



Experience-Based Co-Creation in Hospitals: Negotiating Roles, Evidence and Value

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Abstract

This thesis examines how experience-based co-creation with clinical staff enables and limits value creation. Using Playlab at Mary Elizabeths Hospital as a case, the study explores how designers and clinicians work together through observations, interviews, workshops and iterative design activities to understand and respond to complex hospital challenges. The thesis adopts an abductive approach and is structured through the ADGE framework: Align, Discover, Generate and Evaluate, developed for the thesis.

The literature review positions the project at the intersection of experience-based design research, co-creation and service design in hospitals, highlighting tensions between experience-based and evidence-based logics. The empirical work shows that co-creation in the hospital context is shaped by recurring negotiations around why co-creation is done, who participates, where it takes place, how it is carried out, and what kinds of value are prioritised. These tensions affect how knowledge is recognised, how roles are distributed and how experiential, social and organisational values are understood.

Based on these findings, the thesis develops a value framework and a scenario-based roleplay intended to support reflection and negotiation in co-creation projects. Evaluation suggested that the roleplay was the most effective intervention because it stayed closer to the discovered problem and made tensions easier to discuss in practice. Overall, the thesis argues that experience-based co-creation in hospitals is not a straightforward route to added value, but an ongoing process of aligning perspectives, practices and values in a complex institutional setting.



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Learning goals

The learning objectives for this thesis align with the official objectives of the Service Systems Design department at Aalborg University and are supplemented by personal learning goals. The thesis will demonstrate the competences, skills and knowledge listed below.

The official learning objectives (Aalborg university, 2025):

Knowledge

Students who complete the module will obtain:

- knowledge about the appropriate methodological approaches to specific study areas
- knowledge about design theories and methods that focus on the design of advanced and complex product-service systems
- knowledge about the relevant literature in the Service Design field

With respect to Problem-Based Learning students will be able to:

- account for the scientific foundation, and scientific problem areas
- describe the state of the art of relevant research

Skills

Students who complete the module will be able to:

- work independently, to identify major problem areas and adequately address problems and opportunities

- analyse, design and represent innovative solutions
- evaluate and address major organisational and business issues emerging in the design of a product-service system

With respect to Problem-Based Learning students will be able to:

- master the scientific methods and general skills associated with the problem area
- produce a project report according to norms of the area, apply correct terminology, document extensive command over relevant literature, communicate and discuss the research-based foundation, problem and results of the project orally, graphically and in writing in a coherent manner
- critically evaluate the results of the project in relation to relevant literature and established scientific methods and models, evaluate and discuss the project's problem area in a relevant scientific context
- evaluate and discuss the project's potential for further development

Competences

Students who complete the module will be able to:

- master design and development work in situations that are complex, unpredictable and require new solutions
- independently initiate and implement discipline-specific and interdisciplinary cooperation and assume professional responsibility

With respect to Problem-Based Learning students will be able to:

- participate in, and independently carry out, technological development and research, and apply scientific methods in solving complex problems
- plan, execute and manage complex research and/or development tasks, and assume a professional responsibility for independently carrying out, potentially cross-disciplinary, collaborations
- independently assume responsibility for own scientific development

Personal Learning Goals

- Understand value more broadly in relation to healthcare and specific contexts, including how it can differ depending on the situation and the people involved
- Follow a design process thoroughly and reflectively, making sure not to skip important step and think carefully about process choices
- Use knowledge sharing activities to improve the project by gaining new ideas, perspectives and feedback that can strengthen both the process and the outcome

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1 Introduction

This thesis examines how experience-based co-creation with clinical staff in hospitals enables and limits value creation. The study is situated in PlayLab at Mary Elizabeths Hospital (see Figure 1), a multidisciplinary unit at Rigshospitalet in Copenhagen that experiments with playful, design-led approaches to improving care for children, young adults and pregnant women. PlayLab operates within a healthcare system characterised by strong evidence-based traditions, resource pressure and complex organisational structures. This thesis explores what happens when experience-based design research and co-creation practices are embedded in everyday hospital work. Over the past decades, design research has shifted from expert-driven and user-centred approaches towards more participatory and co-creative forms of inquiry, in which “everyday people” are recognised as experts in their own experiences and are invited to contribute actively in early stages of design (Sanders & Stappers, 2008; Sanders, 2006). Within this landscape, experience-based approaches have gained prominence for engaging with complex, ambiguous problem situations that are not easily captured by quantitative indicators or predefined categories (Nusem, 2018; Pamedytyte & Akoglu, 2019). Hospitals are characterised by such complexity: they bring together multiple professions and value logics, rely on formal protocols and metrics, and, at the same time, must respond to situated, emotional and relational aspects of care.



Figure 1: Entrance to the PlayLab office, whose playful and informal appearance contrasts with the hospital environment.

In healthcare, the move towards person-centred and service-oriented innovation has led to increasing interest in methods such as experience-based co-design, service design and participatory innovation (Donetto, Pierri, Tsianakas, & Robert, 2015; Pamedytyte & Akoglu, 2019). These new approaches attempt to make patients' and staff's experience visible and actionable, often through generative tools, workshops and prototyping activities that foreground everyday life at the hospital. At the same time, they encounter a system strongly shaped by evidence-based logics, in which legitimacy is closely tied to formal research evidence, standardised pathways and measurable outcomes (Nusem, 2018). The tension between experience-based and evidence-based logics is therefore not only theoretical but plays

out in practical negotiations over what counts as “value”, whose knowledge is recognised and which interventions are considered legitimate.

This thesis is motivated by curiosity about the kinds of value co-creation that can emerge in hospitals, and how it can be both challenging and necessary. Through the case of PlayLab, the study examines how co-creation is understood, enacted and experienced within a complex hospital setting, while also exploring how a design intervention might support and strengthen such methods in practice. In a context like Rigshospitalet, where the overarching purpose of saving lives and providing medical care is already powerful and self-evident, it can be difficult to talk explicitly about value beyond this core task or to make experiential and social effects visible alongside clinical outcomes. The thesis, therefore, asks how experience-based co-creation unfolds in practice in and around PlayLab and how it shapes value creation at the hospital.

2 Literature review

This chapter presents the theoretical foundation and initial desk research that shaped the research question for this thesis. It reviews three core concepts: co-creation, experience-based design research and service design in hospitals. The aim is to clarify concepts and establish the framework for later analysis of empirical data.

The chapter is structured around a conceptual Venn diagram, shown in Figure 2. One circle represents experience-based design research, another co-creation and the third service design in hospitals. Each concept is introduced, with a focus on how it connects to the next. The research question is positioned at the intersection of the Venn diagram, where experience-based approaches, collective creativity, and hospital service innovation converge, creating both opportunities and tensions.

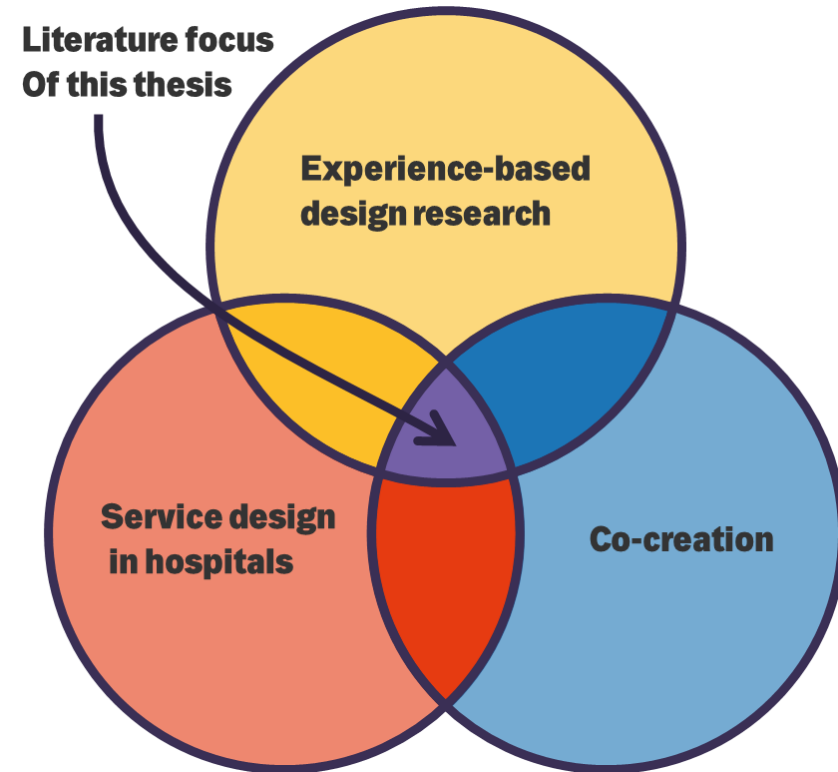


Figure 2 The Venn diagram is used to structure the literature review.

2.1 Experience-based design research

This section positions experience-based design research within the broader development of contemporary design research, where the roles of designers, researchers and participants have become increasingly intertwined (Sanders & Stappers, 2008). It first outlines the changing design research landscape, then examines why experience-based approaches are particularly relevant in complex problem situations characterised by ambiguity, multiple perspectives and evolving conditions (Nusem, 2018), and finally introduces how it is connected to co-creation through generative activities as a means of accessing, expressing and mobilising lived experiences in the research process (Sanders & Stappers, 2008; Visser, Stappers, van der Lugt, & Sanders, 2005).

2.1.1 The changing design research landscape

Design research has gradually developed from expert-driven and user-centred approaches towards more participatory and co-creative forms of inquiry (Sanders & Stappers, 2008). In Sanders and Stappers' description of this shift, people are no longer understood only as subjects to be observed, interviewed or tested, but increasingly as active contributors to knowledge development in the early stages of design (Sanders & Stappers, 2008).

This development is especially visible in the growing significance of the front end of the design process, where questions remain open, outcomes are not yet fixed, and inquiry is oriented towards understanding what should be designed rather than merely how a predefined solution should be implemented (Sanders & Stappers, 2008).

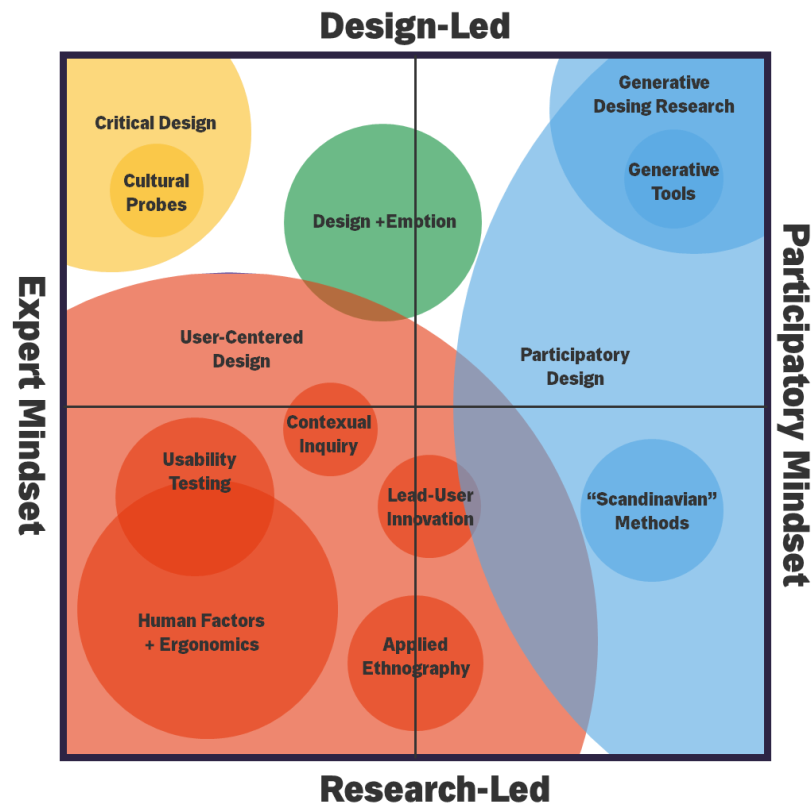


Figure 3: Human-centred design research landscape adopted from Sanders and Stappers (2008)

Within this human-centred design research landscape, shown in Figure 3, experience-based design research is positioned towards the participatory and design-led side of the field, where participants are treated as experts and design inquiry becomes more exploratory and generative rather than mainly evaluative. The figure also shows how this approach differed from more

expert-led and research-led traditions such as usability testing. Through this landscape, experience becomes central because design is not only concerned with optimising products and services, but with shaping future experiences of people, communities and systems (Sanders & Stappers, 2008). This shift also changes the roles within the research process: participants are positioned as experts in their own experience, researchers take on more facilitative roles, and designers contribute by giving form to emerging insights and possibilities (Sanders & Stappers, 2008). Experience-based design research can therefore be understood as part of a broader movement in which design inquiry becomes more collaborative, exploratory and attentive to situated forms of knowing (Sanders & Stappers, 2008; Visser, Stappers, van der Lugt, & Sanders, 2005).

2.1.2 Experience-based approaches in complex problems

Experience-based approaches are particularly relevant when addressing complex problems shaped by multiple actors, changing conditions and different understandings of what the problem is (Nusem, 2018; Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011). In healthcare, for example, systems are often difficult to change because they involve interdependent stakeholders, institutional constraints, informal practices, and competing priorities related to value, quality, efficiency and patient needs (Nusem, 2018). Under such conditions, formal definitions and standard procedures alone are often insufficient for understanding how problems are encountered and lived in practice (Nusem, 2018; Pamedylyte & Akoglu, 2019).

An experience-based approach contributes by attending to how situations are perceived, interpreted and managed by the people involved (Pamedytyte & Akoglu, 2019; Visser, Stappers, van der Lugt, & Sanders, 2005). This is important because many aspects of complex situations are relational, emotional and context-specific and may therefore remain hidden if inquiry focuses only on measurable outputs or predefined categories (Pamedytyte & Akoglu, 2019; Visser, Stappers, van der Lugt, & Sanders, 2005). In this sense, lived experience does not replace other forms of knowledge, but broadens the basis on which complex problems can be understood and addressed (Nusem, 2018; Pamedytyte & Akoglu, 2019).

2.1.3 Experience-based co-creation and generative tools

Experience-based logics and co-creation overlap in generative activities in how the tools provide ways to access forms of knowledge that are difficult to articulate through conventional interviews or observations alone (Visser, Stappers, van der Lugt, & Sanders, 2005). Generative approaches are specifically concerned with evoking people's memories, feelings, concerns, dreams and tacit knowledge through making and reflection (Visser, Stappers, van der Lugt, & Sanders, 2005). Generative tools are not simple techniques for collecting data, but practical means of opening a space where experiential knowledge can be shared, negotiated and mobilised (Sanders & Stappers, 2008; Visser, Stappers, van der Lugt, & Sanders, 2005). By supporting participants in expressing aspects of experience that may otherwise remain tacit, these tools help create a richer understanding of complex situations and inform more context-sensitive responses (Visser, Stappers, van der Lugt, & Sanders, 2005). In this way, co-creation and generative methods form an important methodological foundation for experience-based design research (Sanders & Stappers, 2008; Visser, Stappers, van der Lugt, & Sanders, 2005).

2.2 Co-creation

Co-creation builds on the design research landscape by focusing on how different people participate in collective creativity and value creation, rather than being treated only as subjects of study or as recipients of solutions (Akoglu, 2015). The following section introduces how roles and participation have shifted over time, examines the kinds of value and challenges associated with co-creation and then zooms in on how clinical staff participate as co-creators.

2.2.1 Participation and changing roles

Co-creation can describe any collaborative creative act involving two or more people (Sanders & Stappers, 2012). Within design, Sanders and Stappers use co-creation as the broader term and co-design for cases where collective creativity is intentionally used throughout the design process; in this thesis, co-creation is used in that broader sense to include co-design as well as collaborative works that extend into research, implementation and everyday practice.

Over several decades, the role of “everyday people” in design has changed, as shown in Figure 4. In the 1980s, they were primarily seen as buyers, addressed as customers or consumers; with the rise of software-driven products in the early 1990s, they became users; and today, their role has expanded further to include adapters, participants and co-creators across multiple domains (Sanders, 2006).

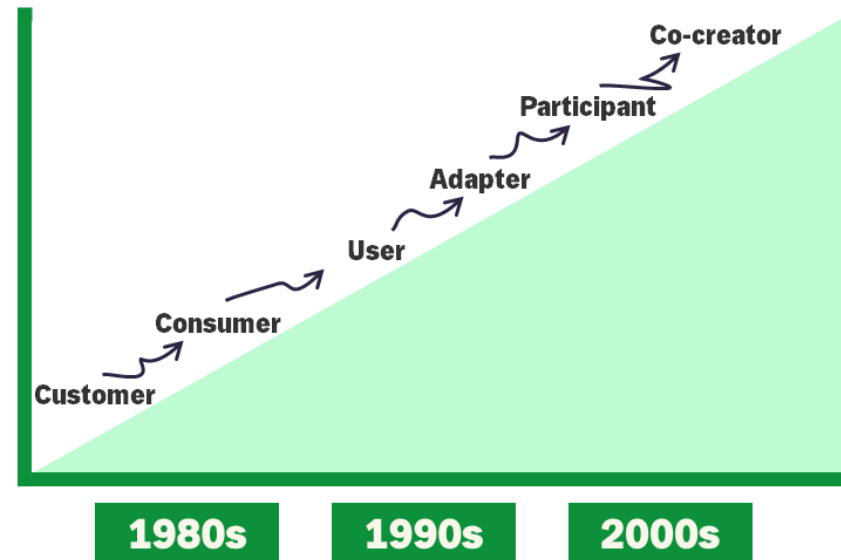


Figure 4: The changing role of everyday people adopted from Sanders (2006)

In collaborative creativity, key dimensions include participant involvement and levels of creative engagement (Sanders & Stappers, 2008). Participation focuses on who joins which activities and when; involving stakeholders in early phases allows them to shape problem framing and opportunities, rather than confining them to late-stage testing (Sanders & Stappers, 2008).

2.2.2 Value creation and risks

Co-creation is associated with diverse benefits and challenges. Steen, Manschot, & de Koning (2011) identify benefits at project, user and organisational levels, including richer idea generation, more relevant services, improved project management and longer-term effects such as enhanced collaboration and organisational learning (Steen, Manschot, & de Koning, 2011). Sanders and Simons distinguish three main value types: monetary value when people are treated as customers to increase consumption; use or experience value when they are involved as users to improve experiences, often with indirect monetary gains; and social value when they are treated as co-creators or owners to improve quality of life, with potential experiential and monetary benefits. These value types relate to different time horizons: monetary value often seeks short-term returns, whereas experiential and social value depend on longer-term engagement and change (Sanders & Simons, 2009).

