Needs Elicitation for Novel Pervasive Healthcare Technology - DTU Orbit (08/11/2017)

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It is widely accepted that engaging with end-users to elicit their needs is beneficial when designing a new artefact. This can be particularly challenging, however, when end-users are limited in their ability to provide input. When there is broad variation in users' needs, a further challenge is to include the large number of users required to represent the entire population. Failure to do so may lead to a solution that is over specialised to fit the needs of only a small subset of users. Both challenges are common in healthcare applications in which the end-user is also care recipient (or patient). What if instead of trying to engage vastly many users in design activities, we could hear the voice of the patient by tapping into existing channels within the health care service system? Many interactions between healthcare providers and patients involve knowledge transfer. Observing these could inform designers about patients' support needs and healthcare providers' information needs.H ealthcare professionals offer a wealth of knowledge based on a clinical understanding of the condition as well as experience listening to patients' problems. Especially where patients are in denial about their condition, their healthcare providers might offer more detailed information than the patient themselves regarding their needs. Since each patient knows only their own experience, whereas healthcar eprofessionals encounter numerous patients, their perspective is more robust against inter-patient variation, and they are able to comment on trends, scale or proportions .We therefore explore how users' needs can be elicited by observing activities in which information is already being shared and discussed in the care process, and from the extensive knowledge of healthcare professionals. This is particularly relevant for pervasive healthcare technology, in which established methods for engaging users to elicit their needs can be difficult or even impossible to apply. In this paper we document our needs elicitation process in a relevant example as a method story, and present our findings and reflections on this as the key contribution of this work.

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