

From Care(ful) Research to Care(ful) Design

Keywords: experiential user information; (health)care contexts, patient experience; product & service design

1. Workshop Organiser/s

Organiser Name	Email	Affiliation
Margo Annemans	Margo.annemans@kuleuven.be	KU Leuven
Liesbeth Stam	Liesbeth.stam@kuleuven.be	KU Leuven
Valerie Van der Linden	Valerie.Vanderlinden@kuleuven.be	KU Leuven
Ann Heylighen	Ann.heylighen@kuleuven.be	KU Leuven

2. Context of Workshop

Background

Various studies show that the environment –products, services, and spaces – has a significant impact on patients’ wellbeing and as such can add to their healing process. Most product and service designers, architects, and hospital boards are convinced of this impact but often lack accessible information offering a nuanced insight into patients’ experiences. Ideally this information is obtained through interaction with real users, allowing the designer to develop more thorough understanding of and empathy with them (McGinley & Dong, 2011). However, since time and money restrictions in a typical design process very often result in a minimal user engagement (Cassim, 2010), designers are unable to obtain this direct input from users and become dependent upon indirect sources of human information (McGinley & Dong, 2011).

As designers often do not have direct contact with the people they are designing for, various techniques have been developed to bring them closer to these people’s experience (Kouprie

& Visser, 2009; McGinley & Dong, 2011; van Rijn et al., 2011). Most of these techniques aim to foster empathy. People's specific situation affects the degree to which actual interaction can be achieved. In the case of vulnerable groups like hospital patients, practical and ethical restrictions make it hard for designers to actually engage with them.

In the past five years, we collected ethnographic data in various (health)care settings, both hospitals and (residential) care facilities, which could provide designers with much of the needed information to gain insight into patients and residents' experience and start empathising with them. Yet the scientific articles, in which this research is mostly presented, are not the number one source where designers look for information (Annemans et al., 2014). Possible explanations are that designers are rather motivated by visual communication and like information to be presented graphically (Lofthouse, 2006) or that they often feel mistrust towards data that have already been interpreted (Restrepo, 2004). They prefer raw data in a format that is condensed down to be design-relevant (McGinley & Dong, 2011).

To be able to inform design about the experience of people in (health)care settings, we explore information formats that meet the above-mentioned requirements and support communicating data about experience.

Aim & research questions

With this workshop we aim to explore and study how design input based on different information formats can provide designers with insight into real people's experience of a (health)care environment. To this end participants will be divided in small groups, which each will start from a different information format to work on a concrete design task related to (health)care. Throughout the workshop the groups will be able to make use of other formats to obtain additional information and refine their design. With this approach we pursue a twofold objective. On one hand, participants will be able to work with real experiential patient data to address actual design tasks. On the other hand, by reflecting on the workshop in terms of the design outcome and process, paying specific attention to the information formats' affordances, participants will experience what the impact is of the use of different information formats on their design.

Questions we will reflect on with the participants during and after the workshop are:

- How does experiential patient information impact on a design process and outcome?
- How can research results support a design process?
- How do different information formats impact on the design process and outcome?

Larger context

The proposed workshop fits within a larger project entitled *From Care(ful) Research to Care(ful) Design*,¹ which investigates which data about patient experience could be relevant for various stakeholders (manufacturers, architects, product- and service designers, boards of healthcare facilities) who aim to develop products, services, spaces or processes that improve this experience. An important consideration in the overall project is to guard the relevance, consistency, and clarity of the provided information and the format through which it is communicated.

The workshop touches upon various themes that will be addressed at the DRS2016 conference. Especially the special interest group on Experiential Knowledge (EKSIG) provides an excellent framework for the workshop. Ultimately, we aim to bring experiential patient information to design practitioners. By investigating how this could be done, we do not only study which methods are suitable to communicate and transfer experiential knowledge, but also add to the development of a framework for guiding the reception and interpretation of professional design practices and/or artefacts within research. Both communicating the experience of vulnerable, and difficult-to-approach users, like patients, to designers and designers' experience of their own design process are key elements that will be addressed within the workshop.

Due to the (health)care context in which the research data have been collected, the workshop could also be of interest to the special interest group SIGWELL. As mentioned, the larger project aims to identify methods and new ways to involve people in design for health and wellbeing, and the associated challenges of working with people who are in a vulnerable state.

Organisers

The organisers have experience in setting up and guiding workshops.

- The proposed workshop builds on the outcome of a workshop organised at the 6th Annual Symposium of Architectural Research Designing and Planning the Built Environment for Human Well-Being (ATUT2014). The results of this workshop will be published as a book chapter (Annemans et al. 2016).
- The exploration of the case studies in the project *From Care(ful) Research to Care(ful) Design* are often approached as a series of workshops. At this point we are conducting workshops with hospital boards. Workshops with designers and manufacturers are planned for the near future.

References

Annemans, M., Van Audenhove, C., Vermolen, H., Heylighen, A. (2014). How to Introduce Experiential User Data: The Use of Information in Architects' Design Process. *Design's Big Debates*.

