

# eHealth-monitor



## Online access and contact

Theme discussion 2  
eHealth-monitor 2019

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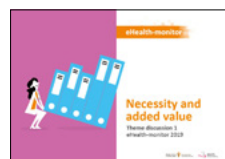
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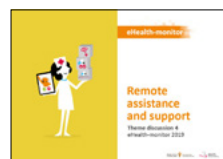
See also the other online theme discussions:



Necessity and added value



Self-management and telemonitoring

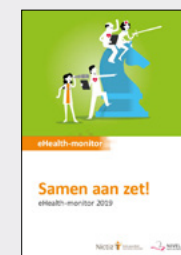


Remote assistance and support



Electronic data exchange and communication between healthcare providers

This theme discussion is part of the report [eHealth-monitor 2019](#). It describes the use of and experiences with IT applications with regard to illness and health that can be used by healthcare users themselves in their own environment. The most important findings and possible follow-up steps are listed at the start of this theme discussion. This is followed by a more detailed description of the research results. The text refers to tables that are provided in the [tables annex](#).



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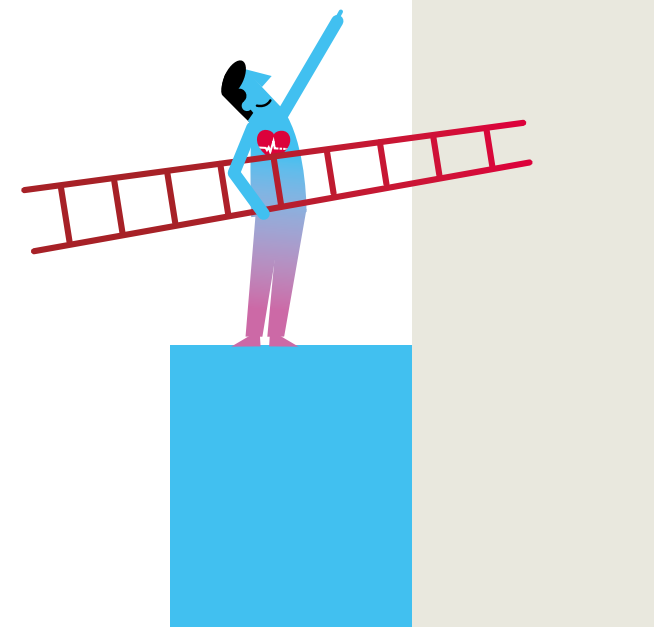


Tables Annex eHealth-monitor 2019

# Online access and contact

Healthcare providers almost always manage their patients' medical data in digital format<sup>1,2</sup>. Healthcare users are increasingly given the option of accessing these data remotely via digital patient records/personal health environment (PHE). Online access to personal health data has many advantages for healthcare users, healthcare providers and also for the interaction between them. Online access allows healthcare users to be more involved in their health and healthcare, and it helps them to be better prepared for consultations with the healthcare provider<sup>3</sup>. Online access can also be used to support a joint decision-making process with regard to healthcare and treatment – provided it is done properly.

Effective 1 July 2020, every Dutch citizen has the right to access their medical data electronically or to be provided with an electronic copy. Exceptions to this are the personal work notes of the healthcare provider and data pertaining to other people<sup>4,5</sup>. A prerequisite for electronic access is a digital infrastructure that makes it possible for information to 'follow' the patient from one healthcare provider to the next<sup>6</sup>. To this end, the government has initiated various acceleration programmes to promote improved information exchange between patients and professionals in hospitals, independent treatment centres, mental healthcare (VIPPP), long-term care (InZicht), obstetrics, (BabyConnect) and general practice (OPEN). The MedMij programme was designed to facilitate the secure, user-friendly and future-proof exchange of digital health data between healthcare users and healthcare providers.



# Discussion of the most important findings

## The objective of online access

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. For the theme 'online access' we looked at the extent to which this objective (**Box 2.1**) has been achieved by analysing the availability of online access as reported by healthcare providers. We also investigated to what extent online access is used by healthcare users and people with a chronic condition.

### Box 2.1 Objectives for online access

"80 percent of the people with a chronic condition will have direct access within five years to certain medical data, including medication information, vital signs and test results, and can use those if they wish in mobile apps or internet applications. For the other groups this is 40 percent.

As a result, people will be more aware of their own health, and errors in health provider records will be detected sooner<sup>7</sup>".

