

Software Engineering with Conflicting User Needs: Patient Accessible Electronic Patient Records

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ABSTRACT¹

With roots in Human Centred Software Engineering, and in User Centred Systems Design Åsa Cajander has lead research on Patient Accessible Electronic Health Records (PAEHR) for six years. This experience has made her revisit the core values of user centeredness, as the different user groups of PAEHR indeed describe conflicting user needs. In this key note she will present the patients' perspective of the system, and contrast that with the perspectives of physicians and nurses. The conflicting needs of the different user groups will be illustrated by a small role play, and she will relate and discuss the findings in relation to the design and development of eHealth systems.

CCS CONCEPTS

• **Human-centered computing** → **Human computer interaction**;
Empirical studies in HCI

KEYWORDS

ACM proceedings, software engineering, patient accessible electronic patient records

ACM Reference format:

Å. Cajander. 2018. Software Engineering with Conflicting User Needs: Patient Accessible Electronic Patient Records. In *Proceedings of International Workshop on Software Engineering in Healthcare Systems, Gothenburg, Sweden, May 2018 2018 (SEHS'18)*, 1 page. <https://doi.org/10.1145/3194696.3194697>

1 KEY NOTE

Patient Accessible Electronic Health Records (PAEHR) has become a global phenomenon in recent years, and in Sweden PAEHR includes a number of different services. Examples are

documentation about health care visits, test results, list of medications, possibility to do a health declaration and to share your medical record with a relative or friend. The deployment of PAEHR is very controversial in Sweden, and has included law suits, numerous discussions in the media and formal complaints to more than ten public authorities. Health care professionals are deeply concerned about the launch of the system. Some aspects of concern relates to the work environment in health care, and the added workload and stress [2,3]. A deeper analysis reveal that the concerns also are in relation to the new role of patients and the doctor patient relationship [4]. At the same time as health care professionals are concerned about PAEHR studies of patients show that they are very positive [6]. PAEHR is used for remembering what was said during visits, to plan for upcoming visits, and to read test results. Especially chronically ill patients appreciate PAEHR. Software engineering is a challenging profession, and there are numerous problems that need to be addressed when designing new systems such as incorporating usability work, and UX perspectives when designing new systems [1] and the role of UX in Agile. PAEHR is an example of another kind of challenge in software engineering where users have very strong, and conflicting needs, and also very different frames of the technology. The core values of User Centred Design are difficult to incorporate in this setting, and there are indeed ethical dilemmas to be addressed.

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SEHS'18, May 27, 2018, Gothenburg, Sweden
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ACM ISBN 978-1-4503-5734-0/18/05.
<https://doi.org/10.1145/3194696.3194697>