

# Master thesis Organisational Design & Development



**Radboud Universiteit Nijmegen**

## **A Structure Diagnosis of Multidisciplinary Consultations: Analyzing Network Collaboration within Prosper and Onco-Oost.**

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Master thesis Organizational Design and Development

**"A Structure Diagnosis of Multidisciplinary Consultations: Analyzing Network Collaboration within Prosper and Onco-Oost"**

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## ABSTRACT

This thesis examines the application of De Sitter's (1994) structural design theory to Prosper, a network organization focusing on oncological care, specialized in prostate cancer surgical treatment, to enhance efficiency and collaboration within multidisciplinary consultations (MDOs). The research employs qualitative methods, including semi-structured interviews and document analysis, to conduct a structure diagnosis of Prosper's operational framework. Findings reveal problematic results in financial decision-making capabilities among Prosper's urologists, causing the obstruction of both innovation development and implementation within MDOs. Results also show a need for more different healthcare specialists present during the MDOs, as now only urologists are present. Despite these challenges, Prosper is able to effectively manage functional concentration, task differentiation, and operational specialization, contributing positively to patient care quality and overall health outcomes. The study concludes that addressing the financial decision-making gap is needed for promoting innovation and sustaining high-quality patient care at Prosper, which can be done when Prosper becomes part of the overarching network Onco-Oost. However, the implementation of Prosper within Onco-Oost can also solve the problems regarding the need for more present specialists within the MDOs. This research underscores the theoretical flexibility of De Sitter's theory in enhancing network collaboration and efficiency, suggesting potential applications across various organizational contexts beyond healthcare. Recommendations for future research include expanding sample sizes, integrating quantitative methods, and conducting comparative studies post-integration with Onco-Oost to identify best practices and optimize resource allocation.

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# INTRODUCTION

## Introduction network collaboration within health care and oncology

Collaboration within oncology networks is fundamental in elevating the quality of care and outcomes for cancer patients. (‘t Lam-Boer et al., 2016; Kehl et al., 2015; Richardson, 2016; Pillay et al., 2015). Within the Dutch Oncology Network, the main goal is to provide “good oncological care”, which is defined as *“the right treatment for every patient in the right place, close by, if possible, concentrated/further away if necessary”* (Regionale Oncologienetwerken, 2018a, p.4). This goal can be divided into four aspects that, when combined, constitute the main purpose of the network. The first aspect is the quality of care. As oncological care is very complex and continuously subjected to evolution, multidisciplinary collaboration is facilitated to keep up with the advancements and therefore ensure optimal treatment for patients. The second aspect, concentration movement through standardization, aims to improve oncological health care outcomes through the centralization of expertise based on tumor types and volume standards. This can lead to increasing patient outcomes, as specialized knowledge and experience of professionals who consistently treat larger numbers of similar cases can lead to more effective and high-quality care. The third aspect, which is care in the right place, includes strategic operation and the effective utilization of regional capacity. This means that the type of care needs to be matched to the complexity of cases and the appropriate expertise and resources. The fourth and final aspect is that smaller regional hospitals have called out for help with addressing obstacles in deploying personnel and resources. Larger hospitals and university medical centers (UMCs) collaborating with local hospitals in their network can ensure the continuity of oncological care as it can provide solutions in capacity and expertise challenges (Regionale Oncologienetwerken, 2018b).

## MDOs as an element of network collaboration

Multidisciplinary team meetings (MDOs) can be defined as consultations where healthcare professionals from various disciplines, such as oncologists, surgeons, radiologists, pathologists, nurses, and other specialists, convene to discuss and collaborate on the diagnosis, treatment, and management of cancer patients. These meetings aim to facilitate complete and coordinated care by leveraging the collective expertise of diverse healthcare providers (Pillay et al., 2015). These MDOs, such as tumor boards and expert panels, serve as a vital element of network collaboration where healthcare professionals from diverse specialties meet to collectively deliberate and determine treatment strategies for complex cases (‘t Lam-Boer et al., 2016; Kehl et al., 2015; Richardson, 2016; Pillay et al., 2015). MDOs typically involve the review of patient cases, including diagnostic reports, imaging studies, pathology results, and treatment plans, to develop individualized care strategies that consider the needs and preferences of each patient (Pillay et al., 2015).

As the MDOs serve as the central element of collaboration within the Dutch Oncology Network, they represent a promise to provide cancer patients with high-quality care while minimizing inconsistencies or differences among different healthcare settings or professionals (Regionale Oncologienetwerken, 2018a; 2018b). These consultations are essential in offering healthcare practitioners plausible diagnoses and treatment options that are designed specifically for the needs of every patient, establishing their primary objective. Aside their primary focus on patient care, MDOs are also able to provide healthcare professionals with an overarching view of all discussions and considerations that have been considered while formulating diagnoses and treatment plans (Regionale Oncologienetwerken, 2020). Therefore, MDOs can benefit both cancer patients and healthcare professionals at the same time.

Furthermore, as MDOs take on a central role within the oncology networks, they also contribute to the fostering of knowledge sharing, the development of relations, and increasing efficiency within their respective network (Regionale Oncologienetwerken, 2020). Research conducted within multiple regional oncology networks states that significant enhancements in patient assessment, diagnosis, and treatment outcomes are the result of the MDO interventions, with adjustments made to 40-45% treatment plans after the consultations which benefits a noteworthy number of cancer patients (Regionale Oncologienetwerken, 2018a). However, while improvements in clinical outcomes are evident, studies have not identified a significant increase in patient satisfaction or quality of life resulting from the MDOs yet (Regionale Oncologienetwerken, 2018b). Nevertheless, by combining the collective expertise of oncologists, surgeons, radiologists, pathologists, and other specialists, MDOs facilitate informed decision-making and enhance the quality of patient care, which is the main purpose of the Dutch Oncology Network ('t Lam-Boer et al., 2016; Kehl et al., 2015). Through discussion and the exchange of knowledge and information, healthcare practitioners can increase their understanding of complex cases and stay informed of the latest developments in oncological care, thereby fostering a culture of interdisciplinary collaboration (Pillay et al., 2015).

## **Problems of MDOs and Their Effects on Network Collaboration**

Despite their crucial role within healthcare and oncology networks, MDOs face significant challenges that may compromise their effectiveness. Studies have identified logistical challenges such as coordination issues and delays in decision-making and treatment planning, stemming from the necessity to wait for MDOs ('t Lam-Boer et al., 2017; Richardson et al., 2016; Pillay et al., 2016). Furthermore, MDOs increase already existing resource allocation problems, including shortages of support staff, time constraints, and insufficient technological infrastructure (Richardson et al., 2016; Pillay et al., 2016). Consequently, despite their potential to enhance network efficiency, MDOs present multiple obstacles within oncological networks (Regionale Oncologienetwerken, 2020). The success of MDO outcomes is

dependent on the presence of adequate facilities, care preparation and selection, expert leadership, and interaction between present specialists (Regionale Oncologienetwerken, 2018b). However, not all criteria are met for every single MDO, which is also caused by participant absence due to time constraints, disruptions during the consultations, lack of administrative support, and inadequate resources. This all combined hinders the effective functioning of the MDOs. Additionally, the growing need for expert-specific knowledge within individualized treatments necessitates regional and tumor-specific designs that current MDO structures fail to provide, particularly for complex cases (Regionale Oncologienetwerken, 2018b).

The ineffectiveness of Multidisciplinary Oncology Meetings (MDOs) poses a societal problem that affects various stakeholders within the healthcare system. Firstly, patients are directly impacted by inefficient MDOs, as delays in decision-making and treatment planning can prolong their suffering and diminish their overall quality of life (‘t Lam-Boer et al., 2017; Richardson et al., 2016; Pillay et al., 2016). Moreover, ineffective MDOs may lead to treatment outcomes that aren’t optimal or opportunities for timely interventions that are missed, potentially compromising patient safety and health outcomes. Additionally, healthcare organizations bear the burden of resource inefficiencies associated with MDOs, such as time and manpower devoted to meetings that fail to contribute to appropriate benefits in patient care. From a broader societal perspective, the inefficiency of MDOs contributes to healthcare system inefficiencies, including increased healthcare costs, reduced productivity, and gaps in access to timely and high-quality care. Therefore, addressing the ineffectiveness of MDOs is essential not only for improving patient outcomes and provider satisfaction but also for promoting the overall efficiency and sustainability of the healthcare system (Bachynsky, 2020; Bodenheimer & Sinsky, 2014; Sikka et al., 2015).

## Suspicion of Structural Problems within MDOs

The suspicion of structural problems within MDOs stems from several indicators, contributing to their inefficiency and ineffectiveness. Each session typically lasts a minimum of one-and-a-half hours and involving around ten healthcare professionals. With each professional dedicating approximately thirty minutes to preparation and hospitals conducting twenty MDOs weekly, the substantial resource allocation of ten full-time equivalents (FTEs) per week underscores the inefficiency troubling these meetings (Regionale Oncologienetwerken, 2020). Additionally, disruptions during MDOs, such as walk-ins, walk-outs, and phone use, disrupting the flow of discussions, particularly in sessions covering a wide array of tumor types. Furthermore, information gathering challenges arise as does the lack of personal familiarity with patients in complex cases, and communication and coordination issues lead to delays in patient care (Regionale Oncologienetwerken, 2018b). Meanwhile, the high pressure on healthcare professionals underscores the urgent need for improvement in the effectiveness and efficiency

of MDOs, prompting efforts to standardize practices across regional networks to formulate best practices (Regionale Oncologienetwerken, 2020).

## MDOs within Prosper

Onco-Oost has requested the research of multiple, some yet to be added to the overarching network, tumor type networks. The aim of this research is to diagnose the MDOs within these networks against the backdrop of known issues that emerge in structures with problematic parameter designs, and with the results, to contribute to the improvement of MDOs. The network that is the research subject of this thesis, is Prosper, a specialized prostate cancer network that combines experts from the Canisius Wilhelmina Hospital Nijmegen, RadboudUMC, and Catharina Hospital Eindhoven. Specialists from these hospitals collaborate to provide the best possible, personal care for patients suffering from prostate cancer. Researching the MDOs within Prosper can contribute significantly to the overall research of MDOs by providing concrete examples of both the strengths and weaknesses of current practices. By examining how Prosper's MDOs operate, inefficiencies and disruptions that obstruct performance can be identified. These findings can then be used to propose improvements that could enhance the effectiveness and efficiency of MDOs not only within Prosper but also in similar networks.

## Research objective

This thesis aims to apply structural design theory proposed by De Sitter (1994) to a network organization. The goal is to assess whether this theory can be effectively applied to enhance network collaboration and efficiency. Specifically, the research will conduct a structural diagnosis of multidisciplinary consultations within Prosper, a specialized oncology network focused on robotics-assisted radical prostatectomies. By analyzing Prosper's MDOs, the study seeks to identify structural improvements that could lead to more efficient and effective network operations. To be able to provide an overall response, several questions need to be answered:

1. What are multidisciplinary consultations in the context of oncological network collaboration?
2. What is the desired situation of the multidisciplinary consultations within Prosper?
3. What is the actual situation of the multidisciplinary consultations within Prosper?
4. What is the gap between the desired and current situation of the multidisciplinary consultations within Prosper?
5. What is organizational structure?
6. What structural causes can be identified for the gap between the desired and current situation of the multidisciplinary consultations within Prosper?

7. Which structural changes should be made to decrease the gap between the desired and current situation of the multidisciplinary consultations within Prosper?

The first two questions and the sixth question will contribute to the conceptual background of this thesis, which will be necessary to perform a diagnosis on Prosper. The second question will also provide an overview of desired values for the structural design parameters that would lead to effective MDOs. The third question will determine the actual values for the design parameters within Prosper, which can be combined with the previous question to determine the gap for question four. The fifth question will provide a theoretical framework for organizational structure and its design parameters, which is the foundation for the answers to the final two questions. In the sixth question, the structural caused will be determined while the seventh and final question formulates proposed changes to the structure of MDOs based on the theoretical framework combined with identified gap(s).

## Thesis outline

This section sets out the structure of the research. The first chapter introduced the research topic, including its societal relevance, framing in literature, and the objective of the research. The second chapter provides an outline of relevant theoretical backgrounds on networks, the MDOs, and organizational structure. This chapter will also provide a conceptual model, which is fundamental to this research. The third chapter provides explanations on the used methodologies, data sources, the intended data analysis procedure, and addresses research ethics. Chapter four presents the results of the research and chapter five will provide a discussion as well as limitations and recommendations for further research. This thesis ends with the sixth chapter, which will conclude the whole research.

## CONCEPTUAL BACKGROUND

This chapter will explain the conceptual framework of the thesis, which acts as a fundamental background for the conducted research. This chapter starts by defining networks within the context of this thesis, emphasizing their role in facilitating resource exchange and information sharing among organizations, which are in this case dedicated to prostate cancer care. This definition will influence the understanding of how collaboration within these networks aims to improve patient outcomes through coordinated and combined efforts. Subsequently, a detailed explanation of the ideal multidisciplinary consultation (MDO) process, as provided by the Regionale Oncologienetwerken, is provided as this highlights the important role within oncological care. Next, this chapter introduces key concepts of De Sitter's (1994) structural design theory and explain their relevance for both healthcare networks and MDOs. The chapter ends with a conceptual model that proposes how structural design parameters may influence the 'quality of organization' variables and network effectiveness by, using Prosper's network as a case study to illustrate these dynamics.

### Multidisciplinary consultations

#### Networks, network collaboration, and network effectiveness

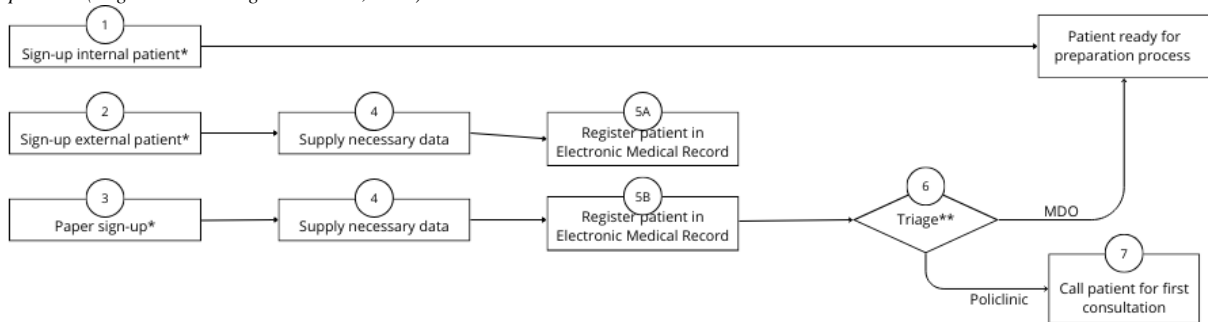
As the MDOs are the central element of oncological network collaboration, it is important to establish a definition surrounding networks, their collaboration and when this is deemed effective. Within the context of this thesis, networks are defined as sets of organizations that are interconnected through relationships that facilitate the exchange of resources, information, and/or services. These networks are characterized by the multiple involved organizations offering services to a shared client group, which in the case of this thesis are prostate cancer patients. Networks focus on resource-based explanations of referrals and interorganizational cooperation (Provan et al., 1996; Provan & Kenis, 2007). Collaboration between these networks includes cooperative interactions and joint activities among different organizations within the network, which are aimed at coordinating and integrating services to improve client outcomes (Provan et al., 1996; Provan & Kenis, 2007). Effectiveness in this context is defined as 'the extent to which Prosper achieves its goals and delivers the desired outcomes efficiently and sustainably' as based on the definition provided by Provan and Milward (1995). Provan et al. (1996) stresses the significance of network/system-level factors like integration and stability in determining effectiveness, emphasizing the need for resource integration and stability for favorable outcomes.

