprises applications in the area of illness and health that can be used by healthcare users themselves, in their own environment. We also look at the usage, experiences and expectations of healthcare users and healthcare providers with regard to telemonitoring.

4. Remote assistance and support

This theme addresses the use of eHealth applications for remote assistance for healthcare users at home, in hospitals or in long-term care facilities. Examples include video conferencing, apps, monitoring technology, automation.

5. Electronic data exchange and communication between healthcare providers.

This theme deals with the use of electronic patient records by healthcare providers and the electronic communication between healthcare providers within the context of the transfer and coordination of patient care.

Research method

The 2019 eHealth-monitor research was conducted in the spring of 2019 by means of questionnaires distributed among representative groups of healthcare professionals and healthcare users. These groups are:

1. Healthcare users 18 years and older
2. People with a chronic condition: individuals 15 years or older who live independently and have a somatic disease or long-term physical disability.
3. Nurses (nurses, practice nurses and care providers) in general practices, hospitals and elderly care facilities.
4. General practitioners
5. Medical specialists

Details about the research method and the representativeness of the research population are provided in Annex A.

Overview

This 2019 monitor includes a brief report with the most important results. More information and the interpretation of the results are provided in the in-depth discussions for each theme.

The Table Annex with this report presents the research results for each theme. Annex B also provides an explanation of the definitions that are used.

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Seven years of eHealth-monitor: from focus on technology to impact on healthcare

Seven years after the publication of the first eHealth-monitor, we're starting to get a picture of the developments in the area of digital patient care (Box 1). For example, the eHealth-monitor of 2013 revealed that doctors and patients in the Netherlands use eHealth applications a lot compared to other countries. At the same time, eHealth was still in the experimental phase, characterised by poor integration of eHealth in healthcare¹.

In 2014 we reported that further integration of eHealth in the primary care process can be complicated. The idea was that eHealth should not interfere too much with the primary care process².

The monitor of 2015 provided insight into the perspective of the healthcare user: what were the problems they were experiencing in healthcare and how might eHealth be used to solve those problems?³. In 2016 the emphasis was on the organisational and implementational aspects of eHealth, in order to start working on those factors that could promote the use of eHealth.⁴.

In 2017 the conclusion was that the implementation of eHealth needed to be a targeted effort. In other words, making intentional choices with regard to the 'why', and 'for whom' a particular eHealth application would be useful⁵.

The 2018 monitor showed that some eHealth innovations are adopted more smoothly and more

quickly than others, and it explained why⁶. This issue of the monitor shows that the majority of healthcare providers are enthusiastic about IT applications in healthcare and want to work with eHealth. eHealth is becoming an increasingly indispensable part of healthcare. This monitor shows that some eHealth applications are used more frequently, while the use of other applications remains the same or is decreasing. Healthcare providers are still noticing in too many cases that the technology is not always as effective as it could be. They also notice that eHealth is not always embedded correctly in the healthcare practice. Rather than lightening the workload, eHealth actually increases the workload in those cases. The enthusiasm of healthcare providers is encouraging. It is important for stakeholders to take practical steps together to further embed eHealth in healthcare. This means: working together to find ways to integrate eHealth in the healthcare practice and finding solutions for existing barriers.

This 2019 eHealth-monitor specifically focuses on the realisation of the eHealth objectives formulated by Minister Schippers in 2014. These objectives focused on:

1. online access to medical data,
2. self-monitoring and data monitoring, and
3. telemedicine and home automation (Box 2).

This main document 'In a nutshell' contains the most important results, which are explained in further detail in five in-depth theme discussions.

Box 1 eHealth and the eHealth-monitor

eHealth is defined in the eHealth-monitor as the application of digital information and digital communication to support and/or improve health and healthcare. The eHealth-monitor is an annual research project conducted by Nictiz and Nivel on the availability and use of eHealth in the Netherlands. This research also looks at incentives, obstacles, effects and developments over time.

In this way the eHealth-monitor hopes to contribute to the sustainable, targeted use of eHealth.

The results of the 2019 eHealth-monitor are based on questionnaires completed by 653 members of the Dutch Health Care Consumer Panel, 2853 members of the Dutch National Panel for Patients with Chronic Diseases and Disabilities, 649 nurses and 498 physicians (Annex A).

Box 2 eHealth policy

The VWS objectives for eHealth took effect in 2014. These were focused on 1) online access to medical data, 2) self-monitoring and data monitoring and 3) telemedicine and home automation. Over the next few years VWS issued a set of measures to further stimulate the smart application of healthcare technology to healthcare.⁷⁻¹³. These objectives further encouraged the positive and very necessary development of 'the right care at the right time with the right information in the right place'. The scaling up of innovative applications of healthcare technology was anchored in general agreements and programmes. This was supported by a wide range of activities such as efforts

to increase the digital skills of healthcare professionals and patients, and awareness campaigns. Increasing numbers of different technologies were implemented and scaled up by healthcare providers. More and more health insurers are also offering multi-year contracts to assist with the digital transformation. The Letter to Parliament "Progress Report on Innovation & Healthcare Renewal" (19 June 2019)¹⁴ from VWS concludes that healthcare providers and VWS will have to make a concerted effort during the next few years to keep the momentum going and further stimulate this innovative care.

eHealth is an indispensable part of healthcare

The reports published by the eHealth-monitor over the years illustrate the development of the use of eHealth in healthcare: From experimental novelties - about and later with the patient - to increasingly targeted integration of eHealth in the patient care process. Initially, eHealth was primarily thought of in terms of digitalisation: converting existing information and regular processes into digital format. Healthcare providers were especially enthusiastic about digitalisation efforts that supported the primary patient care process and did not get in the way of this process. Today in 2019, healthcare providers are very much aware that eHealth can be used to provide smarter, better patient care, especially if the applications are tailored to the needs of the end users. This requires a

digital transformation in which the healthcare processes and the digital possibilities are aligned with each other. The technology needs to be both user friendly and compatible with patient care processes within and between healthcare institutions. To make optimal use of eHealth, patient care processes need to be 'redesigned' and/or tasks need to be assigned differently. Care partners and the government recognise the need for a transformation to 'the right care at the right time with the right information in the right place' in programmes and general agreements (Box 2). Increasing workload, staff shortages and high administrative burden are additional incentives for accelerating the process towards smart, targeted, digitally supported healthcare. A sense of urgency has developed, which has contributed to making eHealth an indispensable part of healthcare¹⁰.



Acknowledgements

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The English version of this research is also available as an infographic with a snapshot of the results.

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