Universiteit Utrecht

Unraveling medical leadership

A qualitative study of independent medical specialists' role perception of medical leadership, medical leadership behavior and contextual factors

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Dear reader,

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I hope you enjoy reading the thesis!

Roos Mulder

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Abstract

Problem and objective. The concept of medical leadership has been given more attention the last couple of years. However, both in scientific literature and in practice, ambiguity exists on what medical leadership actually entails. In scientific literature medical leadership has been described as both a formal role in which a medical specialists takes on a hierarchical leadership role and as an informal role in which all medical specialists work as medical leaders following certain competencies. The conceptual ambiguity is also noticed in practice. Some medical specialists are actively advocating for medical leadership, while others tend to be 'allergic' to the concept, which also results in different behavior. This research aims to study the conceptualization of medical leadership by investigating physicians' role perception of medical leadership, and if and how this role perception shapes medical leadership behavior. In addition, it investigates how this role perception shapes personal and situational factors that are of importance for displaying the physician's medical leadership behavior.

Theories. The individual role perception of medical leadership is studied using existing medical leadership literature and the "what", "how" and "why" typology of Wang et al. (2020). Moreover, the personal and situational factors are analyzed and structured using the ability, motivation and opportunity (AMO) framework. The Conservation of Resources theory (Hobfall, 1989) is used to explain that depending on the physician's role perception, an estimation is made on the needed and present resources. Depending on these available and needed resources, engagement or disengagement in medical leadership is expressed.

Method. This qualitative research using semi-structured interviews was conducted amongst 23 independent medical specialists. This specific group of medical specialists work as entrepreneurs in partnerships; they are not employed by the hospital.

Results. The findings illustrate that there is not one overarching perception of medical leadership. Instead, four different medical leadership types were identified: the societal leader, leadership in everything but being a doctor, leadership in day-to-day work and personal leadership. There was a difference noticed in corresponding medical leadership behavior amongst the medical leadership types. It seems that the closer the perception is to the daily work of a medical specialist, the more corresponding behavior is displayed. Moreover, little knowledge of medical leadership result in the formation of perception based on one's own behavior. Furthermore, time is determined to be the most hindering factor to medical leadership behavior, whereas support is experienced as the most stimulating factor.

Conclusions. This research concludes that *the* medical leader does not exist. Instead, the findings illustrate that a broad concept such as medical leadership asks for more nuance. The different types of medical leadership and difference in corresponding behavior illustrate that individual and contextual differences need to be taken into account. A shared understanding of medical leadership in hospitals, partnerships and amongst individuals is essential in order to improve healthcare.

Key words: medical leadership – medical leadership behavior – individual perceptions – COR theory - AMO framework – healthcare

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1. Introduction

Dutch medical Oath

Based on the Hippocratic Oath 400 B.C. (Westerveld et al., 2015)

I swear/promise to practise the art of medicine as well as I can for the benefit of my fellow man.
I will take care of the ill, promote health and relieve suffering.
I put the interest of the patient first and respect his convictions.
I will not harm the patient.
I will listen and will inform him well.
I will keep secret what has been entrusted to me.
I will further the medical knowledge of myself and others.
I acknowledge the boundaries of my possibilities.
I will adopt an open and testable attitude and I know my responsibilities towards society.
I will further the availability and accessibility of health care.
I will not misuse my medical knowledge, not even under pressure.
This is how I will honour the profession of medical doctor.
I promise
Or
So help me God

The Hippocratic oath embodies the values of the medical profession since 400 B.C. It serves no legal purpose, instead it symbolizes the purpose and responsibilities of medical specialists (Westerveld et al., 2005). At first sight the oath revolves around the direct patientcare, but it also describes the societal role of the medical specialist. The last five years increasing attention has been paid to this societal role (Wilders, 2015), due to the fast changing society in the Netherlands. The trends of an aging population, rising need and use of technology and increasing complexity of healthcare cases have resulted in changes in the healthcare sector (Keijser & Wilderom, 2016). These changes entail the increasing focus on cost efficiency, more pressure on innovations and quality of care. As physicians carry the core responsibility for patientcare, they are the key players to implement changes in the healthcare sector (Keijser & Wilderom, 2016). Recent literature argues that medical leadership is a way to highlight the societal role of medical specialists in maintaining and stimulating effectiveness and efficiency in the healthcare sector (Wilders, 2015). Medical leadership is not clearly defined in scientific literature as it serves as an umbrella-term for multiple concepts (Berghout, Fabbricotti, Buljac-Samardzˇić & Hilders, 2017). It is often framed as the set of competencies or skills that a physician needs to have in order to display leadership behavior (Keijser, 2019). Other literature suggests that medical leadership is actually the function of leadership, in the sense that there is a need for a hierarchical leader within healthcare teams or organizations as a whole (Baker & Denis, 2011). Other scholars argue that medical leadership is a concept that is used strategically for the reconfiguration of the medical profession (Berghout, 2020).