#### The MDO process 'blueprint'

As structure refers to the defining and allocation of tasks, it is important to outline how the tasks of the MDO are defined and allocated to all the different actors involved. All tasks within the MDOs contribute to achieving its overall goals, which are presenting a high-quality diagnosis and treatment plan, finishing

within the scheduled time, and present at least 90% of the patients previously determined to be discussed within the MDO. The activities carried out relating the whole MDO process are divided in six steps. The first step is the signup of patients. In this step the preliminary diagnosis and previous test results are provided by the head practitioner of the patient. Three types of signups are distinguished within this step: internal patients, external patients, and paper signups. Within this step of the process, depending on the type of signup, one to four parties are involved in this part of the MDO process (Regionale Oncologienetwerken, 2020).

Figure 2.1: Step 1: Signup. 1, 7 = Head practitioner; 2,3,4 = Head practitioner external hospital; 5a= Cvo; 5b= secretariat department; 6= specialist (Regionale Oncologienetwerken, 2020).

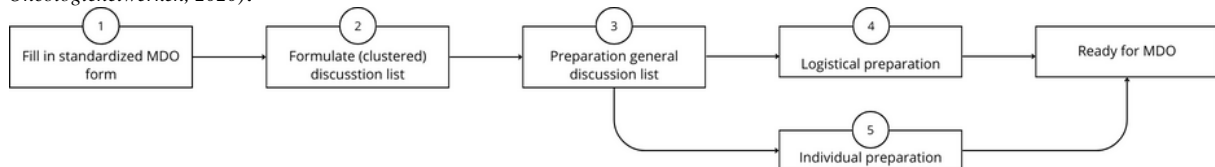


\* Eventhough, there are three different ways patients can be signed up for MDOs, this has no effects for the MDO itself.

\*\* Triage refers to the determination of the urgency and further course of the process.

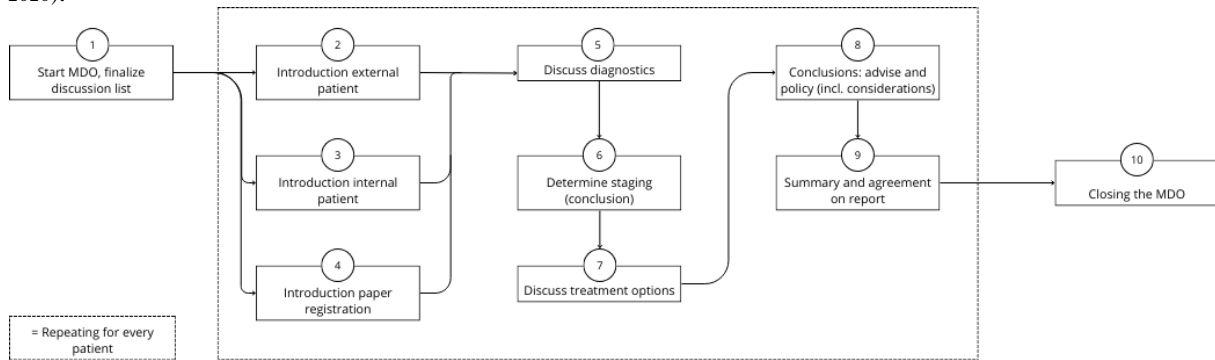
The second step in the MDO process is preparation in which the administration and logistics surrounding the consultation is centrally provided by the centre for oncology (CvO). The involved practitioners need to prepare their cases individually (Regionale Oncologienetwerken, 2020).

Figure 2.2: Step 2: Preparation. 1= CvO or head practitioner; 2,3,4 = CvO; 5= all MDO participants for themselves (Regionale Oncologienetwerken, 2020).



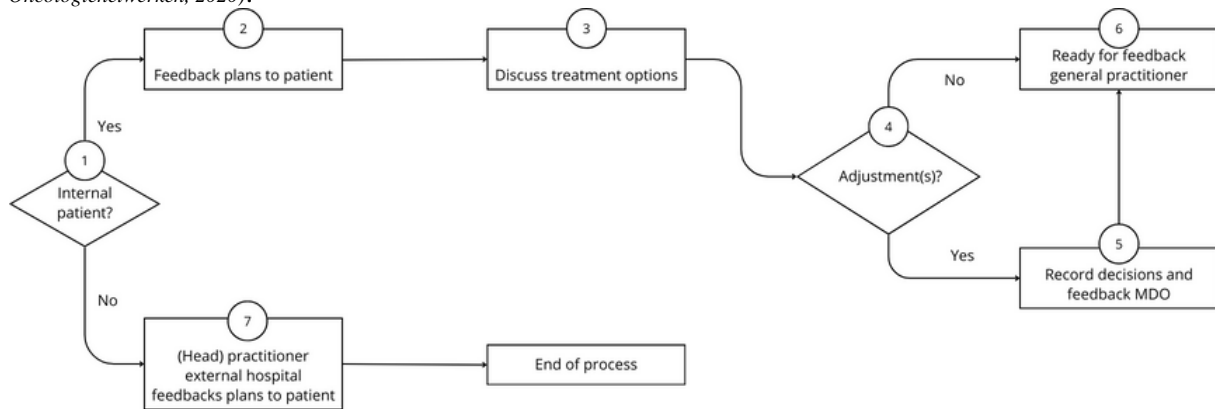
The third part, the actional MDO, is where the participating practitioners all present their cases. With the other practitioners and present specialists, they discuss the preliminary diagnosis of the patient and determine the stadium of the diagnosed cancer. After this thorough diagnosis, treatment plans are discussed and determined. Based on this, the advice and policy, including the different considerations are formulated. This process repeats for every patient that is signed-up for the MDO in question (Regionale Oncologienetwerken, 2020).

Figure 2.3: Step 3: The multidisciplinary consultation. 1= chairman, 2= external practitioners; 3= internal practitioners; 4 = specialist, 5= specialists; 6= all participants; 7= all participants, 8= chairman; 9= CvO, chairman; 10=chairman (Regionale Oncologienetwerken, 2020).



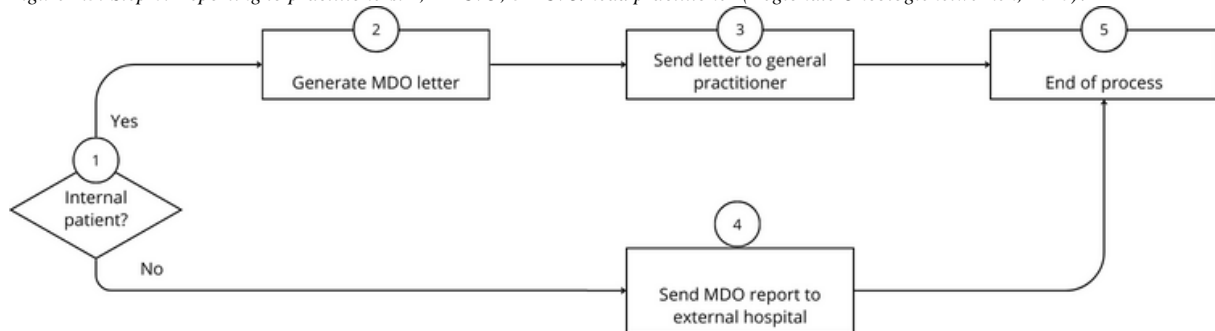
While the chairman and the CvO make up the report, the practitioners now need to report the conclusions of the MDO to their patient. When the patient is external, the external practitioner will communicate the treatment plan and diagnosis to the patient and the process will end there. When the patient is internal, the internal head practitioner will communicate the treatment plans to the patient and adjust them where necessary. When the treatment plans are adjusted, the head practitioner needs to report this to the MDO. Finally, the head practitioner needs to report the conclusions on the patient’s case to the general practitioner (Regionale Oncologienetwerken, 2020).

Figure 2.4: Step 5: Reporting back to the patient. 2,3,4,5,6 = head practitioner, 7= external head practitioner (Regionale Oncologienetwerken, 2020).



The report to the general practitioner is done by the hospital’s head practitioner and CvO (Regionale Oncologienetwerken, 2020).

Figure 2.5: Step 6: Reporting to practitioners. 2,4 = CvO; 3= CvO/head practitioner (Regionale Oncologienetwerken, 2020).



The structure of MDOs is crucial for their effectiveness in facilitating quality care within oncological networks, therefore the focus should be the preparation of the MDOs and the MDO itself. Based on the MDO structure from the Radboud UMC as outlined in the previous paragraph, MDOs have a centralized organization provided by the CvO. The CvO aims to support the regional oncological chains and streamline the MDO process by facilitating coordination, preparing the meetings, spreading the reports to the involved practitioners, and ensuring smooth operation and communication (Regionale Oncologienetwerken, 2020). Moreover, the MDO structure distinguishes between different levels of complexity—low complex local, complex regional, and high complex/second opinion—ensuring that patients are discussed at the appropriate level in a timely manner, thereby enhancing quality improvement efforts (MDO consultation, 2018; Regionale Oncologienetwerken, 2020). This structured approach aims to ensure comprehensive coverage, but also to facilitates increased patient inclusion in clinical trials and overall improvement in the quality of care by the requirements of through related goals such as delivering a high-quality diagnosis and treatment plan, discussing at least 90% of patients in an MDO, and completing the MDO within the planned timeframe (Regionale Oncologienetwerken, 2018b). By following to this structured approach, MDOs are supposed to effectively fulfill their role in optimizing patient outcomes, fostering collaboration within oncological networks and reaching their goals.

## Organizational structure

The concept of “organizational structure” refers to the way tasks are defined and related within and to a network of tasks and activities. Based on Achterbergh and Vriens (2019) tasks are defined as specific actions that individuals within an organization or organizational units are expected to perform within a larger activity to achieve a goal or objective. Activities, however, are series of related tasks that together work towards a goal or objective and often involve collaboration between multiple departments (Achterbergh & Vriens, 2019). Organizational structure provides a framework for how various parts of an organization work together to achieve common goals and objectives. It is particularly relevant condition for interaction within the organization because it may take on such a form which can severely frustrate the organization’s continued meaningful survival. It defines the hierarchy of authority, reporting relationships, and division of labor within the organization. By defining roles and responsibilities, structure can help clarifying who is accountable for what tasks and how different parts of the organization interact with each other. Structures can vary widely across organizations and can be influenced by factors such as the organization's size, industry, culture, and strategy. The design of organizational structures is crucial as it can impact multiple aspects of organizational performance, including efficiency, communication, decision-making, and employee satisfaction (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). For example, structures with simple, clear roles and responsibilities may lead to more effective coordination and faster decision-making, while overly

complex or bureaucratic structures can obstruct agility and innovation. Moreover, organizational structures are not constant and need to be able to adapt due to internal and external changes. It is essential for organizational structures to allow necessary adaptation, or they become self-inhibiting and obstruct their own development (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019).

By applying organizational structural design theory to networks a deeper understanding of the functioning of networks and how to effectively manage them can be developed (Kenis & Raab, 2020). As the theory provides a foundation for an analysis of organizational structures, dynamics, and relations, it can enable the development of insightful findings on networks that have not been provided by network theories (Popp et al., 2014). Moreover, using structural design theory on networks enables the identification of universal organizational challenges and can provide more insights on the enhancement of network performance and effectiveness (Kenis & Raab, 2020). By applying structural design theory, comparative analyses of different networks possibly reveal patterns, trends, and best practices, offering predictive power regarding the impact of e.g. structural design parameters on network performance. Additionally, the nature of organizational structural design theory is able to provide the current research on networks a new understanding of network dynamics (Popp et al., 2014).

## Quality of Organization

De Sitter (1994) states that the (desired) societal contribution an organization seeks to pursue can always be described by two categories of generalized organizational criteria that should be met. He states that every organization should meet the criteria that belong to the category 'Quality of Work' and the category 'Quality of Organization'. Within these categories, two levels can be identified: the first level indicates general variables, while the second level operationalizes these general variables into measurable aspects. Within this thesis, there will only be focused on 'Quality of Organization' due to research limitations. By operationalizing these criteria, an organization's societal contribution becomes explicit, categorized into quality of organization and quality of work. Even though the criteria as seen in Table 1 are generalizable, they need to be translated to fit the specific societal contribution of the studied organization. The category 'Quality of Organization' refers to an organization's potential to realize its societal contribution in an effective and efficient manner. The general first level criteria flexibility, control over order realization, and innovativeness aim to realize and adapt to the specifics of the organization's societal contribution (Achterbergh & Vriens, 2019).

For Prosper, the primary criteria can be aligned with the goals of the MDOs. These goals, as outlined by Onco-Oost, include presenting high-quality diagnosis and treatment plans, finishing within the scheduled time, and ensuring that at least 90% of the predetermined patients are discussed within the MDO (Regionale Oncologienetwerken, 2020). The goal of discussing at least 90% of predetermined patients aligns with the control over order realization variable, specifically the second level variable 'reliable production time'. This refers to Prosper's ability to complete MDOs within agreed-upon

standards (Achterbergh & Vriens, 2019). The goal of finishing meetings within scheduled times relates to the flexibility variable ‘production cycle times’, which in Prosper’s context translates to the time needed to complete the discussion of a patient’s case (Achterbergh & Vriens, 2019). These goals both aim to minimize the time required to discuss a case without affecting the quality of the MDO, ensuring that the necessary number of patients is discussed within the scheduled time.

Additionally, other second-level variables related to flexibility and control over order realization — ‘sufficient product variations,’ ‘sufficient product mix,’ ‘sufficient product volume,’ and ‘reliable production’— can be connected to the MDO goal of providing high-quality diagnosis and treatment plans. In Prosper’s context, these variables translate to the number of different treatment types offered, the degree to which treatment is realized for all patients, Prosper’s capacity to handle an adequate number of patients, and the ability to maintain agreed-upon standards, as shown in Table 2.1. Together, these variables ensure the quality of MDO diagnosis and treatment plans. Although innovation is not a primary goal for the MDOs, incorporating it as a secondary goal is important, as innovation can support achieving the primary goals. Within Prosper’s context, the variable ‘strategic product development’ is translated as the capacity for MDO members to develop innovative products during working hours. ‘Short innovation time’ is translated as the time needed to move from a development idea to its implementation within the MDOs.