¹ <http://rxd.architectuur.kuleuven.be/careful-research-for-careful-design/>

- The Design Research Society's 2014 conference*. Design's Big Debates. The Design Research Society's 2014 conference. Umeå (Sweden), 16-19 June 2014 Design Research Society.
- Annemans, M., Van Audenhove, C., Vermolen, H., Heylighen, A. 2015. Being wheeled through the hospital: How can design be informed about hospital patients' spatial experience in motion? In: Spinney J., Reimer S., Pinch P. (Eds.), *Designing Mobilities*. Routledge, London, 17 p. (forthcoming)
- Cassim, J. (2010). 'Designing effective user interactions – examples from the challenge workshops'. *Proceedings of the 3rd International Association of Universal Design*. [CDROM]. Hamamatsu: International Association for Universal Design.
- Kouprie, M., Visser, F.S., 2009. A framework for empathy in design: stepping into and out of the user's life. *J. Eng. Des.* 20, pp. 437–448. doi:10.1080/09544820902875033
- McGinley, C., & Dong, H. (2011). Designing with Information and Empathy: Delivering Human Information to Designers. *The Design Journal*, 4(2), 187–206.
- Restrepo, J. (2004). *Information Processing in Design*. Delft, The Netherlands: Delft University Press.
- Van Rijn, H., Sleswijk Visser, F., Stappers, P.J., Özakar, A.D., 2011. Achieving empathy with users: the effects of different sources of information. *CoDesign* 7, pp. 65–77. doi:10.1080/15710882.2011.609889

3. Planned Activities and Expected Outcomes

Prior to the workshop

When applying to participate in the workshop participants are invited to submit a one-page explanation of a case of a product, service, or space in a (health)care context they would like to work on.

The submitted cases will be analysed by the organisers to provide an optimal match with the available research data to guarantee valuable information for the participants' design process. One or two cases will be selected to work on during the workshop. All participants will be informed about the selected case(s) prior to the workshop.

Workshop planning

ASSIGNING CASE(S) (15')

After a short introduction participants are grouped to work on the selected case(s).

EXPLORING RESEARCH INFORMATION (15')

The organisers will present different information formats that can be used to consult the available research information on the context of the case(s). Each group will receive relevant information presented in various formats.

The available experiential information has been collected from participants with distinct profiles:

- Long-term hospital patients being wheeled from a ward to treatment

- Day surgery patients both in a traditionally conceived day surgery centre and a centre where patients walk through the procedure
- Patients at an emergency department
- Children staying at an oncology ward
- Patients navigating through the hospital prior to an appointment
- People affected by cancer visiting a cancer care centre
- Residents of a residential care home

The raw data have been collected under various forms:

- Audio recordings and transcripts of interviews
- Poems written by participants
- Drawings made by participants
- Photographs made by both participants and researchers
- Video recordings made by a researcher with comments from the researcher and participants

DESIGNING SUPPORTED BY RESEARCH INFORMATION (45')

In small groups participants will work on a concrete design tasks supported by the experiential patient information they receive.

PRESENTING DESIGN PROPOSALS (15')

The different groups are asked to give a short presentation, not so much focusing on the design but on their source(s) of information, be it the information format or others, and what they learned from it for the design. The presentations should provide the members of the other groups with a good insight in the knowledge gained.

BREAK

ADAPTING DESIGNS BASED ON OTHER INFORMATION FORMATS (30')

Following these presentations, all groups will be provided with the research information under all formats, which they can freely explore to find (additional) information to adapt their design.

PRESENTING ADAPTATIONS (15')

The adapted designs are presented to the group with a focus on why these adaptations were made.

REFLECTING ON THE DESIGN PROCESS (45')

To conclude we will reflect on where, how, and why adaptations took place (or not) and what role the provided information formats played in this process. Finally we would like to identify how the use of the research information influenced participants' sense of patients' experience and how this was translated into the design.

Expected outcomes

Participants will gain

- insight into the impact of information formats on design processes and outcomes;
- insight into patients' experience of (health)care environments and the role of products and services therein.

4. Intended Audience

(Professional) designers (product and service designers, architects) and manufacturers of products with a specific interest in (health)care settings.

Ideal number of participants: 8-12

5. Length of Workshop

½ day (3h + break), preferably on June 29th or 30th (Ann Heylighen is unable to attend on June 27th and 28th). If need be, the workshop could also be held prior on June 27th or 28th, but will then be lead by Valerie Van der Linden and Liesbeth Stam only, as Margo Annemans will be on maternity leave at the end of June.

6. Space and Equipment Required

Studio-space with the opportunity to present on screen for the whole group and work on the case(s) in small groups.

7. Potential Outputs

The insights gained during the workshop will significantly contribute to the framework which will be the outcome of the From Care(ful) Research to Care(ful) Design project. This framework will form the basis to address a broad audience aiming to make research information from (health)care research consultable by designers and others working in these settings.

Like with the workshop organised at ATUT2014, the outcome of this workshop could be reported on in a future publication, exposing it to a wider (academic) audience.

About the Organisers:

Margo Annemans, a postdoctoral researcher at the Research[x]Design group at KU Leuven, currently coordinates the project *From Care(ful) Research to Care(ful) Design*. Her PhD focused on the spatial experience patients in hospitals and its applicability in architectural practice.

Liesbeth Stam is a PhD candidate at the Research[x]Design group at KU Leuven. She investigates the interplay between the material and the social in context of architectural design processes. Liesbeth worked on the project *From Care(ful) Research to Care(ful) Design*.

Valerie Van der Linden, PhD candidate at the Research[x]Design group at KU Leuven, aims to develop design-oriented formats to inform architects about diverse people's spatial experiences. Her research is funded by a PhD fellowship of the Research Foundation – Flanders (FWO).

Ann Heylighen is a research professor and co-chair of the Research[x]Design group at KU Leuven. She obtained a PhD in Leuven and conducted research at Harvard University and UC Berkeley. Currently, her research focuses on spatial experience as source of design knowledge.