> In order to maintain the qualitatively high standard, accessibility and efficiency of our healthcare there is need for leadership to ensure that the connection is made between, on the one hand, the management domain in which the regulation of systems, transparency, control

> and manageability dominate processes and, on the other hand, the medical domain where patient ethics, of whether or not there is response to a therapy or whether or not treatment is desired, makes this domain considerably more flexible. It is the connection between these two domains through transparency, communication and mutual understanding that is the essence of Medical Leadership (Wilders, 2015, p. 18).

This quote illustrates that in order to deal with increasing demands of patientcare and society, physicians need to make a transition in working from a purely medical perspective towards connecting both medical and business needs in their daily work.

Despite the growth in recent literature about medical leadership, the differentiation in definitions of the concept also results in ambiguity of medical leadership behavior in practice (Savage, Savage, Brommels & Mozzacato, 2020). The forming of competency frameworks and the changing responsibilities are apparently open for interpretation. On the one hand, more medical specialists are advocating for medical leadership to make transitions in the medical professionalism, while on the other hand, many physicians rather remain a doctor focused on patientcare (Berghout et al., 2017). If medical leadership promises better healthcare outcomes like, cost efficiency, quality of care and job satisfaction, the differentiation in attitude and behavior towards medical leadership is an essential topic for further research (Savage et al., 2020).

Berghout (2020) recognizes the ambiguity in both literature and practice and argues "research on medical leadership has mainly focused on eliciting skills, activities or competencies and has neglected the social construction of medical leadership in practice" (p. 10). The social construction of medical leadership is created on a societal and individual level. On a societal level, the concept is socially constructed by the use and interpretation of governmental and political actors to stress the need for changes in the healthcare sector. Whereas individual social construction entails the physician's personal meaning-making of the concept and how this is expressed in corresponding behavior (Berghout et al., 2017). This research studies medical leadership on an individual level while recognizing the influence of institutional pressures. The reasons for studying this scope are threefold.

First, studying a physician's meaning-making of medical leadership is of importance because it can shape what behavior a physician displays. The meaning-making of medical leadership entails the physician's perception of what the role of medical leadership entails and how it ideally ought to be (Berghout, 2020). Consequently, the physician may display the behavior that is compliant to one's perception. Thus, in order to get more insights on the conceptual and behavioral ambiguity related to medical leadership, it is necessary and relevant to study a physician's role perception.

Second, there has been an increase in, often expensive, trainings in medical leadership (Berghout et al., 2018). Some trainings interpret medical leadership as personal development, others as specific competencies (e.g. collaboration) or as managerial knowledge and skills (Keijser & Wilderom, 2016). This thesis argues that before training interventions can be successful in enhancing medical leadership behavior, scientific foundation needs to be developed on what medical leadership actually is. Specifically, what physician's role perceptions are, how the differentiation of perceptions come about and how behavior and perceptions correspond.

Finally, in order to support physicians in their leadership development, generic competency frameworks have been developed (Keijser et al., 2019). These frameworks imply that all medical specialists need to develop the same competencies despite individual differences and the major differences in the work

contexts in the healthcare sector (Berghout, 2020). In response to this, this research pays specific attention to the conditions that are relevant for individuals in expressing medical leadership behavior, and how these conditions are shaped by the physician's role perception. The conditions entail the factors that physician's may find hindering or stimulating to display this behavior, including individual characteristics, the working environment and the healthcare sector at large. This study includes personal factors and situational factors because individual behavior is influenced both by individual characteristics and by the environment one operates in (Sartirana, 2015; Boxall & Purcell, 2016). This is especially of importance to medical leadership behavior because, for example, a physician might be willing to work on medical leadership but if one does not get the opportunity to do so, the desired medical leadership behavior will not be displayed (Sartirana, 2015; Berghout et al., 2017). Therefore, the aim of this research is, one the hand, to complement the conceptualization of medical leadership by investigating a physician's perception of the concept and how this shapes behavior and personal and situational factors and, on the other hand, to identify if and how these factors (personal and situational) are of importance for displaying the physician's medical leadership behavior.