*Table 2.1 MDOs and related second level variables for Prosper*

MDO goals	Related general first level variables	General second level variables
Discussing at least 90% of predetermined patients	Control over order realization	Reliable production time
Finishing MDOs within scheduled time	Flexibility	Short production cycle times
Presenting high-quality diagnosis and treatment plans	Flexibility	Sufficient product variations
		Sufficient product mix
		Sufficient product volume
	Control over order realization	Reliable product quality
Potential for innovation	Potential for innovation	Strategic product development
		Short innovation time

### Structural design parameters and parameter values

Design parameters have been developed and discussed by several authors in organization theory, e.g., Mintzberg (1983) and De Sitter (1994) (Achterbergh & Vriens, 2019). Even though different authors have discussed several different sets of parameters, the set of seven structural design parameters as proposed by De Sitter (1994) will be used in this research as Achterbergh and Vriens (2019) state it seems to encompass a complete set that fits with most of the parameters other authors have put forward.

The authors also state that every organizational structure can be described by using this specific set of design parameters. Dependent on the values given to the parameters, which can range from low to high, the characteristics of the structural design of an organization can be described. These values can enable or disable organizational members in certain ways and can therefore affect organizational output (De Sitter, 1994; Achterbergh & Vriens, 2019).

Seven structural design parameters have been identified and can be divided into three parts: Firstly, the three design parameters that are related to the description of the production structure: the degree of functional concentration, the degree of differentiation of operational activities, and the degree of specialization of operational activities. The second set of three design parameters – the degree of differentiation of regulatory activities into parts, the degree of differentiation of regulatory activities into aspects, and the degree of specialization of regulatory activities – are related to the control structure of the organization. The final parameter, the degree of separation, refers to the relation between operational and regulatory activities (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). However, due to time limitations, this research will focus only four parameters: the degree of functional concentration, the degree of differentiation of operational activities, the degree of specialization of operational activities and the degree of separation between operational and regulatory activities. These parameters are chosen as the main objective of this research is to identify structural causes for problems within the MDOs, which are part of the operational process.

### *The degree of functional concentration*

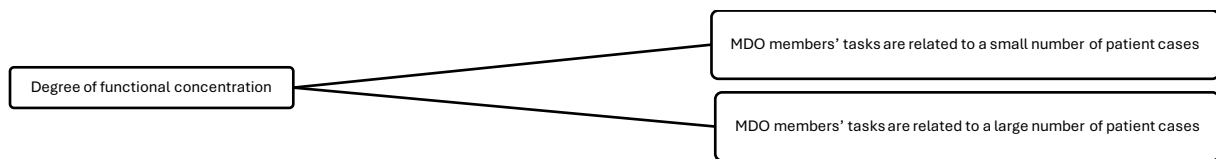
The degree of functional concentration refers to the extent to which operational activities are related to all order types (De Sitter, 1994; De Sitter et al., 1997). In this context, an order is defined as a specific demand for a product or a service, such as a cancer patient seeking a particular form of treatment. According to Mintzberg, orders can be divided based on three criteria:

1. Place – refers to the geographical location of the market segment, resulting in orders being categorized based on their location.
2. Client – refers to the classification of orders in terms of clients that are demanding them, such as public or private clients.
3. Output – refers to the classification of orders based on the products or services provided, such as different types of treatment within healthcare.

A high degree of functional concentration implies that all operational tasks are related to all order types, no matter how they are categorized. Organizations with a high degree of functional concentration often cluster their operational tasks based on the similarity of the task or needed expertise for the tasks. By contrast, a low degree of functional concentration indicates that tasks are linked to fewer order types, where operational tasks are separated based on the different order types. An intermediate degree of functional concentration is also possible, in which a smaller number of activities is related to a smaller amount of order types. It is also important to note that the degree of functional concentration is relative

to the number of defined order types and therefore is dependent on the context of the organization that is studied. Decreasing functional concentration can involve defining the different order types and assigning each order type to its own production flow (Achterbergh & Vriens, 2019). It's important to consider both internal and external orders when analyzing functional concentration. External orders impact all operational tasks, whereas internal orders affect specific parts of the production process. This often leads to the formation of organizational units dedicated to specific order types, each equipped with its personnel and resources. (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). Within the context of Prosper, the degree of functional concentration translates to ‘the degree to which healthcare providers’ tasks are related to a small number of patient cases’.

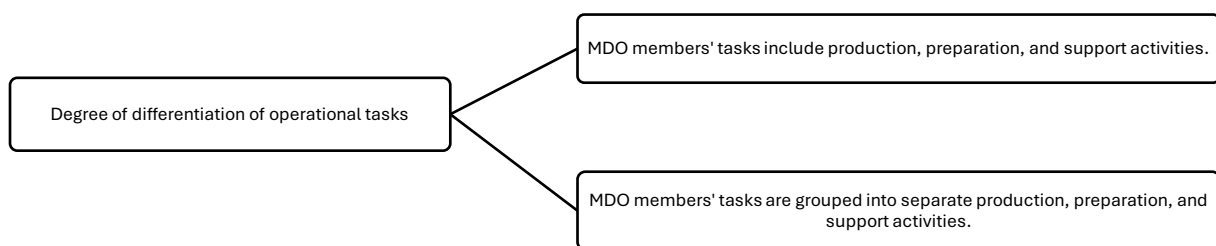
Figure 2.6: Translation of parameter degree of functional concentration to Prosper.



*The degree of differentiation of operational activities*

The degree of differentiation of operational activities in the production structure is based on de Sitter's (1994) concept of categorizing activities into 'production', 'preparation', and 'support'. Production activities include producing a product or service, while preparation activities ensure all necessary resources are available. Support activities ease the connection between production and preparation. The design parameter reaches maximum value when activities are separated into different tasks only concerning production, preparation, and support tasks, meanwhile, lower values indicate integration of these activities into one task. High differentiation means separate roles for planners, salespeople, and maintenance workers, while lower differentiation means employees may have multiple responsibilities, such as production, planning, and equipment maintenance (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). Within the context of Prosper, the degree of differentiation of operational tasks translates to the two dimensions ‘the degree to which healthcare providers’ tasks include production, preparation, and support activities’ and ‘the degree to which healthcare providers’ tasks are grouped into separate production, preparation, and support activities’.

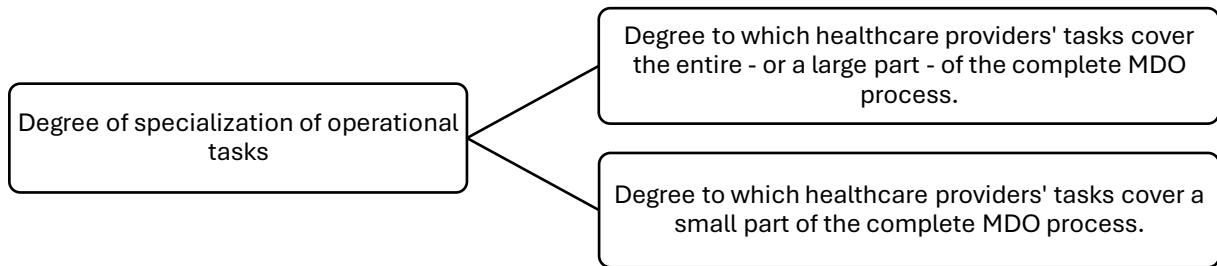
Figure 2.7: Translation of parameter degree of differentiation of operational tasks to Prosper



*The degree of specialization of operational activities*

The specialization of operational tasks refers to the degree to which tasks encompass only a segment of the entire operational process. The value of the parameter is minimal, or low, when the tasks include activities that encompass the entire primary process but the value increases as the process is divided into sub-activities that are assigned to separate tasks. This leads to employees only handling specific portions of the overall operational process. As the operational process is fragmented into sub-activities and allocated to separate tasks, the degree of specialization and efficiency within those areas rises while increasing independency between the different activities and tasks, leading to what is commonly known as the division of labor (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). Within the context of Prosper, the degree of specialization of operational tasks translates to the two dimensions ‘the degree to which healthcare providers’ tasks cover the entire – or a large part – of the complete MDO process’ and ‘the degree to which healthcare providers’ cover only a small part of the complete MDO process’.

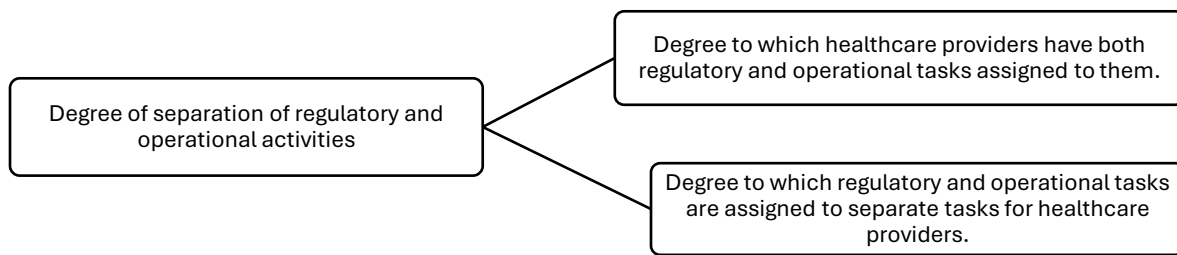
Figure 2.8: Translation of parameter degree of specialization of operational tasks to Prosper



*The degree of separation between operational and regulatory tasks*

The seventh and final design parameter refers to which operational and regulatory activities are assigned to different tasks. De Sitter (1994) states that every activity has both an operational and regulatory aspect. Separation refers to the degree to which these two aspects are assigned to the same tasks, or the degree to which they are not. A high, or maximum, degree of separation is obtained when operational tasks contain as few regulatory activities as possible, or when regulatory tasks contain as little operational activities as possible, in other words, they are separated almost completely. Organizations with a low, or minimal, have tasks in which both operational and regulatory activities are combined as much as possible (De Sitter, 1994; De Sitter et al., 1997; Achterbergh & Vriens, 2019). Within the context of Prosper, the degree of separation of regulatory and operational tasks translates to the two dimensions ‘the degree to which healthcare providers have both regulatory and operational tasks assigned to them’ and ‘the degree to which regulatory and operational tasks are assigned to separate tasks for healthcare providers’.

Figure 2.9: Translation of parameter degree of separation of regulatory and operational tasks to Prosper



## The Effects of parameter values on Quality of Organization Variables

### *Effects of High Parameter Value Structures on Quality of Organization*

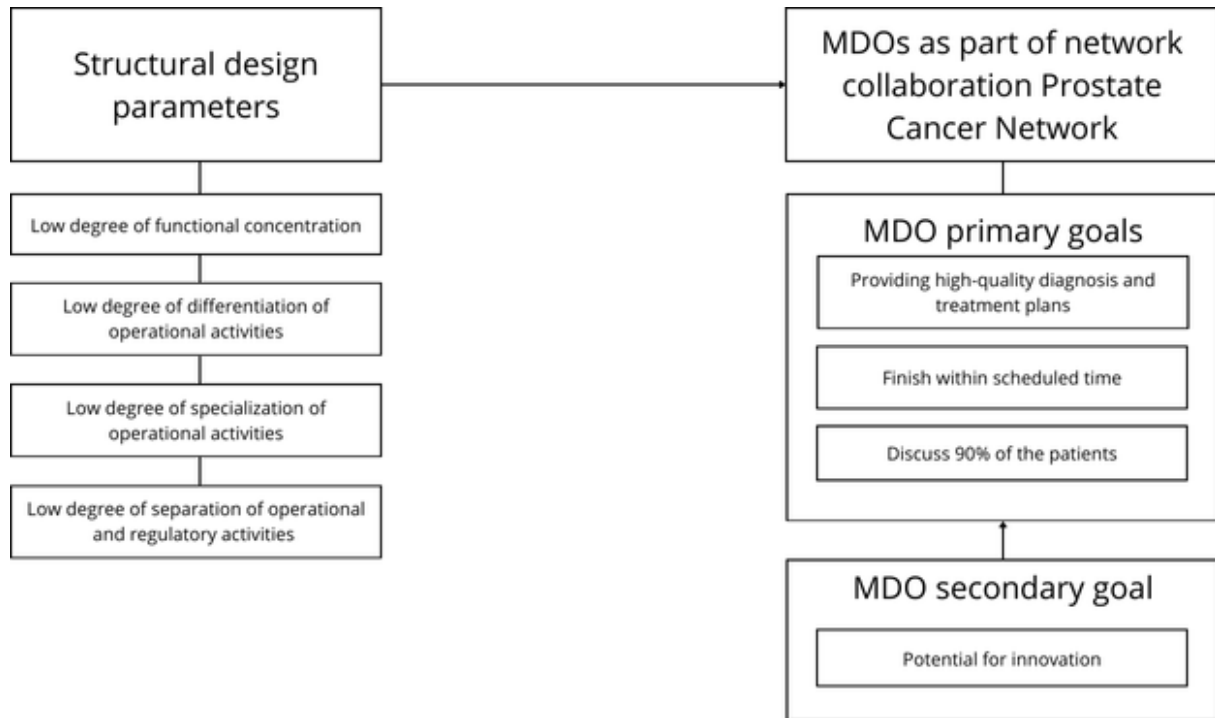
The effects of High Parameter Value Structures (HPVS) on the Quality of Organization are, just as the effects of HPVSs on the Quality of Work, complex and unfavorable. HPVSs lead to long waiting times due to frequent disturbances within highly dependent production cycles, hindering the realization of short product cycle times which are essential for flexibility. Control over order realization becomes challenging, as HPVSs make it difficult to track orders and plan their production efficiently. This is intensified by the lack of regulatory potential and increased disruptions that occur throughout the whole process. Quality control during production suffers due to limited oversight of the entire process and difficulty in anticipating and addressing variations. Process and product innovation are also obstructed in HPVSs due to regulatory constraints. Overall, HPVSs pose significant obstacles to achieving quality of organization variables, undermining efficiency, and flexibility within the organizational processes (Achterbergh & Vriens, 2019).

### *Effect of Low Parameter Value Structures on the Quality of Organization*

Low Parameter Value Structures (LPVS) have beneficial effects on the Quality of Organization. LPVSs lead to shorter production cycle times and increase flexibility by providing organizational members with an overview of the entire production process and the regulatory potential to deal with possible disturbances. As these structures include tasks that cover the whole process, the probability of disturbances is reduced. This also allows for faster detection and resolution of said disturbances. LPVSs also facilitate single-piece production, reducing waiting times and they enhance control over order realization by improving reliability, enabling better production planning, and enhancing product quality control. Additionally, LPVSs foster process and product innovation due to the broader scope of tasks, a wider integrated perspective, and opportunities for experimentation and learning. Overall, LPVSs offer more favorable conditions for realizing quality of organization variables compared to HPVSs (Achterbergh & Vriens, 2019).

