



## D.E.M.O. Projekt

# ePatients in Hungary

Digital Health Solutions in Medicine

POPULATION STUDY, 2021, DECEMBER

Initial report on the representative study on *digital health related knowledge, attitudes and needs of the Hungarian population*

## SUMMARY

Digitization is becoming increasingly important in healthcare, too: the use of digital devices for information collection and sharing is now essential. In addition, digital health is not only a technological revolution but also a cultural transformation involving changes in the doctor-patient relationship, decision-making and health management.

### **Here are the main results of the nationwide representative study on digital health solutions among Hungarian patients:**

- 81.3% of respondents use the Internet in general, with almost 90% of them using it for health and illness related searches, too.
- The most important sources of information on the Internet are websites and the social media;
- At the same time, one third of the respondents also regularly use medical and professional journals for information;
- E-prescription and online appointment booking are used most frequently by patients;
- Nearly half of those surveyed would try a teleconsultation and would like to be recommended reliable websites, apps and sensors by their doctor.

The initial research report can be read below. A more detailed analysis will be available shortly.



# E-PATIENTS IN HUNGARY

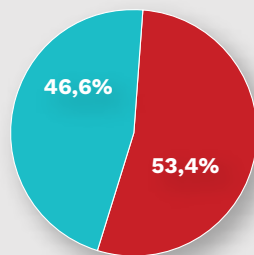
## POPULATION SURVEY ON DIGITAL HEALTH RELATED KNOWLEDGE, ATTITUDES AND USE

Data collection for the nationwide, representative “E-patients in Hungary” population survey of 1,500 people took place between October 5-13, 2021 lead by the Digital Health Work Group of the Institute of Behavioural Sciences, Semmelweis University. Dr Zsuzsa Győrffy and Dr Edmond Girasek were in charge. The research was implemented under the OTKA -FK 134372basic program.

Methodology: CATI, telephone questionnaire survey was used interviewing 1,500 people from a national, representative sample. (quota sampling was based on gender, age / age group, education, and settlement type). data collection was done by Ipsos Zrt.

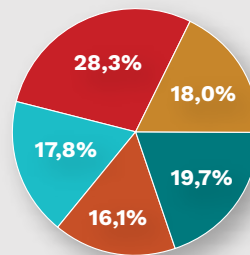
### BASIC DEMOGRAPHIC DATA TABLE

*What is your gender?*



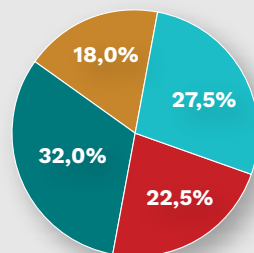
■ Male ■ Female

*What age group do you belong to?*



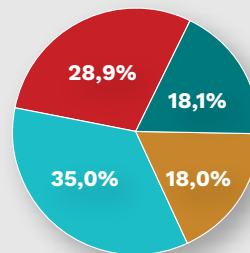
■ 18-29 years old ■ 30-39 years old  
■ 40-49 years old ■ 50-59 years old  
■ 60 years old or older

*What is your highest educational attainment?*



■ Elementary school or lower  
■ Vocational school  
■ Grammar school, vocational high school  
■ University, college or higher

*What is your settlement type?*



■ Budapest  
■ County capital  
■ Town  
■ Village

## HEALTH STATUS AND USE OF HEALTH CARE UTILISATION

Although nearly 90% of respondents rated their health as very good, good or moderate, 48.2% reported long-term chronic illness.

Nearly half of the respondents receive health care several times a year, 25% more than once a month..

## WHAT FEELINGS DOES THE TERM DIGITAL HEALTH EVOKE?

Overall, digital health is more likely to evoke neutral or positive feelings among respondents:

- neutral: 48.7%,
- good or very good: 37.11%,
- bad or very bad: 14.2%

## FROM WHERE AND HOW DO PATIENTS GET INFORMATION IN THE DIGITAL SPACE?

81.3% of the respondents use the Internet in general, almost 90% of them with health and illness relate issues, too.

