



DESIGN4 HEALTH

Extract of the
**Proceedings of the 3rd European
Conference on Design4Health**
Sheffield 13-16th July 2015

Editor: Kirsty Christer

ISBN: 978-1-84387-385-3

Empowering transformation through design inquiry in public healthcare

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Abstract

In health and care service processes the coordination between different caregivers is one of the crucial challenges. This paper presents the patient journey project as a practical application of a pragmatist pattern of inquiry (Dewey, 1938) and as fruitful way to work with/achieve transformative design. Situations of lived experience and moments of reflections perform as a carrier of knowledge and development. The paper argues that the design tools and mindset used in this project are of great importance in the ongoing transformation towards the patients focus in a Swedish public health care organization.

Keywords: Service design, Inquiry, Transformation design, Healthcare, Public sector

Introduction

It is well known that healthcare systems are under hard pressure and increasingly design tools, methods and approaches are being used for addressing a diverse set of public challenges. Coordination processes are among the more complex and complicated within the healthcare system. The process involves different systems and actors from e.g. elderly care, primary care and emergency personnel. These processes are often planned from the respective organizations perspectives with the consequence that patients are passed through as an object rather than an individual. Even though propositions such as patient centred care are gaining attention, to have the patient in focus is not the same as to have the patients' focus.

Having the patients' focus implies seeing the patient as a co-creator of the care processes, not as a passive receiver. New approaches for understanding the patients within the health care sector is necessary to create solutions reducing costs while achieving efficiency, engagement and better overall value delivery. This situation forms the background for the service design based "Patient Journey Project" initiated at the County Council of Värmland, run by the embedded design centre Experio Lab and supported by Veryday design agency. The purpose was to shed light on the care-coordination process including the extended aim to initiate a transformation towards an organization having the patients focus at heart.

Design thinking and practice, more specifically service design are increasingly applied to and used for improvement and innovation in health care settings (Bate and Robert, 2008). Design methods with involving, empathic and experiential characteristics are repeatedly brought forward. Design thinking as concept has been critiqued for a superficial use of design methods without taking design practice experience and aesthetic competence into account (Tonkinwise, 2011). Stephens and Boland (2014) bring specific attention to the aesthetic knowledge being core in design thinking and how it challenges what is known in organizations. Aesthetic knowledge is based on our bodily senses and is embedded in design practice and methods. Drawing on pragmatist position on experience and inquiry they argue that aesthetic knowledge is specifically useful for defining and solving problems. The increased application of service design approaches on and in public sector organizations have been labelled transformation design the aim is to achieve a collaborative change rather than to put a specific product or service in use (Burns *et al*, 2006). The transformation is intended to promote change on an individual and organizational level.

We will in this paper reflect on the patient journey case in relation to John Dewey's framework Logic of Inquiry to bring forward design practice's inherent affinity to reflection and practice experience. From this we articulate design's potential contribution to transformation in public health care setting. In this paper we explore to what extent the patient journey project achieves transformation through an applied inquiry.

Theoretical framework

Characteristics of service design are a high degree of involvement of different actors in the service processes (Wetter-Edman, 2011). When service design becomes transformational one aspect is that people not traditionally trained as designers, use design tools and methods. This is done with the purpose to build capacity for continuous change within the organization (Junginger, 2006). Drawing on transformative service research, transformational and organizational change, together with social- and transformation design Daniela Sangiorgi (2010) suggests 7 transformational principles: 1) Active citizens, 2) Intervention at community scale, 3) Building capacities and research partnerships, 4) Re-distributing power, 5) Enhancing imagination and hope, 6) Building infrastructures and enabling platforms and 7) Evaluating success and impact (see fig 1). Given the short format of this paper we cannot detail the different principles. Most important for the following discussion is the understanding of communities. Sangiorgi suggests that "Communities are considered as the right size scale to achieve large-scale changes" (2010, p 34) In these communities "elective communities (defined by interest, geography, profession or other criteria) are sufficiently larger than the individual to impose moral restraints that transcends the individual will, but still small enough to be recognized as representative of individual interests" (Meroni 2008, p. 14). Thus the community is the entity where the design activities and transformation will take place.