## Conceptual model

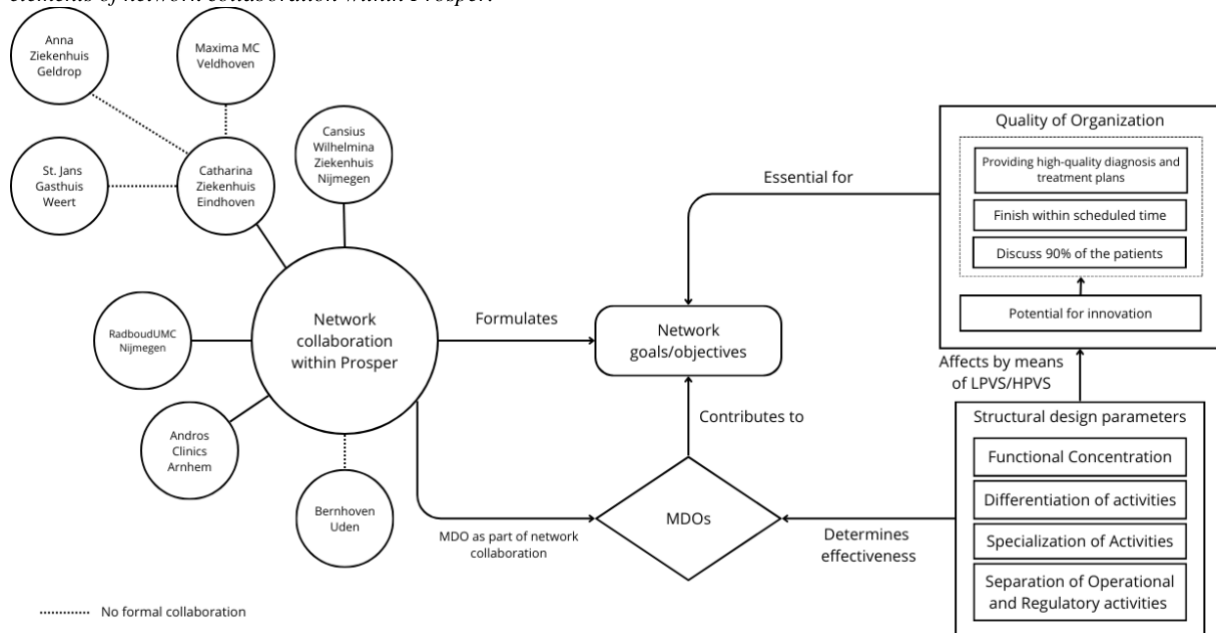
Figure 2.10: Conceptual model of the effect of Structural design parameters on MDOs and its related goals



Based on the developed theoretical framework, a conceptual model for the diagnosis of MDOs within Prosper is formulated. As the aim of the thesis is to provide a diagnosis of the MDOs based on the values of the structural design parameters, these aspects are the two main parts of the conceptual model. Based on De Sitter's (1994) framework, four key structural parameters have been selected to determine the state of the MDOs. By considering the degree of functional concentration, differentiation of operational activities, specialization of tasks, and separation between operational and regulatory activities, the model provides insights into how MDOs can be structured to optimize resource utilization, enhance coordination, and improve patient outcomes. Low parameter value structures emerge as central to this optimization, leading to increased flexibility, improved control over order realization, and increasing potential for innovation. Overall, the conceptual model offers a comprehensive framework for understanding the dynamics of MDOs within Prosper, guiding efforts to enhance collaboration, efficiency, and quality of care.

## The desired situation of multidisciplinary consultations

Figure 2.11: Overall outline of the effects of the structural design parameters and quality of organization variables on elements of network collaboration within Prosper.



The desired scenario for the MDOs is based on a low parameter value structure as stated by De Sitter (1994), and Achterbergh and Vriens (2019). In the context of MDOs, low parameter value structures would involve clear and simple task allocation, minimizing complexity. A low degree of functional concentration for MDOs would mean that a low number of both internal and external cases is related to the healthcare providers' tasks. Second, the degree of differentiation of operational tasks should be as low as possible, which can be indicated by a high number of the tasks of healthcare providers that are related to the entire MDO process. Third, the degree of specialization of operational tasks should be as low as possible, this means that the tasks of healthcare providers should cover a large part of, or the entire MDO process. This can be indicated by a high number of sequentially coupled tasks within the MDO process, and a higher amount of time is needed to discuss one entire case within an MDO. Finally, the degree of separation of regulatory and operational activities should also be as low as possible. This is characterized by a low number of hierarchical layers between the involved healthcare providers, a low number of operational tasks that lack regulatory potential, and a high amount of healthcare providers is able to solve their own problems. By adhering to low parameter value structures, MDOs would optimize resource utilization, promote clarity in task allocation, and increase the effectiveness of the MDOs, ultimately improving patient outcomes within Prosper (Achterbergh & Vriens, 2019).

The values of the structural design parameters impact the Quality of Organization variables. When the values of the design parameters are high, the HPVS cause long waiting times, hindering flexibility, and making order realization and production planning challenging. Control over the production process becomes difficult, leading to disruptions and hindering quality control. Innovation is also stifled due to regulatory constraints. Conversely, LPVS have positive effects on the Quality of Organization variables, reducing production cycle times, increasing flexibility, and improving control

over the production process. LPVSS facilitate single-piece production, enhance order realization control, and foster innovation. Overall, LPVSS offer more favorable conditions for achieving quality of organization variables compared to HPVSS (Achterbergh & Vriens, 2019). The Quality of Organization variables and MDOs together affect the main objectives formulated by Prosper. As it is the main purpose of Prosper to achieve these goals, the ideal situation for Prosper is one where the values of functional concentration, differentiation of operational activities, specialization of operational activities, and the separation of operational and regulatory tasks is as low as possible within the context of the network. With these values as low as possible, the effectiveness of MDOs would be increased and the Quality of Organization variables would be positively impacted.

# METHODOLOGY

## Qualitative method

A qualitative research method has been used to answer the research questions stated in Chapter 1 as qualitative methods are suited best for the study of social processes due to their flexible and adaptable nature. Yadav (2021) highlights that qualitative research can provide a thorough framework that enables the evaluation of research quality, which equips researchers with the necessary tools to assess their own studies rigorously and objectively. As noted by Hammersley (2013), qualitative analysis emphasizes verbal description and interpretation, which can contribute to a rich framework for capturing the complexities of network collaboration dynamics. By embracing the principles of qualitative research, the study aims to provide valuable insights that complement quantitative analyses, thereby offering a holistic understanding of the research phenomenon. Ultimately, the utilization of qualitative methods enables the study to capture the subjective perspectives of stakeholders and delve into the complex dynamics of network collaboration within Prosper, contributing to a deeper understanding of the research context and enhancing the overall quality of the thesis' findings.

The epistemological and ontological foundation for this thesis is rooted in the constructivist paradigm as the multidisciplinary consultations (MDOs) represent complex social phenomena that is shaped by the interactions and interpretations of the involved participants. As Guba and Lincoln (1994) state, the constructivist approach perceives reality as a social construct in which meanings are not inherent but created through both individual and collective experiences. In the context of MDOs, where healthcare professionals from diverse disciplines meet to discuss patient cases, understanding the subjective perspectives, interpretations, and sense-making processes of participants becomes increasingly important. A constructivist approach allows for the exploration of the complex dynamics within MDOs. Moreover, embracing a constructivist paradigm aligns with the qualitative methodology employed in this study, facilitating an in-depth exploration of the lived experiences and subjective realities of MDO participants, ultimately contributing to an increasing understanding of the MDOs (Guba & Lincoln, 1994).

## Data gathering

### Semi-structured interviews

Semi-structured interviews will be conducted to be able to gain more information on how network participants perceive the MDOs. Recognizing the value of open-ended questions and the flexibility it allows, contributed to the aim to capture detailed insights. However, it is of importance to be aware of the limitations of semi-structured interviews, such as bias that can be introduced by the interviewer, and challenges in achieving a large and diverse sample size (Adams, 2015). The ability to uncover complex phenomena and individual viewpoints by means of these interviews outweighs its constraints but to

ensure a more comprehensive understanding of the MDOs the interviews will be combined with observations and document analysis. The interviews serve two purposes within this research, as part of the interviews will be about the current and desired situation of the MDOs and are therefore part of the preliminary research. This information will be analyzed by the means of a gap analysis to determine the difference between the current and desired situation of the MDOs within Prosper. The interviews will also try to uncover the actual values of the structural design parameters, which will be analyzed by the means of a cause analysis to determine if the differences found in the gap analysis have causes that can be found in the structural design parameters (Achterbergh & Vriens, 2019).

## Transcripts

The interviews have been transcribed verbatim after being conducted and were send to the respondents to verify the texts and to ask respondents whether alterations to the texts were needed. For this research, verbatim transcription was chosen instead of non-verbatim transcriptions, as these are more accurate (Oliver, Serovich, & Mason, 2005). Afterwards, the transcripts were analyzed and but not coded as there was no need to identify patterns and themes to answer the research question(s).

## Sample

In this research, two members, both urologists within Prosper, have been interviewed. This non-random selection of respondents can contribute to the degree to which the interviews enable gaining appropriate insights and understandings that allows the research questions to be answered. This is also called purposive sampling and is employed because it can contribute to increasing depth of understanding both Prosper as an entire network and the MDOs and this method of sampling is used to interview respondents that are most likely to yield the needed information (Campbell et al., 2020).

Purposive sampling

## Document analysis

In addition to conducting interviews with network members and observations, several documents of the overarching network, the Dutch Regional Oncology Network, were analyzed to provide more context. Moreover, the development and structuring of the multidisciplinary consultations is described within these documents. The documentation can therefore contribute to a more comprehensive understanding of the current organizational structure. As Prosper lacks documentation, the network's website was analyzed.

## Data analysis

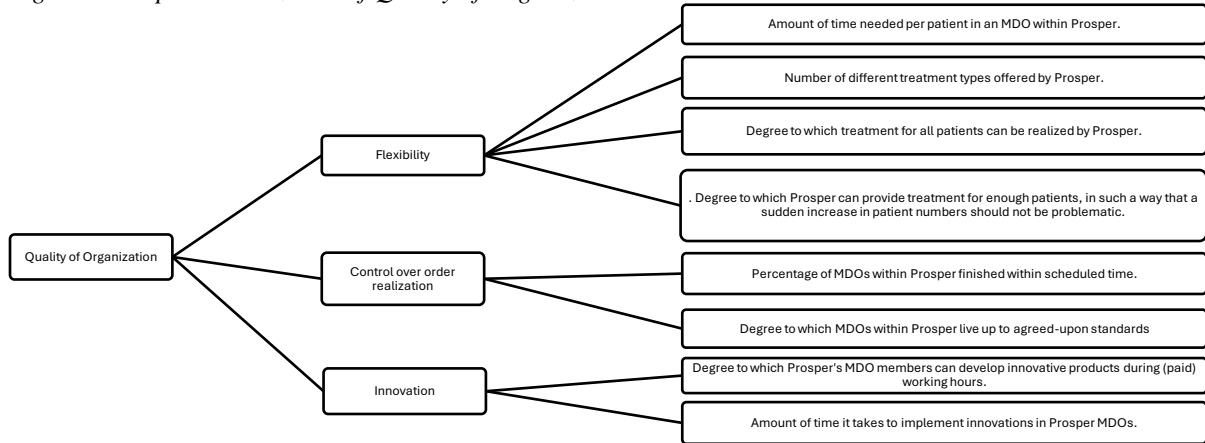
### Gap analysis

The second analysis to be conducted is a gap analysis. Before starting the actual analysis itself, the process starts with the (re)formulating of how prostate cancer network defines its own perception of what ‘meaningful survival’ is. This step, according to Achterbergh and Vriens (2019), provides a more comprehensive understanding of what the goals, identity, and environmental contribution of the network entail. The first step of the gap analysis includes the operationalization of ‘Quality of Organization’ and ‘Quality of Work’, which are needed to be able to determine the variables (V) that describe the performance of prostate cancer network.

Quality of Organization is indicated when looking at variables related to flexibility, control over order realization, and potential for innovation. Flexibility within organizational refers to being able to achieve short production cycle times, a diverse range of product variations, a flexible product mix, and the ability to accommodate different volumes (De Sitter, 1994). Translating this to the context of the MDOs brings us to the following four variables: ‘amount of time needed to discuss one patient within an MDO’, ‘number of different treatment types offered’, ‘degree to which treatment is realized for all patients types’, and ‘degree to which the organization can provide treatment for enough patients, in such a way that a sudden increase in patient numbers should not be problematic’.

Second, variables related to control over order realization involve meeting commitments regarding product quality and production/delivery time. These include ‘reliable product quality’ and ‘reliable production time,’ as proposed by De Sitter (1994), indicating devotion to agreed standards and timely product completion. Translating these variables to the MDOs results in ‘the percentage of MDOs that is finished within the scheduled time’ and ‘degree to which MDOs within Prosper live up to agreed-upon standards’. Third and final, variables related to the potential for innovation are operationalized by De Sitter (1994) using two general indicators that reflect on the degree to which process and product innovations are relevant, which is measured by its success rates, and the average time an innovation idea takes to be implemented or launched (Achterbergh & Vriens, 2019). This can be translated almost directly to MDOs by looking at ‘degree to which treatment and technique innovations are tested by Prosper using clinical patient trials’ and ‘the average time it takes to implement innovations in MDOs’. The operationalization is shown in Figure 3.1.

Figure 3.1: Operationalization of Quality of Organization



The second step of the gap analysis is to determine the norm values for each of the identified variables (V). Norm values are referred to as  $v_i[nv]$ . These values represent the desired situation against which the current actual performance will be measured. To be able to determine the norm values of prostate cancer network, the analyzation of documents and conducted interviews can prove to be helpful, as these values should be realistic and based on what is expected within the network (Achterbergh & Vriens, 2019).

In the third step of the gap analysis, the actual values, to which will be referred to as  $v_i[av]$ , are determined. This can be done by the means of conducting interviews and observing MDOs within prostate cancer network. after determining both the desired and actual organizational behavior, the values  $v_i[nv]$  and  $v_i[av]$  can be compared to conclude whether a problematic difference  $v_i[e]$  exists for the variables. This requires a systematic evaluation of inconsistencies between the desired and observed values. Within this final step, the importance of considering the organization's goals and objectives when prioritizing issues within the identified gap is emphasized, as it ensures that possible interventions align with strategic priorities (Achterbergh & Vriens, 2019).

## Cause analysis

After defining the problematic variables, the next step is to determine the structural causes of this undesired behavior, which is done in a so-called cause analysis. The first step is to identify structural design parameters (P) as introduced by De Sitter (1994) that could potentially influence the problematic variables. Once the parameters are identified, the second step, consisting of two sub-steps, the first of which involves providing a rich description of their actual, current values within the organization's context based on the developed operationalization. By providing a comprehensive understanding of each parameter's current state, insights are gained into their potential impact on organizational behavior and performance (Achterbergh & Vriens, 2019).

The second sub-step entails determining whether each parameter is a potential cause of problematic organizational behavior. Using the design theory connecting parameters to behavior,

analysts assess whether the current actual values of the parameters are expected to cause issues identified in the gap analysis. Each problematic variable ( $v_i$ ) identified is evaluated on whether the current values of the parameters ( $p_i$ ) are contributing to these issues. If a parameter's actual value is deemed 'too high' based on its expected impact on organizational behavior, it is flagged as a problematic parameter ( $p_i[e]$ ).