## Online access is rapidly gaining ground but usage is still below target levels

Compared to previous years, more healthcare providers indicate that they offer patients online access to their medical records. Nevertheless, the availability and usage are still below the target levels for online access. The actual availability of patient portals offered by hospitals is more than 80 percent ([www.hoeonlineisjouwziekenhuis.nl](http://www.hoeonlineisjouwziekenhuis.nl)). Six out of ten medical specialists indicate that they offer online access to the patient's 'diagnoses' and 'prescribed medications'. Among general practitioners this is lower at 22 percent. The user level of online access by healthcare users and the chronically ill is still low as well: less than 10 percent of the healthcare users and about 15 percent of people with a chronic condition indicate that they accessed their medical data online during the past year. One of the reasons for the lower usage by healthcare users is that they primarily check their data online when they absolutely need those data for their disease or condition<sup>3</sup>.

## Benefits of online access

Healthcare providers see the benefits of online access. Yet a quarter of the medical specialists and four out of ten general practitioners consider online access 'undesirable'. For example, they want to be able to add comments to the EPR that cannot be communicated directly to the patient but are important for themselves or colleagues. Online access also requires a different style of writing, because the information needs to be understandable for patients as well. However, these disadvantages are not true disadvantages because all EPR systems give the provider the option to add comments that can be hidden from the patient. Healthcare providers and patients need to be educated about this to promote online access.

A notable finding is that almost all general practitioners recommend websites with health information such as [Thuisarts.nl](http://Thuisarts.nl) or 'Moet ik naar de dokter' to patients. The visitor count for [Thuisarts.nl](http://Thuisarts.nl) is currently around 130,000 a day. Research has shown that the use of [Thuisarts.nl](http://Thuisarts.nl) leads to a reduction in healthcare use<sup>8</sup>. The patient portal, on the other hand, is not recommended as often: less than a third of the doctors did so.

Chronically ill respondents again expressed an interest in online access in 2019. More than one third of these respondents did not have online access to their own medical data from their general practitioner or the hospital but would like to have access. Their main expectations are that online access will give them a better overview of the care they have received and that it will be easier for them to check their medical records. They also expect that online access will allow them to be more actively involved in their health or their treatment and that it will give them a better understanding of their health or treatment.

### **Availability and use of online services is on the rise**

The online convenience and contact services offered most often by general practitioners are the option to request repeat prescriptions (82 percent), followed by the option to ask a medical question via secure email, portal or app (68 percent). This is true for medical specialists as well, although the percentages for this group are lower (33 and 44 percent). Healthcare users are also increasingly using the internet for requesting repeat prescriptions (19 percent) and making an appointment (12 percent).

### **Promote the use of online access and contact**

Targeted experience is what is needed to help all parties involved understand the added value of online access and online contact. Hospitals can share their previous experiences with the implementation of online access; see for example the handbook 'Online inzage Hoe regelen we dat?! [Online access How do we do that?!]<sup>9</sup>. One way to promote the purposeful, targeted use of online access is to emphasise the added value for both healthcare users and healthcare providers. Another way to add value would be to supplement patient records with links to reliable, patient-oriented information and to specify more clearly who patients can contact to get answers to their questions.

Healthcare providers indicate that online access and contact gives patients more insight (see also Theme Discussion [Self-management and telemonitoring](#)). For healthcare users, it's convenient to have all the relevant information available in one place. It can also be helpful for healthcare providers to make arrangements with the patient about reviewing the patient record to prepare for a consultation or visit. For example, have patients check the list of prescribed medications, because doctors indicate that inadequate data exchange with regard to medication is a common issue (see also Theme Discussion [Electronic data exchange and communication](#)). Proactively checking

their own medications enables patients to detect possible errors. Healthcare providers should keep mind that this may not be feasible for every patient, however. A 2015 pilot study on medication safety revealed that 13 percent of the portal users reported inaccuracies in the list of medications, for example because they were no longer taking the medication, a new medication had been added or because the dosage of the medication had been changed<sup>10</sup>.

In addition to promoting the use of online access, it's also very important to offer assistance to new users who want to access their medical record online. Healthcare providers need to take time to explain the process to users, or hire third parties to do this. This time investment is a prerequisite for enjoying the long-term benefits of online access. It also means that some thought needs to be given to an effective division of responsibilities. Nurses can play a leading role in this process. The 2018 eHealth-monitor showed that healthcare users and nurses all thought that nurses are in a logical position to assist patients with the uses of online access. However, nurses should be given the time and possibility to do this.

### Purposeful implementation of online services and contact requires thorough preparation and organisation

eHealth will not generate added value until the technology works properly and the applications are optimally integrated in the patient care processes, with the right care task in the right place (see also [Theme Discussion Necessity and added value](#)). It's obvious that the possibilities of online services and contact – such as requesting repeat prescriptions, making appointments online and e-consultations – will not have added value until they are implemented to replace regular services. However, this will require adjustments in patient care and work processes. Good organisation and preparation are prerequisites as well<sup>11</sup>.