A physician's role perception will be studied using the typology of Wang, Kim, Rafferty and Sanders (2020) who differentiate an individual's perception into the 'what', 'how' and 'why'. This means that the initial perception of an individual of the what, how and why of the role of medical leadership can shape the behavior and attitude one shows as a reaction and can contribute to conceptual clarity. Furthermore, the Conservation of Resources theory (Hobfoll, 1989) is used to illustrate that depending on the physician's role perception, an estimation is made by the physician of the required personal and situational resources. The amount of available resources can stimulate or hinder medical leadership behavior. Moreover, the personal and situational factors that shape a physician's medical leadership behavior are studied using the Ability (A), Motivation (M) and Opportunity (O) framework (Appelbaum, Bailey, Berg and Kalleberg, 2001). The AMO model will be used to categorize and structure the personal and situational factors that are identified in the qualitative research. Ability (A) and motivation (M) are considered personal factors, as it represents individual characteristics (Boxall & Purcell, 2016). In addition, the opportunity to perform (O) aspect is related to the work environment of an individual, which is considered a situational factor in this research.
Therefore, the central question this research addresses is:

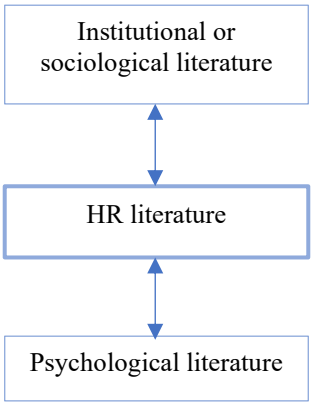
How does an independent medical specialist's role perception of medical leadership shape medical leadership behavior and personal and situational factors, and, how do both these factors shape medical leadership behavior?

1.1 Scientific relevance

Even though the existing body of literature on medical leadership is growing the last decade, one perspective is missing, yet crucial in bridging the existing literature. This perspective is the HRM study. To elaborate on the scientific contribution of this research, first the dichotomy of the existing literature is explained, which is followed by an explanation of the relevance of the overall HRM perspective on this research. Lastly, the contribution of the content of HRM models to this research is elaborated upon.

The existing literature on medical leadership focuses on either the institutionalization of medical leadership or on the development of medical leadership amongst individuals. First, medical leadership is often analyzed from a sociological or institutional perspective. For example, public management scholars studied the tension between medical and managerial logics, stating that medical leadership is the result of hybridization of professional and business logics (Noordegraaf, Schneider, van Rensen & Boselie, 2016). In addition, other studies focus on the effect of medical leadership on healthcare

outcomes like, patient satisfaction, efficiency or quality of care have been conducted (Savage et al., 2020). Other research studied medical leadership from a sociological perspective by analyzing how the professional identity is formed and can be changed (Berghout, 2020).
Secondly, there is a body of literature on medical leadership from a psychological perspective. Work and organizational psychology scholars complemented the existing literature by studying the physicians perspective of the self when displaying leadership behavior (Andersson, 2015). Other research focused more on the engagement of doctors in medical leadership by using motivation theories, like the Self Determination Theory (Giri, Aylott, & Kilner, 2017). Moreover, other studies have been conducted on the competencies and skills that physicians need to develop in order to display medical leadership behavior (Keijser et al., 2019). In sum, medical leadership is either studied from an institutional perspective, or it is focused on the development of the individual.
This research argues that the HRM study can bridge the existing literature. HRM provides a theoretical and empirical basis of knowledge about how individuals, organizations and its environment interact to achieve common goals. HR studies analyze the attitudes and behavior of individuals by using and adapting insights from psychology, while taking the work context into account. The context entails, according to the contingency approach within HRM, that organizations and individuals are embedded in and shaped by social structures, like norms and values or culture (Boxall & Purcell, 2016). This means that by studying medical leadership from a HRM perspective, the institutional literature on medical leadership in the healthcare sector and psychological literature on individuals are integrated. In this research, by using overarching models, individual perceptions and behaviors of medical leadership are analyzed, while recognizing and studying the potential hindering or stimulating element of both individual characteristics and the work environment. These models are explained below.