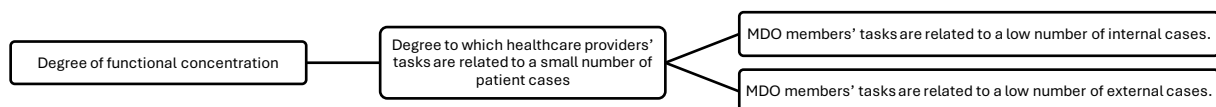
In the final step, a list of problematic parameters based on the outcomes of Step 2 is formulated. Parameters ( $P$ ) for which an error ( $p_i[e]$ ) exists – meaning their actual values are expected to cause problematic organizational behavior – are included. By systematically identifying these parameters, the structural elements of the network that require an intervention can be addressed (Achterbergh & Vriens, 2019).

As described in Chapter 2, the values of the structural design parameters can be either high or low, and sometimes intermediate. For the sake of this providing clear answers to the research questions, the concepts are operationalized based on the two extremes of high and low values. Considering that the multidisciplinary consultations (MDOs) are part of the operational structure of Prosper, only the structural design parameters that are relevant to this part of the entire structure are operationalized.

### *Degree of functional concentration*

In Chapter 2, functional concentration was translated as the degree to which healthcare providers' tasks are related to a small number of patient cases. Following Achterbergh and Vriens (2019), two indicators are proposed. Low functional concentration is indicated by few external and internal order types per operational task, while high functional concentration is characterized by numerous external and internal order types per task. For the case of the MDOs within Prosper, this translates to the following:

Figure 3.2: Operationalization of functional concentration.



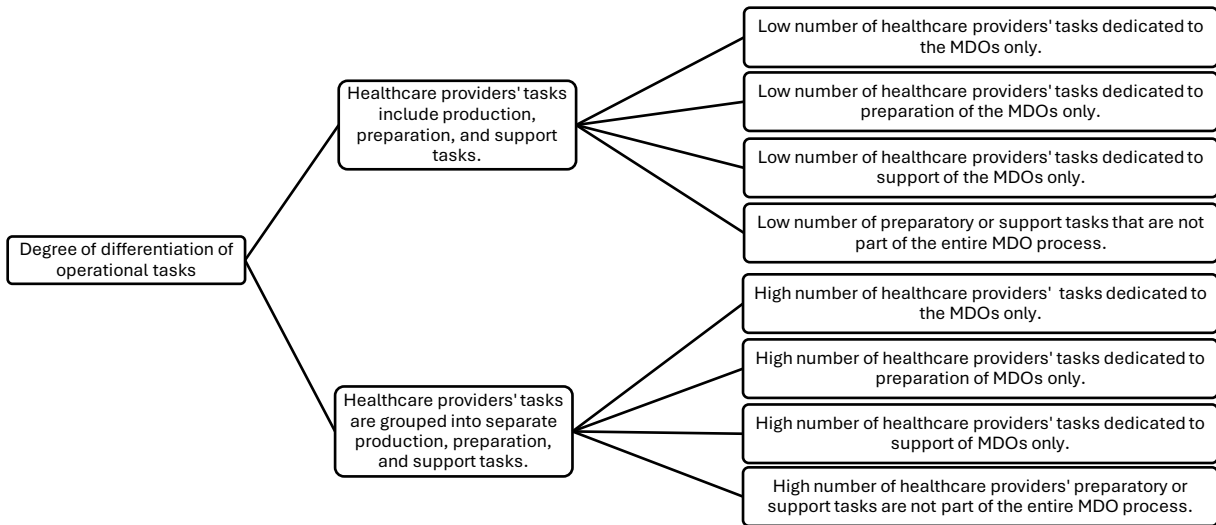
The desired norm value of functional concentration can be defined as follows: *The level of functional concentration is as low as possible so that it does not lead to problems regarding the effectiveness of network collaboration regarding the multidisciplinary consultations, given the context of the organization.*

### *Degree of differentiation of operational activities*

The degree of differentiation of operational tasks includes two dimensions: low differentiation, where tasks encompass all activities, and high differentiation, where tasks are strictly segregated. For low differentiation, indicators include few tasks only for production, preparation, or support, and minimal preparatory or support activities outside the operational process. By contrast, high differentiation involves numerous tasks exclusively for each activity and a significant number of preparatory or support

activities independent of the operational process (Achterbergh & Vriens, 2019; De Sitter, 1994; De Sitter et al., 1997). For the case of the MDOs within Prosper, this translates to the following:

Figure 3.3: Operationalization of differentiation of operational activities

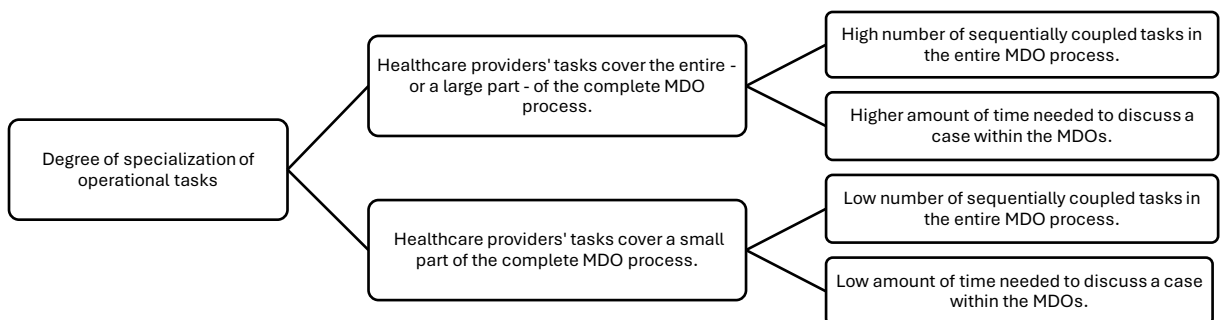


The desired norm value of differentiation of operational tasks can be defined as follows: *The level of differentiation of operational tasks is as low as possible so that it does not lead to problems regarding the effectiveness of network collaboration regarding the multidisciplinary consultations. This entails that, given the context of the organization, the number of tasks dedicated to only production activities, preparation activities, and support activities is as low as possible. This also means that the number of preparatory or support tasks that are not part of the operational process are as low as possible.*

### Specialization of operational activities

Specialization of operational tasks refers to the degree to which activities are divided within the operational process (Achterbergh & Vriens, 2019; De Sitter, 1994; De Sitter et al., 1997). Low specialization is characterized by sequentially coupled tasks and a short production cycle time. Conversely, high specialization is characterized by few sequentially coupled tasks and a brief cycle time (Achterbergh & Vriens, 2019). For the case of the MDOs within Prosper, this translates to the following:

Figure 3.4: Operationalization of specialization of operational tasks

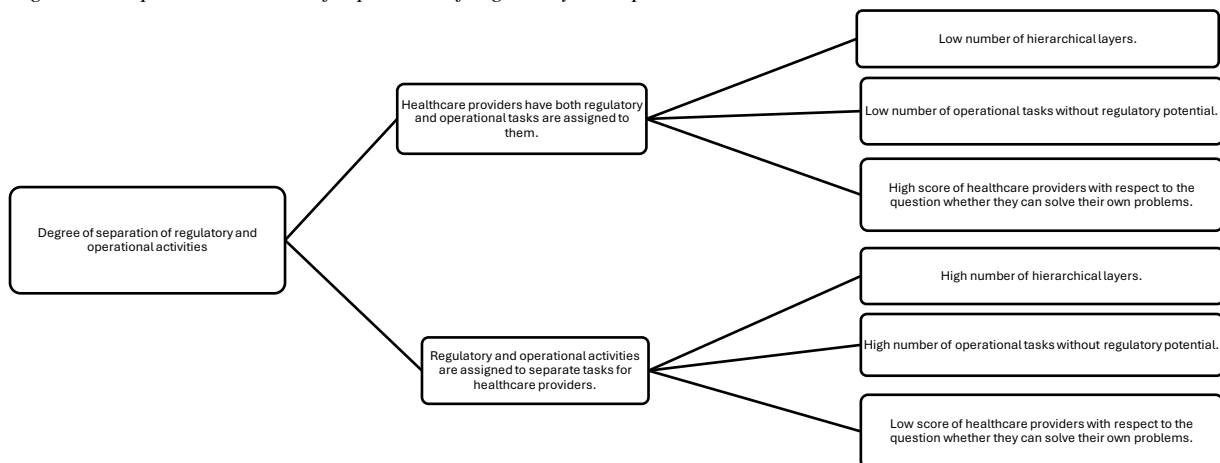


The desired norm value of specialization of operational tasks can be defined as follows: *The level of specialization of operational tasks is as low as possible so that it does not lead to problems regarding the effectiveness of network collaboration regarding the multidisciplinary consultations. This means that, given the organizational context, the number of sequentially coupled tasks is as high is possible and cycle times are high, but not too high.*

### *Separation of regulatory and operational activities*

The separation of regulatory and operational activities refers to the degree to which regulatory and operational activities are assigned to different tasks. Low separation is indicated by few hierarchical layers, operational tasks having regulatory potential, and high employee self-sufficiency. Conversely, high separation is marked by numerous hierarchical layers, operational tasks lacking regulatory potential, and low employee self-sufficiency (Achterbergh & Vriens, 2019; De Sitter, 1994; De Sitter et al., 1997). For the case of the MDOs within Prosper, this translates to the following:

Figure 3.5: Operationalization of separation of regulatory and operational activities.



The desired norm value of separation of regulatory and operational tasks can be defined as follows: *The level of separation of regulatory and operational tasks is as low as possible so that it does not lead to problems regarding the effectiveness of network collaboration regarding the multidisciplinary consultations. This means that, given the context of the organization, the number of hierarchical layers and operational tasks without regulatory potential are as low as possible. Additionally, this means that the score of operational activities with respect to the question if they can solve their own problems, is as high as possible.*

## Research ethics

Incorporating robust research ethics principles in this thesis, particularly involving interviews with medical professionals and observations of meetings, is crucial for ensuring its integrity and validity. Firstly, informed consent procedures, as outlined by Dooly et al. (2017) and supported by Rhodes (2010), will be followed. This involves transparently explaining the study's purpose, potential risks, and data handling protocols to all participants before starting both interviews and observations. Moreover, confidentiality measures will be strictly followed to ensure both participants' and patients' privacy, especially when dealing with sensitive medical information, as underscored by Rhodes (2010). Furthermore, ethical interpretation of findings, avoiding misrepresentation, and ensuring accuracy, supported by Rhodes (2010), is crucial. This is ensured by communicating with participants about interview and observation outcomes, as well as providing them the chance to read the final thesis.

## Qualitative research criteria

In this thesis, qualitative research criteria will be addressed to ensure the credibility, transferability, dependability, and confirmability of the findings. To establish credibility, multiple strategies will be employed throughout the research. This includes the engagement in peer debriefing sessions to foster reflexivity during the whole process and maintaining a progressive subjectivity and transparency by documenting argumentations and reasoning during the research process. Moreover, member checking will be integrated throughout the research process to validate interpretations with both participants and the other interviewer and observer. Transferability will be achieved through provided thick descriptions of the research case, allowing for case-to-case transfer with comparable studies, while emphasizing the responsibility of the reader to assess the applicability of findings to similar contexts. Dependability will be ensured by accurately documenting methodological changes and shifts in constructions, maintaining transparency, and reflecting on the rationale behind decisions made during the research process. Finally, confirmability will be established by maintaining a traceable and well-documented research process by providing transparency in decision-making and navigating the influence of researcher bias on data interpretation. By following these qualitative research criteria, the study aims to produce reliable, credible, and insightful findings that contribute meaningfully to both the field of organizational studies as the improvement of the MDOs and ultimately the healthcare sector (Creswell & Poth, 2016).

## GAP ANALYSIS

Preliminary to determining the current state of the multidisciplinary consultations (MDOs) within Prosper, it is crucial to increase the understanding of Prosper's perception of its own societal contribution. This serves as the foundation for future decisions within an episodic intervention, for example the selection of 'quality of organization' variables or determining the possible impact of potential issues (Achterbergh & Vriens, 2019). For Prosper, their societal contribution is formulated as 'optimizing the treatment for prostate cancer in the Netherlands', primarily through the employment robotics-assisted radical prostatectomies (RARP). The organization argues that this specialization facilitates an increased volume of surgeries, progressing the experiences of both medical practitioners and patients alike. Consequently, an increase of data and insights enables continuous developments in prostate cancer care (Over Prosper – Samenwerkende Prostaatanker Klinieken, 2022).

The first step in determining the current situation is to apply translated 'quality of organization' variables to determine the organization's performance (Achterbergh & Vriens, 2019). As outlined in Chapter Three, the general variables 'flexibility', 'control over order realization', and 'innovation' have been adopted to suit the characteristics of the MDOs within Prosper, which are presented in Table 4.1.

Table 4.1 Set of selected variables

General variables	Second level	Related MDO goal	Second level variables for Prosper
Flexibility	Short production cycle times	Finishing MDOs within scheduled time	Amount of time needed to discuss one patient within an MDO.
	Sufficient product variations	Presenting high-quality diagnosis and treatment plans.	Number of different treatment types offered.
	Sufficient product mix		Degree to which treatment is realized for all patients.
	Sufficient product volume		Degree to which the organization can provide treatment for enough patients, in such a way that a sudden increase in patient numbers should not be problematic.
Control over order realization	Reliable production time	Discussing at least 90% of predetermined patients	Percentage of MDOs finished within scheduled time.
	Reliable product quality	Presenting high-quality diagnosis and treatment plans	Degree to which MDOs within Prosper live up to agreed-upon standards

Potential for innovation	Strategic product development	Potential for innovation	Degree to which MDO members can develop innovative products during (paid) working hours.
	Short innovation time		Time from development idea for innovation to the implementation within the MDOs.

## Determining the norm values

The second step is to establish the norm values of all variables  $v \in V$ , denoted as  $v_i[nv]$ . These norm values are based on the values that are desired by Prosper or the organization is expected to live up to by the Dutch Oncology Network. Determining these norms varies across variables, as not all desired outcomes are explicitly outlined by Prosper or the Dutch Oncology Network, requiring some values to be derived from input from MDO participants.

## Flexibility

Beginning with the translated variables indicating organizational flexibility, the desired time allocated for discussing each patient is calculated. According to the *Generieke Blauwdruk*, at least 90% of patients should be discussed during weekly MDOs (Regionale Oncologienetwerken, 2019). MDO participants confirm an average discussion of ten patients per session, held every Wednesday from 8 A.M. to 9 A.M. Considering the expected 90% discussion rate, leading to one hour to discuss a minimum of nine patients, equating to an average of ca. 6,5 minutes per case (referring to 90% of ten patients within one hour) for  $v_1 =$  'amount of time needed to discuss one case on average',  $v_1[nv] \leq 6,5$  minutes.

As Prosper is a specialized clinical network, the only treatment they offer is operation, also referred to as a radical prostatectomy, as radiation and hormonal therapy are not within their area of expertise. Patients discussed within Prosper's MDOs have been evaluated by a prior MDO, affirming surgery as necessary. As Prosper benchmarks itself against the German Martini-Klinik, which offers two surgical procedures, the norm value for treatment types is determined to be two:  $v_2 =$  'number of treatment types offered',  $v_2[nv] \geq 2$  types of treatment (Martini-Klinik – Centrum Voor Prostaatanker in Duitsland, n.d.).

