

# The Search for the Health and Social Security: Experiences from Consumers Searching for Healthcare Services

Elorm Damalie<sup>1</sup><sup>a</sup>, Reima Suomi<sup>1</sup><sup>b</sup>, Pia Blomqvist<sup>2</sup> and Kaisa Ruotsalainen<sup>3</sup>

<sup>1</sup>*Turku School of Economics, University of Turku, Rehtorinpellonkatu 3, 20500My, Turku, Finland*

<sup>2</sup>*The Social Insurance Institution of Finland (Kela), Finland*

<sup>3</sup>*Frantic, Finland*

**Keywords:** Public Reporting, Information, eHealth, Literacy, Middlemen, Thematic, Systems.

**Abstract:** **Background and Objective:** People use different information services to select their healthcare services. It is important to collect and analyze user feedback from such sites to understand needs of the user and to develop these services. As such information services are usually designed, implemented and maintained by third parties, not the original service deliverers, we shortly discuss the concept of market middlemen. Furthermore, as such services are not easy to use but require a certain level of experience and work from the users, we also shortly review the discussion around eHealth literacy.

**Study Design/Markets and Methods:** Data was collected in year 2017 by the Contact Point for Cross-Border Healthcare through a web-based survey from consumers searching for healthcare services. Some these consumers are users of then Choosehealthcare.fi online service in Finnish Hoitopaikanvalinta.fi website, that now is renamed to EU-healthcare.fi and EU-terveydenhoito.fi in Finnish. Together feedback was collected from 93 respondents. We used thematic qualitative analysis to find themes that the respondents took up when answering the survey. We used pre-analyzed material by Contact Point for Cross-Border Healthcare and Frantic.

**Results:** The results show that the needs of the users are very varied, and information on many different issues are sought for. In general, the respondents found the amount of information to be overwhelming, and it was difficult to find answers to specific questions. More structured information will give users an opportunity to compare services between the different countries.

## 1 INTRODUCTION

The availability of information is more important now than ever before. Consumer decision is now very dependent on the amount of information available to them. This is seen in amount of information consumers are bombarded with daily by various companies. In the healthcare sector, there is an important need of availability of information to help consumers make their healthcare choices (Wahlstedt and Ekman, 2016). The internet is gradually becoming the source of healthcare service-related information (Parker and Plank, 2000, Lemire et al., 2008). Searching for good reliable healthcare information is gaining prominence among consumers. This has led to the demand of platforms that enables consumers to have access to the

information they search for in terms of healthcare. There is the need of a platform that patients go to for information about where to go for healthcare. The norm is for consumers seeking information on healthcare services turn to platforms with neither comprehensive nor accurate information. There are a number information sharing platforms available to consumers to help them make healthcare choices. An example of such a platform in existence in a number of countries is the public reporting system.

Public reporting systems are platforms that provide good and quality information to consumers. Cacace (2012) defined public reporting as the performance-related information about healthcare and social service providers to the public in a comparative approach. The goal of this is to give as much information possible to affect the choices of the consumer. It is considered as a strategy to stimulate

<sup>a</sup> <https://orcid.org/0000-0001-5695-3415>

<sup>b</sup> <https://orcid.org/0000-0003-2169-7997>

improvement in quality and promote transparency among providers. The fact is that, one of its benefits is it gives very detailed information to the consumer about the various healthcare service providers available. It serves as a link between consumer and service providers.

There are several factors that enhances usage of public reporting systems as a source of information for consumers. Presentation formats of information and the quality of information enhances the usage of public reports and eases the decision making of the consumer (Faber et al., 2009). Public reporting systems serve as middlemen between consumers and service providers as they serve as a link between the consumer and the service provider.

The search for health services demands middlemen to make this easy and possible for all parties involve. Yavaş (1994) defines the middlemen as the third person in a trade off between a buyer and a seller, he or she matches the buyer and the seller. Middlemen serve as a link between the consumer with a healthcare service delivery institutions. The role of middlemen has been visible in the real estate business and in the employment agencies. Hence this article looks at middlemen role of EU-healthcare.fi as a source of information to consumers and also as a middleman between consumers and healthcare service providers. Yavaş (1994) further states that the search in any market is made thinner as the middleman reduces the search intensities. According to Biglaiser(1993) there are two most noticeable reason for the middle man 1) they facilitate matching in the market, in this context the healthcare market as that is difficult for consumers and service providers to meet on their own 2) the middleman also validates quality of a service or product. There is a need for middlemen in healthcare services. Different websites serve as middlemen between service providers and user in markets, including healthcare services. Research has revealed that for consumers to fully benefit from the use of healthcare services, they will require some level of understanding of eHealth, eHealth literacy and motivation.