This research uses the typology made by Wang et al. (2020) on individual perceptions. The authors organized and structured the existing literature on employee perceptions of HRM. They found three components of employee perception namely, 'what', 'how' and 'why'. This means that *what* the individual thinks a practice is, *how* it is implemented and *why* it is implemented are essential for the successful implementation of HR practices (Wang et al., 2020). This research uses this typology and examines the physician's perception of medical leadership by identifying what, how and why one considers as medical leadership, due to the earlier mentioned differentiation in physician's perceptions about medical leadership (Berghout, 2020). This means that this research uses the typology to structure a physician's perception of medical leadership which can help to create conceptual clarity. The added value of Wang et al.'s (2020) typology is that it illustrates that different aspects of individual perception influence individual behavior. Moreover, the authors go one step further and conclude in their analysis that perception does not merely influence behavior but also influences one's understanding of the organizational context, individual needs and pressures and vice versa. To contextualize this, the physician's perception of medical leadership will also play a role in what aspects one finds hindering or stimulating in medical leadership behavior. Therefore, this research considers the perception as a determining concept that shapes contextual factors that are important for medical leadership, while also shaping medical leadership behavior. This can be theoretically explained by the COR theory (Hobfoll, 1989).

The COR theory describes that resources act as motivators for behavior; individuals are motivated to gain and retain resources (Hobfoll, 1989). The theory is in particular is relevant for this research because it differentiates between personal and situational resources. It argues that individuals make for multiple

situations an estimation of the needed and present resources in order to be able to display behavior (Meijerink, Bos-Nehles & de Leede, 2018). The theory is often used in HR literature to explain how perceptions shape individual and situational resources in (dis)engagement of behavior. For example, NG and Feldman (2014) describe in their meta-analysis that one's perception of existing career barriers prevent individuals in gaining resources resulting in disengagement from career changes. The present study builds on this line of argumentation, and further specifies the aspect of individual and situational resources using the AMO model.

Moreover, the AMO model (Appelbaum et al., 2001), which is often used in HRM study, can be used to categorize contextual factors that influence behavior. The AMO model states that ability, motivation and opportunity interact together in determining one's behavior or performance. The AMO model is used in the present study for three reasons. First, it is an overarching model and therefore applicable in multiple contexts (Knies, op de Beeck & Hondeghem, 2021). Second, it provides a structure for the analysis of factors that are important for medical leadership. The AMO model can be used to link HRM practices to performance, but it is also often used as a conceptual model to categorize and structure contextual antecedents (e.g., Sartirana, 2015 or Knies, 2011). Third, it emphasizes the importance of both individual (ability and motivation) and situational (opportunity) factors to clarify the hindering and stimulating antecedents that shape a physician's medical leadership behavior (Sartirana, 2015). For example, in the research of people management, the AMO model is used to identify the potential hindering or stimulating factors that line managers experience in executing people management behavior (Knies, 2011). These studies have emphasized the relevance of identifying both individual factors and situational factors in the display of behavior. The present research follows this line of reasoning and therefore uses the AMO model to structure the individual and situational factors.

The present research also has a specific relevance to the existing literature in terms of its research sample. Most medical leadership studies have been conducted in university medical centers or based on medical specialists who are employed by the hospital itself. Moreover, the majority of existing qualitative literature on medical leadership has been conducted amongst medical managers who already have a formal leadership position (Andersson, 2015). In comparison, the present research was conducted amongst self-employed physicians who work in a partnership. This means that these physicians work together as entrepreneurs and are not officially employed by a hospital; instead, the hospital and partnership are interdependent (Denis & van Gestel, 2016). A true hierarchical employer-employee relationship is therefore not applicable in this case. However, the HRM perspective is still relevant to this specific sample. This research builds on the argumentation of Lepak and Snell (1999) that "it would be a mistake to assume that the impact of human resources ends at the 'edge' of the organisation" (p. 42). The authors state that the HR study is and should be involved in employment modes that go beyond the employee-employer relationship because alliances (e.g., between partnerships and the hospital) are equally important in creating organizational and societal value (Lepak & Snell, 1999).
In addition, the HR perspective attempts to balance relevance and rigor, which means that generic research models are still sensitive to context (Boxall & Purcell, 2016). Because independent medical specialists work in a different context than physicians who are employed by a hospital, their perceptions and performance of medical leadership may also differ. Wang et al. (2020) provide a generic typology of individual perceptions but stress in their study that there is a great need for contextualizing research on individual perceptions. This research aims to complement this by specifically focusing on independent medical specialists. Because these physicians may not all have a formal leadership position, different attitudes toward the concept can be studied. In addition, because nationally over one-third of all medical specialists work as entrepreneurs and in general hospitals 65% of the workforce consist of independent medical specialists (Federatie Medisch Specialisten, 2021), more focused empirical