In this thesis, however, monetary value is understood more broadly than just direct financial gain. In a public welfare context, value is not always meaningfully captured through profit or revenue, since the purpose of service innovation is often linked to welfare rather than market exchange. For that reason, monetary value is taken here to include data-driven performance measures, as these share a similar framing: they translate outcomes into comparable, marginal forms that can support prioritisation, justification and decision-making across the organisation. In this sense, metrics are treated not as identical to money, but as operating within the same evaluative logics of quantification and accountability.

However, this value creation across the three types and the potential additional benefit do not follow automatically from simply bringing people together or labelling an activity as co-creation. Co-creation is sometimes used as a buzzword, with vague expectations and little clarity about which values are being pursued, leading to misalignment between project goals and co-creation activities (Akoglu, 2015; Steen, Manschot, & de Koning, 2011). When this happens, participation can become symbolic rather than impactful, and co-creation may consume resources without meaningful influence on decisions (Steen, Manschot, & de Koning, 2011). Co-creation also demands significant time and capacity for participation, facilitation and coordination across diverse stakeholders, which can challenge already resource-limited organisations (Lee, Jaatinen, Salmi, Smeds, & Holopainen, 2018). This mix of potential value, benefits and costs underscores the need to examine how co-creation is practised in specific contexts.

2.2.3 Clinical staff as co-creators in hospitals

In hospital-based co-creation, clinical staff participate as domain experts and future implementers of solutions (Rygh, 2018; Sanders, 2020). Their practical knowledge of workflows, patient needs and organisational constraints makes them essential for innovations that are both meaningful and feasible (Pamedylyte & Akoglu, 2019; Nusem, 2018).

However, clinical training often prioritises evidence-based practice over creativity and exploration, leaving many staff feeling “not creative” (Sanders & Stappers, 2012). Sanders identifies five mindsets towards co-creation: intuitives, who naturally embrace it; learners, who grow into it through experience; sceptics, who doubt the value of collective creativity; converts, who shift from scepticism to advocacy; and hypocrites, who publicly support co-creation but resist it in practice (Sanders, 2020). In hospital settings, all five mindsets can be found among clinical staff, directly affecting participation: some embrace experimentation, while others defend existing protocols and hierarchies (Sanders, 2020).

Co-creation primarily with staff rather than directly with patients raises important questions about representation and whose voices are truly being centred (Islind, et al., 2023). When patients are difficult to involve directly, clinicians often act as proxy users, carrying patients’ needs while unavoidably balancing these with their own professional perspective (Islind, et al., 2023; Pamedylyte & Akoglu, 2019). This proxy work can create professional-centric bias but also practical value, as staff gain ownership and are more likely to sustain solutions over time (Sanders, 2020). The challenge is to ensure that co-creation

respects both patient, staff and organisational needs while maintaining the creative openness needed for generating value through co-creation (Donetto, Pierri, Tsianakas, & Robert, 2015; Rygh, 2018).



2.3 Service design in hospitals

Service design in hospitals situates design activities within the concrete realities of hospitals, where services unfold across multiple touchpoints, professions and organisational layers (Pamedylyte & Akoglu, 2019; Nusem, 2018). The following section briefly traces how hospital innovations have evolved towards more service-oriented perspectives, describing what service design contributes to and struggles with in hospitals, and finally explores how service design interacts with evidence-based logics in these environments.

2.3.1 From technology-led innovation to service design

Historically, hospital innovation has been dominated by medical and technological advances—from 19th-century sterile techniques and spaces to post-war specialised wards and high-tech equipment. Mid-20th-century evidence-based protocols further emphasised efficiency and standardisation. While enhancing safety and quality, they often treated patients as cases navigating predefined processes, with limited regard for broader journeys and emotional experiences (Wolf, Niederhauser, Marshburn, & LaVela, 2024).

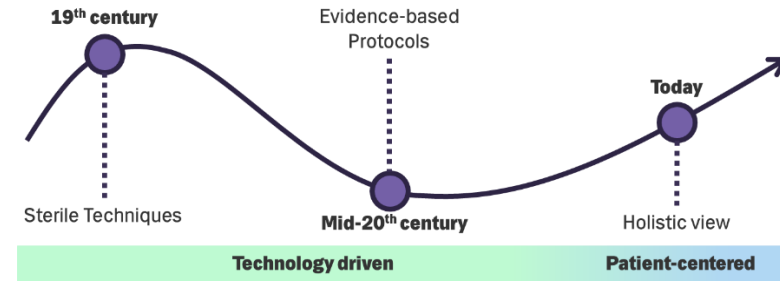


Figure 5: Timeline based on Wolf, Niederhauser, Marshburn & LaVela (2024) and Rygh (2018)

Rygh (2018) argues that demographic change and the growing burden of chronic disease increase the complexity of healthcare delivery, because patients often need coordination across multiple services and support that extends beyond treatment alone. (see Figure 5) In this context, hospitals are pushed towards more patient-centred forms of care that can address informational, emotional and relational needs. Alongside the clinical case, service design is presented to support this shift by helping different stakeholders develop shared understandings and collaborate across professional boundaries. (Rygh, 2018).

2.3.2 Roles and challenges for service design in hospitals

Service design in hospitals is commonly described as a human-centred, collaborative and iterative approach that treats services as integrated systems of processes, touchpoints and interactions rather than as isolated encounters. It combines methods from design to understand experiences over time, make intangible aspects of care visible and support the coordinated design of service processes, interfaces and organisational routines (Pamedytyte & Akoglu, 2019). Through this systemic perspective, service design seeks to align patient experiences, professional practices and organisational goals within complex hospital settings (Hempe, 2013; Nusem, 2018).

A central role of service design is to support a shift towards person-centred care by focusing on the needs, values and capabilities of patients and professionals rather than only on existing procedures or technologies (Donetto, Pierri, Tsianakas, & Robert, 2015; Pamedytyte & Akoglu, 2019). This involves framing services as configurations in which value is co-created through interactions among patients, families and staff and in which outcomes include experiential and relational dimensions as well as clinical indicators. Service design methods such as journey mapping, visualisation and prototyping are used to explore how roles, processes and contexts might be reconfigured to enable more participatory and holistic care (Rygh, 2018).

2.3.3 Experience-based and evidence-based logics

Experience-based and evidence-based logics differ in their assumptions about how knowledge should be generated and applied in healthcare (Pamedytyte & Akoglu, 2019; Nusem, 2018). Evidence-based logics emphasise the systematic production of research evidence and its translation into guidelines, protocols and standardised interventions (Nusem, 2018). Experience-based logics, in contrast, emphasise the importance of lived experience as a source of insights into how care is understood and experienced by patients, relatives and staff in specific contexts (Pamedytyte & Akoglu, 2019). These orientations may create tensions when open-ended and contest-sensitive forms of inquiry meet systems that privilege predefined interventions, measurable outcomes and procedural standardisation (Pamedytyte & Akoglu, 2019; Nusem, 2018).

From an evidence-based perspective, experiential knowledge may appear too situated or too difficult to evaluate in conventional ways, while from an experience-based perspective, standardised models may understate the emotional, relational and contextual dimensions of care (Pamedytyte & Akoglu, 2019; Nusem, 2018). However, the relationship between the two should not be understood as a simple opposition, since several authors point to the value of combining them in healthcare improvement (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011; Pamedytyte & Akoglu, 2019).

2.4 Research question

Across the literature, experience-based design research, co-creation, and service design in hospitals appear as overlapping approaches to engaging with complex hospital challenges (Donetto, Pierri, Tsianakas, & Robert, 2015; Nusem, 2018; Sanders, 2020). Experience-based research provides methods and mindsets for exploring complex problems and reframing them through cycles of making and reflecting (Akoglu, 2015). Co-creation refers to the involvement of different actors, including clinical staff, as co-creators in these processes. Service design situates this work within the historically technology-driven, protocol-oriented, and resource-constrained environment of hospitals, where innovation must balance both experiential needs and institutional logics (Hempe, 2013; Nusem, 2018).

Taken together, these strands highlight that experience-based, co-creative work with clinical staff in hospitals can enable new forms of value creation for patients, staff and organisations, but is also constrained by evidence-based expectations, hierarchies, resource pressures and questions of representation and participation (Donetto, Pierri, Tsianakas, & Robert, 2015; Sanders, 2020). This leads to the following research question:

How does experience-based co-creation with designer and clinical staff enable and limit value creation in hospitals?

This question focuses on hospitals as specific contexts where experience approaches, co-creation and service design intersect and where the relationship between experience-based and evidence-based logics is particularly pronounced.

3 Methodology

This chapter sets out the methodological foundations of the thesis by explaining how the study is designed and how knowledge is discovered from the empirical work. It first presents the overall research approach, clarifying the abductive stance, the understanding of knowledge as both tacit and explicit and the distinction between discovered and generated knowledge. It then introduces the process model that structures the research and design activities, before detailing the specific methods, tools and feedback activities through which data are discovered. Together, these elements aim to make the research transparent and coherent, and to demonstrate its alignment with the study's focus on experience-based co-creation in a hospital setting.

3.1 Approach

This study adopts an abductive approach to explore experience-based co-creation in a hospital setting, to understand how different forms of value are generated and what challenges arise from these practices. Rather than starting from a fixed model of “good” co-creation, this thesis will move iteratively between empirical material and theory, allowing problem framings and conceptualisations to evolve as new observations, tensions and possibilities emerge (Bruggeman, Ciliotta Chehade, & Ciuccarelli, 2023). This approach is well-suited to design research in complex domains such as healthcare, where both the problem and solution spaces are initially uncertain, and the combination of tacit and explicit knowledge is central to understanding the project (Kistruck & Shantz, 2022).

3.1.1 Abductive reasoning in an uncertain design context

Abductive reasoning is often described as inference to the best explanation (Bruggeman, Ciliotta Chehade, & Ciuccarelli, 2023). The move from a surprising or puzzling observation to a plausible hypothesis that could explain it. It is a form of reasoning that does not necessarily seek to derive conclusions, as in deduction or to generalise from repeated observations, as in induction; instead, it asks what the best explanation is for what is observed as visualised in Figure 6 (Bruggeman, Ciliotta Chehade, & Ciuccarelli, 2023).

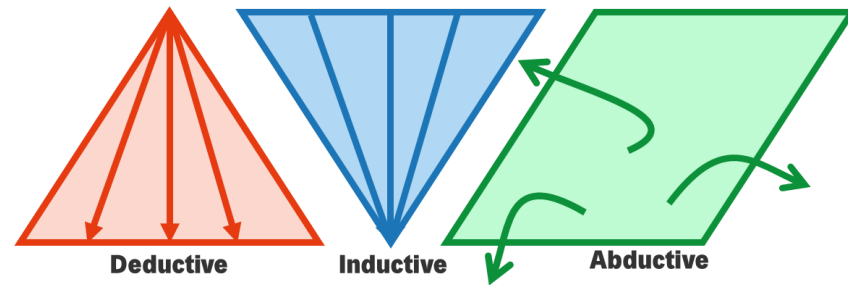


Figure 6: How the different reasonings move with knowledge

Within design research, authors have argued that this abductive movement is at the core of “design thinking” (Dorst, 2011). Designers and design researchers routinely move from partial, ambiguous material about people’s lives to possible ways of understanding and intervening, iteratively assessing and reframing as more is learned (Bruggeman, Ciliotta Chehade, & Ciuccarelli, 2023). This contrasts with more evidence-based practices in hospitals, where reasoning is often deductive: Applying established guidelines or protocols to test whether a patient’s symptom fits a known diagnostic or treatment path (Shin, 2019). Alternatively, inductive, drawing on pattern recognition from prior cases and evidence to generalise about likely health outcomes (Shin, 2019).

3.1.2 Knowledge as tacit and explicit

In this study, knowledge is understood as both tacit and explicit. Tacit knowledge refers to embodied, experiential and often intuitive understandings that people find difficult to explain in words, yet still shape their perceptions and actions (López-Cabarcos, Srinivasan, & Vázquez-Rodríguez, 2024). Explicit knowledge, by contrast, is articulated and codified. Such as protocols, guidelines, process descriptions or quantitative indicators and data values, that can be documented, shared and automated more directly (López-Cabarcos, Srinivasan, & Vázquez-Rodríguez, 2024). Organisational knowledge-creation literature has emphasised that innovation and learning depend on ongoing movement between tacit and explicit forms, rather than on the type alone (López-Cabarcos, Srinivasan, & Vázquez-Rodríguez, 2024).

In design research, Sanders and Stappers (2012) have argued that many of the experiences, needs and aspirations relevant to design are tacit or latent, claiming that people know more than they can say and that conventional verbal techniques tend to privilege what is already explicit and reflectable (Sanders & Stappers, 2012). At the same time, explicitly articulated knowledge, as participatory goals and perspectives, remains essential for coordination work across disciplines and for relating local insights to broader discourses and evidence (Sanders & Stappers, 2012). From this perspective, tacit and explicit knowledge are not competing forms but complementary, and both are required to understand how co-creation unfolds in practice (Sanders & Stappers, 2012).

This view resonates with the abductive approach adopted in the thesis and with the study's experience-based focus (Sanders & Stappers, 2012). Abductive reasoning depends on being aware of what does not yet fit existing explanations and on allowing such moments of misfit to suggest new ways of framing a situation (Sanders & Stappers, 2012). For experience-based co-creation, this means focusing on both what people say about value, challenges and outcomes and what emerges through their actions, interaction and concrete experience over time. Treating tacit and explicit knowledge as equally important and distributed across diverse stakeholders, therefore supporting the choice to work with multiple and complementary forms of knowledge in the empirical work (Sanders & Stappers, 2012).

3.1.3 Discovering and generating knowledge

This thesis treats some findings as discovered and others as generated, reflecting the dual aim of design research to surface existing patterns in a situation and to produce new design models, concepts and artefacts through iterative intervention (Easterday, Rees Lewis, & Gerber, 2018; Edelson, 2002). This distinction is useful because it reveals aspects of the current system that were previously unnoticed and brings new framing, representations and material interventions into being through the research and design activities (Donetto, Pierri, Tsianakas, & Robert, 2015).

Discovered knowledge, as used here, refers to patterns, mechanisms or tensions that pre-exist the project, even if it is this design research that makes them empirically visible (Edelson, 2002). Generated knowledge, by contrast, refers to the new concepts, framings, design arguments and representations that emerge through the concrete configurations of this research and design process (Easterday, Rees Lewis, & Gerber, 2018). This includes, for instance, the specific way in which experience-based co-creation is conceptualised in this thesis, and the visual or material artefacts co-created with participants, which describe how value unfolds over time.

Abductive reasoning, as described in the approach, links these two modes of knowing by moving from surprising observations to exploratory design hypotheses that can be externalised and tested through iterative cycles of generating and evaluating interventions (Easterday, Rees Lewis, & Gerber, 2018). In this project, some insights are discovered by engaging with both tacit and explicit understandings already present in the hospital context, using empirical methods nested within the broader design process. Other insights are generated collaboratively as these different forms of knowing are brought together, externalised and reframed in workshops, analyses and design activities. In this sense, experience-based co-creation is not only the focus of the study but also a mode of knowledge production.

3.2 Process

The research and design process in this thesis is structured around a four-phase model developed for this project, inspired by both the Double Diamond framework (discover, define, develop, deliver) (Design Council, n.d.) and Sanders and Stappers' co-design process (pre-design, generative, evaluative and post-design) (Sanders & Stappers, 2012). Rather than defining phases primarily in terms of divergent or convergent movements, the ADGE framework is organised around the dominant mode of knowledge emergence in each phase.

3.2.1 The ADGE framework

Figure 7 visualises the ADGE framework as a set of four connected phases: Align, Discover, Generate and Evaluate. The different colours in the figure distinguish between the parts of the process associated with discovering and generating knowledge, making it visually clear that the framework moves between more exploratory and more productive modes of work. The diamond shapes show that each phase contains both divergent and convergent movement. The arrows further show that the framework is not meant to be followed in a fixed sequence; instead, it allows free movement between phases, so insights can be revisited and earlier assumptions adjusted as the process unfolds. In this way, the figure presents ADGE as an iterative and flexible design process rather than a linear one.

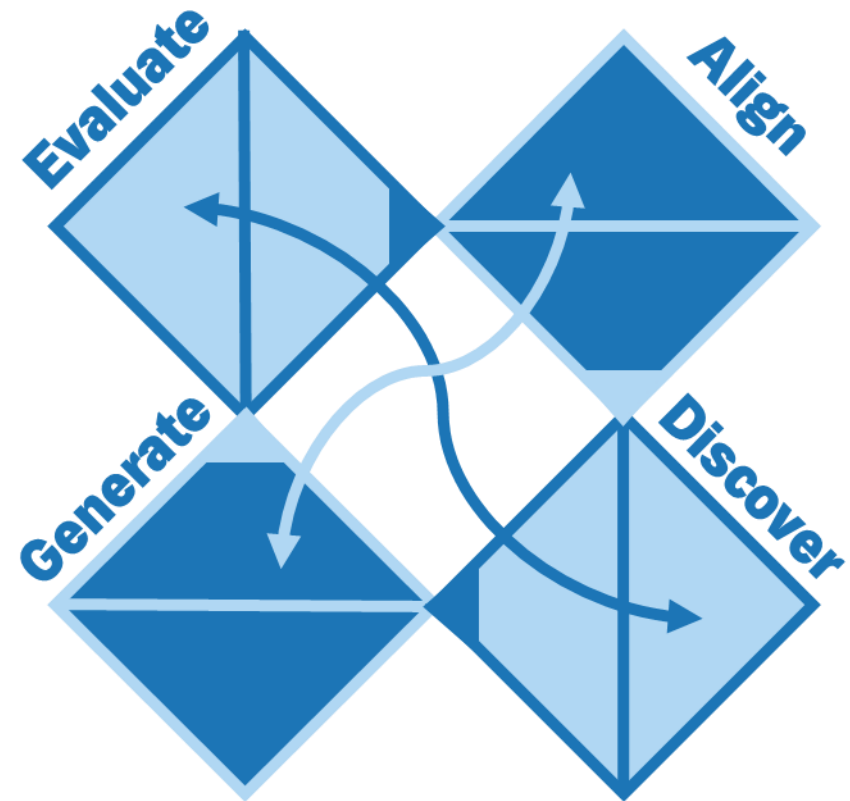


Figure 7: The ADGE Framework

3.2.1.1 Align: Generating a shared starting point

The first phase, Align, concerns the work that occurs before any concrete research or design activities. The focus is on generating a shared understanding of the project's purpose, scope and approach among the involved stakeholders. This includes clarifying motivations, expectations, constraints and roles and negotiating how the work will be carried out while building relationships as a generative approach.

3.2.1.2 Discover: uncovering problems and contexts

The second phase, Discover, focuses on discovering knowledge about the agreed problem area and its context. It involves engaging with stakeholders to understand how the current situation is organised and experienced, what issues are present and which conditions shape the problem. Here, the problem is treated less as something predefined and more as something that needs to be uncovered and externalised in relation to the situation and context.