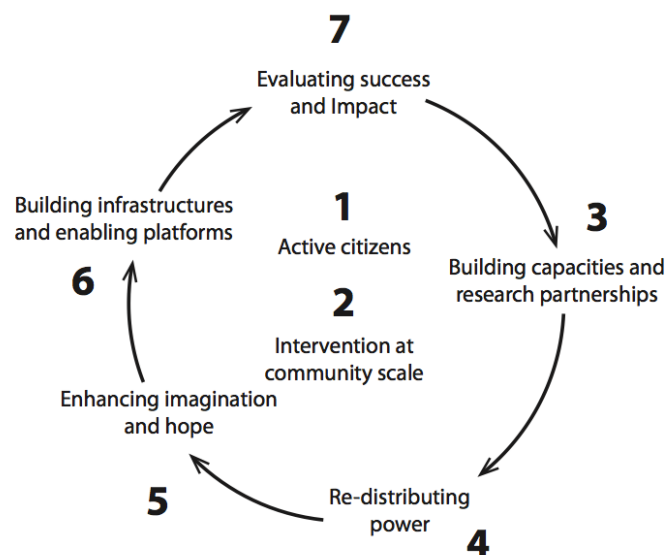


Figure 1 Transformational principles (Sangiorgi 2010, p 33.)

Design as pragmatist inquiry and the role of experience

In regards to service design and transformation design this paper positions design as inquiry. The idea of seeing and understanding design profession through pragmatist philosophy and theory is not new. (Schön, 1983) was inspired by pragmatist thought for his proposition of design as reflection in action, as was Krippendorff (1989) in proposing design “as making sense of things”. Further Steen and colleagues (2011) framed the user centered involvement process in terms of inquiry. Within interaction design and experience design the role and deliberate work with aesthetic experience has been discussed (Wright and McCarthy, 2008). The explicit role of aesthetic knowledge as core in design knowledge is articulated by Stephens and Boland as “Therefore, aesthetic knowledge, or what we know about a problem or a situation through our bodily senses of sight, sound, taste, touch, and smell, is the fundamental quality that makes design thinking useful for problem-solving” (2014 p.2).

The process of inquiry is central in pragmatism, more so than finding an absolute answer. Anna Rylander (2012) writes that the core of pragmatist thought is that our theories must be linked to experiences of practice. Key for understanding and knowledge in Dewey’s philosophy is the understanding of experience. According to Dewey experience is embodied, and the way through which we learn, together with an intellectual questioning of what this experience means. “In his [Dewey’s] view, for example, space and time are not forms that are brought to experience, but conceptions that are constructed *on the basis of* experience.” (Hickman *et al*, 2009). Further Dewey distinguishes between two kinds of experience; the first kind is minimally reflected upon, it is felt and he calls it ‘direct’, the other kind is reflected upon and called ‘known’ or ‘indirect’ (Hickman, 1998).

The pragmatist position pays great attention to the role of experience in the learning and development process. Designers have been positioned to be interpreters of socio-technical and material contexts and practices, as suggested by for example Verganti (2008), and Kimbell (2012). What is lacking in this proposition is that there is very little attention paid to the notion of experience. Experience and indeed the whole idea of (artistic) inquiry are central in both the understanding of how the designers pursue their work and what they interpret.

Method

The analysis is based on a selection of published writings about this case (Kadic, 2014). The second author was the managing design consultant developing the patient journey methodology, and leading the design work. Participation of the first author in, and recordings from a workshop (April 2014) discussing a set of projects conducted during the first year of Experio Lab’s activities and specifically the role of The Patient Journey project, together with additional interviews with managers in the county council (Spring 2015). Thus the analysis per se rests on this experience. In

addition videos from the final workshop summing up the findings have been part of the material. In the analysis of the case we use the seven transformational principles for discussing the different

aspects of the case. Additionally we relate the different activities performed in the project to the Dewey's inquiry with the purpose to expand the understanding of design as inquiry.

The Case – the Experio Lab Patient Journey

The Patient Journey project was initiated by the County Council of Värmland, Sweden and Experio Lab – a national centre for patient-focused service innovation. Experio Lab contacted Veryday to co-develop a design-based process to explore the complexities of the care coordination process. The purpose was to understand what happens, from the patients' perspective, when different systems, competences and people meet along the patients' way. The patients' journey was investigated before, during and after a specific case of illness.

The Patient Journey Project took place in fall 2013 and involved 29 stakeholders that directly and indirectly influence the patient journey in separate areas. The patient journey was a combination of several different methods: to become a user, role-play, participant observation, journey mapping and expert interviews. The teams met for a 4-hour collaborative session every Friday for 8 weeks, see Fig. 2.