e-Health is defined by Mitchell (1999) as a “*new term needed to describe the combined use of electronic communication and information technology in the health sector. The use in the health sector of digital data –transmitted, stored and retrieved electronically – for clinical, educational and administrative purposes, both at the local site and at a distance*”. In 2001, Eysenbach gave a very detailed definition of e-health as “*an emerging field in the intersection of medical informatics, public health and business, referring to health services and*

*information delivered or enhanced through the internet and related technologies. In a broader sense, the term characterizes not only a technical development, but also a state-of-mind, a way of thinking, an attitude, and a commitment for networked, global thinking, to improve health care locally, regionally, and worldwide by using information and communication technology*”. From the definitions, eHealth is a combination of a number of areas of activity. For this article, the definition of eHealth will be restricted to the definition by Eysenbach. This definition highlights the need of examining eHealth literacy.

eHealth literacy is defined by Norman and Skinner (2006) as the “*the ability to seek, find, understand and appraise health information from electronic sources and apply knowledge gained to addressing or solving health problem*”. This definition takes into account the different skills set needed to become an eHealth literate. The key aspects of eHealth literacy can be listed as follows: traditional literacy, health literacy, information literacy, scientific literacy, media literacy, and computer literacy (Norman and Skinner,2006). These are further divided into two central types: *analytic* (traditional, media, information) and *context-specific* (computer, scientific, health) (Norman and Skinner,2006). The level of eHealth literacy affects the access, dissemination and assimilation of information by the intended user. This also affects the motivation of the intended user.

Motivation to use a system is a fundamental reason to accept and use any health information platform. According to Keller (2008) there are five principles of motivation: attention is building the curiosity and gaining the attention of the consumer by using different approaches, the second is the relevance of the content of the public reporting systems, a consumer’s confidence motivates them to use a public reporting systems and the satisfaction of the consumer with their experience is important in building a consumer’s motivation. The combination of eHealth, eHealth literacy and intended consumer’s motivation drives user engagement. Intended user’s engagement enables the possibility of making choices based on information about healthcare choices.

## 2 METHODS

For this research, a qualitative survey was conducted to recognize the best means of offering information on cross border healthcare to targeted audience on EU-healthcare.fi.

## 2.1 Participants

For this research, a qualitative survey was conducted to recognize the best means of offering information on cross border healthcare to targeted audience on EU-healthcare.fi (previously Choosehealthcare.fi). During the research, 93 participants were reached through campaigns on Facebook and twitter and additionally by sending an invitation to prior contacts made on travel fair and other events. The age profile of the respondents ranges from between 10 and 20 years old to over 70 years old. The age profile was quite even in

- 20 – 30 years old (15 persons)
- 30 – 40 years old (13 persons)
- 40 – 50 Years old (18 persons)
- 50 – 60 years old (24 persons)
- 60 – 70 years old (19 persons)

In addition to this, 4 respondents were over 70 years old and two respondents were under 20 years old. Out of all the respondents 67 are working full time, 18 are pensioners, 4 are students, 4 are unemployed, 1 has a family related activity, 1 is on leave and 1 has an informal career.

A significant share of the respondents resided in Helsinki Metropolitan Region and the majority represented Southern Finland. The northernmost respondent was from Oulu. Two respondents out of the 93 lived abroad.

The largest number (45) of respondent estimated themselves to use healthcare services normally approximately once every six months. A quarter (20) of the respondents estimated themselves to use the healthcare services approximately once every two month. Out of the 93 respondents, 18 used healthcare approximately once a year. Healthcare services were used once a month by 6 respondents, 2 respondents used more seldom healthcare services than listed above and 2 used healthcare services often than all respondents listed above.

## 2.2 Data Collection and Analysis

This section gives detailed account of how data was collected and analysed.

### 2.2.1 Data Collection

Data was collected in year 2017 by the Contact Point for Cross-Border Healthcare through a web-based survey. As with qualitative survey research in general is used to gain in-depth information about people's underlying reasoning and motivation. According to

Jasen, (2010), qualitative survey is used to study the diversity of a topic within a given population. To achieve this in this research open-ended survey questions were asked to allow the respondents to provide detailed answers. This allowed the respondent to express what they felt about the topic and provided exploratory data that revealed unforeseen opportunities, quotes and issues. The responses to these open-ended questions were used as a basis for analysis, to develop and understand the research questions.