knowledge of this group is of great importance to scientific research and the healthcare sector (SEO economisch onderzoek, 2010).

1.2 Societal and practical relevance

This means that the study of medical leadership is valuable for both practitioners and society as a whole. Medical leadership has been given increasing attention due to its positive societal effects on healthcare quality and cost efficiency (Berghout, 2020; Savage et al., 2020). The reason behind this is twofold. First, when physicians engage in leadership roles and activities, organizational and medical goals can be achieved more effectively due to the alignment of both medical and organizational objectives (Berghout, 2020). This alignment is needed to best allocate resources. Second, physicians are more likely to accept the leadership of a medical professional than a non-medical professional (e.g., a manager) (Keijser et al., 2019). This means that when a physician initiates a project using a medical leadership style, it is more likely to be supported by other physicians (Savage et al., 2020). This is needed to ensure that projects are successful and that the costs of failed projects are prevented. In addition to an increase in quality of care and cost efficiency, medical leadership is also useful because it enables physicians to develop soft skills (Keijser et al., 2019). The human capital development of physicians is mostly focused on the acquisition of medical knowledge; however, physicians are seldom trained in soft skills. Collaboration, communication and reflection are as vital to the medical profession as hard skills (Keijser et al., 2019). Moreover, by gaining a more complete understanding of the contextual factors that influence a physician's practice of medical leadership, trainings and other interventions can be better adjusted to the professional's needs (Keijser & Wilderom, 2016). The development of interventions can be optimized in this way to further enhance the practice of medical leadership.

1.3 Reading guide

This introduction is followed by a theoretical framework (chapter 2) in which the theoretical models and most important concepts are explained. This chapter serves as a theoretical basis for the empirical study. The methodology is explained in chapter 3. Moreover, in chapter 4 the results of this study are described, which are analyzed and interpreted in the discussion (chapter 5). In this chapter an answer to the main question is given as well.

2. Theoretical framework

The following theoretical framework elaborates on the different role perceptions of medical leadership by creating an overview of the existing literature and its differences (2.1). This elaboration is complemented by literature about individual perceptions using the typology of Wang et al. (2020) (2.2). This is followed by an explanation of the Conservation of Resources theory, which will explain the idea that depending on one's perception, different personal and situational factors and behavior are displayed (2.3). These personal and situational factors are concretized using the AMO framework (2.4). Lastly, in order to connect the literature to the empirical study, expectations are described (2.5).

2.1 Role perceptions of medical leadership based on existing literature

In the existing literature on medical leadership, there is an increasing need for conceptual clarity on this topic. Due to the conceptual unclarity, this research cannot determine one concrete definition of medical leadership. An analysis of the main literature streams will illustrate this differentiation in the conceptualization. Medical leadership as a formal and an informal role are described.

Medical leadership as a formal role in hospital strategy-making

Literature on medical leadership has developed over the past several years. In the Netherlands, calls for medical specialists to participate in the development of strategies for cost containment had already begun in the mid-1990s (Denis & van Gestel, 2016). The idea behind this was that when medical specialists and hospitals held joint responsibility in strategy development, the support base for the strategies would be larger. This joint responsibility meant that medical specialists would not merely be involved in medical care but would also need to participate in managerial activities (Denis & van Gestel, 2016). However, despite medical specialists becoming more involved in managerial activities, there is still a visible separation between hospital managers and medical specialists (Keijser & Wilderom, 2016). Governmental initiatives that intended to stimulate collaboration between these two parties have not been effective. Denis and van Gestel (2016) state the following about these initiatives: "it seems as if it does not guarantee more collaboration yet and even may work out in opposite direction" (p. 52). As such, it can be concluded that merely involving medical specialists in strategy-making is not effective.