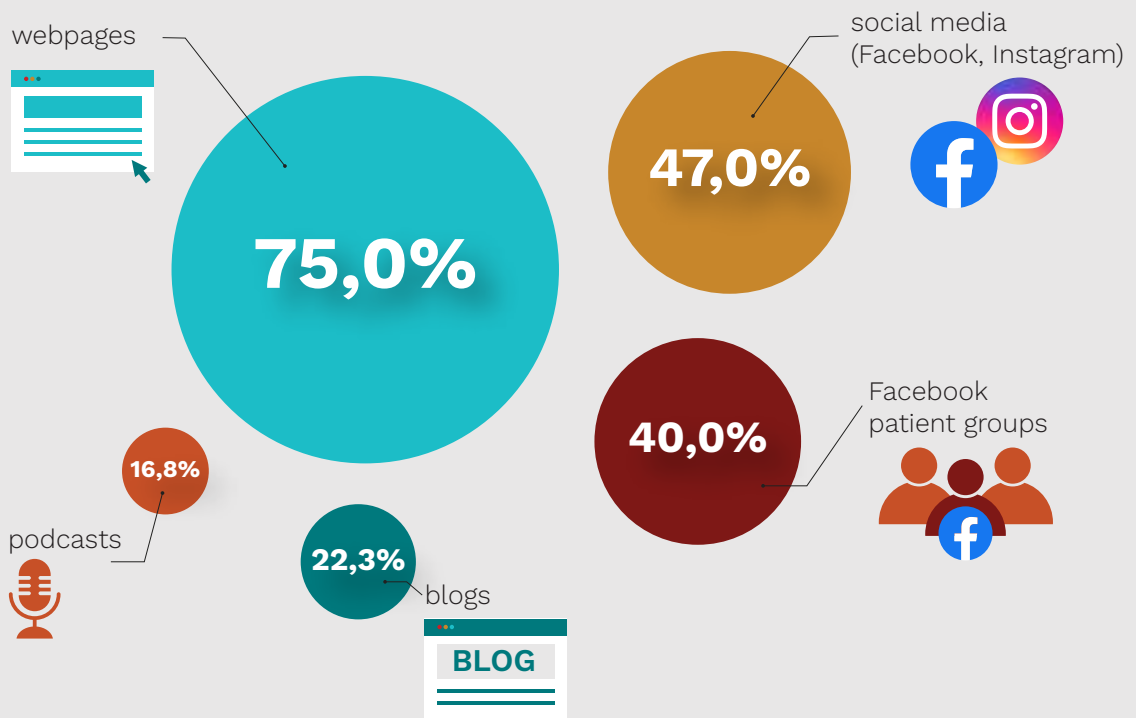
### *Internet use in connection with health and illness:*

- • 13% daily
- • 22.6% weekly
- • 29.5% monthly
- • 29.5% seek information occasionally.

**Almost half of the respondents who do not use the internet -especially those over 60 - are helped by a family member, relative, or friend to carry out online searches for health information.**

## HOW OFTEN DO PEOPLE SEARCH FOR INFORMATION ON VARIOUS PLATFORMS?

Respondents use a variety of channels to get health related information (multiple answers can be marked at once).



People use 2.75 sources of health information on average to get information on health related topics.

### *Have ePatients appeared?*

One third of the respondents find information on medical websites (31,1%) and in professional journals (25,5%).



### *When do we use the Internet?*

- Before seeing a doctor: 21.4%
- After seeing a doctor: 6.7%
- Before and after seeing a doctor: 28.6%

NB: 43,2 % of respondents do NOT use the internet when seeing a doctor. That means, many use it when they are unwilling or unable to consult a doctor!