### 2.2.2 Analysis

We used thematic qualitative analysis to find themes that the respondents took up when answering the survey. We used pre-analyzed material by Contact Point for Cross-Border Healthcare and Frantic.

There are five phases that are inherent in qualitative data analysis and these are compiling, disassembling, reassembling, interpreting and concluding (Yin 2011, 117). In relation to this, the style of analysis used in this research was the deductive thematic analysis. All answers from the survey where combined and analysed using the six-phase procedure suggested by Braun and Clarke, 2006 illustrated in Table 1.

Table 1: The six-step thematic analysis procedure (Baron and Clarke, 2006).

| Phase                            | Procedure for each phase                                                                                                                                                             |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Familiarization with the data | Phase reading and rereading the data. Immersion of self and becoming familiar with the data.                                                                                         |
| 2. Coding                        | Generation of codes that identify important features that might be relevant to answering the research questions.                                                                     |
| 3. Generating initial themes     | Examining generated codes to identify significant potential themes. Collating all the data relevant to each potential theme.                                                         |
| 4. Reviewing themes              | Reviewing the potential themes against the dataset, to make sure if the themes that answer the research questions. Themes are usually refined by splitting, combining or discarding. |
| 5. Defining and naming themes    | In this phase, there is the generation of precise names for each theme and detailed analysis of the themes.                                                                          |
| 6. Writing report                | This phase begins with a fully defined and named themes and involves the final analysis to relate back the research questions and writing of report                                  |

### 3 RESULTS

The results from the inductive thematic analysis are presented here to describe respondent's behaviour, knowledge, desires and requirements for the search of healthcare services. Using the data collected from the qualitative survey, 20 raw data themes were discovered relating to respondents experience, knowledge and perception of healthcare and EU-healthcare.fi. Following the identification of first themes (n= 6-10) and after the reviewed themes (n=2-4) three defined and named themes were identified: information platform (website), type of information and presentation of information. (See figure 2, 3, 4).

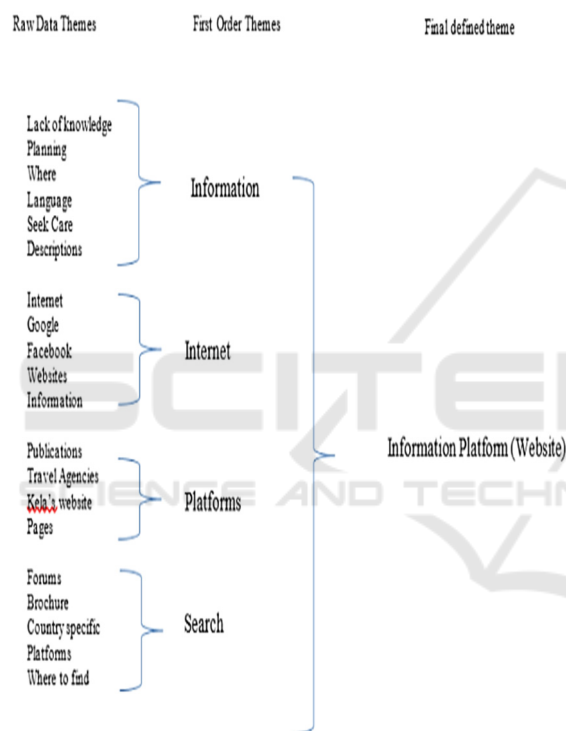


Figure 1: Respondents need for an information platform (Website).

#### Information Platform (Website)

All the respondents stated or indicated the need for a universal information platform(website),where they could find all the information they are searching for concerning healthcare services within Finland and abroad. This finding is consistent with the literatures on eHealth, public reporting and the need for information. Out the respondents who responded to the question of where they searched for information, received and found information, 5 respondents stated from a health center or a doctor, 23 respondents stated from Kela, 26 responded from other officials and

experts, 24 respondents stated from internet forums and 24 respondents responded nowhere. As the respondents answered:

*"From Kela's services in international healthcare"*  
*"FB and other platforms in which patients [tell that] they have ordered drugs from abroad"*  
*"From friends"*  
*"From insurance companies" or " Insurance companies' websites"*  
*"I went to kela"*  
*"The internet"*  
*"Industry publications and from magazines I deem trustworthy"*  
*"In the country visited"*  
*"The reception staff at the hotel told me where to go"*

Furthermore, from the answers provided by the respondent, the ease of finding information has been a critical challenging issue. As other respondents answered:

*"From the husband's place of work / representatives of the international company"*  
*"From a hospital in the country"*  
*"The The Ministry of Foreign affair's website"*  
*"I got an address where to go from the hotel reception"*  
*"From the website of the Finland-Alanya association"*  
*"From country-specific websites"*

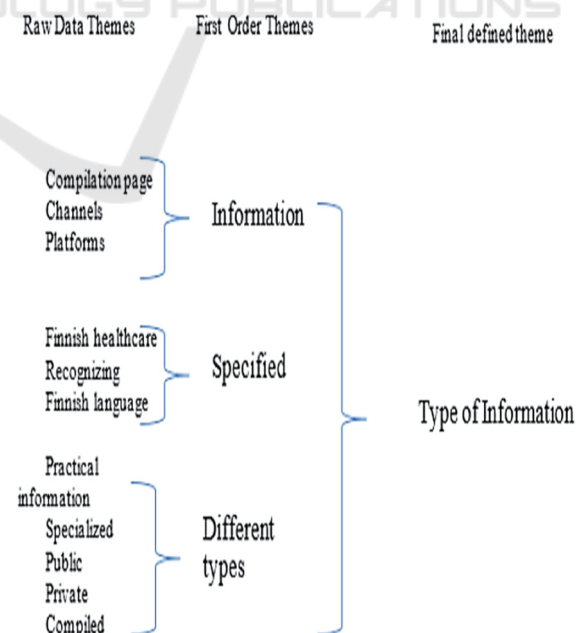


Figure 2: Respondent's thoughts on the type of information.

### Type of Information

The theme type of information is made up of information, specific and different types. Most of the respondent emphasized the difficulty in finding the right information as stated:

*"A lot! Concrete guidance is absent or confusing."*

The respondent further specified the things she was looking for:

*"Price. Availability. Insurance. What does insurance cover?"*

*"From the information on the international Kela-card".*

Majority of the respondents furthermore emphasized their need of very specific information. One respondent responded to the question was there something that she or she could not find and the response was *"Overall it was difficult to find information on what kinds of care were available and how the possible billing would work."* and also posed the question *"How are medical visits paid, what kind of treatment can I receive [in the foreign country]"*. This was the specific question she needs answer to and has searched for information from travel agencies. Lastly, one respondent expressed the difficulty in recognizing medical products and was searching for information from a pharmacy, Facebook and forums. The respondent posted the question: *"Do I need a certificate for my medicine?"*

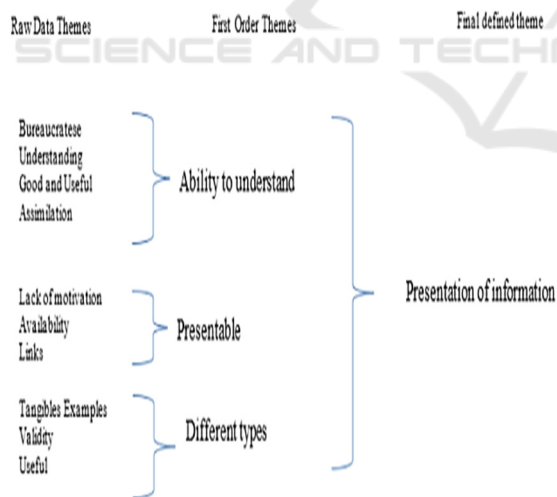


Figure 3: Respondents need for good presentation of information.

### Presentation of Data

Presentation of data is important to the use of information page. Information that is not presented well is useless to the consumer as expressed by a number of the respondents of the survey:

*"It would be nice to receive information from a single, clear website."*

*"Concrete checklists on how to act"*

*"Prices, quality etc. [of the services], comparative information"*

Furthermore, some respondents which to have a single page on the internet with all the information they will need:

*"Some kind of information page online"*

*"It would be nice to receive information from a single, clear website."*

*"Comprehensive information in a single place and preferably some contact information to reach if no answers are found."*

*"There were some things on Kela's website, but the information came in crumbs and finding it was not easy."*

A number of respondents also emphasized the language of the information presented:

*"Compiled on a single website in plain Finnish."*

*"On Finnish-language websites."*

Presentable information should be easy to understand and located easily on the page. The ability of finding information is increased if the information is presented in good and useful way. The result of lack of proper presentation of information is stated by one respondent: *"I did not really find information on what to do if I got into an accident."* Information validity is a matter of concern to respondents as mentioned by one respondent: *"A website with current information on each country and its services"*

## 4 CONCLUSIONS

The purpose of this research was to identify the consumers need for information to support their decisions on healthcare service. Information platform (website), type of information and presentation of information were the three main themes identified from the data. The result from this research supports the previous research on public reporting, eHealth, eHealth literacy, middlemen and motivation. According to the results, there is a strong link between the three identified themes to the effective use of information available to consumers on healthcare service delivery.