3.2.1.3 Generate: creating new interventions and understandings

The third phase, Generate, is where knowledge is primarily generated through design and development activities. Building on the insights from Discover, this phase focuses on creating new artefacts, concepts, scenarios or interventions that respond to the discovered problem or need.

3.2.1.4 Evaluate: discovering effects and implications

The fourth phase, Evaluate, focuses on discovering how the generated interventions work in practice and their implications. At this point, it is not known in advance what constraints influence the intervention and value it creates; these effects must be observed and analysed.

3.2.2 Positioning the ADGE framework in relation to existing models

The ADGE framework shares important features with existing process models while shifting the emphasis. The Double Diamond describes four phases (discover, define, develop, deliver) structured around two main cycles of divergent and convergent thinking, first on the problem and then on the solution (Design Council, n.d.). Sanders and Stappers similarly distinguish between pre-design, generative, evaluative and post-design activities in co-design processes, highlighting the importance of extended front-end and follow-up (Sanders & Stappers, 2012).

ADGE retains the idea that design work moves repeatedly between opening and narrowing down, but organises phases by the dominant mode of knowledge emergence. Generated (Align, Generate) or discovered (Discover, Evaluate). Rather than by divergence and convergence themselves.

Process models such as the Double Diamond and the co-design frameworks are often described as high-level heuristics rather than recipes, intended to be adapted to the demands of specific domains and projects (Lee, Jaatinen, Salmi, Smeds, & Holopainen, 2018). Developing the ADGE framework can be seen as such an adaptation. It translates the divergent-convergent and pre/post-design insights from these models into a form that focuses on knowledge discovery and generation.

3.2.3 Using the ADGE framework to study experience-based co-creation in hospitals

This thesis uses ADGE to structure a study of experience-based co-creation in a hospital setting, where value is produced not only through clinical outcomes but also through how staff, patients and designers make sense of experiences, problems and possibilities together. In this context, the framework fits because co-creation's iterative nature requires room for shared understanding, for developing responses to concrete situations, and for testing whether those responses support practice. The approach also reflects that experience-based work in healthcare often involves shifting roles and negotiation expectations, so knowledge has to be discovered and generated in ways that can move between observation, intervention and reflection.

3.3 Methods

The approaches and ADGE framework described above are operationalised through concrete methods. The following sections introduce two methodological lenses that structure the thesis, present the specific tools used across the ADGE phases and describe the feedback and knowledge-sharing activities that support the research process.

3.3.1 Lenses

The methodological choices in this thesis are organised around two lenses: the say-do-make framework for structuring knowledge generation and game-based workshop design for facilitating collaborative sessions. Together, these lenses operationalise the abductive, tacit/explicit, and discovered/generated knowledge outlined earlier, guide the choice of methods within each ADGE phase, and structure how knowledge is discovered and generated.

3.3.1.1 Say-do-make as a structural lens

The say-do-make model shown in Figure 8 is used as a lens for planning and conducting knowledge work throughout the project. In this view, different methods are understood according to whether they primarily focus on what people say (articulated views and reflections), what they do (observable practices and interactions) or what they make (artefacts and expressions that externalise more tacit or latent understandings, seen on the model as knowing, feeling or dreaming) (Sanders & Stappers, 2012). Sanders and colleagues have shown that combining say, do and make activities opens access to deeper, more experiential layers of knowledge that are crucial for design research (Sanders & Stappers, 2012).

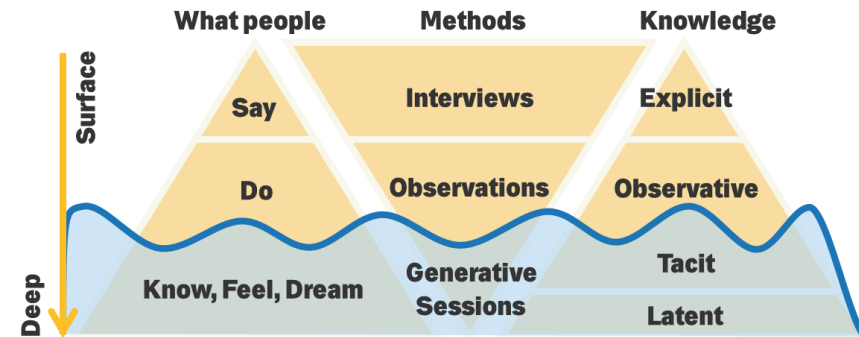


Figure 8: The Say-Do-Make model

Say-oriented methods are used to access explicit perspectives on purposes, experiences, values, challenges and outcomes (Sanders & Stappers, 2012). Do-oriented methods focus on how activities and interactions unfold in practice, including routine behaviour that may never be described directly (Sanders & Stappers, 2012). Make-oriented methods, such as generative activities and visual mapping, invite participants to construct and share artefacts that externalise aspects of their tacit and experiential knowledge, (Sanders & Stappers, 2012) thereby making visible layers of understanding that were previously hidden or difficult to articulate (Sanders & Stappers, 2012).

As a methodological lens, the say-do-make approach directly supports the abductive approach and the view of knowledge as both tacit and explicit (Sanders & Stappers, 2012). Abductive reasoning depends on rich, sometimes surprising observations. Combining say, do and make increases the likelihood of encountering such “surprises” that do not fit existing explanations (Sanders & Stappers, 2012). In this thesis, the say-do-make lens is applied mainly within the discovery phases of the ADGE

framework: Discover and Evaluate. In these phases, the methods are combined to uncover both explicit and tacit aspects of the problem and the subsequent implementation of interventions.

3.3.1.2 Game-based workshop design

For collaborative sessions, methods are further informed by a game-based perspective on workshop design, drawing on the book *Gamestorming* by Grey, Brown and Macanugo (201). Games are understood here as structured activities that help the group move through opening, exploring and closing movement, with different games suited to divergent, explorative or convergent aims and to different stages in a process (Gray, Brown, & Macanugo, 2010). This resonates with the idea in design research of the alternation between broad exploration and focused synthesis (Easterday, Rees Lewis, & Gerber, 2018).

In practical terms, workshop activities are designed and selected with attention to their function within a broader “game world” (Gray, Brown, & Macanugo, 2010). Some activities are intended to open up topics and surface a wide range of experiences or ideas; others to explore and deepen selected themes; and some to close by synthesising, prioritising or reframing what has emerged (Gray, Brown, & Macanugo, 2010). Gamestorming emphasises linking games in series, so that the output of one becomes the input for the next (Gray, Brown, & Macanugo, 2010). This aligns with the abductive stance, where each step generates material for further interpretation rather than being treated as a standalone event (Bruggeman, Ciliotta Chehade, & Ciuccarelli, 2023).

As a lens, game-based workshop design complements say-do-make and ADGE by providing a vocabulary and set of patterns for sequencing methods and managing divergence and convergence within and across phases. operationalise how sessions can be structured to support different kinds of knowledge emergence, with opening and exploratory activities to discover hidden knowledge and games to generate new knowledge through brainstorming-like activities (Gray, Brown, & Macanugo, 2010).

3.3.2 Feedback and knowledge-sharing activities

In addition to formal data collection methods, this thesis involved a range of feedback and knowledge-sharing activities that contributed to the iterative development of the research. These provide external perspectives on emerging interpretations and help surface assumptions that might otherwise remain implicit.

Supervision has played a central role. One-to-one and group supervision at the university had provided structured spaces for discussing theoretical choices, preliminary findings and analytical frameworks. Hospital supervision meetings with the local project contact have supported alignment between the research and ongoing initiatives and provided context-specific insights. These dialogues serve as recurring checkpoints where developing hypotheses about experience-based co-creation can be questioned, refined or redirected.

Peer feedback was gathered during self-hosted sessions with 15 participants from diverse backgrounds in healthcare, social science and design. Engaging with such a diverse group over multiple occasions is intended to expose the project to multiple disciplinary and practical vantage points, thereby broadening the range of possible interpretations and highlighting issues that may not be visible from a single professional or academic perspective. A generative element has also been included in the sessions, with participants brainstorming or testing interventions in groups on a specific problem related to the thesis.

Lastly, a conversation with a domain expert has informed the study's theoretical development. Discussions with Liz Sanders have been used to explore how preliminary observations relate to concepts in co-creation and generative design research, and to test where emerging interpretations resonate with challenging these theoretical frameworks

These feedback activities are essential to the methodological design, supporting continuous reflection on the research process and outcomes and reinforcing the thesis's iterative approach.

4 Context and empirical data

This chapter presents the empirical context and material that form the basis for the understanding of experience-based co-creation in a hospital setting. It introduces the case of PlayLab at Mary Elizabeths Hospital shown on Figure 9 and describes the empirical data discovered through observations, interviews and workshops. The aim is to make it transparent where the data come from, what kind of situation they represent and how they have been produced and handled in relation to the methodological approach outlined earlier in the thesis.



Figure 9: Mary Elizabeths Hospital

4.1 Case study: PlayLab and Mary Elizabeths Hospital

The case is situated at Rigshospitalet in Copenhagen shown in Figure 10, Denmark's largest and most specialised hospital (Rigshospitalet, n.d.). Rigshospitalet functions as a national referral hospital, receiving patients and families from across Denmark as well as from Greenland and the Faroe Islands (Rigshospitalet, n.d.). Its services are organised into a wide range of sections and departments, each with its own professional culture, workflows and improvement projects (Rigshospitalet, n.d.).

Within this setting, Mary Elizabeths Hospital is an upcoming hospital for children, young people and pregnant women and is planned to open in 2027 (Ole Kirks fond, n.d.). The project combines a new physical building with a broader transformation programme focused on experience, play and patient-centred care (Ole Kirks fond, n.d.). Mary Elizabeths Hospital is established through a collaboration between the municipality of Copenhagen, the Capital Region and the Ole Kirk Foundation, with a substantial donation earmarked for user experience and play (Ole Kirks fond, n.d.). This funding forms the basis for PlayLab and an in-house design team with designers and anthropologists



Figure 10: Rigshospitalet

The strong emphasis on user experience also requires that the hospital be designed around the lived experience of care, rather than solely around clinical functions. Building the new hospital, therefore, involves both constructing physical spaces and building new mindsets and practices around care, collaboration and participation (Mary Elizabeths Hospital, n.d.). In this sense, Mary Elizabeths Hospital can be understood as a site where experience-based approaches and evidence-based logics meet. (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011).

4.1.1 PlayLab as an experimental unit and collaborative space

PlayLab is a multidisciplinary unit within Mary Elizabeths Hospital that tests and develops the concept of PlayLab itself as a design service desk for clinicians in Mary Elizabeths Hospital, while supporting ongoing clinical work at Rigshospitalet (Rigshospitalet, n.d.). At PlayLab, staff from Rigshospitalet can seek help in addressing problems and needs through playful solutions and processes. Clinical professionals who have identified a problem are met by a team that can help co-create and test solutions that support patients, families and staff (Rigshospitalet, n.d.).

4.1.2 Problem framing and case focus

This case is driven by curiosity about the value created through PlayLab's Co-creation practices and the interactions that shape them. It is also a way to learn more about how these practices unfold in everyday hospital work, in line with the literature that treats co-creation as a situated, relational and process-oriented form of knowledge production rather than a single method or outcome. PlayLab is a strong case for this thesis because its experimental, experience-based approach fits the research question. At the same time, the smaller scale of many PlayLab projects makes it possible to follow the process across more phases and therefore to observe co-creation and its effect not only as an idea but as something that unfolds and changes throughout the process, from initiation to implementation.

This case also aligns with PlayLab's expectations for the thesis, which are to generate insights into their practices and context rather than to address a single predefined problem. That makes it a strong fit for an abductive study, where the aim is to explore and refine understandings through engagement rather than to begin from a fixed problem statement.

4.2 Empirical data

This section presents the empirical material that forms the basis for the analysis in this thesis. The material has been discovered iteratively through observations, interviews and workshops and it reflects both the ongoing work at PlayLab and the broader context of Mary Elizabeths Hospital and Rigshospitalet. Together, these sources provide insights into how co-creation is practised, experienced and discussed in the hospital setting.

The empirical material comprises observations, field notes, individual and group interviews and co-creative workshops. These data were discovered between 3 February 2026 and 19 May 2026, during which PlayLab and collaborators were observed, interviewed and engaged through workshops.

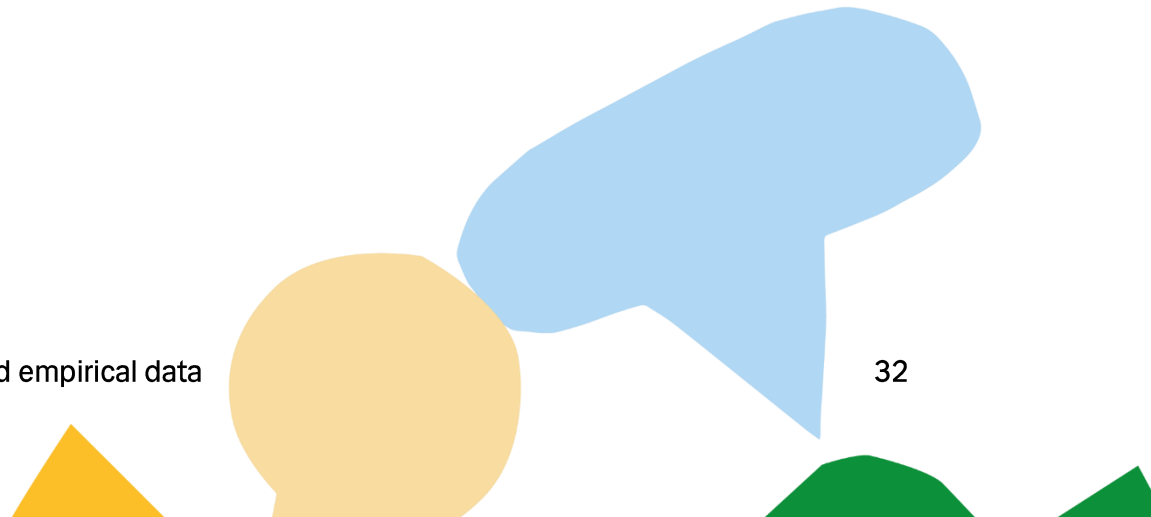
4.2.1 Data collection process

Data collection followed an iterative, abductive process consistent with the methodology described earlier. Initially, emphasis was placed on exploratory observations to gain a broad sense of PlayLab's work, the kinds of problems it addressed, and the unfolding of co-creation. Field notes were taken by hand during or immediately after activities and later typed up to ensure a consistent written format.

As patterns and tensions began to emerge from these observations, the focus shifted to interviews to explore them in more depth. Individual and group interviews were used to assess participants' reflections on co-creation, experience-based approaches, and the hospital setting, including aspects that might not be directly visible in observations. Interviews were audio-recorded and later transcribed so that both observation and interviews would be available in comparable written form. In the later stages of the project, workshops were organised to explore further and test ideas and concepts related to co-creation and experience-based approaches in the hospital setting. Here, the workshop results are used as data together with observations from the workshop.

4.3 Aligning the project

Taken together, the literature review, the methodology and this chapter on context and empirical data constitute the Align phase of the ADGE framework for this thesis. Together, they position the project within experience-based research on co-creation and service design in hospitals, clarify how the study will be conducted and describe how the collaboration between the PlayLab and Mary Elizabeths Hospital is organised.



5 Discover

The Discover phase of the ADGE framework marks the shift from aligning the project with academic debates, methodological commitments and the case context to systematically exploring what is happening in practice in PlayLab. In this chapter, the research question is explored by investigating how experience-based co-creation with clinical staff currently unfolds, which forms of value are generated or constrained, and where challenges and missed opportunities emerge in everyday work.

The chapter is structured around three primary kinds of data sources: Observations, interviews and workshops. Followed by a synthesising subchapter on recurrent findings. The observations subchapter focuses on what clinical staff and designers do in practice, tracing routines, interactions and situated adaptations in relevant parts of the hospital. The interviews subchapter focuses on what people say about their experiences, values, challenges and expectations related to co-creation in the hospital setting. The workshops subchapter examines what participants make together when invited to externalise tacit knowledge and explore alternative futures through generative tools. In each of these subchapters, empirical material is presented and reflected on, with emerging findings made explicit in relation to the research question.

The final subchapter on findings draws insights from the three data sources to identify patterns of challenges and missed opportunities for value creation in current co-creation practices. Here, the Discover phase contributes to the ADGE framework by showing where and how existing initiatives appear to work well, where they struggle and which conditions shape these outcomes. In doing so, it addresses the research question while also preparing the ground for the Generate phase.

5.1 Observations

This subchapter introduces three observed areas of interaction: the testing of a co-created intervention, a meeting for project managers, and a co-creation project kick-off. These different areas illustrate different aspects of co-creation in PlayLab and in relation to Mary Elizabeths Hospital. The observations address the research question by showing how experience-based co-creation with clinical staff enables value creation in practice, but also how hospital routines, ownership gaps, and evidence-based expectations limit it.

5.1.1 Project testing

The first observation concerns a PlayLab project that tested a co-created intervention in a paediatric ward. The project developed a 3D-printed zebra head that attaches to the scanner used to identify patients via wristbands (see Figure 11). The intervention was co-created by designers and a nurse to address both low scanning rates and discomfort some younger children experienced during scanning. In line with Sanders and Simons' (2009) value framework, the nurse explicitly aimed to generate social value by giving children a more active and playful role in their own treatment, which, in turn, produced experience value through a less frightening scanning situation and monetary value (when seen in the thesis as a metric) by contributing to a higher scanning rate over time.



Figure 11: The 3D printed Zebra head, scanner, wristband and poster

The observation, however, also illustrates how co-created interventions depend on broader ownership among colleagues to become part of everyday practice. While the nurse who co-created the solution expressed strong commitment and engagement, other nurses showed less ownership and raised concerns as soon as the prototype was introduced (See Appendix A). A central issue with the solution was the physical size of the 3D-printed zebra head, which several nurses immediately perceived as impractical for their workflows, even though the co-creating nurse downplayed the concern about size. This points to a form of ownership bias, in which personal investment in a solution can make its shortcomings less visible to those who co-created it.

At the same time, the observation shows how implementation is strengthened when clinical staff take on the operational responsibilities of implementation that designers cannot easily perform outside the ward. The co-creating nurse actively reminded colleagues in the electronic journal system to use the new solution, acting as an internal ambassador for the intervention (see Appendix A). This aligns with the literature on clinical staff as key carriers of co-created practices, whose situated authority and everyday presence enable them to translate design intent into actual routines in ways that external designers cannot easily achieve (Nusem, 2018). In this case, the electronic journal system not only functioned as a practical reminder but also as a bridge between the experience-based intervention and the hospital's evidence-based infrastructure (see Appendix A). Using shared systems in this way can help align and gradually merge experience-based logics with evidence-based expectations, as co-created practices become visible,

discussable and legitimate within the same organisational spaces as traditional medical knowledge.