Medical leadership as a formal role as medical manager

A new stream of literature focused on the physician in a manager role. The term medical manager was found. The purpose of this new role was to act as a "linking pin" between managers and physicians (Denis & van Gestel, 2016). Physicians can exert more influence over their colleagues than managers (Keijser et al., 2019). This is because managers and physicians traditionally have competing logics. The manager's logic is more business-driven, while physicians act and think from a medical perspective (Noordegraaf et al., 2016). The new role of a medical manager was intended to overcome this gap. The medical manager is a formal role in which a physician carries the responsibility of departmental performance (Berghout et al., 2017). However, further scientific research has concluded that the effect of this formal position on healthcare outcomes seems limited (Denis & van Gestel, 2016). Research has found that simply executing management activities (e.g., finances) is not enough to stimulate cost effectiveness and better quality of care. Moreover, research has determined that medical managers often feel as if they are "stuck between both worlds" due to the lack of facilitation in this role (Berghout et al., 2017). "When 'new' (organizational) responsibilities, such as multidisciplinary collaboration, are not backed-up by a supportive environment this may lead to identity violations causing stress and work dissatisfaction" (Berghout, Oldenhof, van der Scheer & Hilders, 2019, p. 133). It has been determined that physicians are willing to participate in the medical manager role but are hindered in the facilitation

of their intended duties, resulting in negative outcomes. As such, these critiques have resulted in another reconceptualization of medical leadership.

Medical leadership as an informal role

Another literature stream has stated that for medical and managerial logics to be integrated, medical leadership must be seen as an informal role in which physicians intrinsically engage as medical leaders in their daily work (Berghout, 2020). This means that all physicians would consider both medical and organizational processes during clinical work. The outcome of this new reconceptualization has been the formation of multiple competency frameworks, such as the CanMeds competencies (Keijser et al., 2017). These frameworks were developed in Canada, the UK and the Netherlands (Berghout et al., 2019) and are intended to function as a tool to stimulate and guide physicians in their leadership competencies and skills. This has also led to the rise of multiple trainings and other intervention methods (Keijser & Wilderom, 2016). However, it is critical to note that physicians can only receive guidance in developing these competencies by participating in trainings. Additionally, physicians are mostly encouraged to develop medical knowledge, whereas leadership skills are often neglected, partly due time constraints (Berghout, 2020). Leadership development requires the long-term facilitation and redesign of both intrinsic and extrinsic components of work (Keijser & Wilderom, 2016). Berghout (2020) emphasizes this as follows: "it is important that researchers and practitioners do not further develop skills or competency models. Instead, more focus is needed on facilitating the reconfiguration of medical work and professional identities to adapt to changing patient, health system and organizational demands" (p. 159). However, it is currently unclear how this facilitation should be designed or contextualized.

Another notable aspect of these competency frameworks is that they are often prescriptive: one *should* be competent in the outlined skills to be a medical leader. On the one hand, this prescriptive framing can stimulate physicians to develop the necessary competencies, but on the other hand, it can also raise resistance to competency development (Berghout et al., 2019). The reason for this resistance is that a multiple competencies are described, but the individual added value of each competency is not determined. Additionally, the importance of each competency can differ depending on the context or specialization. This emphasizes the need for contextualization.

In conclusion, the concept of medical leadership remains ambiguous in the existing literature and the practice of medical leadership in both a formal and informal role. Moreover, the facilitation and contextual antecedents that influence the perception of medical leadership require more empirical analysis.

2.2 Individual perception of medical leadership: what, how and why

As stated above, the medical leadership is in literature portrayed as a formal and informal role. This research aims to create a deeper understanding on how the role perceptions come about by studying how a physician perceives medical leadership. Berghout (2020) emphasizes the need for meaning-making: "By investigating how actors give meaning to medical leadership, in other words, how physicians socially construct medical leadership in practice, their values, ideals and purposes can be explored" (p. 12).

This research uses the literature on employee perception on HR practices, how they react to it and what factors influence this reaction. As stated earlier, Wang et al. (2020) created a typology of employee perception which consists of 'what', 'how' and 'why'. The differentiation of the three components is based on a body of literature about perception forming and is applied to employee perceptions of HR. Although medical leadership is not a HR practice, the typology can be used in this research due the underlying theoretical assumptions of every 'what', 'how', 'why' component.