As seen from the data, the need for an information platform (website) is paramount to the successful understanding and selection of healthcare services. Public reporting systems are just an example of such a platform. A platform that consumers can tend to with certainty that they will find the information they are looking for. The knowledge of the existence of an

information platform (website) by a consumer is a source of motivation to use the information platform to assist in decision making in terms of healthcare. From the data is clear that consumers will like to use Choosehealthcare.fi, in Finnish Hoitopaikanvalinta.fi website, which is now renamed to EU-healthcare.fi.

The middlemen have a responsibility of defining the type of information that are presented on the information platform (website) for consumers. From the data collected, consumers want specific, practical and useful information. Furthermore, consumers want more structured information that gives them the opportunity to compare services in different countries. This is a motivational source to use the information platform (website). Comprehensive and easy-to-follow information on the healthcare system seems to be difficult to design. With a strong understanding of eHealth and eHealth literacy, information platform that caters to the needs of consumers within Finland and abroad can be achieved.

Presentation of information is essential to the success of the information platform (website). From the survey is clear some consumers were not happy with the presentation of the information. Presentation of information comprises of font size, the various links on the page to other pages, clarity of the information presented and easy navigation of the website. The eHealth literacy level of consumers affects how they access, disseminate and assimilate information. Hence, can affect the motivation of a consumer to use the information platform as was noted in the data collected.

The results show that the European and health service scene is rather scattered, non-standard and difficult to understand. Comprehensive and easy-to-follow information on the healthcare system seems to be difficult to design. It was encouraging to see that people with very different backgrounds had found the service and used its services. Users also found the www-site though very many different channels. It is clear even from our study that there is a huge demand for middlemen-services in healthcare service delivery, but a lot has to be done to improve their usability, including the improvement of people's health literacy, as well as their social literacy

Based on this study there should be further research exploring the themes (information platform, presentation of information, type of information) in greater details to form a more solid understanding of the challenges regarding the use of EU-healthcare.fi. Also, subsequent research should aim to facilitate eHealth literacy of consumers as this is the future of healthcare service delivery. Furthermore, there

should be more research on the marketing and popularization of the EU-healthcare.fi.

## ACKNOWLEDGEMENTS

Contact Point for Cross-Border Healthcare and Frantic carried out the survey and the pre analysis of the collected data. The authors will like to thank them for availability of the data.

## REFERENCES

- Biglaiser, G. (1993). Middlemen as experts. *The RAND journal of Economics*, 212-223.
- Barun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative research in psychology*, 3(2), 77-101.
- Cacace, M. (2012, May). Public reporting on the quality of healthcare providers: international experience and prospects. In *LSE Health and Social Care Formal Seminar Series* (Vol. 9).
- Eysenbach G. 'What is e-health?' *J Med Internet Res* 2001;3:E20. [Full text] [Medline]
- Faber, M., Bosch, M., Wollersheim, H., Leatherman, S., & Grol, R. (2009). Public reporting in health care: how do consumers use quality-of-care information? A systematic review. *Medical care*, 1-8.
- Keller, J. M. (1987). Development and use of the ARCS model of instructional design. *Journal of instructional development*, 10(3), 2-10.
- Lemire, M., Paré, G., Sicotte, C., & Harvey, C. (2008). Determinants of Internet use as a preferred source of information on personal health. *International journal of medical informatics*, 77(11), 723-734.
- Mitchell, J. (1999). From telehealth to e-health: The unstoppable rise of e-health. Canberra, Australia: Australia: Commonwealth Department of Communications. *Information Technology and the Arts (DOCITA)*.
- Norman, C. D., & Skinner, H. A. (2006). eHealth literacy: essential skills for consumer health in a networked world. *Journal of medical Internet research*, 8(2), e9.
- Parker, B. J., & Plank, R. E. (2000). A uses and gratifications perspective on the Internet as a new information source. *American Business Review*, 18(2), 43.
- Wahlstedt, E., & Ekman, B. (2016). Patient choice, Internet based information sources, and perceptions of health care: Evidence from Sweden using survey data from 2010 and 2013. *BMC health services research*, 16(1), 325.
- Yavaş, A. (1994). Middlemen in bilateral search markets. *Journal of Labor Economics*, 12(3), 406-429.
- Yin, R. K. (2011). *Qualitative research from start to finish*. New York, NY.