Alongside the physical prototype, PlayLab developed a storyline and character universe intended as an open script that nurses could adapt and build upon when interacting with children (See Appendix A). In practice, several nurses found this narrative dimension challenging. They treated the provided storyline as something that needed to be followed correctly rather than as an open framework to be reinterpreted and felt uncomfortable improvising or “breaking the rules” of the character created by PlayLab. This can be seen as a clash between experience-based expectations of creative adaptation and a professional culture trained to follow protocols and evidence-based guidelines, even in situations without direct clinical consequences.

5.1.2 Business case template

The second observation concerns a launch meeting for project managers on a new business case template (see Figure 12) developed with a consulting firm for Mary Elizabeth's Hospital, intended to compare the operational costs of projects with their expected rewards and to make different kinds of value more visible (see Appendix B). While the template explicitly aimed to broaden the view of rewards, its design and timing also revealed how certain value types were implicitly prioritised. The business cases were introduced after projects had already been initiated, focusing on the operational phase rather than on earlier framings and concept development (See Appendix B). In terms of Sanders and Simons' (2009) value framework, this late-stage positioning makes it more likely that co-created value will be articulated primarily in monetary terms, since experience and social value are often shaped in earlier phases and are harder to renegotiate once an intervention is largely defined.

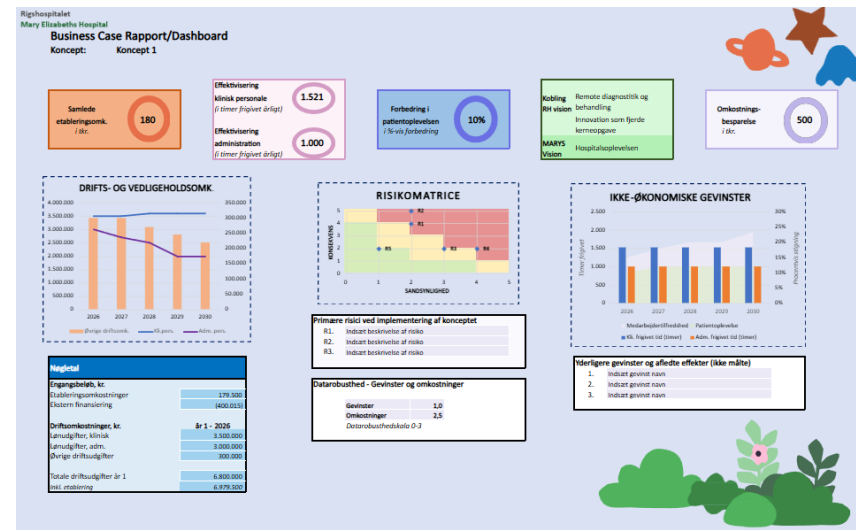


Figure 12: Business case template

The chosen timeframe further reinforces this tendency. The template asked project managers to estimate rewards over a three-year period, which resonates with Sanders and Simons' (2009) observation that monetary value is typically associated with shorter time horizons. In contrast, experience and social value depend on longer-term engagement and change. By constraining the analysis to three years, the template favours value effects that can be quantified relatively quickly, such as cost savings or productivity gains, while making it difficult to account for slower, cumulative shifts in experience or culture (See Appendix B).

The language used in the template also shaped how value could be understood. Value was consistently framed as “rewards”, suggesting something clearly identifiable, transferable and explicit (see Appendix B). This choice of wording favours explicit forms of knowledge, such as financial metrics or codified performance indicators, rather than tacit knowledge and experiences that are harder to express in discrete units. During the meeting, several managers reflected on how difficult it was to combine “soft values” with “hard numbers” in this format, mirroring the tension between experience-based and evidence-based logics described in the literature (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011).

When discussing specific reward categories, efficiency was initially placed somewhere between monetary and experiential value, since it did not necessarily improve patient or clinician experience but also did not always translate directly into cost savings (see Appendix B). In the end, efficiency was grouped with experience rewards mainly because it was “not monetary”, which effectively centred the whole categorisation around the monetary dimensions as the primary reference point. This suggests that even when non-monetary value types are acknowledged, they are organised in relation to financial metrics rather than on their own terms.

The way experience value was operationalised in the template further illustrates this narrowing. Experience was measured only as percentage increases in survey satisfaction scores, providing a thin, highly specific data foundation for a complex phenomenon (see Appendix B). This aligns with an evidence-based orientation that seeks clear indicators but risks reducing experience to what can be captured in standardised instruments, rather than engaging

with the richer, tacit dimensions that experience-based methods typically foreground. All value estimates were also graded on “robustness”, with the highest level described as “evidence-based” (see Appendix B). Experience-based interventions are thus assessed from an evidence-based perspective, with robustness defined by conventional research evidence.

5.1.3 Co-creation project kick-off

The third observation concerns the kick-off of a co-creation project at PlayLab, involving a designer, a nurse and a doctor in a 1.5-hour work meeting, which is described as the project's starting point and initial problem exploration (see Appendix C). Although the project was framed as co-creation, the meeting was characterised by a strong power imbalance. Rather than staging generative activities in which participants jointly explored and reframed the problem, the session remained at the level of knowledge sharing, and the clinicians left without gaining new insights into the situation (see Appendix C). This contrasts with the literature's description of co-creation as a mode where clinical staff act as co-creators in framing problems and imagining solutions, supported by designers as facilitators of collective creativity rather than as sole owners of the design process (Sanders & Stappers, 2012).

Throughout the meeting, the designer repeatedly emphasised that she, together with other designers, would be responsible for “the real brainstorm” in later sessions, while the clinicians' role was to externalise their knowledge so that designers could work with it (see Appendix C). This reflects a division of roles closer to traditional user-centred research, where experts extract

information from users and then design on their behalf, than to the co-creation practices outlined by Sanders and Stappers (2012).

The meeting further revealed a significant misalignment in how the problem was framed. The nurse and doctor repeatedly tried to focus on the underlying causes and systemic patterns behind the problems, referring to general issues across 12000 different diagnoses. In contrast, the designer insisted on discussing concrete consequences that could occur, specific examples and individual stakeholders (see Appendix C). From a design perspective, this focus on empathising with cases is consistent with approaches such as design thinking, which often begin with concrete user stories to support abductive reframing of problems. However, in this context, the clinicians already had deep, everyday experience with the patient and did not share the same need for such individualised exemplification. They also suggested that the designer could gain a better understanding by being more present in the hospital, hinting at the importance of contextual immersion rather than repeatedly asking for examples (see Appendix C).

The clash was also visible in how the meeting's intentions were perceived. While the session was formally presented as co-creation, one clinician explicitly noted that pursuing the direction they believed was needed would "destroy the designer's game", signalling an awareness that the chosen methods constrained which kinds of knowledge and perspectives could surface (see Appendix C). The clinicians' reactions resonate with the documented tensions between experience-based approaches and evidence-based logics in hospitals, but in an unexpected way: Here, the experience-based logic, applied rigidly and without openness, acted as a barrier, while the evidence-based perspectives more quickly recognised the mismatch between

method and problem. This demonstrates that experience-based approaches do not automatically support co-creation; when not used adaptively, they can become a source of misalignment and resistance.

After the meeting, the designer described the clinicians as resistant and acting like "hypocrites" in the co-creation process (see Appendix C). However, from the perspective of Sanders' (2020) Discussion of mindsets towards co-creation, the observed dynamics suggest almost the opposite configuration: the clinicians attempted to engage critically with the framing and methods. At the same time, the designer held on to a co-creation label without enacting the corresponding redistribution of roles and creativity. Rather than reflecting a lack of commitment on the clinicians' side, the situation appears close to what Sanders (2020) described as the designer acting as a hypocrite, being an actor who speaks the language of co-creation while retaining control over key decisions and generative activities.

5.1.4 Do-findings

Across the three observations, a recurring pattern is the friction between experience-based and evidence-based logics in everyday practice. Experience-based initiatives introduce playful interventions, narrative properties and more comprehensive notions of value. However, they must be translated into evidence-based infrastructure, metrics and decision-making tools that prioritise measurable effects. When design-led methods are applied rigidly, this friction can become a barrier rather than a productive negotiation. Together, the observations suggest that this clash is shaping how problems are framed, which values are counted and whose expertise is allowed to guide decisions.

5.2 Interviews

This subchapter presents three interviews that complement the observed interactions by adding participants' own perspectives on co-creation in and around PlayLab and Mary Elizabeths Hospital. The first interview is with the nurse and the doctor who participated in the PlayLab co-creation project kick-off; the second is with a test designer at PlayLab; and the third is with a PlayLab play designer. Together, these interviews offer different professional viewpoints on co-creation, highlighting how clinicians and designers, respectively, understand the aims, roles and value creation in co-creative work. The interviews deepen the research question by showing how clinicians and designers understand the value created through co-creation and where they see limits regarding patient representation, creative roles and practical feasibility.

5.2.1 Clinicians

The first interview was conducted with the nurse and doctor who participated in the project kick-off meeting and focused on their experiences of collaborating with PlayLab designers (see Appendix D). The clinicians described having had high expectations of the project kick-off, but also a strong sense of confusion and misalignment as the process unfolded (see Appendix D). When they thought about design beforehand, they primarily associated it with visual expression and communication, and expected PlayLab to contribute by making materials and messages clearer and more engaging. This points to limited familiarity with different design fields and a bias towards seeing design as a late-stage, aesthetic activity rather than as a broader,

generative practice, in line with experience-based co-creation literature (Sanders & Stappers, 2012).

When asked what kind of value they hoped the project would create, both clinicians answered “value for the patient” and found it difficult to specify it further (see Appendix D). When this was followed up with a question about whether the aim was to create a better experience for patients, they strongly rejected this phrasing, emphasising that the issue at hand concerned the hospital's “core task,” not an add-on to the experience (See Appendix D). This response shows the clash between experience-based and evidence-based logics described in the literature (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011): while design and service design often treat experience as a central dimension of value, clinical staff tend to reserve the language of “core tasks” for problems framed in more traditional, outcome- and guideline-oriented terms. At the same time, when elaborating on value, the clinicians noted that a “boring” version of their goal was to meet national standards, aligning with a monetary-oriented view of value as something measurable, whereas what they really cared about was helping patients manage their treatment and building better relationships (see Appendix D). This resonates with Sanders and Simons' (2009) distinction between monetary, experience and social value, suggesting that the clinicians primarily aimed for social and experiential value, while assuming that monetary effects, as formal standards, would follow as an additional benefit.

The interview also confirmed and deepened the observations from the project kick-off. The clinicians explicitly stated that the meeting “did not give us any new insights” and that it “became clear how different our worlds are”, validating the impression that the session had remained at a knowledge-sharing level without discovering new shared understandings (see Appendix D). A key point of friction concerned what counted as evidence. The clinicians had expected that PlayLab would want academic articles, clinical guidelines or statistical data about the problem and understood “evidence” in terms of formal research (see Appendix D). By contrast, the designer mainly requested individual cases and concrete patient stories as input for empathising and framing, which the clinicians did not initially recognise as evidence in the same sense. This difference illustrates how experience-based and evidence-based logics mobilise different notions of data and robustness, mirroring the tensions described in the literature on integrating these approaches in hospitals (Pamedylyte & Akoglu, 2019).

Finally, the interview shed light on the clinicians’ self-perceived role in co-creation. Both described feeling that they “did not have the brain” to do what designers do, and did not see themselves as creative. (see Appendix D). They positioned themselves as providers of information rather than as potential co-designers, closely mirroring the mindsets noted by Sanders (2020), in which some participants regard design-led creativity as something reserved for others and co-creation risks becoming a one-way extraction of knowledge rather than a shared generative activity. This self-positioning also resonates with the designer’s behaviour in the observed meeting, where creative work was explicitly reserved for designers in later “real brainstorms” (see Appendix C)

and helps explain why the clinicians experienced the collaboration as misaligned despite their initial enthusiasm for working with PlayLab (see Appendix D).

5.2.2 Test designer

The second interview was conducted with a test designer at PlayLab, who has an anthropology background (see Appendix E). She described PlayLab as a concrete way of supporting Rigshospitalet’s ambition to treat innovation as a “fourth core task”, alongside treatment, research and education (Rigshospitalet, n.d.). Positioning PlayLab as a bridge between evidence-based foundations and experience-based experimentation. In her view, the value that PlayLab primarily works with is experiential and relational; if clinicians were seeking support for more strict evidence-based or technology-driven solutions, she expected they would instead collaborate with universities or industry partners (see Appendix E). Experience-based approaches, such as prototyping and playful exploration, are understood to build on, rather than replace, evidence-based practice. The clinical core remains the foundation, while designed activities offer new perspectives on how this core is enacted and experienced.

She emphasised that projects at PlayLab often address aspects of care beyond immediate treatment, such as relationships and communication, and that co-creation can increase clinicians’ influence on their work in “fun” ways (see Appendix E). This resonates with Sanders’ (2008) argument that making and playful generative activities enable staff to engage as co-creators and with literature highlighting co-creation’s potential to improve not only services but also collaboration and organisational learning in

pressured healthcare environments (Steen, Manschot, & de Koning, 2011). In the interview, she linked this to broader challenges in healthcare around recruitment and retention, suggesting that experience-based approaches might both address specific problems and help make the hospital a better place to work (see Appendix E). She also described how PlayLab helps clinicians see patients “as humans” in a more holistic way, something she found difficult for clinicians to sustain within existing frameworks and documentation systems, which rarely support such a perspective.

Her view of the designer role aligns closely with co-creation literature (Sanders & Stappers, 2012) Furthermore, stands in contrast to the behaviour observed in the co-creation project kick-off meeting described earlier. She did not believe that designers had “better ideas” than clinicians; instead, she stressed that designers bring different tools for sorting, combining and working with ideas and that their main task is to facilitate settings where clinicians can use their extensive knowledge creatively (see Appendix E). This mirrors Sanders and Stappers’ (2012) description of designers as facilitators of collective creativity and challenges the more expert-driven notions of design in which creative control remains with the design team. She also framed clinicians as effective proxies for patients, both because they understand patients’ and families’ problems and because they must eventually implement and sustain new interventions. This argument aligns with research on proxy design (Islind, et al., 2023) and on the importance of staff involvement for successful implementation in hospitals.

At the same time, she emphasised that negotiating between evidence-based and experience-based logics is not

straightforward. Initially, she experienced resistance and uncertainty, but as relationships deepened and clinicians saw concrete examples of what experience-based approaches could do, it became easier to introduce methods such as co-creation workshops and prototyping (see Appendix E). She saw PlayLab’s embeddedness in the hospital as important to this negotiation, implicitly addressing clinicians’ earlier critique that designers were insufficiently connected to everyday practice. Finally, she reflected on the difficulty of building clinicians’ design competencies while keeping projects moving. Clinicians are used to rules, frameworks and correct answers and therefore tend to move quickly towards solutions, while design-led work insists on spending time in the problem space. She suggested that deeper co-creation would require repeated collaboration with the same clinicians, gradually increasing their participation. However, she noted that this would limit PlayLab’s reach in the wider hospital (see Appendix E).

5.2.3 Play designer

The third interview was conducted with a play designer at PlayLab and focused on his understanding of PlayLab’s role in relation to clinical work and hospital innovation (see Appendix F). He described PlayLab as a team that helps clinicians move from observing the symptoms of a problem to jointly analysing it and developing possible solutions, rather than working only with predefined design outputs (see Appendix F). This position aligns with the literature on experience-based design research, in which designers support the iterative reframing of complex problems through collaborative inquiry rather than merely giving form to already-defined requirements (Easterday, Rees Lewis, & Gerber, 2018).

Beyond the direct outcomes of individual projects, the designer emphasised the importance of their broader impact on everyday innovation culture. He described how projects can help clinicians reflect on their own practices, articulate related issues and gradually develop a mindset in which they feel more comfortable exploring problems and solutions themselves (see Appendix F). This aligns with Steen et al.'s (2011) view that co-creation generates organisational learning and longer-term collaborative effects, as well as Sanders' (2020) argument that co-creation can build creative confidence among non-designers by inviting them into making and reflecting activities. As in the earlier interviews, he noted that clinicians tend to talk about value primarily as something created for patients. At the same time, he himself framed value as a response to need, defining it in terms of explicit needs (see Appendix F). This can be seen as a broader view of value than that of the clinicians, but still narrow in terms of the different kinds of value.

Making and materiality were central to his description of shifting mindsets and the development of ownership. De explained that clinicians are often invited to build solutions in paper or cardboard, not because this is the most efficient development route, but because it strengthens their belief in their own skills and their sense of ownership over the solutions (See Appendix F). This directly reflects Sanders' (2006) description of the act of making as something everyone desires, on different levels and in different contexts. The designer links this to a need for more holistic views: Clinicians need support to see patients as more than diagnoses, and to see themselves and their colleagues as more than their formal roles and evidence-based competences, including how they can influence care at a more experiential level

(see Appendix F). This mirrors both the test designer's emphasis on PlayLab helping clinicians "see patients as humans" and the nurse and doctor's struggle to articulate value beyond "value for the patient".

At the same time, he highlighted structural constraints that complicate experience-based work. He described that hospitals were often viewed as "closed" systems where frameworks, settings and organisational silos often worked against each other, making local routines hard to change and cross-silo collaboration difficult (see Appendix F). This account resonates with the literature on the complex, layered nature of hospitals and with a view of how existing silos and protocols often fail to support experience-based logics (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011).

In the play designers' experience, clinicians often associate design primarily with aesthetics, making it harder to introduce the broader landscape of design approaches and to discuss different possible solutions (see Appendix F). He also noted that co-creation is sometimes used only as a label or buzzword, without corresponding systems, roles or methods to support it in practise, matching both Akoglu's (2015) and Steen et al.'s (2011) critique of symbolic participation in co-creation, as well as the observed I project kick-off meeting with the same problems.

5.2.4 Say-findings

Across the three interviews, a recurring pattern is how participants talk about co-creation, value and design in ways that reflect and reproduce the tension between experience-based and evidence-based logics. Clinicians consistently described value primarily as “for the patient”, in contrast to the designer's view on value as a response to a need. The clinicians also tend to see design mainly visually and regard themselves as non-creative providers of information. In contrast, designers describe their own role as facilitating clinicians' creativity through making, prototyping and reflection, revealing misalignments in how roles, expertise and co-creation are understood. Finally, all three interviews highlight that terms like “design”, “value” and “co-creation” are often used with different meanings or even as buzzwords and that only when relationships, expectations and notions of evidence are explicitly negotiated do experience-based approaches begin to reshape everyday innovation practices in the hospital.