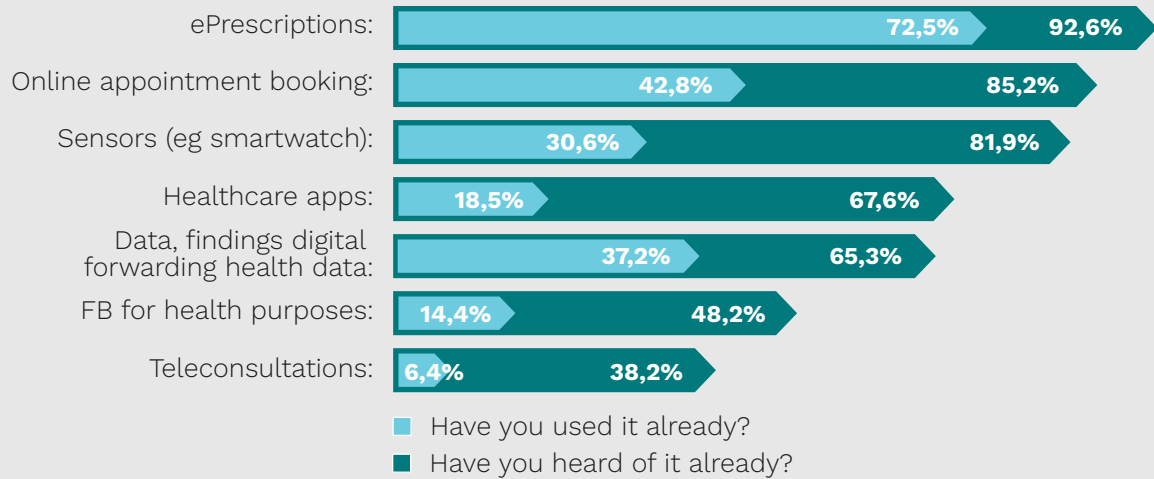
### *Have ePhysicians appeared?*

**According to patients, their doctors are basically receptive to their patients 'online information search:**

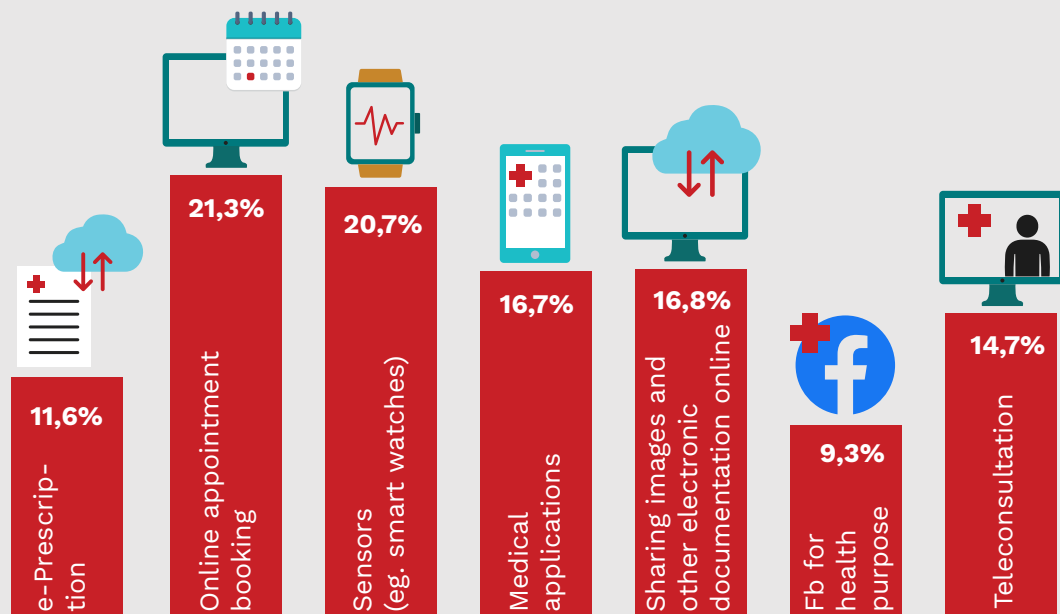
- dislikes: 20.8%,
- moderate reception: 31.8%,
- good / very good reception: 31%
- don't know: 17%

## USE OF DIGITAL DEVICES

*What digital technologies have patients heard of and what have they already used?*