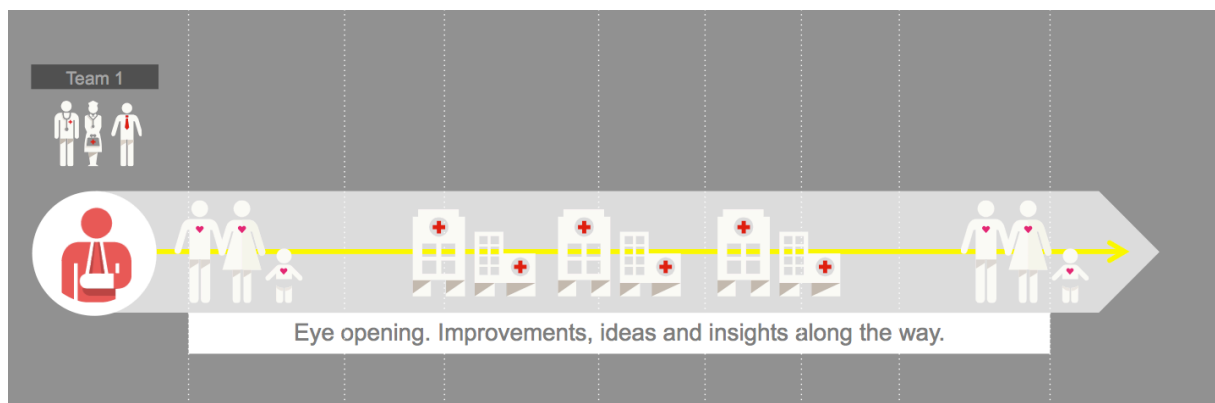


Figure 2 Patient Journey process. Source: Veryday

After the introduction, every other week was a journey, the following was a reflective workshop, and then a summarizing workshop was held. Each discovery team acted out and documented different patient and staff perspectives in context. Three case files of real patients were used for the role play, for mapping out their respective journeys. An essential part of building each journey involved reenactment and documentation from the viewpoint of the patient. One was the patient, the others filmed, observed and took notes. Ex:

A 70-year old man who broke his hip, one of the participants played the role of the patient. His first task was to fall down in his office, call an ambulance and wait for its arrival. He was then taken by ambulance to the hospital, went through the registration process in the

ER, experienced a long waiting period, was taken to x-ray, and on and on until the point of discharge. Throughout this journey, the participant playing the patient was wearing foggy goggles to feel what it was like to have cataracts. The journey was documented from multiple points of view via stop-motion photography. The images were then stitched together into videos for the team to analyze and share with others beyond the team.

See: <http://experiolab.com/portfolio/projects/the-patient-journey/>.



Figure 4. Documentation during the Patient Journey. Source Experio Lab

Outcomes

The project generated in all 21 opportunity areas and 18 selected hot spots. After an evaluation workshop including managers and an advisory board focusing on feasibility / implementation approximately half got selected for development.

As mentioned above props were used to simulate and feel experiences such as visual impairment, etc. The collaborative assessment of the findings and the holistic vantage point gave the groups a very different view of strategic improvements, opportunities and themes. The participants did not only move through the process but they also were moved in their feelings which can be exemplified by this quote told by a participating nurse:

I've been a nurse for 40 years and this has completely changed how I look at everything. I feel really ashamed that it took me so long to understand what patients see, need and feel. Now I can't stop thinking about all the things we can improve. Ulla Rami, nurse.

The outputs in terms of learnings, highlighted issues, strategic insights etc. were considered as valuable as the outcomes in a change of mindset, relationships and shared experience across functions and the currency of empathy, stories and genuine deep understanding. More than a year later the Managing Director of the County Council says that this project has been vital for showing a tangible example of what the organization intend with having the patients focus. She further mentions four specific projects that are being implemented, and that the work is fundamental for the strategic, political and visionary works that is currently underway for future Health and Care services in the county. Further, which is of interest to this paper, there are several accounts of a cultural change. On individual level people have had more or less life changing experiences in line with Nurse Ulla's quote above.

Findings – Transformation through inquiry

Using the vocabulary of the transformative principles (Sangiorgi, 2010) the patient journey can be described as transformation design. The principles also point out weaknesses of the case. The engaged and empowered participants created a *community* with a shared agenda. The projects duration with repetitive customer journeys and following workshops allowed for the participants (the *citizens*) in this community to gradually understand the methods they were working with. This enhanced their understanding and capacity to be present in the situation.

The iteration between the journeys and the workshops are an example of how to move between being in a situation and then reflecting upon it together with peers. This is the fundamental character of the design driven inquiry that forms the basis for the 3 following transformational principles. The iterative process *created capacities and formed research partnerships* where the participants reflected on their own practice as well as the patient experience. Thus making place for collaborative reflection using experienced practice for understanding what happened, in line

with a pragmatist inquiry. The actual inclusion and engagement of the involved people in this case let the people in the system experience what the patients might feel. This initiates a *redistribution of power* through the experience in two ways. The participants are in a position where they can change what they do and how they act. Additionally they will see patients in a different light. The iterative process moving between actual journeys and reflective workshops gave space for ideation and proactive thinking. Thus providing a situation for *imagination and desire for change* to grow.