5.3 Workshops

This subchapter presents two generative workshops that complement the observations and interviews by exploring how co-creation can be staged in practice. The first workshop was conducted with PlayLab designers and nurses to examine how collaboration unfolded. The second workshop involved four students from different fields and was inspired by literature emphasising the importance of involving future users in co-creation activities, focusing on exploring challenges and solutions present at hospitals (Sanders & Stappers, 2008). The workshops respond directly to the research question by exploring when co-creation with clinical staff can help surface shared value for patients and staff. Then the workshop format itself constrains participation, alignment and follow-through.

5.3.1 PlayLab project

The first workshop was carried out as part of an ongoing PlayLab project. It was planned and facilitated to both contribute to the project and serve as empirical material for this thesis. It brought together ten participants: from PlayLab, a graphic designer, a product designer, a play designer and two test designers; and from the clinic, five nurses from different positions and areas. PlayLab's and the nurses' overall goal for the session was to "collectively explore how one could make a solution for the problem". In contrast, the thesis focused on how such a co-creative exploration unfolded in practice between designers and clinicians in this hospital setting.

The workshop was structured using the I DO ART framework (Hersted, Obel Høier, & Pedersen, 2011), with a clear intention, desired outcome, agenda, rules, roles and a timeframe. The

intention was to explore the problem area and requirements for a solution in a way that created a shared understanding, which could inform the design process and further exploration of the problem in the hospital. The desired outcome was to complete six areas of the PlayLab project canvas: What is the problem, What do we do today, Which terms and conditions are at play, What should the solution be able to do, What do others do to solve similar problems, and Which risks are important to be aware of. To reach this outcome, the workshop agenda used a game-based format in mixed groups of designers and clinicians. In each round, groups worked on a large paper "game board," combining rules and prompts to write or draw their findings directly on the board. When time was up, the group switched boards with another group, layering their contributions onto the previous group's material before jointly presenting the most important points. First, three games focused on the problem-related areas, then a second part addressed the solution-related areas.

The games were deliberately designed to invite more experience-based and tacit knowledge into the discussion by allowing participants to use not only written text but also drawings and maps, in line with generative tools literature that emphasises making and visualisation as ways of accessing what people know beyond what they can say (Sanders & Stappers, 2012). Some games took the form of semi-structured interviews, others used simple mapping structures such as matrices. The roles were arranged so that each group contained both designers and nurses. This reflects the co-creation literature's recommendation to mix roles and responsibilities while still providing structure to support participation in complex settings such as hospitals (Rygh, 2018).

From a facilitation perspective, the alignment phase at the beginning of the workshop proved crucial (see Appendix F). It quickly became apparent that participants held different understandings of the problem and that it was difficult to construct a shared framing, which matched earlier observations of misalignment during the project kick-off meeting (see Appendix C). The games helped by providing the groups with concrete prompts and starting points, but a sense of shared direction did not fully emerge until after the first round of presentations. Up to that point, both designers and clinicians showed limited trust in the process, reflecting the broader tension between open-ended, exploratory design logics and the expectation for clearly defined, evidence-based procedures described in the literature (Carr, Sangiorgi, Büsher, Junginger, & Cooper, 2011).

The difference in how participants related to rules and roles was especially visible. Several nurses repeatedly asked what they were “allowed” to do within each game, seeking clarification about the correct way to proceed. At the same time, designers were more likely to bend or reinterpret the rules when it seemed helpful (see Appendix F). This behaviour aligns with earlier empirical findings and with the literature on evidence-based practice, in which clinicians are trained to follow protocols and guidelines, making it harder to act differently, even in a context that explicitly permits experimentation (Wolf, Niederhauser, Marshburn, & LaVela, 2024). At the same time, the workshop also showed that designers are not automatically comfortable stepping into new roles. In one interview-style game, the test designer suggested that the graphic designer should conduct the interview to achieve different kinds of outputs. However, the graphic designer declined and appeared clearly uncomfortable, mirroring clinicians’

reluctance to leave familiar professional identities. This nuanced contrast with simplified narratives, in which only clinicians struggle with new roles, indicates that the difficulties with co-creative role shifts are not about the co-creation activities but the role shifts within them.

Games that supported clinicians’ roles as knowledge holders and designers’ roles as facilitators worked noticeably better. In the interview game, where one participant interviews another about a concrete experience instead of everyone writing on their own, the dynamic between designers and nurses became more balanced and productive: the nurses’ situated expertise was explicitly acknowledged, while designer could use their questioning skills to help surface and structure deeper levels of knowledge (see Appendix F). This configuration aligns closely with Sanders and Stappers’ (2008) description of co-creation, in which everyday people contribute lived experience, and designers provide tools and facilitation to make sessions generative. By contrast, some of the mapping games, such as a risk matrix for discussing risks, were difficult for both clinicians and designers to use. Despite being intended to make thinking easier, they created a barrier and slowed down the work. The more text-based games were experienced as simpler and more accessible, suggesting that the balance between abstract mapping and concrete articulation needs careful calibration, particularly in a context where evidence-based logics and analytical tools already shape how people think about risk.

Despite the workshop being structured so that the first half focused explicitly on the problem before moving to solutions, the clinicians frequently tried to discuss potential solutions in the early rounds. This matches both observations and interviews, in

which clinicians tended to rush towards the solution that must be fixed efficiently. At the same time, design-led approaches insist on staying longer in the problem space, especially for complex problems. The games helped slow this movement, but did not fully prevent it, suggesting that tools alone cannot override deeply ingrained habits shaped by evidence-based efficiency logics.

The content produced in the workshop further shows these dynamics. In the section “What do we do today?”, it was written that they “followed processes” and “focus on delivering information rather than ensuring understanding”. This formulation reflects the strong influence of evidence-based and protocol-driven logics in hospital communication, where the primary responsibility is to deliver accurate information in line with guidelines. At the same time, by positioning this as “what we do today” in a workshop explicitly aimed at addressing a recognised problem, the nurses implicitly acknowledged that these current practices do not fully solve the issues and that new perspectives are needed, resonating with literature calling for more person-centred views on care and the designer's claims about clinicians needing a more holistic view on patients (Wolf, Niederhauser, Marshburn, & LaVela, 2024).

When asked who experiences the problem, the nurses first identified patients as the primary carriers of the problem the project sought to address, but also highlighted that staff are affected. They described feeling less professional in situations where they cannot help patients understand their treatment and reported that this has an emotional impact on them as clinicians. This connects to their earlier definition of value as something that is “for the patient” and shows how that value is intertwined with their sense of professional identity and well-being. It aligns with co-creation literature that emphasises that value can be created simultaneously for users and staff, and with Sanders and Simons’ (2009) perspective on social value as improving the quality of life and relationships beyond only delivering measurable outputs.



Figure 13: Results from workshop

Finally, the responses to the question “What are others doing to solve similar problems?” were notable; the clinicians mainly mentioned examples of visual communication solutions, such as

posters and information materials, which could reflect a narrow understanding of design as primarily aesthetic and visual, consistent with the first interview’s findings and the initial expectation before the project kick-off meeting (see Appendix D). This limited repertoire contrasts with the broader design-led and co-creation approaches discussed in the literature (Edelson, 2002), which includes prototyping, scenario building and service reconfiguration and underscores the need for PlayLab to both work within and gently expand clinicians’ existing mental models of what design can be. For results see Figure 13. Across facilitation and outcomes, the workshops illustrate how generative tools can begin to unlock tacit, experience-based knowledge while simultaneously revealing deep-seated evidence-based logics.

5.3.2 Student workshop

The second workshop was conducted with four students from different fields: one design student, one nursing student, one medical student and one physiotherapy student. The involvement of students was a way of including “future users” in the design process, in line with literature that emphasises broad participation in co-creation, including those who will later inhabit emerging practices (Rygh, 2018). Secondly, it allowed exploration of mindsets and approaches among participants who are not yet fully shaped by the routines and constraints of the hospital setting, yet have emerging experience with both evidence-based and experience-based approaches from their education and clinical placements.

The workshop was structured around the I DO ART framework (Hersted, Obel Høier, & Pedersen, 2011). The overall intention was to explore difficult problems in hospitals and examples of “good

solutions”, investigate possible connections between them, and examine how such connections might inform tools for co-creation and problem-solving in hospitals. The desired outcome was both clusters of properties associated with “difficult problems” and “good solutions” in hospital contexts, and a “toolbox” consisting of artefacts and short descriptions of how these tools could support problem-solving and the creation of good solutions in hospitals. The agenda had three parts: interviews, clustering and making. Before the workshop, each participant was asked to send two photos to the facilitator: one representing a hospital-related problem and one representing a hospital-related solution. These were printed and used as artefacts for the workshop.

The workshop began with paired interviews about the problem photos. One pair consisted of two healthcare students, and the other of a healthcare student and a design student. An interview guide was developed based on feedback from previous workshops to support less-experienced interviewers. After the first round of interviews, all four participants worked together to cluster relevant findings from the conversations, identify shared themes across different problem photos, and align their understandings. The process was then repeated for the solution photos. In the final phase, the group was asked to “make” a toolbox that could address the clusters. This activity was inspired by the “design the box” game from the book *Gamestorming* (Gray, Brown, & Macanuso, 2010), where participants focus on the packaging of a solution and what is communicated on it. For this workshop, the game was extended to include the making of concrete artefact tools inside the box and writing sales arguments on the outside, articulating why this toolbox would be valuable in a hospital context.

The observation from the interviews matched several patterns from the earlier empirical materials while also adding new nuances. In the pair that included the design student, the interview reached a deeper level of problem exploration, including reflections on how specific issues played out in local contexts and how they related to broader organisational dynamics. By contrast, the pair of two healthcare students moved more quickly towards solutions, spending less time staying with the problem, mirroring the previously observed tendency of clinicians to “jump to solutions” (see Appendix G). The use of printed photos as interview artefacts worked well in both pairs. Participants actively pointed to and described properties in the images. In one case, the medical student explicitly emphasised that her image was not about the concrete situation depicted but about what it symbolised, which helped anchor the conversation in underlying patterns rather than surface details. She described her problem photo as representing a non-medical solution that “on paper is great but in reality, horrible”. (see Appendix G)



Figure 14: The images chosen by participants

In the clustering activities, the students were effective at matching properties across different problems and solution areas,

even though the photos themselves varied, as shown in Figure 14. Through discussion, they gradually reframed and merged their clusters in response to one another's comments. The clustering also functioned as an alignment mechanism: students questioned one another about terms or phenomena they did not understand, such as specific healthcare terms, until they reached a shared view of what each cluster represented, similar to how alignment was sought in the first workshop, but here emerging more organically through student-to-student negotiation. This design student later noted that there was no cluster explicitly related to work happiness. This realisation mirrors earlier findings about differences in how value is understood, where clinicians tend to focus on value for patients. At the same time, designers and PlayLab staff use value for staff and organisations as part of their view on value.

In the making phase, constructing the toolbox and its tools supported the generation of new ideas, in line with the generative design literature, which understands making as a way of thinking rather than merely representing already-formed concepts (see Figure 15). Some of the ideas emerged directly from the act of building (Sanders & Stappers, 2012). As students worked with materials, the act of making sparked new ideas, demonstrating how material engagement can extend reasoning beyond purely verbal clustering (see Appendix G). One of the created tools was a “time machine” (see Figure 16), intended to symbolise the importance of drawing on knowledge from the past while also having the courage to look into the future. When the design student asked how it should look, the nursing student responded that this was up to him, indicating that form was less important than function and meaning. This interaction opened space for a

broader understanding of design, not limited to aesthetics but concerned with what tools enable and how they shape practice, resonating with the shift from design as visuals to design as services and systems in the literature (Akoglu, 2015).



Figure 15: Participants using generative materials

After the workshop, the participant described the session as fun, especially the making part, and reported that time had passed quickly (see Appendix G). They expressed surprise at how well the problem and solution properties fit together across their different examples, which suggests some initial scepticism about the experience-based approach but also indicates that, with some trust in the process, it could produce useful insights. This reaction parallels the clinicians' growing recognition, evident in earlier empirical material, that experience-based methods can reveal connections and tensions not immediately visible in day-to-day practice, while also underscoring the need for careful framing to build confidence in unfamiliar ways of working.



Figure 16: The "time machine"

The resulting clusters offer a concise picture of how these future professionals understand hospital problems and solutions. On the problem side, the clusters were labelled Capacity, Hygiene, Patient experience and Work environment. On the solution side, there were Fewer adverse events, Experience, Value for many and User satisfaction. The cluster "Fewer adverse events" was connected to both metrics and social value, with good solutions being those that support protocols, reduce errors and stabilise predefined treatment pathways while supporting health. "Value for many" was articulated as value simultaneously for patients, families and staff, acknowledging the wider configuration of "users" in the hospital and aligning with service design perspectives on multi-stakeholder value creation. In discussing "User satisfaction", participants noted that if a solution were not perceived as good in practice, it would not be used, aligning with the play designer's earlier point that poor solutions are unlikely to be adopted in everyday routines regardless of their formal merits. The "Work environment" cluster captured how many problems were attributed to solutions and systems that were not designed with staff needs in mind, aligning with the literature (Sanders, 2006) Furthermore, prior empirical data on the importance of staff involvement for both implementation and sustained use of interventions.

The tools produced for the toolbox (see Figure 17) further illuminate how the students imagined supporting more experience-based forms of value in hospitals. The time machine tool, as noted, symbolised the need to combine evidence from the past with openness to future possibilities, fitting the thesis's broader picture of experience-based approaches that build on evidence-based foundations while extending them through experiential work. Several artefacts focused on knowledge and knowledge sharing, reflecting awareness that many problems are not only about individual competence but about how information and understanding circulate across roles and departments. A "staff apron" was proposed to protect staff from negative experiences in the hospital, extending the idea of protection from patients to include the emotional well-being of clinicians. Other artefacts aimed at supporting softer, social values for patients, such as trust and safety and one tool focused explicitly on improving patient understanding and user knowledge.

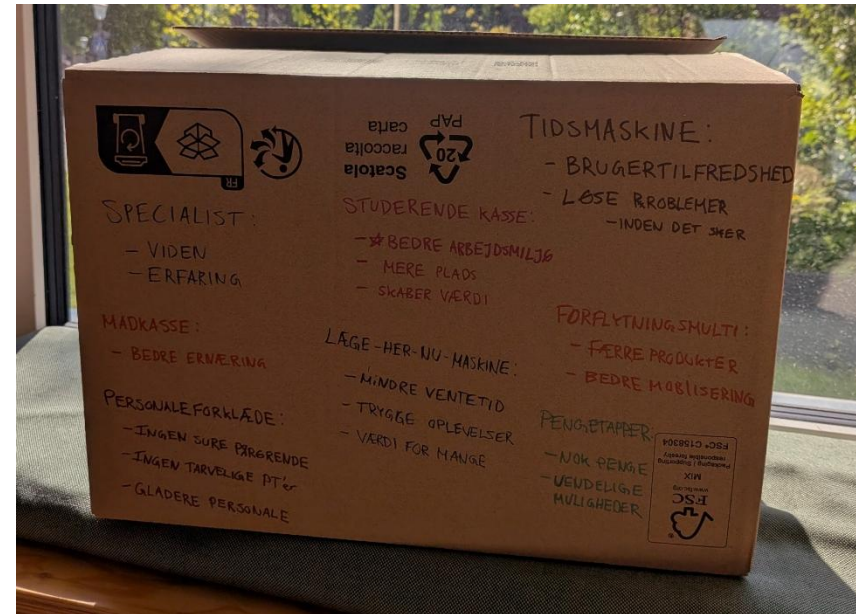


Figure 17: The "toolbox", with explanations of the content

None of the artefacts had any functionality, but their intended functions provide a rich picture of what they believed real tools and interventions should aim to achieve. In this sense, the toolbox becomes a generative representation of the desired qualities of a future co-creation tool in hospitals: supporting holistic views of patients and staff, integrating evidence-based safety with experiential value, and enabling knowledge sharing and reflection across professional boundaries.

5.3.3 Make findings

Across the two generative workshops, a recurring pattern is how making activities help participants manage and renegotiate the tensions between experience-based and evidence-based logics more concretely and collaboratively. In both the PlayLab and student setting, structured games, interviews, clustering and material prototyping supported alignment on problems and values but also revealed how strongly participants are shaped by existing roles, protocols and ideas about what “counts” as legitimate evidence or design work. At the same time, the workshops showed that these generative spaces are fragile: they require careful staging, trust-building, and the continuous negotiation of roles and expectations to enable more sustained, experience-based innovation in the hospital context.



5.4 Recurring tensions and negotiations

Across the empirical material, the unfolding of experience-based co-creation in Playlab can be understood as a series of recurring negotiations of who, what, where, how and why it is being co-created. Rather than treating co-creation as a stable method, this section frames the findings as situated negotiations across professional roles, value logics, tools and settings. The illustration (Figure 18) visualises these negotiations through the two characters and elements around them.



Figure 18: The findings symbolised as a image

5.4.1 Why we are doing co-creation

The first negotiation concerns why co-creation is initiated and how value is articulated between evidence-based and experience-based logics. In interviews, clinicians framed value as “for the patient”, while designers spoke about it in terms of needs, and lastly, managers spoke about value as rewards. This shows both a narrow view of value and why projects are initiated, as well as a tension between the different perspectives. This negotiation is also about why different approaches should be used, specifically whether to use fixed problem framing or multiple iterations. This is again connected to the experience-based and evidence-based logics and shows how the question of why is both a question of values and methods.

In Figure 18, this is symbolised by the shared thought bubble, which represents the need for a more shared language around purpose, value, methods and problem framings.

5.4.2 Who is doing the co-creation

A second negotiation concerns who gets to participate and on what terms. In both interviews and observations, clinicians were often positioned by themselves and sometimes by designers as non-creative rather than active contributors to idea generation. At the same time, the workshops showed that creative hesitation was not limited to clinicians; participants across roles sometimes looked for permission, structure or clearer expectations when working in new roles.

Observations across cases suggest that creative agency is not something one profession has and the other lacks. Rather, it is shaped by whether the situation is negotiated to an expert

mindset, where knowledge is delivered from fixed roles, or a participatory mindset, where knowledge and ideas are developed more jointly. This is represented in Figure 18 by the two people, who visualise co-creation as a relation negotiation between different forms of expertise rather than a transfer of agency and creativity from the designer to the clinicians.

5.4.3 Where co-creation happens

A third negotiation concerns where co-creation can take place and what kind of setting best supports it. Earlier findings showed that PlayLab offered a more playful and exploratory environment than the surrounding hospital, making it easier to stage generative activities and momentarily loosen everyday routines. At the same time, the empirical material also showed that co-creation could not be detached from the hospital context, because relevance depended on maintaining a connection to clinical realities, constraints and workflows.

The central issue is therefore not only having a creative space but negotiating a space that is both sufficiently different from the hospital to invite exploration and sufficiently connected to it to remain meaningful. In Figure 18, this is symbolised by the ground the characters stand on, emphasising that co-creation depends on a shared grounding between experimental space and institutional context.