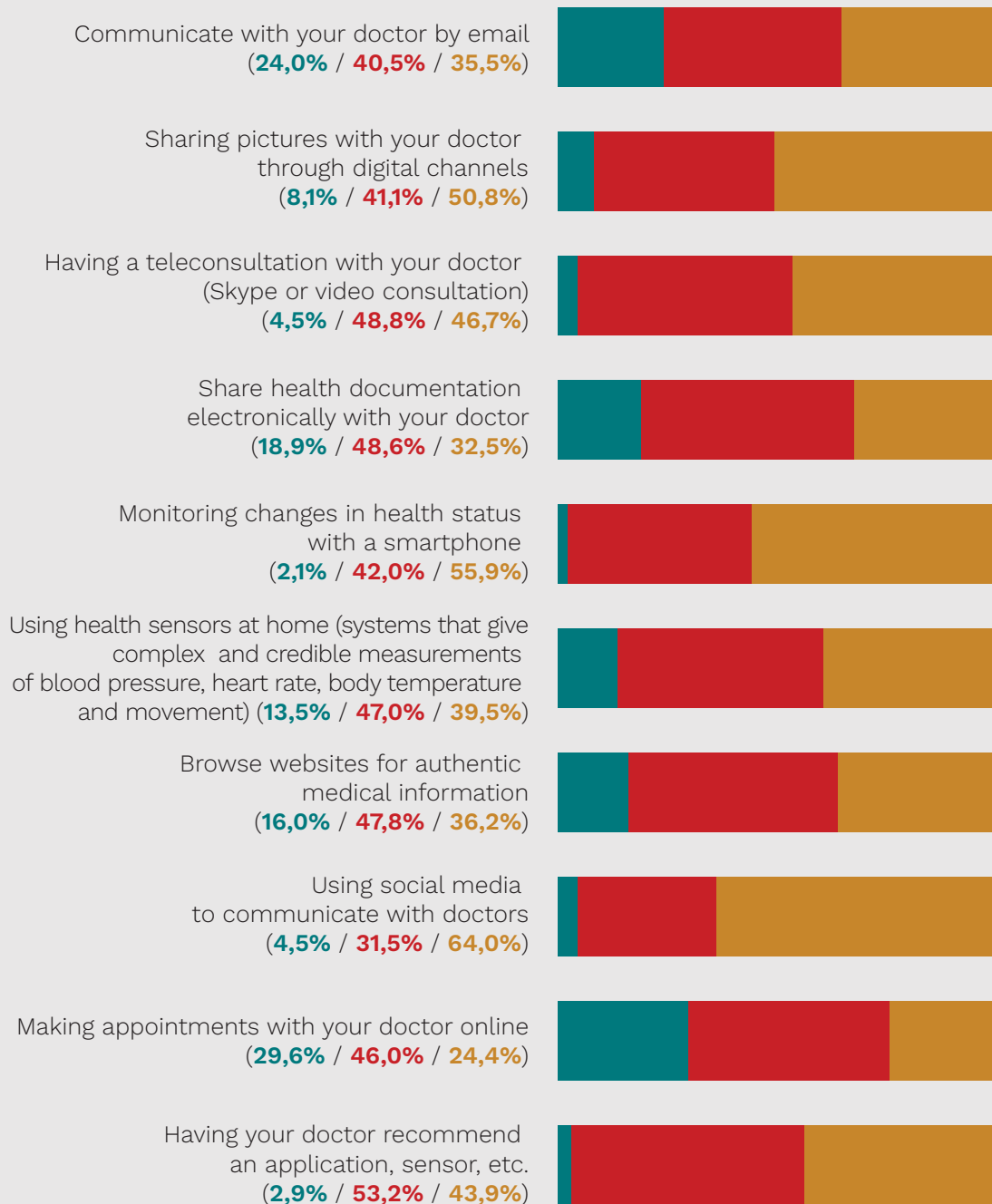
*What digital technologies would you like to use from those you haven't tried it yet?*



## WHAT WOULD PATIENTS NEED?

*Which of the following options do you use and which would you use if you had a chance?*

- Have used it already
- Haven't used it, but would like to if they had the opportunity
- Haven't used it, and wouldn't like to





## WHY WOULD IT BE GOOD TO USE DIGITAL DEVICES WITH HEALTH-RELATED QUESTIONS AND PROBLEMS?

Patients hope that the use of digital devices would improve doctor-patient communication. In addition, it is a convenient, fast solution and can save time. It facilitates better patient involvement in the healing process and reduces unnecessary doctor-patient encounters.

