

# Use of e-Health by Healthcare Professionals vs. non-Healthcare Professionals

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**Abstract.** The role of e-health is increasing worldwide. We surveyed the use of e-health in a large-scale population-based study, involving a representative sample of the Norwegian population aged above 40 years. Two-thirds of the health professionals had used search engines, apps, social media or video services for health purposes – while this was the case for approximately half of the non-health professionals.

**Keywords.** E-health, health professionals, population-based survey

## 1. Introduction

The use of e-health is increasing. The most frequently used type of e-health is obtaining information about health and illness by using web search engines such as Google. However, other services are gaining importance as sources of health information and other health-related content, including health apps, social media and video services such as YouTube [1-3]. Health professionals may be early adopters of e-health and may through their interaction with patients play a positive role in increasing patients' use of such services [4]. Moreover, health professionals may play a central role in developing and improving e-health services. We therefore wanted to examine how health professionals compare to non-health professionals in their own use of e-health services.

## 2. Methods

The Tromsø 7 study involved a sample of citizens of Tromsø, Norway aged above 40. Participants completed questionnaires and participated in physical examinations and lab tests. Data pertaining to profession and e-health use were analyzed for the present study, focusing on frequencies and between-group statistics. More details about the study and other results have been published elsewhere [1,5,6].

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### 3. Results

In our sample of 1381 self-identified health professionals and 6089 non-health professionals, 66.5% of the health workers and 51.2% of the non-health workers had used search engines, apps, social media and video services for health purposes (defined as having used services for information and advice on health and disease issues) in the last year (Table 1). The difference in the proportion of use in the two groups was statistically significant (15.3%, 95%CI 12.47%-18.04%,  $p < 0.0001$ ).

**Table 1.** Frequency of use of e-health among healthcare professionals and non-healthcare professionals

Frequency of use	Healthcare professional (%)	Non-healthcare professional (%)
Often	167 (12.1)	354 (5.8)
A few times	641 (46.4)	2234 (36.7)
Once	111 (8.0)	530 (8.7)
Never	462 (33.5)	2971 (48.8)
Total	1381 (100)	6089 (100)

### 4. Discussion and Conclusions

We found a statistically significant higher use of e-health services in the group of health professionals. This is not surprising considering that this group consists of many highly qualified people with at least a bachelor-level education. Prior studies [1] have found that educational level is an important predictor for e-health use. Moreover, health professionals may also use e-health for instance, to update themselves professionally or to find information for their patients. Many health professionals see e-health as beneficial to healthcare [7]. This study supports the idea that health professionals have a relatively high use of e-health and might be involved to a larger extent in the development and propagation of e-health within the health services.

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