The norm value for the extent to which treatment can be realized for all patients is based on the second interview, which stated that treatment is achieved for “normally, nine out of ten patients.” While realizing treatment for all patients is idealistic, a pragmatic norm of 90% will be used in this case. Therefore, the norm value for  $v_3 =$  ‘degree to which treatment is realized for all patients,’ is determined to be  $v_3[nv] = 90\%$  (referring to the interval [90, 100]). Additionally, ensuring the organization's flexibility involves its capability to accommodate to a certain number of patients. According to the Dutch

Oncology Network, each location must conduct a minimum of 100 radical prostatectomies annually (SONCOS normeringsrapport, 2023). Thus,  $v_4 =$  'number of operations conducted each year',  $v_4[nv] \geq 100$  operations.

### Control over order realization

To determine the performance on control over order realization within Prosper, the percentage of MDOs concluded within the allocated time is analyzed. While aiming for 100% might be idealistic, Achterbergh and Vriens (2019) suggest 95% as a pragmatic norm. Thus,  $v_5 =$  'percentage of MDOs finished within scheduled time',  $v_5[nv] = 95\%$  (referring to interval [95, 100]).

Subsequently, evaluating whether Prosper can live up to agreed-upon standards within its MDOs, two sub-variables are considered. The first agreed-upon standard taken into account is that at least 90% of listed patients must be discussed within an MDO (Regionale Oncologienetwerken, 2019). With an average of ten patients listed, a minimum of nine should be deliberated weekly (Appendix X – transcript 1). This sets  $v_{6a} =$  'Percentage of previously determined patients to be discussed within the MDO',  $v_{6a}[nv] \geq 90\%$ . Additionally, SONCOS standards require the presence of at least six different specialists during MDOs (SONCOS, 2023). Thus,  $v_{6b} =$  'number of different specialists present',  $v_{6b}[nv] = 6$  types of specialists. For the final norm value  $v_{6b}$  should be noted that the patients have been discussed in preliminary MDOs within their own hospitals in which, according to the second interview, all necessary specialists are present. Therefore, it should be questioned whether the current norm value is necessary.

### Innovation

Lastly, evaluating innovation indicators within Prosper determines the organization's ability to develop and implement innovations. According to the first interview, Prosper is not fully formalized, necessitating the development of formalization and uniformization documents. These developments are crucial for the future of the network. Therefore, MDO members should have time to develop these innovations during their (paid) working hours. Therefore,  $v_7 =$  'degree to which MDO members can develop innovative products during (paid) working hours'. The norm value for this variable,  $v_7[nv]$ , indicates that both hours and funding are available for MDO members to develop innovations.

The last variable to be given a norm value is the implementation time of the developed innovations. The SONCOS standards report (2023) states that oncological care is constantly evolving due to technological innovations, scientific insights, daily practice experiences, and professional consensus. Accordingly, oncological care centers are given a one-year period to implement new standards. This leads to a norm value  $v_8 =$  'implementation time for innovations', is set at  $v_8[nv] \leq$  one year.

## Determining the actual values

The actual values for the selected variables for ‘quality of organization’ are based on insights gained from both interviews (Appendix 2 and 3). The first actual values that are discussed are the variables that indicate Prosper’s flexibility. For the first variable,  $v_1$  = ‘amount of time needed to discuss one case on average’, interview findings indicate  $v_1[av] = 3,5 - 5$  minutes. Regarding  $v_2$  = ‘number of treatment types offered’, Prosper provides patients with three options for radical prostatectomy: a traditional abdominal operation, keyhole surgery, or robot-assisted keyhole surgery (Prostaatanker - Prosper, Specialist in Operatieve Prostaatverwijdering, 2022). Consequently, the actual value is  $v_2[av] = 3$  types of treatment. As for  $v_3$  = ‘degree to which treatment is realized for all patients’, a combination of the second interview with a MDO participant and Prosper’s published data yields an actual value of 96.7% (Resultaten - We Doen Er Alles Aan Om Verbeteringen door te Voeren, 2022). Thus,  $v_3[av] = 96.7\%$ . Lastly,  $v_4$  = ‘number of operations conducted each year’ is determined to be  $v_4[av] = 400$  operations, as per insights from the first interview.

The second group of actual values that is determined, is the group indicating the ‘control over order realization’. The actual value for the first variable  $v_5$  = ‘percentage of MDOs finished within scheduled time’, is determined to be 95% based on the second interview in which is stated it happens “rarely”, but to state that all MDOs are finished on time is not realistic. Hence,  $v_5[av] = 95\%$ . For the second variable,  $v_6$  = ‘degree to which MDOs within Prosper live up to agreed-upon standards’, it’s subdivided into two components. The first sub-variable,  $v_{6A}$  = ‘percentage of patients discussed within an MDO’, ranges between 90% and 95% based on observations from the initial interview, considering occasional registration lapses leading to a patient’s absence as well as the statement that “nine out of ten patients is at least discussed”. Thus,  $v_{6A}[av] = 90\%-95\%$ . The second sub-variable,  $v_{6B}$  = ‘number of specialist types present within an MDO’, is singular, as reported by the first participant, resulting in  $v_{6B}[av] = 1$  type of specialist.

Concluding with indicators of innovation within Prosper, starting with  $v_7$  = ‘degree to which MDO members can develop innovative products during (paid) working hours’. Based on information from both interviews, there is no room for MDO members to develop the needed innovations for the MDOs during paid working hours as this must be done in personal time. Additionally, Prosper lacks official funding or budgeting for this purpose. Therefore, it can be concluded that  $v_7[av] =$  ‘there are no hours nor funding available for MDO members to develop innovations’. Finally,  $v_8$ , the “implementation time for innovations,” is not measurable at the time of this research. According to the second interview, the implementation time within Prosper is “way too long,” although this mostly refers to the development time. Since none of the formalization and uniformization innovations have been completed and are still a work in progress, there is no way to determine the actual value of  $v_8$ .

## Determining whether there is a problematic difference (error) between the norm values and actual values

The next step is to identify any problematic differences between the norm values and actual values for the designated 'quality of organization' variables. These differences indicate potential 'gaps', representing organizational problematic organizational behavior. Therefore, for each  $v_i \in V$  it needs to be determined whether the actual value  $v_i[av]$  'fits' the norms established by the norm values  $v_i[nv]$  (Achterbergh & Vriens, 2019). In the case of Prosper, 'fitting' refers not only to the actual values being equal to the desired norm values, but also in some of the cases also to exceeding these values, which indicates Prosper performs better than what is expected of them. In such cases, where Prosper exceeds expectations, this is explicitly noted for the specific variable. Conversely, if actual values fit the norm values or imply exceeding performance, the variable is considered unproblematic. However, any other divergence from desired norms implies an error concerning the variable (Achterbergh & Vriens, 2019).

Starting with the variables indicating the organization's 'flexibility', none of the variables show a problematic difference. Starting with  $v_1$ , the difference between  $v_1[nv]$  and  $v_1[av]$  reveals a problematic difference:  $v_1[nv] \leq 6,5$  minutes while  $v_1[av] = 3,5$ , - 5 minutes. Regarding the second variable, the difference between  $v_2[nv] \geq 2$  types of treatment and  $v_2[av] = 3$  types of treatment indicates no problem. The third variable also does not indicate a gap between the desired values and actual values as  $v_3[nv] = 95\%$  (referring to interval [95, 100]) and  $v_3[av] = 96,7\%$ . Finally, the fourth and final variable to indicate flexibility implies a good fit between the desired and actual values as  $v_4[nv] \geq 100$  operations per year and  $v_4[av] = 400$  operations per year.

Continuing with the variables indicating Prosper's 'control over order realization', variable  $v_5$  doesn't show a problematic difference as  $v_5[nv] = 95\%$  (referring to interval [95, 100]) and  $v_5[av] = 95\%$ . For the first sub-variable indicating whether Prosper lives up to agreed-upon standards,  $v_{6A}[nv] \geq 90\%$  and  $v_{6A}[av] = 90\%$  (referring to interval [90, 95]) show that there is no problematic difference. The second sub-variable, however, shows an error as  $v_{6B}[nv] = 6$  types of specialists and  $v_{6B}[av] = 1$  type of specialist.

Finally, variables reflecting Prosper's innovation potential reveal differences between desired and actual values. For  $v_7$ , where  $v_7[nv]$  = there are both hours and funding available for MDO members to develop innovations,  $v_7[av]$  = there are no hours nor funding available for MDO members to develop innovations shows an apparent gap exists. Lastly, where  $v_8[nv] \leq 1$  year, there is no actual value available yet for  $v_8$  as the identified gap for  $v_7$  leads to no results for the successive variable.

## Determining the gap

Although differences exist between the desired values  $v_i[nv]$  and actual values  $v_i[av]$  for some variables, most variables are deemed unproblematic. Variables  $v_1$ ,  $v_2$ ,  $v_3$ ,  $v_4$ ,  $v_5$  and  $v_{6a}$  are not considered to be problematic, as no  $v_i[e]$  exists for these variables as shown in Table 4.2. However, two variables show problematic differences, and a third variable is shown to not be measurable.

Table 4.2 Identified variable norm values and actual values

Variables used for Prosper	Norm value $v[nv]$	Actual value $v[av]$	Gap
Amount of time needed to discuss one patient within an MDO ( $v_1$ )	$v_1[nv] = \leq 6$ minutes	$v_1[av] = 3-4,5$ minutes	$v_1[e]$ does not exist
Number of different treatment types offered ( $v_2$ )	$v_2[nv] = \geq 2$ types of treatment	$v_2[av] = 3$ types of treatment	$v_2[e]$ does not exist
Degree to which treatment is realized for all patients ( $v_3$ )	$v_3[nv] = 90\%$ (interval [90, 100])	$v_3[av] = 90\%$	$v_3[e]$ does not exist
Degree to which the organization can provide treatment for enough patients, in such a way that a sudden increase in patient numbers should not be problematic ( $v_4$ )	$v_4[nv] = \geq 100$ operations at minimum	$v_4[av] = 400$ operations	$v_4[e]$ does not exist
Percentage of MDOs finished within scheduled time ( $v_5$ )	$v_5[nv] = 95\%$ (interval [95, 100])	$v_5[av] = 100\%$	$v_5[e]$ does not exist
Degree to which MDOs within Prosper live up to agreed-upon standards ( $v_{6A}$ ) ( $v_{6B}$ )	$v_{6A}[nv] \geq 90\%$	$v_{6A}[av] = 90\%-95\%$	$v_{6A}[e]$ does not exist
	$v_{6B}[nv] = 6$ types of specialists	$v_{6B}[av] = 1$ type of specialist	$v_{6B}[e]$ exists
Degree to which network members can develop innovations ( $v_7$ )	$v_7[nv] =$ there are both hours and funding available for MDO members to develop innovations	$v_7[av] =$ there are no hours nor funding available for MDO members to develop innovations shows an apparent gap exists	$v_7[e]$ exists
innovation implementation cycle time ( $v_8$ )	$v_8[nv] = \leq 1$ year	$v_8[av] =$ No specific time frame.	$v_8[e]$ not measurable

Variable  $v_{6B}$  is deemed problematic because the agreed-upon multidisciplinary nature of MDOs requires the presence of multiple specialist types, aligning with  $v_{6B}[nv] = 6$  types of specialists. However, with only one specialist type present in Prosper's MDOs, they become monodisciplinary, deviating from norms and potentially compromising treatment quality, as discussed in the first interview. However, the patients discussed within the Prosper MDOs have previously been discussed in MDOs where the required number of specialists is present.

The second problematic variable is  $v_7$ . The norm value for these variable states that members of the Prosper MDOs need to be provided with both hours and funding to develop necessary innovations. According to both interviews, there is no time in the full schedules of the urologists to work on needed formalization and uniformization innovations that could contribute to Prosper's future development. Additionally, the first interview revealed that there is no funding available for the network, meaning the work members do on innovations outside their working hours is unpaid.

Finally,  $v_8$  is not measurable, meaning a problematic difference can not be identified but an error occurs. The SONCOS standard report states that one year is the maximum time to implement organizational developments or innovations (SONCOS, 2023). However, since members have no time to develop any innovations, none have been implemented within the MDOs, making this variable not measurable and thus problematic.

## CAUSE ANALYSIS

With variables  $v_{6b}$ ,  $v_7$  and  $v_8$  identified as problematic, the next step entails establishing the structural causes underlying these issues. As outlined in Chapter 2, structural design parameters exhibiting high values can cause problematic organizational behavior. The proposed theoretical foundation of this thesis states that identifying such structural parameters  $p \in P$ , which are characterized by 'too high' values, can contribute (at least partially) to the explanation of the causes of problematic values in the analyzed variables (Achterbergh & Vriens, 2019). As stated in Chapter 2, this part will focus on the four parameters; the degree of functional concentration, the degree of differentiation of operational tasks, the degree of specialization of operational tasks, and the degree of separation of regulatory and operational tasks and their relation to the problematic differences found in the variables for the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists ( $v_{6b}$ ), the degree to which network members can develop innovations ( $v_7$ ), and innovation implementation cycle time ( $v_8$ ).

### Finding whether it is a problematic parameter

#### Degree of functional concentration

Based on De Sitter's (1994) design theory, a degree of functional concentration which is too high can have several effects for the problematic variables  $v_i[e]$  relating to  $v_{6b}$ ,  $v_7$ , and  $v_8$ . As a high value of functional concentration means that operational tasks are possibly related to all order types, variability and task complexity can increase. This increase can lead to more disturbances and errors, which negatively affects the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists. Moreover, as tasks are related to lots of different order types, which have different demands, it becomes challenging to uphold a high quality across all products. This is caused by the fact that the need to switch between multiple order types can lead to errors, therefore a too high value for the degree of functional concentration compromises the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists (Achterbergh & Vriens, 2019; De Sitter, 1994). In addition to this, a too high degree of functional concentration can hinder the degree to which network members can develop innovations, as the complexity of the operational process increases, making it difficult to focus on innovations. This lack of ability to focus is caused by the fact that employees are involved with (too) many order types and their related tasks, which causes a reduction of both focus and resources. This makes it challenging to allocate time and effort to innovation projects, thereby slowing down innovation advancements (Achterbergh & Vriens, 2019; De Sitter, 1994). Finally, a high value for functional concentration is expected to increase innovation implementation time due to the grown complexity it causes in the operational process, which needs more coordination. As the involvement of employees in more different order types and tasks can already create

bottlenecks and delays in the primary process, this would affect the room for time that is needed to implement innovations (Achterbergh & Vriens, 2019; De Sitter, 1994). Overall, while a high degree of functional concentration can streamline some aspects of production by grouping similar tasks, it generally causes an increase in both variability and complexity. This can negatively impact the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, the degree to which network members can develop innovations, and innovation implementation cycle time due to the heightened potential for disturbances and delays, the decrease of focus, and the growing need for more coordination.

