



Optimising the Care Journey at the Department of Cardiology at LUMC

Qualitative study into challenges experienced in the cardiovascular workflow

The Dutch healthcare system is under **increasing pressure from rising patient numbers, administrative burdens and staff shortages**. These challenges are felt throughout the healthcare sector, including academic hospitals such as the LUMC. The cardiology department at the LUMC, in collaboration with TU Delft, has initiated a project to optimise their current care journey. This is done by **improving workflow efficiency, reducing workload, and enhancing the wellbeing** of healthcare professionals, while maintaining high-quality patient care.

The project applies a **strategic design approach with mixed methods**. This includes qualitative research through interviews, observational studies and stakeholder mapping. It identifies key problems in the current workflow, including administrative overload, fragmented communication and a lack of **transparency between internal systems, people and technology**. The findings indicate a **misalignment of expectations patterns** between internal healthcare professionals, patients, and external healthcare providers. This leads to decreased wellbeing, reduced collaboration, and professional burnout.

Keywords: healthcare innovation, strategic design, workflow optimisation, patient experience, digital transformation, cardiology

“What is also very troublesome, is that patients call us themselves during work hours or are transferred through the operator. As a result, we do not actually get to do the work we need to do.”

“Sometimes it is difficult to balance teaching and performing direct patient care, especially when there are many students at the same time.”



A **strategic design framework** was developed to address these challenges. Including interventions for **future implementation**, such as a redesigned patient portal, a digital collaboration platform for interprofessional communication, and a knowledge data bank for medical and lifestyle information.

The interventions aim to **increase transparency, facilitate collaboration and empower patients to engage in their care journey**. By implementing the interventions, the cardiology department can improve workflow efficiency, enhance the wellbeing of internal healthcare professionals and improve patient experience.

“I hope there will be more support to make things more flexible sometimes.”

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