5.4.4 How co-creation is carried out

A fourth negotiation concerns how co-creation is conducted through tools and activities. Across the workshops, maps, games, interview guides and prototyping material helped participants externalise experiences, align perspectives and explore new possibilities. However, the findings also showed that tools did not work automatically. Some tools supported reflection and generative dialogue, while others proved difficult when their structure did not align with the participants' mindset or the situation.

What emerges across the material is a tension between using tools to structure and using them to generate new knowledge. Co-creation in this setting needed both, but in balance: too little structure created uncertainty, while too much risked reproducing the same logics the process was meant to expand beyond. In the figure, this is represented by the designer's tools.

5.4.5 What is co-created

The next negotiation is about what participants believe co-creation should produce. As shown earlier, clinicians often associated design with visible or concrete outcomes, while designers understood design more broadly. This difference shaped expectations and tensions between clinicians and designers

Across the empirical material, this suggests that co-creation is negotiated not only by participants but also by assumptions about what the output is supposed to be before working on the problem. In Figure 18, this is symbolised by the box held by the nurse, representing the question of what form the outcome is being imagined and carried forward.

5.4.6 How-might-we question

Taken together, these tensions show that the main challenge is not a single barrier, but the lack of support for negotiating co-creation more explicitly in practice. The syntheses across observations, interviews and workshops point to a recurring need for a tool that can help clinicians and designers jointly frame purpose, roles, values, setting and outcome. This leads to the following design question for the next phase of the thesis:

How might we support clinicians and designers in jointly framing problems, roles and value in ways that connect evidence-based and experience-based logics?

6 Generate

In the ADGE framework, Generate is the phase in which knowledge is primarily produced through design and development activities, building on the accumulated insights and framings from Align and Discover. Rather than treating the problem as fixed, Generate approaches it as something that can be reconfigured through material concepts, tools and scenarios, which in turn make new understandings and possibilities visible. The how might we question from the Discover chapter described experience-based co-creation in this hospital context as an ongoing negotiation over roles, evidence and value, structured by both experience-based and evidence-based logics. Patterns included friction between experiential and clinical value logics, uncertainty about who gets to define problems and solutions and the mediating role of tools and spaces in making knowledge shareable. These patterns pointed not only to challenges but also to concrete opportunities. If the how-might-we question could be answered and negotiation surfaced and more explicitly supported, designers and clinicians might be better able to align on what matters and why.

In this sense, the Generate phase continues the abductive movement that runs through the thesis. Surprising observations from Discover are treated here as prompts to propose and test new interventions using the "how might we" question. The aim is not to "solve" co-creation in hospitals, but to develop a situated concept that makes specific negotiations about value and roles easier to conduct and reflect upon. Methodologically, the work in this phase remains grounded in the design-led, co-creative and game-based perspectives introduced earlier. Generative tools and workshop formats are used not only to gather further data but

to collaboratively produce new artefacts, in line with Sanders and Stappers' (2012) emphasis on making as a way of accessing and generating knowledge. At the same time, the Gamestorming-inspired attention to opening, exploring and closing is used to structure activities, moving from broad exploration of tensions towards a more focused design concept (Gray, Brown, & Macanuso, 2010).

This chapter is organised into two subchapters that mirror this movement. The first chapter describes a small, focused workshop conducted together with an expert facilitator, in which key negotiation patterns from Discover were enacted and explored through roleplay and material artefacts. The second subchapter presents a value framework developed from the workshop's findings. Together, these subchapters show how the Generate phase translates insights into a concrete intervention that can be carried forward into the Evaluate phase.

6.1 Workshop

The Generate phase began with a small-scale workshop between the researcher and a trained facilitator with a background in process and innovation engineering. The facilitator acted in a dual role as both workshop leader and active participant, mirroring the dual positioning of designers described in the literature as both facilitators and co-creators in complex, cross-disciplinary projects (Sanders & Stappers, 2008). The decision to work with a facilitator was directly informed by the Discover findings, which showed that co-creation in this hospital context is shaped by frequent, sometimes opaque, negotiations over roles, evidence tools and value. Rather than attempting to simulate these negotiations alone, the workshop assembled two participants to stage interactions where positions could be articulated, challenged and reframed in real time. This aligns with the literature on co-design spaces, where carefully staged encounters between actors allow them to experience, explore and experiment together with a new framing of a situation (Sanders, 2020).

The workshop was planned using the I DO ART framework (Hersted, Obel Høier, & Pedersen, 2011). In this case, the intention was to explore how we might question the enactment of negotiation situations and then develop potential tools to support them. The desired outcome was a set of conceptual tool ideas, materialised as simple artefacts to support negotiation between clinicians and designers on co-creation projects. This intention connects closely to the methodological lenses already in use: roleplay, reflection and LEGO-based prototyping as a make-oriented, generative medium within the broader say-do-make framework. The workshop agenda was structured as a series of role-played scenarios corresponding to the different negotiations

identified in the combined findings and reformulated into everyday scenarios: “Who gets to have ideas?” “Choosing tools”, “The problem keeps shifting”, Evaluating a playful intervention” and “The poster vs the process”. Each scenario distilled a recurring negotiation: about why and how co-creation is used, who should participate and what should be created. By embodying these saturations, the workshop aimed to surface how such negotiations feel from the inside, rather than only treating them as abstract analytical categories. For each scenario, the two participants alternated between the roles of clinicians and designers, ensuring that both experienced the negotiation from both perspectives throughout the workshop. The material combined generative design materials and domain-specific props. LEGO bricks were used as the primary generative medium, offering a flexible, low-threshold way to build physical metaphors and tool representations. This choice builds on generative design research, in which simple modelling components enable participants to externalise tacit knowledge and future wishes in tangible form. In addition to LEGO, the table included typical design materials (Markers, Post-its, paper) and medical artefacts such as syringes and bandages (see Figure 19). These props supported roleplay by grounding scenarios in the hospital, designing material culture and giving the roles tangible objects to hold onto, in line with findings about how tools and spaces mediate co-creation.



Figure 19: Materials for the workshop

Each scenario followed a similar structure. First, the participants enacted the scenario based on the findings in Discover, using concrete examples with weight on both sides of the negotiation from both roles. Second, they stepped out of character to reflect on what kinds of negotiations had taken place, what had felt difficult or unbalanced and where additional support might have changed the conversation. Finally, they used LEGO to build artefacts that symbolised tools, frameworks or prompts that could have supported the negotiation more productively. The workshop lasted approximately two hours, covering all five scenarios within this opening-exploring-closing structure familiar from game-based workshop design. Each scenario supported divergence in the roleplay while still forcing convergence on at least one artefact per pattern, resonating with the Gamestorming (Gray, Brown, & Macanuso, 2010) recommendation to link games in series and the ADGE framework, which has both divergent and convergent parts in each phase, including the Generate phase. In

this case, the outputs took the form of material metaphors and tool descriptions, which were revisited at the end of the session to identify common themes. Across scenarios, the resulting artefacts shared a concern with making value and process more visible and negotiable. Several LEGO constructions (see Figure 20) explored ways of mapping steps in both the clinical and design processes, highlighting where responsibilities shift, where handovers occurred and where assumptions about value were made but not spoken. This resonates with the Discover findings that alignment only emerged when groups externalised their thinking in clusters. Other artefacts explicitly invited staff experience and emotional strain into discussions that were otherwise framed only in terms of patient outcomes.

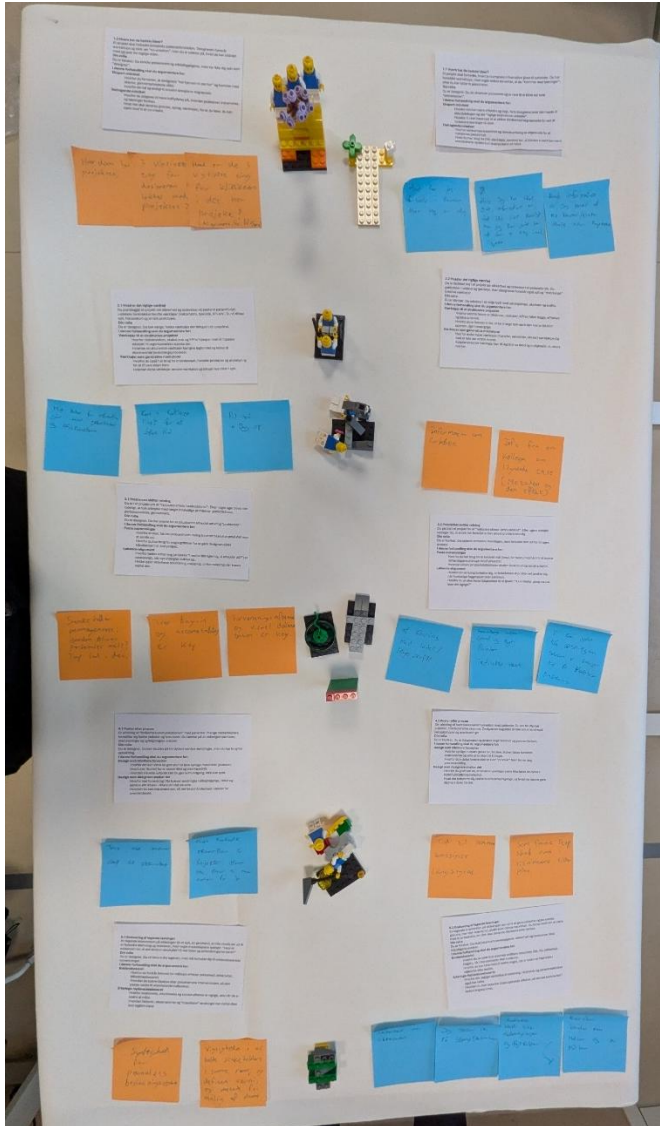


Figure 20: The result of the workshop

When discussed collectively at the end of the workshop, the artefacts were clustered into a small set of conceptual tool directions (see Figure 21). The ideas judged to have the best answer to the how might we question and were those that could:

- 1) Visualise different types of value across a co-creation project,
- 2) show intermediate steps in both clinicians and design processes rather than only results, and
- 3) legitimise both assumptions and evidence as discussable elements rather than treating only formally measured indicators as “real”. These directions directly address the negotiations and tensions, in which staff values and organisational constraints were often backgrounded, and in which no shared language existed for long-term experiential and social value. From this clustering, the value framework presented in the next subchapter emerges as the most promising direction to take forward.



Figure 21: “Tools” build in the workshop

6.2 Design concept

The first outcome of the Generate phase and initial answer to the "how might we" question is a value framework designed to support co-creation projects between clinicians, designers and other stakeholders by making different value assumptions explicit, comparable and discussable (see Figure 22). The framework visualises how different values are connected to specific events or actions within a project or solution, and invites participants to map where they jointly believe value is created or lost. In doing so, it addresses the need identified in the Discover phase for tools that help clinical staff and designers align their perspectives on what matters, beyond a narrow focus on measurable clinical outcomes.

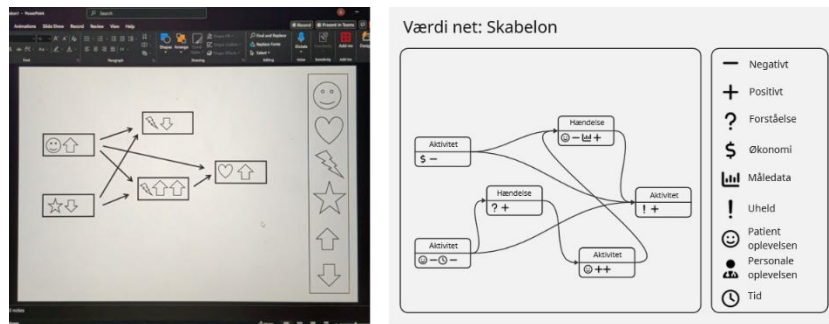


Figure 22: first versions of the value framework

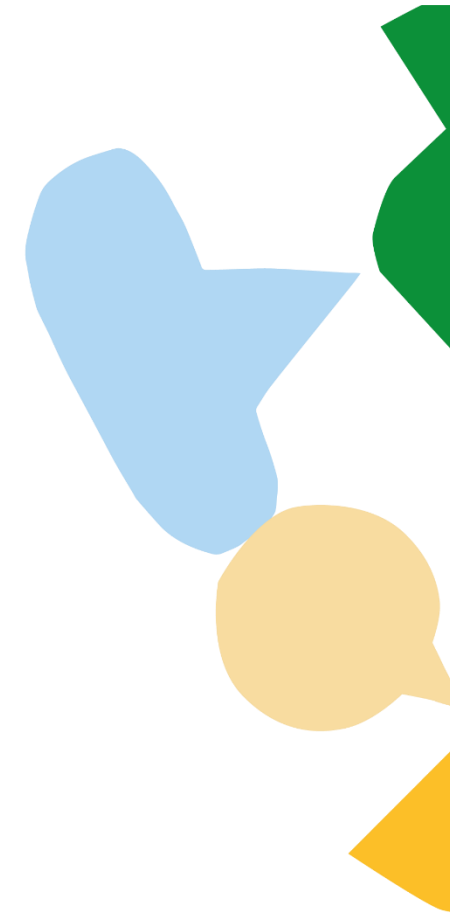
The framework is intentionally built on assumptions rather than certainties. It is designed to be easy to enter as there are no wrong answers, only different perspectives that can later be compared, tested and refined. For each event in a co-creation process for a solution, users map which values they believe are affected and in what direction. Within the same visual "box" for that event, they

draw symbols for relevant values and annotate these with a plus or minus sign to indicate whether the event is expected to create or reduce that kind of value. In contrast to conventional evaluation frameworks, the focus here is not on quantifying the value produced but on articulating where value is believed to lie and how different forms of value interact. This emphasis resonates with Sanders and Simons' (2009) distinction between monetary, experiential and social value and with the thesis's broader interest in multiple value logics in hospitals. To allow participants to indicate the relevant weight in a simple way, the framework allows multiple plus or minus signs after a value symbol to indicate that an event is believed to have a particularly strong positive or negative effect, and to assess the total amount of a value generated or reduced.

Based on patterns and values discussions in the Discover phase, the framework includes seven pre-defined values: Patient or staff understanding, monetary, measurable data (such as scanning percentages, calls or other KPIs), adverse events, patient experience, staff experience and time. These categories reflect both the evidence-based focus on adverse events, measurable outcomes and resource use and the experience-based concern with patient and staff experiences that are less easily captured in existing templates. For each value associated with an event, users can further annotate their assessment with a check mark or a question mark after the plus and minus signs. A check mark indicates that the expected value change is supported by some form of data, either evidence-based or experience-based; a question mark signals that it is primarily a hypothesis or assumption.

The framework's primary purpose is alignment. By asking clinicians and designers to construct the map together, this approach enables co-creation as a negotiation over value logics rather than a one-sided attempt to "sell" playful or experiential interventions into an evidence-based system. At the same time, the framework has several beneficial side effects. First, it can be used as an idea-generation tool: clusters of minus signs serve as prompts for brainstorming ways to reduce negative impacts, and blank areas suggest where new events or interventions might be introduced to create additional value. This links back to the Gamestorming book (Gray, Brown, & Macanuso, 2010) Furthermore, it is a notion of using visual artefacts as game boards that invite players to spot gaps and opportunities. Second, by visualising both assumptions and validated effects, the framework can support planning of evaluation activities. Events marked with many question marks, but potentially high value, become candidates for focus testing, whereas areas with many check marks may require

The framework remains deliberately lightweight and conversational. It does not aspire to replace formal evaluation frameworks in the hospital, but to complement them by opening a broader "value language" in which experiential, social and organisational concerns can be voiced alongside clinical metrics. In doing so, it translates the insights from Align and Discover into a concrete intervention that can be tested and further developed with clinicians and designers in the Evaluate phase.



7 Evaluate

Where the Generate phase developed an initial intervention, the Evaluate phase turns to what happens when the intervention is put into use. In the ADGE framework, this phase remains discovery-oriented, but the focus shifts from identifying the problems to examining how the newly generated intervention behaves in different settings. Evaluate the functions as a testing phase in which observations from use are turned into input for deciding whether the idea should be developed further, adjusted or taken in a different direction.

Rather than treating the first test as a final verdict, the phase is organised as a sequence of testing and evaluation. This allows the thesis to explore how a concept is received, what it reveals about the assumptions behind it and what should be carried forward into the next step. In this sense, Evaluate keeps the abductive movement of the thesis alive: findings from use become inputs for revisiting both the framework and the design behind it.

In this thesis, the Evaluate phase is operationalised through two tests: first with students from different fields of study and then with a PlayLab test.

7.1 Student test

The first evaluation of the value framework was conducted as a 40-minute, in-person test (see Figure 23) with eleven students from different fields of study, including healthcare, design and social science. The group composition reflects the thesis's broader attention to cross-disciplinary perspectives and future actors in the healthcare system, extending the role of students described earlier in the Discover phase to the evaluation of a concrete tool. Participants were placed into smaller groups with a deliberately mixed set of disciplinary backgrounds, to mirror the diversity of co-creation teams in hospital projects and to encourage negotiation across different value logics. For the test, each group was introduced to the value framework and its intended functions, together with a brief presentation of the Zebra head Scanner case. The task was to map events and actions related to the Zebra head Scanner intervention, how they were connected and which values were associated with each. To support work with a tool they had never seen before, participants were given printed posters corresponding to format 2 of the framework in an in-person version (appendix G). The groups were asked to complete the framework in 20 minutes, based on their understanding of the Zebra head Scanner project from the introduction and their own assumptions. To make the case more tangible, each group also received one of the 3D-printed zebra heads as a physical artefact to handle and discuss, linking back to the emphasis on material tools and props in earlier workshop designs.



Figure 23: Participants testing the value framework

Observing the groups during the exercise made it clear that the framework invited different approaches. Some groups treated it primarily as a kind of score sheet, writing a value in a box and then using combinations of plus and minus signs to track arguments for and against value creation. Others worked more in line with the

original intention, using separate boxes to follow the flow of events or actions, then attaching values to each step. In this version of the framework, events and actions were separated into two different boxes. In practice, this distinction became a source of confusion, as participants spent time debating whether something should be treated as an event or an action, even though this distinction is less important than the value relationships the framework aims to surface. One participant with a healthcare background explicitly asked whether there was a “correct” way to use the framework. This question resonates with the earlier finding that many clinicians and healthcare students are trained to look for the right and wrong answers and to follow prescribed procedures, even in exploratory activities. Despite being told that the framework was built on assumptions and that no answers were wrong, several students still searched for hidden rules. At the same time, the test showed that some of the expected side-effects of the framework, cations as a prompt for idea generation, emerged naturally. In several groups, discussions of mapped minus signs quickly turned to possible changes or new interventions to reduce negative impacts. This supports the Generate-phase ambition for the framework to function as both a structuring device and a generative tool for spotting opportunities.