Subsequently, the problems and issues related to  $v_i[e]$  that could be expected in the context of Prosper when the parameter value of functional concentration has a value that is too high needs to be determined. As a high degree of functional concentration means that urologists within Prosper must deal with all order types, they possibly will need to switch between different treatment types or protocols frequently, causing the risk of errors to increase e.g., miscommunication or misapplication of treatment protocols. As the complexity of the operational process within prosper may lead to more disturbances, the likelihood of delays, incorrect treatment, or missed follow-ups increases and therefore decreases the quality of the product Prosper offers, which is high-quality oncological care. As the complexity of being involved with most order types can prevent employees from being able to have the time and resources for the development of innovations, this development can be obstructed. The limited capacity of the urologists to engage in the research and development of needed innovations for the MDOs can cause necessary projects to be sidelined due to lack of time and/or budgeting. These factors combined can cause a slow development of new guidelines or protocols due to operational overload. Finally, as a high degree of functional concentration requires more coordination, the implementation time of innovations becomes lengthened. This could cause delays in rolling out innovative care models across Prosper, but a prolonged implementation time can also lead to Prosper to fall behind, causing a potential loss of their competitive advantage in adopting state-of-the-art protocols.

As Prosper is a specialized clinical network dedicated to treating prostate cancer patients by conducting radical prostatectomy operations, this focus reduces complexity since urologists are not required to manage multiple types of orders. As a result, the risk of errors due to miscommunication or misapplication is minimal, ensuring that the quality of care remains unaffected by the degree of functional concentration. During the interviews, it was revealed that urologists lack the time and budget for developing innovative formalization and uniformization plans, as these efforts are currently carried out during their personal time and are nowhere to be finished yet. This lack of time is not attributed to the degree functional concentration as this is not the result of increased complexity. However, the absence of time for innovation development is not due to operational complexity but rather a lack of dedicated resources. Consequently, as there are no innovations that have finished development, there is no implementation process to be delayed. Therefore, within Prosper's organizational context, the degree

of functional concentration is not problematic as it allows for efficient and consistent patient care but leaving little room for innovation (Appendix 2; Appendix 3).

### Degree of differentiation of operational tasks

As stated by De Sitter (1994), a high value on the parameter degree of differentiation of operational tasks, in which activities are separated into 'production', 'preparation', and 'support' tasks, can be expected to cause multiple implications regarding the degree to which MDOs within Prosper live up to agreed-upon standards regarding  $v_{6B}$ ,  $v_7$ , and  $v_8$ . As a high degree of differentiation of operational tasks allows employees to develop expertise in their specific tasks, the quality of each individual task can be increased. However, a high number of interdependent tasks increases the chances for disturbances or delays, which can negatively impact the overall the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists (Achterbergh & Vriens, 2019; De Sitter, 1994). Second, as differentiation promotes expertise within one of the three areas – production, preparation, and support – more innovative approaches within each domain can arise. However, the degree to which network members can develop innovations requires the integration of all three areas and as a high degree in differentiation can lead to disconnection between the three, it makes the development of innovations rather difficult as the capabilities and requirements from each area need to be included (Achterbergh & Vriens, 2019; De Sitter, 1994). Lastly, as the specialization originating from a high degree of differentiation can lead to efficiency improvements within each task and potentially speed up parts of the innovation process, the need for coordination between the differentiated tasks increases and, when not managed accurately, slow down the overall innovation process. The interdependencies between the differentiated tasks enlarges which increases complexity, causing more possibilities for delays and disruptions. While differentiates tasks may improve, the overall innovation implementation cycle time can be obstructed if disruptions arise that involve cross-functional coordination (Achterbergh & Vriens, 2019; De Sitter, 1994). In conclusion, while a high degree of differentiation of operational tasks has potential benefits in terms of specialization and focused expertise, it also brings significant challenges related to coordination, and integration that must be carefully managed to optimize the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, strategic development, and innovation speed.

A high degree of differentiation of operational tasks can have several implications for the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, the degree to which network members can develop innovations, and innovation implementation cycle time within Prosper. Regarding the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, while the differentiation of tasks may improve their quality, the creation of interdependent tasks introduces more disruptions and delays, potentially decreasing the overall quality of care. Coordination among specialists being divided among different areas like production, preparation, and support poses challenges, often resulting in

communication gaps or misalignments. In the case of Prosper, the preparation of one urologist may be perfect, but when it is not delivered on time, the whole treatment of the patient can be delayed which may even have lethal consequences. Even if support tasks, such as patient follow-ups, are exactly managed, disturbances during production can disrupt the entire treatment process, highlighting the interdependency between operational tasks and their impact on the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists. In the context of Prosper, the differentiation of operational tasks can have notable implications for the degree to which network members can develop innovations. While differentiation may foster innovation within each different area—production, preparation, and support—by promoting focused expertise, it also causes challenges for integrating insights and capabilities across these domains. A high degree of differentiation can lead to disconnection, making it difficult to achieve understanding and collaboration, which is essential for strategic innovation development. For instance, preparation specialists might develop advanced scheduling techniques, and production specialists might innovate new treatment methods. However, merging these innovations into a one cohesive approach for patient care can be challenging. Additionally, a lack of alignment between preparation, production, and support functions can obstruct the creation of care pathways or treatment plans, ultimately affecting the overall effectiveness of Prosper's the degree to which network members can develop innovations. For Prosper, the specialization of operational tasks can lead to significant implications for innovation implementation cycle timelines. While specialization can increase efficiency within individual tasks, the need for increased coordination between differentiated tasks can slow down overall progress if not managed effectively. The complexity and interdependencies between tasks introduce more opportunities for delays and disruptions, especially when innovations necessitate cross-functional coordination. Even if each task e.g., diagnosing, treatment planning, and therapy delivery, is executed correctly, the overall implementation of a new treatment protocol can be delayed by coordination issues. Moreover, innovative treatment methods developed by urologists might face delays in implementation due to the necessity of integrating the support and preparation tasks separately.

Within Prosper, every urologist participates in preparatory, operational, and support tasks within the MDOs, significantly reducing the risk of delays or disturbances. Since urologists can perform all three types of tasks, they are not dependent on one another, leading to minimal interdependency and few coordination challenges. As a result, the quality of care remains unaffected. Despite the organization's struggle with a lack of time and funding for innovation in the MDO process, the high degree of differentiation is expected to affect the degree to which network members can develop innovations due to coordination and integration challenges, which are not an issue for Prosper. This is caused by all three activity types being well-integrated. Once again, there are no implementation processes for innovations to be considered during the time of this research. This leads to the conclusion that, given the context of Prosper, the degree of differentiation of operational tasks is deemed not problematic (Appendix 2; Appendix 3).

## Degree of specialization of operational activities

Based on the described design theory, a high value on the parameter degree of specialization of operational tasks can be expected to have several outcomes regarding the degree to which MDOs within Prosper live up to agreed-upon standards regarding  $v_{6B}$ ,  $v_7$ , and  $v_8$ . Within organizations that have a high degree of specialization, employees perform specific, repetitive tasks, which leads to an increase in expertise and consistency regarding their specific tasks. Consequently, this can induce more precision and reliability, increasing overall the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists. Conversely, with a high degree of specialization, interdependency between tasks grows as every task depends on the preceding task's output. This causes the risk for delays and disturbances to grow (Achterbergh & Vriens, 2019; De Sitter, 1994). Subsequently, as specialized workers develop expertise in their specific tasks, innovations within their own domains can potentially grow. Nevertheless, the degree to which network members can develop innovations requires input from people across multiple tasks and functions, which is challenging within highly specialized organizations and can therefore obstruct product development (Achterbergh & Vriens, 2019; De Sitter, 1994). Finally, a high degree of specialization allows employees to become more efficient at their own tasks, potentially reducing product cycle time and increasing certain parts of the innovation process. However, a high degree of specialization requires increased coordination between tasks, causing more delays and disturbances, and therefore slowing down the overall innovation implementation cycle time. This is caused by the fact that both planning and scheduling become more complex as all specialized tasks need to be coordinated among each other as interdependency has increased, which potentially lengthens innovation implementation cycle time. In conclusion, a high degree of specialization in operational tasks offers both benefits and challenges. It can lead to higher quality in specific tasks and faster execution but requires more coordination and to ensure that these benefits translate into overall improvements in the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, strategic development, and innovation speed.

In the context of Prosper, a high degree of specialization in operational tasks can lead to several problems and issues related to the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, the degree to which network members can develop innovations, and innovation implementation cycle time. A high degree of specialization enables employees to repeatedly perform specific tasks, enhancing their expertise and consistency, which can improve the quality of individual tasks. However, the high interdependency between these specialized tasks means that the quality of the final product—patient care—depends heavily on the coordination and execution of each preceding task. Any disturbance or delay in one specialized task can affect the entire process, negatively impacting overall the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists. If a urologist's task delays providing necessary scans, it can disrupt the scheduling and execution of treatment plans, and therefore compromising the

quality of care. Similarly, while precision in a treatment procedure might be high, delays in pre-treatment diagnostics or post-treatment follow-ups can cause the overall quality of care to suffer. Therefore, maintaining seamless coordination and timely execution of tasks is crucial for ensuring high-quality patient care at Prosper. The degree to which network members can develop innovations can also be influenced by the specialization of tasks. Specialization fosters domain-specific expertise, which can potentially lead to innovations within those domains. However, the degree to which network members can develop innovations necessitates the integration of knowledge and input from multiple functions, which can be challenging in a highly specialized organization. While specialists in radiology may develop a new advanced imaging technique, integrating these innovations into treatment protocols involving urologists, oncologists, and support staff can be difficult. This can lead to fragmented care strategies that do not make use of the needed interdisciplinary insights, thereby hindering Prosper's ability to create effective and high-quality patient care solutions. Finally, within Prosper the specialization of tasks can also affect the innovation implementation time. Specialization can enhance efficiency and reduce cycle time for individual tasks, potentially accelerating parts of the innovation process. However, the need for increased coordination among these specialized tasks can create bottlenecks, ultimately slowing down the overall innovation process. As complex planning and scheduling requirements, become increasingly interdependent, delays and disturbances lead to the lengthening of the required time for innovation. Even if each specialized task—such as diagnostics, surgery, and therapy—is performed efficiently, coordinating these tasks to implement a new treatment protocol can become time-consuming. Additionally, innovations in one area, such as new diagnostic techniques, may face delays in adoption due to the need for coordination with treatment and support functions. Therefore, while specialization can enhance efficiency in individual tasks, effective management of coordination and interdependencies is crucial for minimizing delays and optimizing innovation implementation cycle time at Prosper.

Examining the degree of specialization of operational activities at Prosper, it is evident that the main activities—preparing the MDO, conducting the MDO, and providing feedback to patients and practitioners—are sequentially coupled. While the tasks linked to these activities are not dependent on each other, the interdependency between the main activities is crucial: feedback cannot be provided without an MDO, and the MDO cannot occur without preparation. Although this sequential interdependency slightly increases the risk of disturbances and their impact, the overall degree of specialization of operational tasks remains as low as possible. Consequently, this specialization is not the parameter problematic with the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, the degree to which network members can develop innovations, or innovation implementation cycle time at Prosper (Appendix 2; Appendix 3).

## Degree of separation of regulatory and operational activities

A high value on the parameter of the degree of separation of regulatory and operational tasks can have significant implications for the degree to which MDOs within Prosper live up to agreed-upon standards regarding  $v_{6B}$ ,  $v_7$ , and  $v_8$ , as stated by De Sitter's (1994) design theory. Beginning with the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, a high degree of separation between regulatory and operational tasks can create a network with high complexity, as tasks are often small and specialized. This complexity increases the interdependent relations within the network, heightening the probability of disturbances and delays due to an increased requirement for coordination among the different tasks. Moreover, as regulatory tasks are separated from operational tasks, more delays happen due to employees dealing with operational disturbances have no regulatory potential to deal with them. The operational disturbances are escalated through a hierarchy of regulators, that might not possess the necessary knowledge about the disturbances or how to deal with them, leading to delayed and inadequate responses. This causes regulators to lose sight of the overall process, which affects their ability to maintain the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists (Achterbergh & Vriens, 2019; De Sitter, 1994). Because, due to a high degree of separation, regulators are not directly involved in the operational process they oversee, they don't possess the ability to understand the entire process and make informed decisions about strategic developments. Since the degree to which network members can develop innovations requires an integrated perspective on the organization's production process, a strict separation between regulatory and operational tasks makes effective innovation challenging (Achterbergh & Vriens, 2019; De Sitter, 1994). Subsequently, a high degree of separation can slow down the innovation implementation cycle time, as new ideas and improvements need to pass through multiple layers of regulation before implementation. Operational employees and regulators are less able to communicate and collaborate on solving problems due to their separated roles. This lack of communication can decrease creativity and slow down the innovation process as high separation can limit the potential for experimenting with and improving infrastructural conditions. Moreover, operational employees, who are crucial for identifying practical improvements, are restricted in their regulatory capacity, leading to fewer and slower infrastructural innovations. Because innovation often requires changes in the infrastructure and coordinated efforts across various departments, a high degree of separation of regulatory and operational tasks makes it difficult to achieve the necessary coordination, thereby lengthening the innovation cycle (Achterbergh & Vriens, 2019; De Sitter, 1994). Therefore, a high degree of separation of regulatory and operational tasks can result in a less responsive and flexible organization, leading to potential delays and inefficiencies in maintaining the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, developing strategic products, and innovating quickly. This separation creates a fragmented system where communication and collaboration are obstructed, regulatory actions are delayed, and the overall regulatory potential is decreased.

In the context of Prosper, if the parameter value for the degree of separation of regulatory and operational tasks were too high, several problems and issues related to the degree to which MDOs within Prosper lives up to agreed-upon standards regarding the required number of specialists, the degree to which network members can develop innovations, and innovation implementation cycle time could be expected. A high degree of separation between regulatory and operational tasks can lead to a highly complex network, as tasks become specialized and fragmented. When regulators are not directly involved in treatment processes, they may be slow to respond to issues that arise during the delivery of care, such as equipment failures or errors. Additionally, regulators may lack an understanding of the operational processes involved in patient care, leading to delayed or inadequate responses to disturbances. This lack of cohesion can affect the quality of care provided to patients at Prosper. Therefore, balancing specialization with effective coordination and regulatory integration is crucial for maintaining high standards of patient care at Prosper. Second, the separation between regulatory and operational tasks poses significant challenges for the degree to which network members can develop innovations. This separation can limit the organization's ability to gain a full understanding of its production processes, which is essential for innovative developments. Prosper's success in product development is dependent on collaboration between regulatory and operational functions, which is obstructed with a high degree of separation. The gap between regulatory and operational personnel can obstruct innovation efforts, as regulatory standards may not align with operational capacities and obstructions. Consequently, Prosper may face delays in developing strategic products. Lastly, the realization of innovation implementation cycle time may face obstacles stemming from the separation of regulatory and operational tasks. Innovation ideas and improvements may encounter delays as they need to be discussed within multiple regulatory layers before implementation, lengthening the innovation implementation cycle and potentially impeding Prosper's ability to swiftly respond to evolving patient needs.

In Prosper's case, urologists involved in the production process meet with business managers and sometimes members of hospital boards every three months to discuss the state-of-the-art. This arrangement allows for cohesion between regulatory and operational tasks, as urologists have some regulatory potential, which does not negatively impact the quality of care. However, since urologists are not able to make financial decisions, there is currently no available budget for innovations or Prosper in general. Although collaboration between regulatory and operational functions is essential for product development, it is hindered by a high degree of separation in financial decision-making. Consequently, urologists must develop innovations in their personal time, significantly delaying development, which obstructs the implementation of these innovations. Therefore, in the context of Prosper, the degree of separation between regulatory and operational tasks is too high and thus deemed problematic (Appendix 2; Appendix 3).