### Possible follow-up steps

- In IT applications for online access, also provide links to websites with reliable, patient-oriented information such as Thuisarts.nl, Kijkwijzer and websites of patient organisations.
- Use the positive experiences of healthcare providers with online access by showcasing them in publicity campaigns. Spend time on online access and concrete IT applications in regular professional development training courses for healthcare providers so they can gain experience.
- Healthcare providers are encouraged to make arrangements with patients about using online access to prepare for consultations. Focus on a concrete goal that has added value for all parties involved, such as verifying the list of medications for example.
- Assign responsibilities and divide the tasks with regard to online access. Allocate time and money to inform and assist healthcare users. Nurses can play a leading role in this process.

### Box 2.2 Good examples

- Healthcare providers at Lentis, a mental healthcare facility, discovered several factors that affect the successful implementation of online access, such as the position of the project leader and the attitude of management towards the implementation. Communication about the implementation, the digital skills of the users and managing the expectations of all parties involved are important as well, as are the (reliance on) technology and suppliers.
- Jeroen Bosch Hospital involved patients in the development of their portal by giving them online access at an early stage. In response to the patient feedback, they opted for a different layout to present the information.
- St Jansdal Hospital in Harderwijk created a digital doctors platform. This led to the appointment of online access ambassadors. The hospital supports the mission of these so-called 'DigiDocs', for example by compensating them for the time they invest in innovation<sup>9</sup>.

## Availability of online access is on the rise

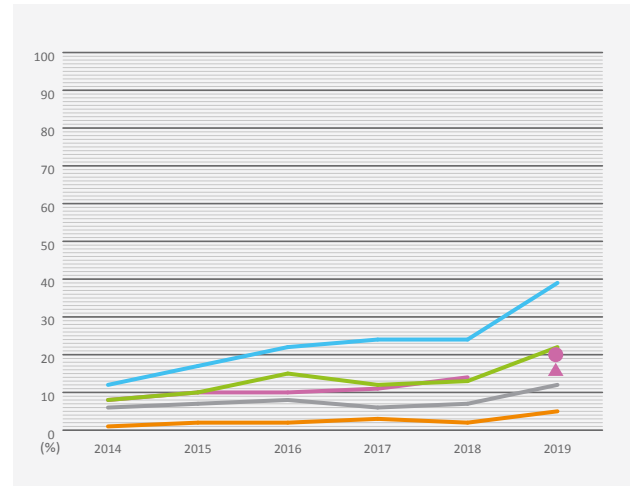
The available options for online access offered by healthcare providers are increasing (Figures 2.1, 2.2 and 2.3). General practitioners and medical specialists are the most likely to offer access to the patient's own diagnosis and prescribed medications. Compared to previous years, healthcare users are more frequently given the option of adding their own comments or health data to their general practice electronic patient record via the internet. Seven percent of the medical specialists indicate that this is an option (Tables 2.2 and 2.4). The number of doctors who indicate that their patients have access to test results and laboratory analyses after the consultation with the doctor is higher than the number who indicate they give access before the consultation (Figures 2.1 and 2.2). The 2017 eHealth-monitor shows that doctors think it's better to give online access after the consultation because test results need to be explained, and in case of bad news, doctors prefer to inform the patient in person<sup>1</sup>.

## Usage of online access still below availability

Compared to previous years, more healthcare users report that they are able to access their medical records. Of these, 10 percent indicate that this option is offered by their general practitioner; 23 percent indicate that this option is offered by their hospital (Table 2.11).

**Figure 2.1**

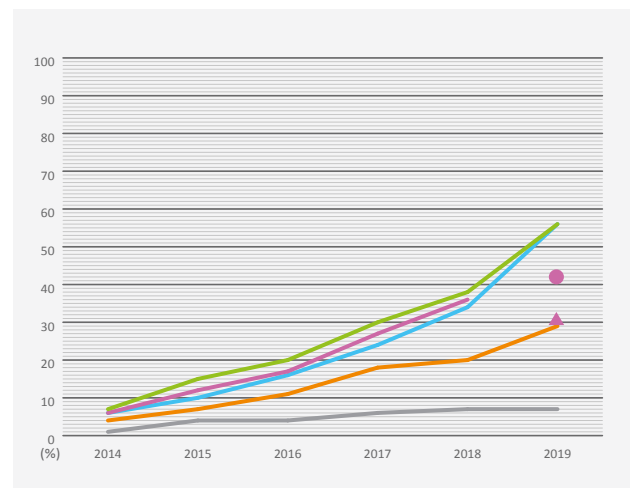
**General practitioners**  
Percentage indicating which parts of the medical records can be accessed online by patients; from 2014 to 2019.  
\*  $p \leq 0.05$ ;  
\*\*\*  $p \leq 0.001$



