



Graduation opportunity – Improving patient engagement from hospital to rehabilitation

We aim to fulfill needs during the "black hole" of transition towards rehabilitation: You will take a scientific approach exploring the transfer from hospital to rehabilitation after discharge from the outpatient clinic. In your design, you will work on a process solution to empower patients and healthcare workers to facilitate an engaging start for rehabilitation.

Dr. Jos Kraal, Industrial Design Engineering, TU Delft Dr. Petra Kok, Reumatoloog en Chief Medical Information Officer (CMIO), Reinier de Graaf Gasthuis Delft In collaboration with the Delft Design Lab 'Health Journeys'

Healthcare consumption will increase exponentially in the next years, resulting in a growing shortage of (human) resources and increasing costs. Process optimization and digital transformation of healthcare is needed to ensure that patients continue to receive appropriate, comprehensive, and continuous care throughout their entire health journey and to keep healthcare accessible, affordable, and of high quality in the future. Overall, there is a lack of overview and connection of technical innovations in healthcare processes and there is a need for a "compass for navigation" towards transformation.

Explorative research, process thinking, and a human-centered design approach, can significantly contribute to the transformation of healthcare. Recent research at Reinier de Graaf with the TU Delft Design department shows that the design of a digital journey map provides an overview and creates a connection between patients, healthcare providers and employees from the organization for digitalization. The Journey mapping design method provides overview and connection: visualizing processes with journey mapping can help to gain an overview and create a shared language for change. Adoption and implementation of process thinking and working in the healthcare ecosystem, thereby connecting the different perspectives and users within the health care ecosystem.

At the personal patient-doctor level, healthcare providers have limited time, availability, and knowledge about the possibilities for healthcare transformation and are not necessarily keen to innovate. The existing solutions do not fit into the healthcare processes resulting in resistance to use these tools in daily practice. Integration of process solutions around the patient is the key for the best human interactions and healthcare management.

After hospital discharge from the outpatient clinic patients often experience a "black hole" while waiting for the opportunity to start rehabilitation. The challenge of this graduation research a qualitative and explorative study leading to a sustainable and impactful process solution to empower patients for rehabilitation after hospital discharge from the outpatient clinic. In such a way that patients and health care workers are supported to facilitate an engaging start for rehabilitation.

This might include, (you are free to create your own journey and challenges):

- Qualitative, explorative study; Literature review, Observations of care/organizational process, Semi-structured interviews/ Focus groups, Systemic analysis

- Exploring hospital discharge process after treatment at the outpatient clinic:
 - Needs, resistance and expectations of patients and health care providers
 - Factors contributing to communicate and collaborate with intent, empathy, understanding
 - Knowledge and support needed by patients health care providers after treatment at the outpatient clinic and before the start for rehabilitation
 - Opportunities, risks, bottlenecks

What would fit and lead to success?

- Design of a hospital discharge journey, leaving the outpatient clinic and waiting for rehabilitation
- Explore patients' needs and behaviors using theoretical concepts from psychology
- Dare to ask questions with curiosity and listen with attention
- Being able to explore the context within the medical world
- Be creative and convince us
- Think outside the box with open mind
- Opportunity to create a scientific paper

We are looking for a designer with some expertise and interest in working in a hospital environment. You are willing to collaborate with multiple disciplines and stakeholders in this context, and willing to make impact for our patients. We believe that a DfI background fits best for this assignment, but feel free to reach out and convince us why you are best equipped to work on this graduation opportunity.

Are you interested in this assignment? Reach out to Jos Kraal (<u>j.j.kraal@tudelft.nl</u>) and/or Petra Kok (<u>p.kok@rdgg.nl</u>) for a cup of coffee to discuss the opportunities.