The predefined values proved highly helpful. Several students, particularly those from medicine, noted that being presented with categories such as patient and staff experiences prompted them to consider perspectives which would otherwise have been overlooked. They align with earlier findings that clinicians would focus mainly on clinical outcomes and efficiency. However, when explicitly asked to consider patient and staff experiences, they were able to see both value creation and value reduction in these

dimensions. However, the reliance on predefined values also had a constraining effect

The workshop also surfaced challenges related to scale and notation. Groups struggled to find the “right zoom level” for the mapping: some tended to list every single micro-action. In contrast, others stayed at such a high level that diverse activities were merged into broad categories. Similarly, there were difficulties in representing the situation in which the same action might be perceived as value-creating for some staff and value-reducing for others. In the tested version of the framework, there was no straightforward way to visualise such ambivalence. After completing their frameworks, many groups nonetheless emphasise that such visualisation could be useful not only for aligning project teams but also for communicating the expected value and acknowledged pain points to new users when implementing interventions such as the Zebra head scanner. At the same time, several students requested a clearer explanation of why this kind of mapping is needed and how it relates to more traditional forms of evaluating in healthcare.

The first student test made it possible to evaluate not only the framework itself but also the kinds of reasoning and discussion it could support. Overall, the test showed that the value framework was difficult to use in practice and that some of its structure created more friction than clarity. At the same time, the parts that worked best were also the ones that stayed closest to Discover's findings, especially the predefined value categories, which helped participants think more concretely about new perspectives and values.

This pointed to an important limitation. While the tools addressed the right general issue, the overall framing and notation were still too far away from the empirical material on which they were based. The separation between events and actions, the visual logic of the mapping and the amount of explanation required to make the framework usable suggested that it would need substantial further iteration before it could function as a robust tool. In that sense, the test indicated that moving directly from the Discover finding into a fully developed framework was not the most effective next step.

At the same time, the evaluation suggested that the process of developing the framework was itself highly meaningful. The roleplay of scenarios proved especially productive, since it created space for reflection on negotiation, value and professional roles in a way that felt more open and tangible than the framework. This made the method behind the framework appear more valuable than the framework itself. Rather than continuing to refine the tool in the same direction, the evaluation therefore shifted attention to the scenario-based roleplay could be taken forward as a more promising way of supporting the desired reflections.

This opened a new direction for the next phase. Instead of returning to the Generate phase to further develop the framework in its existing form, the focus shifted to testing the roleplay in a setting closer to practice. This time with a PlayLab designer. That next test builds on the insight that the most productive element may not be the mapping tool itself, but the reflective negotiation, which could be achieved in other ways.

7.2 PlayLab test

While the student test primarily revealed challenges in using the value framework as a mapping tool, the PlayLab test shifted attention to the scenario-based roleplay used to develop the framework, which was a more promising way of supporting reflection on negotiations. In the test, the scenario roleplay was conducted together with a PlayLab test designer, without the making component of the earlier use of the method. It was explicitly framed as an internal tool to support reflection on negotiations between designers and clinicians.

The session was organised around the same negotiation scenarios that had been developed in the Generate phase, drawing on recurring tensions identified earlier in the thesis, such as misaligned expectations about evidence, ownership and different understandings of value. The test designer participated in the same way as the external facilitator did in the Generate workshop, with roles alternating between the designer and clinicians across the different scenarios. Simple artefacts were again used to anchor the roles and support the performance. In contrast to previous activities, this activity did not include a generative part of making tools; instead, more time was allocated to playing out the scenarios and to the reflection afterwards. This was due to a change in aim: this test was not intended to create any new tools but rather to provide a meaningful reflection on the co-creation negotiations.

A key difference from earlier was the test designers' prior experience with the hospital and with PlayLab projects; unlike the external facilitator, she could draw on detailed, situated knowledge of ward routines, project histories and organisational

constraints when stepping into the clinician role. This meant the scenarios quickly moved beyond generic roleplay to nuanced depictions of how negotiations could unfold.

At the beginning of the session, it was somewhat challenging for the test designer to play the clinician role, matching how clinicians in the earlier workshops initially found it unfamiliar to step into a design-led mindset. After the first scenario, however, the roleplay became more fluid, with multiple mindsets represented in each role, a level higher than the earlier use of the tool. This was also due to the deeper level of context-specific knowledge in this roleplay. In this way, the PlayLab test mirrored earlier workshop formats in which clinicians were domain experts and knowledge holders, but here, with the designer as the domain expert in co-creation. Whom in this context became the ones asked to examine their own practices and assumptions.

The reflection after the roleplay made several low-hanging fruit visible for adjusting PlayLab's way of working. With the test designer having multiple adjustments she wanted to make afterwards. This kind of low-hanging-fruit reflection was also present during the Generate workshop session, but was set aside because of the workshop's broader goal of developing more general tools. However, in this context, the low-hanging fruit would be very valuable when using the roleplay internally in PlayLab to support their practices.

After the session, the test designer described the experience as receiving some of PlayLab's own medicine, noting that PlayLab usually invites clinicians to engage in similar generative activities. This remark is significant in relation to the thesis's earlier discussions of PlayLab as an experimental unit with a mandate to develop co-creation practices in the hospital. In many of the observed projects, PlayLab staff facilitate clinicians' reflections on their work; here, the roles were partially reversed, and scenario-based roleplay was used to make PlayLab's own practices available for reflection. This suggests that approaches originally designed to support clinicians in co-creation can also be re-oriented towards designers themselves, helping them become more aware of the contexts they work in and more deliberate about how they negotiate value in co-creation processes with clinicians.

This shift in emphasis is particularly relevant when considering PlayLab's reach within the hospital. As described in the case chapter, PlayLab collaborates with multiple departments and has the potential to influence thousands of clinical staff over time through its projects and processes. In that light, investing in tools that strengthen designers' reflective practice, and in turn shape how they design and facilitate co-creation actively, may be an efficient way to support value creation at scale. Rather than trying to support all clinicians directly, the scenario-based roleplay positions designers as key knowledge holders about co-creation who nonetheless need structured spaces to articulate and reconfigure this knowledge, in the same way clinicians need support in articulating their experiential knowledge about care.

The PlayLab test had the same limitation as the Generate workshop, where even though participants had different roles, they still needed to represent both perspectives on the negotiation. Building on this limitation, an idea emerged during the debrief to develop a future version of the methods for four participants, with two clinicians and two designer roles representing the different perspectives, for example, a designer focused on playful experiences, another designer focusing on documentation, a clinician emphasising patient safety and another emphasising staff well-being. Such a configuration could make it easier to sustain conversation and reach deeper negotiations, but would require adjustment to the scenarios, prompts and reflection format, pointing towards the need for further testing.

Overall, the PlayLab test suggests that the scenario-based roleplay from the Generate workshop can be reused as an internal reflective tool for designers (see Figure 25). By removing the making component and dedicating more time to roleplay and reflection, the test showed how the method can surface both immediate adjustment and more fundamental questions about how PlayLab negotiates value and evidence in its collaboration. In line with the abductive approach of the thesis, this does not position the scenario-based roleplay as a finished solution, but as a promising direction for further experimentation, particularly in relation to how it might be scaled to involve more participants and integrated into PlayLab's broader repertoire of tools.

The shift in direction during the Evaluate phase is therefore not a sign that the process failed, but rather a reflection of this phase's purpose within the ADGE framework. As described earlier in the methodology chapter, Evaluate is concerned not only with assessing whether a generated intervention works as intended, but also with discovering how it behaves in use and what this reveals about the assumptions built into it. In this case, the testing showed that the value framework was difficult to use as a stand-alone tool. At the same time, the scenario-based roleplay from which it emerged appeared more effective in supporting reflection on negotiations around value, evidence and roles. The decision to shift focus towards further testing of the roleplay should therefore be understood as part of the thesis's abductive and iterative approach, in which surprising findings are not treated as deviations from the plan but as prompts for reframing the problem and adjusting the design direction. Rather than moving linearly from Generate to a finalised solution, the Evaluate phase here contributed by identifying what was most promising to carry forward and what requires reconsideration. In that sense, the change in direction is consistent with both the abductive logics of interference to the best explanation and the iterative structure of ADGE, where movement between phases remains open as new knowledge emerges.



Figure 24: Design of scenario cards

8 Discussion and reflection

This chapter discusses and reflects on the thesis's findings in relation to the methodological choices, the PlayLab case and the generated results. It brings the concepts and empirical material presented in the previous chapters into dialogue with one another, to clarify how the study answers the research question and what kinds of value, challenges and biases emerge from experience-based co-creation with clinical staff in a hospital setting. The chapter is structured in three subchapters, focusing respectively on methods, the case and the results.

8.1 Methods

This subchapter reflects on the thesis's methodological choices and how they have shaped both the knowledge produced and the study's limitations. It discusses the development and use of the ADGE framework before turning to questions of co-creation, participant selection and prioritisation across phases.

8.1.1 Reflecting on the ADGE framework

Developing and working with the ADGE framework has been both productive and demanding for the project. The framework was initially introduced as an adaptation of existing process models, such as the Double Diamond (Design Council, n.d.) and Sanders and Stappers' co-design process (2012), with a stronger emphasis on how knowledge is discovered and generated across phases. In practice, this focus on Align, Discover, Generate and Evaluate has helped structure the thesis in a way that mirrors its abductive and experience-based ambitions, making it possible to trace how different forms of knowledge emerge over time rather than treating methods as isolated steps.

At the same time, the process of constructing ADGE alongside the empirical work meant that the framework has been closely tailored to this project. For this thesis, using an established model such as the Double Diamond would likely have led to a broadly similar overall trajectory. However, ADGE has made the distinction between discovered and generated knowledge more visible in everyday decision-making, especially when navigating tensions between evidence-based and experience-based logics in hospital settings. In a context where relationship-building, alignment, and real-world testing are central, this emphasis has extended the framework's value beyond what more generic

models explicitly offer, while also raising questions about how transferable ADGE is to other design projects that do not share the same focus.

8.1.2 Levels and limits of co-creation

Writing a thesis on co-creation requires reflecting on the extent of co-creation achieved in the project. Across the ADGE phases, co-creation was most pronounced in the alignment and discovery work, where the project purpose, scope and practical arrangements were negotiated between academic and hospital stakeholders and where clinicians and designers contributed situated expertise through interviews, observations and workshops. In this sense, the study has operated as a co-creative alignment exercise between the academic framing of experience-based co-creation and the ongoing initiatives at PlayLab and Mary Elizabeths Hospital.

At the same time, the project has clear limits on participation and agency. As an academic thesis, responsibility for the research design, analysis, and final interpretations rests with a single researcher, which constrains the extent to which decision-making and authorship can be genuinely shared. Even if more co-creative or participatory configurations had been used, the thesis would still ultimately reflect one person's choices and accountability. This structural constraint has likely made it harder to invite actors into deeper co-creative roles, for instance, in co-authoring analyses or co-owning the final design concept, than would have been possible in a non-academic project. The reflection here is that fully embracing co-creation may require formats that loosen the boundaries of individual academic ownership, while still ensuring transparency.

8.2 The case

This subchapter reflects on how the specific case of PlayLab at Mary Elizabeth's Hospital has shaped the possibilities and limits of the study, with particular attention to the role of students, access to clinical staff, emotional and ethical tensions in the field and the difficulty of talking explicitly about value in a purpose-driven hospital context. These reflections complement the earlier description of the case and the empirical material by focusing on how the hospital's situated conditions influenced what kinds of co-creation and evaluation were practically and ethically possible.

8.2.1 Students as future actors in the system

The student workshop confirmed that healthcare students are a particularly promising group for experience-based co-creation related to hospitals. They combine emerging clinical experience from their education with a strong likelihood of becoming future professionals in the system, enabling them to draw on concrete encounters from practice and to imagine how co-creation tools might be used in their own future work. In contrast, the design student involved in the workshop represents a professional trajectory that may or may not intersect with healthcare, since designers are distributed across many sectors and often move between domains more fluidly.

From a case perspective, this suggests that hospitals underuse healthcare students as co-creation partners, despite their relevance as near-future users and carriers of new practices. The student workshop showed that they were able to participate actively in generative activities and articulate nuanced tensions between evidence-based training and the desire to work more experientially, even without long-term hospital employment. In

this sense, involving healthcare students' mores systematically could be a way for hospitals like Rigshospitalet to explore new practices with actors who are close enough to the system to understand its realities, yet not fully bound by existing professional hierarchies.

8.2.2 Emotional and ethical tensions in observations

A more personal challenge in this case has been balancing the researcher's role with the impulse to intervene in situations involving sick children. In several observed workshops and activities, it felt difficult not to contribute or step in when it seemed that an intervention or suggestion could improve a child's experience, even though such involvement could compromise the observational stance and the integrity of the data. This tension becomes especially acute when playful interventions intersect with vulnerability and distress, making non-interference feel counterintuitive at a human level.

These moments reveal an ethical question that goes beyond standard research protocols. In that context, the aim is to understand and support experience-based value for children and families; deliberately holding back to maintain methodological purity can feel misaligned with the purpose of care. The case ethically navigates situations where the roles of observer, collaborator and human being are difficult to separate and where "helping" may both support and distort the phenomena under study.

8.3 Results

The results of this thesis point to a tension between complexity and proximity. In the Generate phase, the project explored two different directions for translating the findings from the Discover phase into a possible intervention. Both directions sought to address the recurring tensions and negotiations identified in the empirical material. However, they did so in different ways and at different distances from the originally identified problem. This makes it relevant to reflect not only on the final result, but also on how closely each being's direction remained connected to the situated knowledge developed through observation, interviews and workshops in the field.

In this sense, the results can be discussed as more than a choice between two concepts. They can also be understood as a reflection on the transitions from discovery to generation, in which design work must move from insight to intervention without losing its connection to the problem.

8.3.1 Closeness to the problem

One central reflection on the result is that the scenario-based roleplay appears to be the stronger intervention because it stays closer to the problem that was discovered. This is linked to the broader challenge of doing extensive discovery work without drifting too far away from it in later phases. Gamestorming and co-creative design approaches can be highly productive because they enable linking, combining and reframing ideas in new ways. However, each new translation, framing or conceptual step also introduces the possibility of moving slightly off course. The Generate phase is therefore not only about being creative or expansive, but about navigating a careful path between the

discovered findings and the desired solution. In this thesis, that challenge became visible in the difference between the value framework and the roleplay. The value framework remained related to the findings, but it presented them in a more mediated, slightly more abstract format, creating some distance from the concrete negotiations observed in practice. The roleplay, by contrast, preserved more of the original situation by building directly on the discovered negotiations, both in content and format.

For that reason, the roleplay can be understood as a solution with a more immediate fit to the problem, even if its scope may initially seem narrower. It may not stretch the findings as far conceptually as the value framework did, but its strength lies in its ability to translate the problem with relatively little loss of connection. This seems especially important in a case like this, where the thesis concerns experience-based co-creation and tensions that are difficult to capture through formal models alone. A solution that remains close to the discovered situation may create a more meaningful effect because it is easier for participants to recognise, engage with and relate back to their own practice. In that sense, the reflection is not that the value framework was without potential, but rather that it would likely have required more time, iterations and resources in the Generate phase to become grounded and convincing as the roleplay already was in its simpler form.

8.3.2 Keeping it simple

A second reflection concerns the simplicity of the final result. A scenario-based roleplay is not, in itself, a radical new invention, and this can make the intervention appear modest in relation to the complexity of the hospital context and the ambitions of the thesis. Compared to more elaborate frameworks or larger organisational tools, the roleplay may seem too simple. This raises a relevant question about whether the solution is sufficient or risks under-responding to a complex, multi-layered problem.

At the same time, the simplicity of the roleplay can also be understood as one of its main strengths. In contexts where time, resources, and organisational attention are limited, simple interventions are more likely to be used, tested, and further developed in practice. This aligns with the logic often captured in the KISS principle (Keep it simple, stupid): keeping a solution simple is not necessarily a sign of lack of ambition. However, it can instead be a strategic choice that prioritises accessibility, learnability and feasibility. For this thesis, that means the scenario-based roleplay should not be dismissed as simple but recognised as an intervention that provides a manageable starting point for experimentation.

This reflection also points towards how the result could evolve. Starting with a simple roleplay does not mean that the intervention must remain simple forever. Rather, it creates a base from which further complexity can be added in a more informed way. For example, the roleplay could later be expanded by involving additional actors, opening for more roles that designers and clinicians, or staging negotiations across a wider range of institutional perspectives. Such development could make the intervention both richer and more innovative, but it would also introduce new demands for facilitation, coordination and evaluation. From that perspective, beginning with a simple version seems appropriate. It allows the intervention to test what actually works and what does not before scaling it further. The reflection is therefore that the result may be simple. However, this simplicity is productive because it keeps the interventions actionable and developable step by step, rather than becoming overdesigned too early.

8.4 Learning goals

This thesis has made it possible to work with value more broadly and contextually than before. The goals of understanding value in relation to healthcare have been both difficult and meaningful because value in a hospital setting rarely appears in a fixed form. Instead, it shifts depending on the situation, the people involved, and the kind of outcome being considered. Working with this concept has therefore shown that value cannot be reduced to one general definition, but must be understood as something situated, relational and sometimes difficult to pinpoint. That difficulty has been frustrating at times, but it has also been important because it has made the thesis more sensitive to the complexity of the context rather than forcing it into a simpler, more rigid interpretation.

Another important learning has been to follow a design process thoroughly and reflectively. For this project, using a self-developed process framework has been motivating and useful as a guide, because it has made it easier to stay oriented while still leaving room for reflection and adjustment. At several points, the process was demanding because different choices had to be made about what to include, what to prioritise and how to move forward. In that sense, the project framework did not remove the project's difficulty, but it helped make it manageable. It also made the thesis feel more coherent, because the different phases could be followed more systematically, and the decisions made along the way became easier to justify

A third learning has been to use knowledge-sharing activities to strengthen the project. This has worked well, not only because feedback from others brought in new ideas and perspectives, but

also because the project became easier to articulate through those conversations. Putting the findings to work for others made it possible to see connections that were not always clear, and then everything remained only in the mind. In that sense, knowledge sharing has functioned as both a development tool and a reflection tool. It has helped sharpen the project but has also supported the process of understanding it.

The official learning objectives also align well with this thesis in broad terms. The project has required knowledge of relevant methods and literature, skills in working independently with a complex problem area and competencies in planning and conducting interdisciplinary work in an uncertain setting. In that sense, the thesis has not only been an academic writing task but also an exercise in applying design research to a real, complex context.

