Consumer Health Informatics: Barriers and Facilitators of eHealth Usage among Consumers

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Abstract. EHealth services offer diverse advantages but they cannot tap their full potential if they do not fit to the intended users. Therefore this workshop aims at identifying barriers and facilitators of eHealth usage of consumers. It follows the idea of a future workshop and includes several key note talks from experts from different scientific disciplines.

Keywords. eHealth, mHealth, Health Care Utilization, Acceptability of Healthcare, Health Literacy

Introduction of the topic

In today’s society the Internet plays an important role for seeking health-related information. In this context eHealth is a common term that refers to “health services and information delivered or enhanced through the Internet and related technologies” [1]. Many eHealth tools exist, and eHealth sources are widely used: Santana et al. identified that the Internet influences the way people handle a consultation as well as their behavior towards health professionals [2]. In 2009, 86% of U.S. physicians used the Internet to gather health, medical or drug information [3]. Moreover, eHealth is predicted to become even more important in the future due to several reasons: First, eHealth empowers patients to use health information technologies more often in the future; according to a study health apps will be used by 1.7 billion people by the year 2017 [4]. Furthermore, the number of chronic diseases, e.g., cancer or diabetes, is increasing steadily in all age groups causing much higher expenditure in the healthcare sector [5]. Consequently, in the future, medicine is expected to be more personalized [6] and information technology is often seen as the way to handle this task. EHealth is able to improve the health-related knowledge and behavior of individuals [7] and enables patients to be an informed partner in the medical decision process [8]. Nevertheless, electronic health services cannot tap their full potential if they do not fit to the intended users’ wishes, competencies, and expectations. Those individual customers’ backgrounds are closely related to ethical questions, e.g., data ownership, privacy, and with technology design such as usability of eHealth services.
It is vital to identify factors that trigger the usage behavior towards eHealth or barriers, which lead to the non-acceptance of electronic health services. EHealth services are used in a complex and dynamic field of patients, healthy citizens, family members or friends of patients and medical professionals. Therefore, the examination of several viewpoints from social sciences, psychology, medical professionals and eHealth service designers is helpful when identifying barriers and facilitators of eHealth usage. This is why the workshop “Consumer Health Informatics: Barriers and Facilitators of eHealth Usage among Consumers” will bring experts from different fields of interests together to discuss factors leading to a successful dissemination of electronic health services. The method of the workshop will pick up major ideas of the concept of future workshops [9] using experts’ key note talks as preparation for a following critique phase. In this phase the workshop participants will discuss and identify main barriers and facilitators of eHealth use amongst customers from their different viewpoints.

1. Aim of the discussion

The key objective of the workshop is the identification of factors contributing to the usage of eHealth services from different viewpoints. Thus, the workshop will start with key note talks from experts of the medical field, social sciences and the field of information technology.

Workshop participants will get insights into different aspects and viewpoints of matching eHealth services to consumers’ needs. This will be the basis for a discussion moderated by the workshop chair. In this discussion a list of barriers and facilitators of different viewpoints will be created. Finally, each participant has a general idea of factors contributing to the consumers’ eHealth acceptance.

2. Contribution from each speaker

The authors of the workshop proposal are coordinating the project group “Consumer Health Informatics” within the GMD1 and will moderate this workshop. Lena Griebel, first author of this proposal, has got a background in social sciences and medical process management and conducts research on how to link eHealth services with the intended users.

Within a defined timeslot of 45 minutes, different well-selected international speakers will present the following topics:
- EHealth services all over Europe: What is done and what will be done in the future?
- Patients’ needs for information and information overload: Patients’ health literacy and eHealth literacy and the importance of their competencies for the acceptance of eHealth services. What do those factors mean for user interface design?
- The professional point of view: What do physicians think about patient-centric eHealth services? Is there a real benefit for the patient and/or the physician?

Those key note speeches will give the necessary input for the following future workshop which will take another 45 minutes.

1 [http://www.gmds.de/fachbereiche/informatik/AGundPGs/PG_CHI/PG_CHI.php](http://www.gmds.de/fachbereiche/informatik/AGundPGs/PG_CHI/PG_CHI.php)
3. Expected results

Due to the fact that eHealth acceptance is linked with diverse scientific disciplines and viewpoints such as psychology or information sciences, it is necessary to identify factors contributing to this acceptance from several sides. This workshop will provide information about expert insights from several disciplines. Their main ideas will trigger a critique phase in which all workshop participants work together in small groups to create a list of facilitators and barriers of eHealth usage. With the outcome of the workshop, each participant will have a main idea of important factors. The results will be analyzed by the project group afterwards that will categorize the factors. Moreover, the list will be used to create a meta-model of eHealth acceptance barriers and facilitators. It is intended to publish the results and the related meta-model in at least one scientific journals.

Furthermore, the results will be included in the project group’s Wiki and will thus trigger further discussions among experts in the field of eHealth.

4. References


2 http://gmds.mi.hs-heilbronn.de/pg-chi/index.php