- Use the internet to add comments or measured health values to their own medical data/electronic patient record \*
- Use the internet to gain insight into the prescribed medication \*\*\*
- Use the internet to gain insight into test results and laboratory analyses after the consultation has taken place (2019)
- ▲ Use the internet to gain insight into test results and laboratory analyses before the consultation has taken place (2019)
- Use the internet to gain insight into test results and laboratory analyses
- Use the internet to gain insight into notes (clinical course) in the record
- Use the internet to gain insight into the diagnoses of the patient \*\*\*

**Figure 2.2**

**Medical specialists**  
Percentage offering online access to parts of the medical records; 2014-2019.  
\*\*\*  $p \leq 0.001$



- Use the internet to add comments or measured health values to their own medical data/electronic patient record \*
- Use the internet to gain insight into the prescribed medication \*\*\*
- Use the internet to gain insight into test results and laboratory analyses after the consultation has taken place (2019)
- ▲ Use the internet to gain insight into test results and laboratory analyses before the consultation has taken place (2019)
- Use the internet to gain insight into test results and laboratory analyses
- Use the internet to gain insight into notes (clinical course) in the record
- Use the internet to gain insight into the diagnoses of the patient \*\*\*

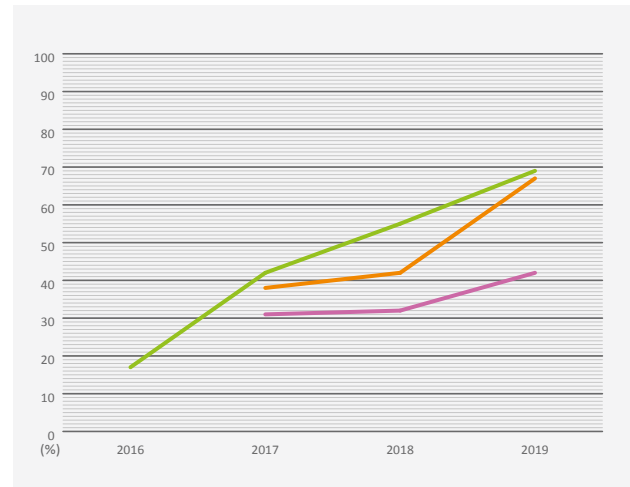
The actual usage level of online access among healthcare users is low. Only 5 percent of the healthcare users have accessed their medical data online. For hospitals this is 14 percent (Table 2.12). Among people with a chronic condition, 13 percent indicate that they have accessed their medical data from their general practitioner online. Out of these, 17 percent accessed their data from the hospital. Interest among this group in online access is high, however (Figure 2.4).

**Requesting repeat prescriptions or asking questions online are popular options**

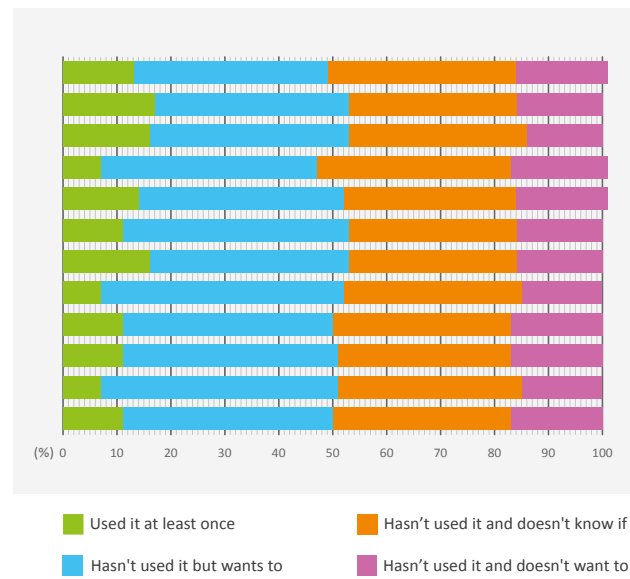
General practitioners are most likely to offer the option of requesting repeat prescriptions (82 percent), followed by the possibility of asking a medical questions via secure email, portal or app (68 percent) (Tables 2.21 and 2.22). These are the most common online convenience services offered by medical specialists as well: one third of the medical specialists indicated that patients can request repeat prescriptions online. Asking a medical question via secure email, portal or app is an available option according to 44 percent of the medical specialists (Tables 2.23 and 2.24).