9 Conclusion

This chapter concludes the thesis by synthesising how the study has aligned academic, methodological and case perspectives, how the research and design process unfolded through the ADGE framework and what results emerge regarding experience-based co-creation with clinical staff in hospitals. It draws together the preceding chapters to answer the research question: How does experience-based co-creation with clinical staff in hospitals enable and limit the creation of value for patients and staff? Furthermore, to outline the thesis's contributions and implications for both PlayLab and the wider field of service design in healthcare.



9.1 Bridging literature, methodology and case together

A central achievement of the thesis lies in the extended Align work carried out across the literature review, methodological and context chapters. Academically, the study positions itself at the intersection of experience-based design-research, co-creation and service design in hospitals, clarifying how concepts such as experience, value and co-creation are understood and how they relate to evidence-based logics in healthcare. Methodologically, it adopts an abductive stance and view of knowledge as both tacit and explicit, translating these into the self-developed ADGE framework and the methodological lenses of say-do-make and game-based workshop design. Empirically, it aligns with PlayLab and Mary Elizabeth's Hospital by making transparent how the case is situated, how empirical material was generated and how collaboration with designers and clinicians was organised. This alignment work is more than a preparatory step; it is itself a co-creative exercise that negotiates meanings and expectations between academic and hospital stakeholders. In a context where terms such as “Co-creation”, “Value” and “experience” already circulate in policy and practice, but not always with the same meanings, the Align phase helped establish a shared starting point from which the Discover, Generate and Evaluate phases could proceed. At the same time, the abductive and iterative nature of the study meant that this alignment remained open to revision as new tensions and insights emerged, underscoring that alignment in complex hospital projects is an ongoing negotiation rather than a fixed precondition.

9.2 Structuring experience-based inquiry

The ADGE framework: Align, Discover, Generate, Evaluate, has structured the thesis's process in a way that mirrors its experience-based and abductive ambition. In the Discover phase, observation interviews and workshops were used to uncover how co-creation unfolds in and around PlayLab, focusing on what clinicians and designers do, say and make, in concrete situations. The Say-do-make lens was applied to combine access to articulated perspectives, observed practices and tacit or latent understanding that surfaced through generative activities. This phase produced rich empirical material that reveals recurrent patterns of friction between experience-based and evidence-based logics, misalignments in roles and expectations and difficulties in articulating value beyond generic references.

The Generate phase translated these findings into a design intervention: a value framework intended to support negotiation around co-creation projects. Through a small, focused working using roleplay and LEGO-based prototyping, tensions identified in Discover were enacted and explored as everyday negotiation scenarios. This generative work treated co-creation not only as an object of study but as a mode of knowledge production, in which hypotheses about value and bias were materialised in tools and artefacts that could be further tested and discussed. The Evaluate phase then examined how this framework was understood by students and used those findings to redirect the solution into the scenario-based roleplay, which was then tested with more promising results.

Across these phases, ADGE proved productive in highlighting how knowledge is both discovered and generated over time, rather than treating research and design activities as separate. However, the implementation in this thesis also shows the consequences of weighting phases differently. Substantial time and text were devoted to Align and Discover, proving a strong foundation for pattern recognition and conceptual development, but leaving less room for multiple iterations of Generate and Evaluate.

9.3 Tensions, value framework and contributions

One of the thesis's main results is the articulation of the tensions that characterise experience-based co-creation with clinical staff in the PlayLab context. These tensions, identified across observations, interviews and workshops, concern: (1) Why we are doing co-creation, Who is doing the co-creation, Where co-creation happens, How co-creation is carried out and What is co-created. Rather than offering a single diagnosis, the thesis shows how these tensions recur in different guises, from the Zebra head scanner test and the business case template to project kick-off meetings and co-creation workshops and how they shape both value creation and its limits.

Regarding evidence and knowledge, the study demonstrates that experience-based and evidence-based logics are not merely opposed but often clash in practice. Designers often seek individual stories and experiential insights as valuable data to emphasise and reframe problems, while clinicians expect formal research, guidelines or statistics to count as "evidence". Conversely, playful interventions and narrative properties may be perceived as insufficiently robust when assessed through conventional evidence-based criteria. The thesis argues that navigating this tension requires more explicit recognition of multiple knowledge forms and of their interrelations, rather than subsuming one under the other.

In terms of value, the study shows that clinicians frequently refer to "value for the patient" and frame problems as core tasks. At the same time, designers talk more explicitly about experiential and social value, such as comfort, engagement and professional well-

being. Organisation tools, like the business case template, tend to privilege monetary or easily quantifiable value, sometimes pulling experiential aspects into narrow metrics such as satisfaction scores.

The thesis also highlights tensions around roles and creative agency. While co-creation rhetoric positions clinicians as co-creators, empirical material shows that they often see themselves as non-creative providers of information and that some designers retain control over "real brainstorming" and key generative decisions. Workshops that explicitly recognise clinicians as knowledge holders and designers as facilitators, such as interview-based games, tend to produce more balanced and productive interactions. In contrast, overly abstract or rigid tools can reproduce existing hierarchies and inhibit participation. These findings reinforce calls in the literature to attend not only to who is "in the room" but also to how roles, tools and space are staged to support genius collective creativity (Sanders, 2020).

For PlayLab and Mary Elizabeth's Hospital, the thesis offers both a mirror and concrete suggestions. The five tensions provide a vocabulary for recognising recurring challenges in their co-creation practices, such as misalignment between project expectations and organisational metrics, or between designers' and clinicians' understandings of evidence and creativity. Scenario-based roleplay, while not fully resolved, points to tools that could help make tensions and negotiations between designers more discussable. In this way, the results support ongoing efforts at PlayLab to position innovation as a "fourth core task" alongside treatment, research and education, by providing a more nuanced account of what innovation value looks like in practice.

9.4 Limitations and future directions

As an academic thesis conducted by a single researcher, the project has clear limitations in terms of participation, scope and time. While co-creation was conducted in alignment with data analysis and concept development, ultimate responsibility for the research design rested with a single person. This structural constraint may have limited the possibilities for deeper co-ownership of findings and the value framework by clinicians and designers, compared with a non-academic project, where authorship and decision-making can be more widely distributed. Furthermore, the relatively greater emphasis on the Align and Discover phases meant that Generate and Evaluate could be explored only through a small number of iterations and short-term tests.

Further work could build on this thesis in several ways. First, further development and longitudinal evaluation of the scenario-based roleplay could test its potential and refine its design. Second, exploring ADGE in other sectors could examine how the framework behaves when different phases are properties and when other organisational logics are at play. Third, more experiential formats that loosen the boundaries of individual academic ownership, such as co-authored analyses or shared design labs, could depend on the co-creative character of research on co-creation itself.

9.5 Closing remarks

The thesis has shown that experience-based co-creation with clinical staff in hospitals neither delivers added value nor inevitably undermines evidence-based standards. Instead, it unfolds as a series of situated negotiations in which different forms of knowledge, value and professional identity are brought into relation, sometimes productively and sometimes with friction. By articulating five tensions and proposing a scenario-based roleplay grounded in the PlayLab case, the study contributes to a more nuanced understanding of what it takes to make co-creation meaningful and sustainable in complex hospital settings. In doing so, it invites both researchers and practitioners to treat co-creation not only as a method for generating solutions but also as an ongoing practice of aligning perspectives, processes and values in the shared work of caring for patients and supporting those who care for them.

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Appendix

Appendix A: Project testing observation and material

Observations Guide:

Benefits
↳ ORG

Implementation

Limits

Realistic view

Value

Evidence-based
Experience-based

Zebra

i First Com

ARM bind

Så vi kan se
og ved at det er
dig

"det er sådan
sikkerheden"

Før en ny ting
prøv si bind si
måde

bør

Så bliver her
si JS ved at

det er dig

↳ Bias i observation

ingen fordeling

ingen interesse

↳ styrk med osv.

ned i sikkerhed

dertil

barn der ikke snakker
meget

STRIBE

Den stribeløse zebra

Stribe den stribeløse zebra har prøvet alt for at få sine striber tilbage uden held. Alt fra at bade i skyggerne fra træerne på savannen til at male striberne på med mudder fra mudderhullet.



Heldigvis kan det magiske blæk i stregekoden fra armbåndet få striberne til at komme frem igen. Men de varer desværre ikke evigt! Det kræver at han scanner armbånd hver dag.



Klik Stribe på din Zebra scanner næste gang du skal scanne et armbånd, så han ikke længere er Stribe, den stribeløse zebra.



Appendix B: Business case template

Timing i forhold til projektet, atypisk tidspunkt med business cases. Det har ikke været et design kriteriet men et stort visionsprojekt

Nu over i gennemførelse og implementering projekter skal til at møde virkeligheden og den økonomiske virkelighed

ØPA-økonomer, template er lavet sammen med Deloitte og ØPA

MARYs fordyrende elementer, arbejde med at se gevinsterne i den forbindelse

Det kan være at der ikke er en økonomisk gevinst fordi det ikke har været fokus

Specifikt fokus på hospitalsoplevelsen, OKF er optaget af at de projekter de har startet kan overleve i driften

Business case bliver brugt til at se de forskellige veje, Værter: det er ikke en god business case

De bløde værdier kommer ikke frem

Hvordan vi kan formidle business cases, pakke hårde tal ind i bløde værdier

Ikke betraget som et færdigt produkt

Arbejde på brug og præsentation

I nogle cases vil det give mening at se på flere scenarier

Tidsbesvarende – læger vs. sygeplejersker økonomisk gevinst ved at kunne ansætte færre

Effektivisering vil ikke kunne ses som økonomisk gevinst medmindre man kan bevise at nogle vil blive fyret, Klinisk tid og ikke klinisk tid

Kvalitetsbevidst skal der bruges værktøjer til at måle

Give et bud på data på en kvalitetsscore

Forbedring i patientoplevelse i %-vis forbedring

Risiko fokus – kan der være en risiko for at vi ikke kan realisere gevinsterne – kan vi høste gevinsterne hvis vi gør det – sammenligne cases

Evidensbaseret robust hed! – VIGTIGT robusthed!

Ikke-økonomisk: sammenligner Timer frigivet og tilfredshed, æbler og bananer

Hvad de (økonomerne) kalder "ægte økonomi" penge der ryger direkte ind på deres budget ikke tilfredshed eller frigivet timer

Så vil man skulle en diskussion med økonomerne

Interne og eksterne timer og visning af dem

Hvornår overgår noget i drift, 3 år frem, korte gevinster mening at det skal være 5 år men stadigvæk kortsigtede gevinster. Social / Økonomisk

Er det et projekt hvor gevinsterne bliver større år for år

Business case indtil reinvestering

Beslutte at udvide hvis det giver mening

Det vil man skrive eller nævne et sted når man præsenterer – det fulde billede kan ikke ekspliciteres på skrift?

"Det er tit godt med et eksempel" – designer/ kliniker

Kontekst – andre nyere designet hospitaler OPEX TenneT "Energio"

Gennemsnitlig antal spørgsmål gange op med hvor mange der kommer fra riget til MARYs, hvor er x (noget der ikke er på MARYs)

BIAS og dårlig matematik

Minutter per spørgsmål, antagelse

Tabt fortjeneste (tabt oplevelse)

Appendix C: Co-creation project kick-off meeting

Transition between child and young person

Test designer – nurse and doctor

The plan is to map activities, with related problems and at the end prioritise these problems.

Designer has pre-categorised the mapping in age, stakeholder and diagnosis.

These categories were met by resistance from the clinicians. Mostly the diagnosis category, because they argued that with 12000 different diagnoses it was impossible to look at specific problems related to the different diagnoses. It was clear that the examples and the category was helpful for the designer in terms of emphasizing with the users but difficult for the clinicals because it was more restraining and left a feeling of leaving someone behind.

One of the clinicians said in relation to that: “Not to destroy the game but.” She knew that their view was conflicting with the terms of the workshop.

Clinicians believe to have found the root to the problem and want to focus on exploring this root problem, while the designer wants to explore the consequences of this problem and focus on mapping this.

This are met by resistance from the clinicians but are at last accepted. They aren't informed of the purpose of doing this. They ask if there is any reason why they are doing this because they feel like they already have mapped this in earlier material.

The designer tells that is important that they externalise these insights so that the designer together with other designers can brainstorm solutions. The designer has put herself in a researchers position where she collects knowledge from the clinicians rather than creating new knowledge together with them. They are the designers they should create the ideas and control the process.

The clinicians act as mediators both on behalf of patients and other clinicians. They are aware of what their assumptions are and what they are surer on.

Root up/down/deep

The power of the designer to control the process. Open the problem and don't want to simplify the problem (anti-kiss)

Whose premise is the workshop on, who will benefit from the workshop and get new knowledge – in this format only the designer, no knowledge is generated only shared.

The designers say: "We are making this so we as designers can design"

There are some confusions about the workshop in terms of rules, clinicians asks if they are allowed to use a different colour post its.

When talking about the problems the clinicians are good at using general terms as "risk behaviour" while the designer gets more specific with "smoking" – connected to the diagnosis challenge

The designer has a need for becoming a specialist in the problem and context so she can develop a solution instead of using the clinicians in that part of the process.

Designers argues that the project is complex because it stretches beyond a single department

"It is nice that you write longer text on the post its, when we as designers will make a solution"

The clinicians said that if you as designers went for a walk in the outpatient clinic you would see the challenges they describe, hints at they don't have a connection to the hospital

"is it to harsh to say that" in the role as mediators they reflect on who they are mediating for.

Designer says: "we should not talk about solutions... but"

The clinicians aren't allowed to be divergent they should give the context to the designers so they can have divergent sessions. What is the expert knowledge the clinicians bring, is it clear who they are mediating for every time and how does it work when they are mediating for multiple groups.

Also mediating on behalf of parents, here the designer also tries to mediate – different kind of experience in terms of the mediation. Being a parent comes with experience outside of work

Space: walking back to PlayLab as there is space to do a big brainstorm

Designer asks the clinicians to focus on where the impact would be greatest. And chose that for them

The clinicians are aware that there are more systemic and organisational problems that the designers can choose and focus on what interventions they can

When focusing on users the clinicians say that it doesn't matter if we make solutions for the patients if the doctors won't accept it. The implementation is important and for that we have to make a solution for the clinicians. Are afraid that the patients will feel prepared but be rejected – maybe a reflection on their own experience in the workshop

mark what is important? Can we choose everyone?

The clinicians believe that it would be easy to make a solution that would only fit a small part of the users

The clinicians want a solution that is as general as possible. A contrast to the designers need for specific users and context

“do you have any suggestions to solutions that we should bring”

“We will use it as a way to start our real brainstorm”

Clinicians asks if the designer also wants the bad ideas.

They don't get time to brainstorm just to write down what they already have thought about

The designers say she will take the post its back to the design team but a afraid that they will be overwhelmed – a bad thing that they created so many post its as she asked for.

The clinicians said that the workshop was “fine” and they understand the premise of working together with the design team.

They add that they have a youth panel which is important to involve.

Asks if the design team can help with graphical work – and are told by the designer that it is only if there is anything new.

The designer explains the process, and she will go back to the design team and brainstorm together with them and then send suggestions for solutions based on that.

In the end of the meeting, the designer shows the other solutions the team has build.

afterwards the designer says that the workshop went differently than what she had expected. She experienced resistance.

She talks with her colleagues about the experience and the resistance. She believes that it is the clinicians that are the challenge and they don't want to be a part of the project on the designer's premise. And they are the types of people that don't understand strategy and innovation. She described them as hypocrites. And didn't understand their resistance since it was them that came down to the design team for help.

Appendix D-G is located in separate document.

Appendix F: PlayLab Workshop

Problem løsning problem

Definitions spørgsmål

Skal jeg lige forstå det korrekt

Kan der ikke godt sidde nogle her -

Mere align behov

Fokus på processen

"Så værktøjet skal kunne"

"Jeg ved ikke om jeg må snakke om det"

Designeres rolle

"Jeg spørger bare dumt kan det også være sådan noget med" – adfærds specialist

Vilkår er svært

Vores erfaring det ved vi ikke om er et problem

"Ja rammer og vilkår"

Hvorfor snakker man om noget andet

Der skal også være lidt til de andre hold

Fint at arbejde ovenpå,

Roller virker

Hieraki at afbrydelser

Overvej rækkefølgen i forhold til opsamling

Hvad med vilkår omkring samarbejde er der noget der - designer til klinikere

Grafisk designer leg - interview hieraki

Du kan bare spørge

Sofie - det er der plantegningerne kommer ind i billedet

Hovedproblemet er at de får nogle problemer derhjemme -10/10

Snakker løsning

Introduktion af deltagere

Løsning

Grafer er sværere end fri tekst

Tid til kaffe workshop som frirum tid

Appendix G: Student workshop

Hvor det specifikt er ved jeg ikke men det er der nogle af jer der gør - Designer

Det kan være at halvdelen af dem her ikke er syge peger på billede - Designer

Udforsker problemet frem for at interviewe det i samme gruppe – Fysioterapeut og Sygeplejerske

Generelt problem forskellige løsninger forskellige steder - Designer

På papiret er det fint men i praksis er det dybt forfærdeligt - Medicin

Jeg ved overhovedet ikke hvordan det er designet - Medicin

Det forstår jeg ikke – Sygeplejerske, Medicin svarer

"Det er cirkukært problem"

Ikke taget højde for arbejds glæde - Designer

Hedder det ikke arbejdsmiljø - Sygeplejerske

Skal vi lave noget med patient oplevelse mangler vi ikke det - Fysioterapeut

Den er nem lige at have med i lommen - Sygeplejerske

Rent teknisk er der meget mekanik der får det til at virke - Designer

Er der alle score skemaer der inde - Medicin til zebra konkret

Ahva siger du - Designer til Fysioterapeut løsning

Det er strikkecafe men det er tanken om frivillig på hospitalet - Medicin

De her produkter der er anonyme Men er over alt - Designer

Det som skaber værdi der er det skaber værdi for mange - Designer

Generelt er der jo UTH - Sygeplejerske

Designer forstår ingentin

Det er jo ikke nødvendigvis at gode løsninger kræver oplæring men sådan er det bare nogen gange - Designer

Hvordan ser en tidsmaskine ud - Designer

Det bestemmer du - Sygeplejerske

Hvad hvis man havde en flyvende læge - bygget ud fra Lego vinge

Ægte sjov

Sjovt at lave inatøre

Vildt hvor meget det hang sammen

Fedt med kontraste til tema til metoder

Godt tempo

Ved jeg ikke hvor lang tid der er gået

Appendix H: AI-Declaration

A List of generative AI technology that has been used in this project.

- Perplexity
- Nano banana pro
- AAU Primo Research Assistant
- Grammarly

Description of how it has been used:

Perplexity: Have been used to support literature research and enhance gramma and sentence structure in the report

Nano banana pro: Have been used to create the image symbolising the findings.

AAU Primo Research Assistant: Have been used to support literature research.

Grammarly: have been used to enhance gramma and sentence structure.