## Determining the problematic parameters

Based on the conducted cause analysis, it becomes clear that the parameter most likely to cause errors within the variables: the degree to which MDOs within Prosper live up to agreed-upon standards regarding  $v_{6B}$ ,  $v_7$ , and  $v_8$ , is the degree of separation of regulatory and operational tasks. In the context of Prosper, where urologists are involved in the production process and have some regulatory potential, a high degree of separation in financial decision-making obstructs innovation. This separation leads to significant delays in innovation development and consequently obstructs the implementation of said innovations due to the absence of dedicated resources and budget. Despite the cohesive collaboration between regulatory and operational functions in other aspects, the high degree of separation in financial decision-making significantly hinders Prosper's ability to innovate and implement new initiatives efficiently.

Conversely, the other parameters—degree of functional concentration, degree of differentiation of operational tasks, and degree of specialization of operational activities—do not appear to be causing significant issues within Prosper's organizational context. The low degree of functional concentration ensures efficient and consistent patient care, although it limits room for innovation due to resource constraints. Similarly, the degree of differentiation and specialization of operational tasks within Prosper is deemed as low as possible, as interdependency and coordination challenges are minimized, and thus do not pose significant obstacles to the degree to which MDOs within Prosper live up to agreed-upon standards regarding the required number of specialists, strategic development, or innovation implementation cycle time.

In conclusion, while Prosper faces challenges related to resource allocation and innovation development due to a high degree of separation between regulatory and operational tasks, the other parameters appear to be effectively managed within the organization's context. Therefore, addressing the issue of separation in financial decision-making is crucial for overcoming barriers to innovation and ensuring Prosper's continued success in providing high-quality patient care.

## Conclusion

This thesis has aimed to apply De Sitter's (1994) structural design theory to network organizations and see if the theory can be utilized to enhance network efficiency and collaboration. This was done by conducting a structure diagnosis of Prosper to determine whether the identification of structural improvements could lead to more efficient and effective network outcomes. This study has revealed several problematic differences between the ideal and current state of Prosper's multidisciplinary consultations (MDOs), particularly relating to multidisciplinary input and innovation development and implementation. Based on the conducted analyses and interviews, the lack of financial decision-making

abilities is deemed crucial, as this obstructs the allocation of resources for innovations, which affects Prosper's ability for both development and implementation.

Moreover, this research has shown that Prosper's effective management of functional concentration, task differentiation, and operational specialization positively contribute to the quality of patient care they aim to deliver. However, the identified gaps create a need for structural intervention to realign Prosper's operational framework with their strategic needs in such a way that an environment in which continuous improvement and innovation within oncological care is fostered.

In conclusion, addressing the identified challenges, especially bridging the financial decision-making gap, emerges as crucial in promoting innovation and sustaining Prosper's commitment to delivering high-quality patient care. By integrating these insights, Prosper can enhance its operational efficiency and collaboration, ultimately achieving its goals of improving oncological treatment outcomes.

# DISCUSSION

## Interpretation of the results

According to De Sitter's design theory, if the degree of separation between regulatory and operational tasks is deemed too high, the organization must redesign several aspects to lower the parameter value as much as the organizational context allows. For starters, integrating both regulatory tasks and potential into operational tasks could contribute to a lower parameter value. Integrating regulatory tasks into operational roles can reduce the parameter value. This would involve the training of operational staff to handle regulatory tasks and enabling them to deal with disturbances the moment they arise (Achterbergh & Vriens, 2019; De Sitter, 1994; De Sitter et al., 1997). For Prosper, this would entail allowing urologists to make their own decisions regarding financials its allocation. This would enable them to allocate funding for both the development and implementation of innovations. Decentralizing financial decision-making not only empowers the urologists but also contributes to lowering the parameter value (Achterbergh & Vriens, 2019; De Sitter, 1994; De Sitter et al., 1997). Providing Prosper's urologists with more regulatory potential would reduce delays caused by waiting for external regulatory intervention, and therefore facilitating more efficient decision-making and operational effectiveness. Subsequently, lowering the degree of separation could enable Prosper members to resolve the issue of specialist diversity within their MDOs. Currently, the only present specialists present are the urologists, while according to the SONCOS standards report (SONCOS, 2023) six different types of medical specialists are required to be present during the MDOs. However, as the urologists would gain more regulatory potential, they might become able to involve other specialists in their MDOs. This increased regulatory capacity could enable them to make decisions that lead to the inclusion of the necessary diverse expertise, potentially improving the effectiveness and quality of both the MDOs and patient care.

Finally, even though the purpose of this research has been fulfilled, one note on Prosper seems necessary. As Prosper is a relatively small network, it strongly benefits from its informal support of the MDOs. This is caused by the fact that members of the network are able to consult each other outside of the MDOs when needed, which results in a decreased time needed to discuss patients within the MDOs (Appendix 2). Besides the strong informal support, both Prosper as a network and their MDOs benefit from their small size, as this causes the structural parameters to remain relatively low. Even though there are ideas to scale-up Prosper, it should be taken into account that, according to De Sitter's theory, the parameter values are expected to increase with a larger number of participants which can eventually cause the parameter values to become problematic (Appendix 3; De Sitter, 1994; Achterbergh & Vriens, 2019; De Sitter et al., 1997).

## Managerial implications

As Prosper is integrated into Onco-Oost, it is crucial to maintain the existing high standards and efficiency. Onco-Oost needs ensure that the parameter values of Prosper do not increase, as this could hinder the effectiveness and quality of Prosper's MDOs and overall patient care. This can be achieved by keeping Prosper focused on radical prostatectomies, thereby ensuring a low degree of functional concentration. Maintaining the current state within the MDOs, where urologists handle preparatory and support tasks themselves, will result in low degree of differentiation of operational tasks. Additionally, preserving the sequence and structure of these tasks will ensure a low degree of specialization of operational tasks. As Prosper has demonstrated that specialized MDOs significantly contribute to high-quality patient care and operational efficiency, the network can become an example for the design of other cancer-type networks. A second implication for Onco-Oost is the need to address Prosper's current funding issues. The lack of budget obstructs the development and implementation of innovations, forcing urologists to work on these advancements in their personal time. Providing Prosper with adequate funding would allow innovation activities to be conducted during paid working hours would increase innovation and positively affect patient outcomes. Finally, joining Onco-Oost could lead to Prosper gaining better access to the specialists currently missing from their MDOs. Increased collaboration within the overarching network would facilitate resource sharing, potentially improving MDO quality and, consequently, overall patient care. However, it should be taken into account that the involvement of more specialists, and therefore increasing the number of participants, could cause the parameter values to become problematic.

## Theoretical implications

This research demonstrates the successful application of De Sitter's (1994) structural design theory, originally an organizational theory, to a healthcare network. This suggests broader implications for organizational theory, indicating that structural design principles can effectively be applied to not only other healthcare networks but also to networks across multiple sectors, and therefore possibly transcend organizational boundaries. Moreover, the possibility to adapt structural design theory to networks implies that insights gained from other organizational theories that are focused on businesses, could potentially be applied to network organizations. This highlights the theoretical flexibility and applicability of structural design theory in enhancing network collaboration and efficiency, making it useful for future research and practical implementations in diverse organizational contexts.

## Reflection

### Limitations

During the conduction of this research, several limitations were encountered that could have possibly impact the results. Firstly, there was too little time to research all network partners, resulting in a potentially small sample size. This small sample size not only affects the generalizability of the results but also introduces subjectivity related to the qualitative research method that was used. The use of semi-structured interviews, while providing depth, may have caused a lack in diversity and completeness of the results. Additionally, the response time from urologists was very long, limiting the ability to gather more data within the limited timeframe. The limited timeframe also caused the inability to take part in MDOs for observation, which has restricted the deeper understanding of the dynamics within the MDOs. Furthermore, the only available documentation was from the Prosper website, which is limited due to the lack of formalization and uniformization within the network. This caused more difficulty with the formulation of the ideal MDO situation for Prosper and the connected norm values for the variables. Lastly, as Prosper is not yet part of Onco-Oost, the ability to compare it to other cancer-type networks at this stage is difficult. Despite these limitations, the research was conducted to the best possible standard within the given timeframe and with the available resources.

### Recommendations for future research

Future research should aim to expand the sample size by conducting complementary quantitative research and observations across the entire network, including all layers, in addition to using interviews. This approach employs data triangulation, which would increase the generalizability of the findings and reduce the subjectivity and potential bias introduced by a small sample size. Incorporating direct observations of MDOs and other operational activities within Prosper could provide a deeper understanding of the dynamics and potential areas for improvement, which interviews alone may not fully capture. Once Prosper is integrated into Onco-Oost, comparative studies with other cancer-type networks could identify best practices and areas for improvement, thereby increasing the overall effectiveness of the network and patient care. Given that healthcare professionals have full schedules, a larger timeframe is needed to adequately research all network partners. Additionally, future studies should assess the impact of dedicated funding on the development and implementation of innovations within Prosper. This could examine how financial support affects the speed, quality, and outcomes of innovation projects, thereby providing more insights into the optimization of resource allocation for the overall improvement of healthcare. Finally, as the theoretical implications of this research indicate that not only structural design theory, but also other traditional organizational theories could possibly be applied to networks, future research could focus on the application of these theories to network organizations and hopefully contribute to network outcomes.

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# APPENDIX

## Appendix 1: Interview Guide (Dutch)

### INTRODUCTIE

Wij zijn Robin Gorter en Anouk van den Elzen, masterstudenten in Organisational Design & Development aan de Radboud Universiteit. We doen onderzoek naar de invloed van organisatiestructuur op de effectiviteit van MDO's en governance in het prostaatkankernetwerk. Interessant om te weten is dat medestudenten binnen onze scriptiegroep onderzoek verrichten naar andere tumortype netwerken binnen Onco-Oost. Anouk richt zich in haar onderzoek op de structuur van het MDO. Robin richt zich in zijn onderzoek op de structuur van de governance.

Mogen we tutoyeren? (*Ja? Dan overal waar "u" staat vervangen door "je"*)

Het interview duurt ongeveer 1 uur, maar u mag het interview stoppen wanneer u/je maar wilt. Ook mag u vragen overslaan indien u dat wilt. Het interview wordt geanonimiseerd. U zult het transcript na het afgelegde interview ontvangen, zodat u de kans krijgt om akkoord of geen akkoord te geven over de inhoud en de strekking. Uw naam zal niet in het uiteindelijke rapport belanden en er zal ook geen informatie in staan die naar u te herleiden valt. Daarnaast komt het transcript niet in de bijlage van de scriptie te staan. Na het interview, zullen we het transcript alleen delen met onze begeleider en waar nodig de tweede lezer van de scriptie, die toegang hebben tot de beveiligde werkmap. We zullen het transcript en de opnames dus met niemand anders delen. We begrijpen dat het gaat om vertrouwelijke informatie en we zullen hier secuur mee omgaan. Dit houdt in dat onze scriptie niet gepubliceerd zal worden/ niet in het universiteitsarchief komt, omdat het gaat om een vertrouwelijke scriptie.

Vindt u het goed dat we het gesprek opnemen op een videorecorder/ geluid opnemen in Teams? Mocht u nog vragen hebben tijdens het interview, schroom dan vooral niet deze te stellen.

Bij voorbaat hartelijk dank voor uw/je medewerking.

### ALGEMEEN NETWERK (15 minuten)

1. Zou u uzelf kort willen voorstellen en uw rol binnen het prostaatkankernetwerk willen uitleggen?
2. Kunt u vertellen waarom is gekozen voor samenwerking binnen een netwerk en welke doelen jullie willen bereiken met deze vorm van samenwerking?
3. Hebben alle netwerkpartners dezelfde doelen?
4. Worden deze doelen behaald? Waarom wel of niet?
5. Hoe zit het netwerk eruit? Met wie wordt er samengewerkt?

6. Hoe zou de samenwerking kunnen worden omschrijven? Hoe ziet deze eruit?
7. Tegen welke uitdagingen loopt u aan binnen de netwerksamenwerking of tegen welke uitdagingen lopen andere netwerkpartners aan? Waar zou u graag verbetering zien?

MDO (15-20 minuten)

1. Kunt u vertellen wat een MDO precies inhoudt?
2. Hoe ziet dit MDO eruit binnen het prostaatkankernetwerk? Wat is het proces, wie zijn de deelnemers en hoe ziet de samenwerking eruit?
  1. Wie moeten er deelnemen? Zijn dit alle ziekenhuizen bijvoorbeeld, ook al zijn er geen patiënten van hun die aan bod komen?
3. Hoe zit uw rol er binnen een MDO uit? Waar bent u voor verantwoordelijk en bij betrokken?
4. Wat zijn de primaire doelen/doelstellingen van MDOs? Worden deze doelen bereikt?
5. Hoe vaak vindt het MDO plaats binnen het prostaatkankernetwerk? Zijn hier altijd dezelfde personen aanwezig, of wisselt dit af?
6. Hoe ervaart u de MDOs? Welke punten gaan goed en waar is ruimte voor verbetering?
7. Hoe ziet de taakverdeling eruit binnen het MDO?
  1. Hoeveel tijd is er ongeveer voor het uitvoeren van een taak? Is dit genoeg tijd volgens u?
  2. Is dit een efficiënte taakverdeling volgens u?
8. Hoeveel patiënten worden besproken in het regionale MDO?
  1. Hoe bepalen jullie wie er besproken wordt binnen een regionaal MDO?
  2. Worden alle patiënten in een wekelijks regionaal MDO besproken. Of een deel van de patiënten?
9. Als er problemen zijn waar jullie tegenaan lopen binnen een MDO, kunnen jullie deze problemen dan zelf oplossen of worden hier andere mensen/instanties bij betrokken?
10. Een norm uit het SONCOS-normeringsrapport is dat een of meerdere multidisciplinaire overleggen gehouden moeten worden per week, waarin ten minste 90% van de patiënten besproken wordt. Is deze norm reëel volgens u en halen jullie deze norm? Zo niet, waarom niet?
11. Hoe zit het met de aanwezigheid van specialisten tijdens het MDO? Levert de verwachte aanwezigheid weleens problemen op?
  1. Is er voor specialisten de mogelijkheid om informeel of buiten de MDOs om met collega's te overleggen?
  2. Hoe denkt u dat dit de MDOs beïnvloedt?
12. Voldoen de MDOs aan de kwaliteitseisen met betrekking tot o.a. voorbereiding van deelnemers?
13. Wordt er geïnnoveerd binnen de MDOs? Zijn deze relevant en wat is het effect van deze innovaties?

## GOVERNANCE (15-20 minuten)

### CONCLUSIE

Om af te sluiten willen we u/je bedanken voor uw tijd en waardevolle input. Na het transcriberen zullen we het transcript toesturen voor akkoord en mocht u geïnteresseerd zijn in de scripties kunnen wij deze zeker toesturen. Tot slot willen we u verzekeren dat dit interview vertrouwelijk is en dat we verantwoord met de informatie om zullen gaan.