19 percent of the healthcare users indicated that they requested a repeat prescription from their general practitioner online during the past year, 12 percent made an appointment with their general practitioner

**Figure 2.3**  
**Nurses**  
Percentage of organisations working with a patient portal; from 2016 to 2019.  
\* p ≤ 0.05;  
\*\*\* p ≤ 0.001



**Figure 2.4**  
**People with a chronic condition**  
Percentage that uses and/or wants to start using online access to medical data that are updated by the healthcare provider; in 2019.





online and 8 percent asked their general practitioner a question via an e-consultation. The use of these services has increased compared to previous years (Tables 2.27 and 2.28). The percentages are slightly lower for hospitals. 5 percent of the healthcare users made an appointment online with a healthcare provider from a hospital, 6 percent asked a question via an e-consultation and 3 percent requested a repeat prescription via the internet (Tables 2.32 and 2.33).

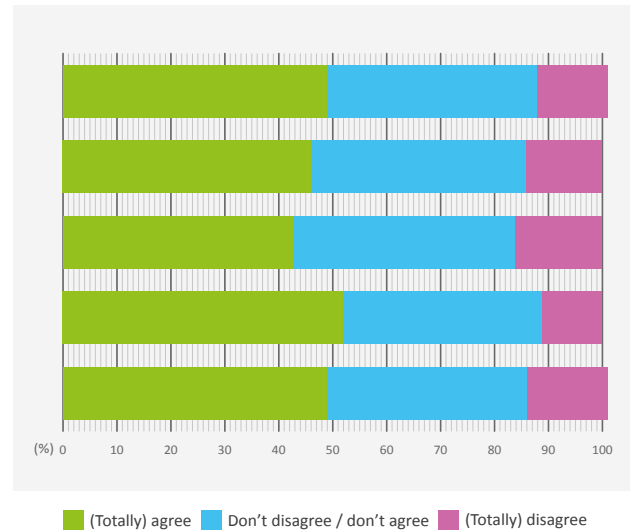
**Added value of online access**

People with a chronic condition see the added value of online access. About half of this group agrees that online access contributes to: improved control over their medical records, improved overview of the care they have received and more involvement in their health and treatment (Figure 2.5).

**General practitioners recommend health information websites more often than online access**

A quarter of the medical specialists and four out of ten general practitioners consider online access ‘undesirable’ (Table 2.20). In addition, a quarter of the general practitioners often or always advise their patients to access their medical record online. This advice is offered by one third of the medical specialists. This is illustrated by the fact that more than 90 percent of the general practitioners often or always

**Figure 2.5**  
**People with a chronic condition**  
 Percentage that agrees with statements about the contribution of online access to patient care; in 2019.



*Online access contributes to:*

- ... improved overview of the care I have received
- ... improved understanding of my health or treatment
- ... improved ability to make my own decisions about my health or treatment
- ... improved verification of my data in the medical record
- ... more involvement with my health or treatment

recommend websites with health information, such as Thuisarts.nl or ‘Moet ik naar de dokter’, to their patients (Tables 2.37 and 2.38).

**Nurses experience different benefits from patient portals**

This year we asked nurses about their experiences with and expectations regarding patient portals. 53 percent of the nurses in elderly care feel that the implementation of client portals has improved the quality of patient care. The benefit reported most frequently by hospital nurses is that client portals help patients make

decisions about their care (62 percent). Nurses in general practice primarily feel that it promotes the self-sufficiency of the clients (65 percent) (Table 2.18). The main disadvantage reported by nurses is that patients have difficulty using the patient portals (33-57 percent) (Table 2.19). This is reported most often by general practice nurses. This group of nurses also reports more often than nurses in other healthcare sectors that it takes a lot of time to explain the portal to patients (29 percent) and that the technology doesn't work properly (24 percent).

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This theme annex is part of the eHealth-monitor 2019.  
The other parts are: the research report,  
4 other theme discussions, the tables annex and the infographic.

These documents can be downloaded from [www.nictiz.nl](http://www.nictiz.nl) and [www.nivel.nl](http://www.nivel.nl)

Myrah Wouters, Martine Huygens, Helene Voogdt, Maaïke Meurs, Janke de Groot, Annemarie Lamain, Karlijn de Bruin, Anne Brabers, Conchita Hofstede, Roland Friele, Lies van Gennip. Together we can do it! eHealth-monitor 2019.

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