### THE BENEFITS OF USING DIGITAL SOLUTIONS



- Comfortable (90,2%)
- Saves time (88,8%)
- Reduces the number of face to face doctor-patient encounters (83,3%)
- Improves care efficiency (74,8%)
- Helps patients to cooperate better in the healing process (73,1%)
- Improves doctor-patient communication (70%)
- Patients have faster access to healthcare (69,8%)
- Patients are better involved by doctors in the healing process (63,2%)
- Improves security of healthcare (62,8%)
- May improve the quality of care (48,5%)
- May reduce the chances of making mistakes (39,5%)

## WHAT MIGHT BE THE DISADVANTAGES OF USING DIGITAL DEVICES?

Respondents believe that the impersonal physician-patient relationship, misinterpretation of the data, and technical difficulties may be the greatest disadvantage for both caregivers and patients.

Patients are most concerned about depersonalization of care and misinterpreting the shared health data. Potential technical difficulties are a serious issue for both patients and caregivers..

### DISADVANTAGES OF USING DIGITAL DEVICES



- Care becomes impersonal (76,1%)
- Patients misinterpret their shared health data (72,3%)
- Faulty technology can jeopardize patients' recovery (68,5%)
- Makes patients / doctors frustrated / patients dissatisfied (65,4%)
- Increases the administrative burden of doctors (62%)
- Personal information is less secure (58%)
- May lead to overdiagnosis (screening out large numbers sooner in large numbers the number of people receiving care and thus the burden on health care may increase) ) (52,8%)
- Increases the risk of burnout among doctors (45,2%)
- Quality of care decreases (34,3%)

## WOMEN AS DIGITAL HEALTH MANAGERS?

Female respondents are more likely to seek information about health, illness, and they are the ones who are more likely to ask for help in doing searches. They are more prone to ask for help on social media platforms and are more likely to be members of online patient communities. Women indicated a higher proportion of searching medical interfaces and using professional journals. YouTube and other video-sharing sites, on the other hand, are male-dominated.

Women are more likely to employ online appointment booking, e-prescriptions and telemedicine as well as emailing their doctor, sharing images and other electronic documentation. Women showed a higher preference for their doctor to recommend authentic websites, apps and sensors.

Although more women use digital health solutions this does not necessarily mean that they are satisfied with it. They indicated to a greater extent that the use of digital technologies can make the doctor-patient relationship more impersonal, reduce the quality of care, increase over- and misdiagnosis. They are also more likely to agree with the view that technological difficulties can jeopardize secure care.

## AGE, EDUCATIONAL BACKGROUND AND TYPE OF SETTLEMENT AS DETERMINING FACTORS

**Younger people and those with higher education are more open to and informed about digital health solutions.**

There is no significant difference in knowledge or use among age groups under 60, however, 60 appears to be a watershed. Those with higher education use social media less as a source of health information.

**Those with higher education prefer using websites more and social media less as a source of health information when compared to lower educated people.**

Higher educated people are more likely to use scientific literature for their searches than lower educated people. It can be stated that those who had COVID used more internet information sources.

Those who have heard about more digital health solutions, use more varied sources for their health searches and have higher education will see digital solutions as having more advantages.

The smaller the settlement, the worse the subjective health status. Moving up the settlement gradient improves the subjective evaluation of health status.

The type of settlement is not decisive in terms of what kind of digital health solutions respondents have heard about, but those living in villages used significantly fewer digital devices for medical purposes. There was no significant difference according to the type of settlement in the diversity of online information sources, evaluation of digital health benefits and disadvantages, and the frequency of online health information searches.