The following principles, *building infrastructure and enabling platforms*, as well as *evaluating success and impact* were not included in the initial project. This is also one of the major weaknesses of the project. When initiated there could also have been a plan for how to handle the results, although, it is difficult to anticipate the result when in an exploratory project and applying new approaches for the first time. Despite this there are traces both in ongoing transformational change and implemented projects.

Conclusions

The project has proven to be a successful format to build effective engagement and deliver powerful insights and opportunities for improvement, on a personal and organizational level. The project highlights the need for interplay of experience both as learning experience (knowledge) and human experience (perception). Placing people in the situation of experiencing they get access or are reminded to use both. The patient journeys created a process of critical reflection that confronts problematic situations, shaping opportunities for improvement and innovation. The project has already had measurable positive impact. Specific insights and opportunities have been identified and are being implemented. This project enabled a wide range of stakeholders with influence on different parts of the patient journey be brought together in order for them to get a feeling for the actual end-to-end experience being delivered.

The case itself can be discussed from a design perspective as the Patient Journey project, and from the public health side as The Health and Care Coordination Project. Thus the patient journey becomes a means for understanding these different conceptualizations and shows the differences in mindset of what should be the focus of the organization.

We have argued in this paper that research through experience is essential for achieving change/transformation, this through the participants' insights based on their own experiences, and their ability to integrate these experiences in their work practices. We further suggest that this design approach with experience can be seen as pragmatist inquiry and further helps the management to get closer to the patients experience. Through this process the holistic patient experience becomes the focus within the organization and helps to empower transformation.

References

- BATE, P. & ROBERT, G. 2008. Bringing User Experience to Health Care Improvement: The concepts, methods and practices of experience-based design. *Health Promotion Journal of Australia*, 19, 165.
- BURNS, COTTAM, VANSTONE & WINHALL 2006. RED Paper 02, Transformation Design. In: COUNCIL, D. (ed.). London: Design Council.
- DEWEY, J. 1938. *Logic : the theory of inquiry*, New York, H. Holt.
- HICKMAN, L. A. 1998. Dewey's Theory of Inquiry. In: HICKMAN, L. A. (ed.) *Reading Dewey: interpretations for a postmodern generation*. Bloomington: Indiana University Press.
- HICKMAN, L. A., NEUBERT, S. & REICH, K. 2009. *John Dewey between pragmatism and constructivism*, New York, Fordham University Press.
- JUNGINGER, S. 2006. *Change in the Making: Organizational Change through Human-Centered Product Development*. PhD, Carnegie Mellon University.
- KADIC, H. 2014. The Patient Journey [Online]. Available: <http://experiolab.com/portfolio/projects/the-patient-journey/>.
- KIMBELL, L. 2012. Rethinking Design Thinking: Part II. *Design and Culture*, 4, 129-148.
- KRIPPENDORFF, K. 1989. On the Essential Contexts of Artifacts or on the Proposition That "Design Is Making Sense (Of Things)". *Design Issues*, 5, 9-39.
- RYLANDER, A. 2012. Pragmatism and Design Research – An Overview. In: DI, D. (ed.) *Kunskapssammanställningar*.
- SCHÖN, A. D. 1983. *The Reflective Practitioner: How Professionals Think in Action*, London, Basic Books Inc.
- STEEN, M., MANSCHOT, M. & DE KONING, N. 2011. Benefits of co-design in service design projects. *International Journal of Design*, 5, 53-60.
- STEPHENS, J. P. & BOLAND, B. J. 2014. The Aesthetic Knowledge Problem of Problem-Solving With Design Thinking. *Journal of Management Inquiry*, 1-14.
- TONKINWISE, C. 2011. A taste for practices: Unrepressing style in design thinking. *Design Studies*, 32, 533-545.

VERGANTI, R. 2008. Design, Meanings, and Radical Innovation: A Metamodel and a Research Agenda. *Journal of Production and Innovation Management*, 25, 436-456.

WETTER-EDMAN, K. 2011. Service design: a conceptualization of an emerging practice. Licentiate thesis, University of Gothenburg.

WRIGHT, P. & MCCARTHY, J. Empathy and experience in HCI. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 2008. ACM, 637-646.