The typology builds on literature that can also be applied to medical leadership. First, it builds for a large extent on the literature of individual sensemaking and information-processing. It is about how individuals receive and process information and signals that are send to them (Wright & Nishii, 2013). These messages can be send by organizational strategy or HR practices as Wang et al. (2020) describe, but the messages can also be transferred by peers or representatives of the profession, as is the case with medical leadership (Wilders, 2015). Moreover, the typology highlights that individuals may interpret the sent information differently. This means that individuals, either employees or physicians, may interpret external stimuli differently and develop an internal strategy for how to form a reaction to this (Wright & Nishii, 2013). These differences may be attributional to individual characteristics, experiences or social interactions between peers. All in all, Wang et al. (2020) have created a typology of employee reactions on HR practices based on theoretical assumptions from other disciplines. This thesis uses the theoretical assumptions of the typology's 'what', 'how' and 'why' to study, categorize and structure the physician's perception of medical leadership.

What

The way an individual perceives a concept depends on their process of "sensemaking," in which the individual attempts to understand what the goal of a new practice is (Wright & Nishii, 2013). Communication and information processing play an important role in sensemaking. Wang et al. (2020) describe the perceived "what" as follows: "If HR practices are to influence employee outcomes, they must first exist in the minds of employees, because cognition is a crucial precursor of subsequent attitudes and behaviors" (p. 143). In the area of medical leadership, this means that before a physician is able to act as a medical leader, they must first know what the role entails and what its goal is. Does the physician perceive medical leadership as a formal position, an informal position or something else? This also emphasizes the need for conceptual clarity in literature.

How

The "how" is described as the individual's perception of the design and implementation process of the practice. An underlying concept that is often used is "situational strength." A strong situation entails the common understanding of an individual's expected behaviors, goals, procedures and rewards (Bowen & Ostroff, 2004). In a weak situation, the individual experiences ambiguity in the expectations, resulting in a difference in behavior and attitudes amongst individuals (Wang et al., 2020). This could explain the different attitudes of physicians toward medical leadership, as expectations about their goal and how it contributes to medical performance can shape whether or not they have a positive attitude toward medical leadership.

Why

Finally, the "why" of the practice involves the process of sensemaking, which can differ for each individual. This process is described as the attributions individuals make after receiving information. According to Nishii, Lepak and Schneider (2008), attributions can be either internal or external. Internal attributions involve the strategy behind the practice (cost reduction or focus on quality) or the organizational philosophy with regard to employee wellbeing or exploitation. In contrast, external attributions entail the idea of compliance with external pressures such as new policies (Nishii et al., 2008). These internal and external attributions emphasize that contextual pressures are an important element in shaping perceptions. The "why" is an important element of communication in medical leadership. The perception of the goal of medical leadership can, for example, be used as a tool to cut the costs of managers and can therefore place an extra burden on physicians. It can also be perceived as a new way of working to enhance the quality of care and the wellbeing of physicians (Keijser et al.,

2019). In other words, two individuals can have different perceptions of why medical leadership is implemented, which can potentially shape their attitudes and behaviors.

All in all, the typology builds on literature from organizational behavior, sensemaking and information-processing. The typology recognizes that there is a divergence in the intention of the sender of the message and the interpretation of the receiver. This means that clear theoretical ideas can exist about medical leadership on an institutional level but that physicians may interpret these differently; the use of this typology bridges the institutional literature with the individual level. In addition, the strength of the typology is that it recognizes the divergence between individual perceptions and makes a plea to study these differences, rather than control for it (Wang et al., 2020). The appliance of the three separate components of the typology will create a more detailed understanding of what specific elements of medical leadership perception differ and what correspond between individuals.

The following section describes how perceptions influence contextual factors and behavior using the Conservation of Resources theory.

2.3 Conservation of Resources theory: Individual perception, personal and situational factors and behavior

Medical leadership behavior

The typology of Wang et al. (2020) illustrates that different role perceptions can also result in different behavior. Medical leadership is described as an informal or a formal role. However, what specific behavior correspond to these roles remains unclear. For example, the competency frameworks of medical leadership describe what competencies belong to medical leadership but there is no literature on how physician's actually behave or use the competencies in their daily work, potentially due to the large differentiation in work contexts (Berghout, 2020). This research tries to fill this gap by specifically focusing on medical leadership behavior. Consequently, in order to build a theoretical argumentation on how medical leadership behavior is formed, this research follows two theoretical argumentations. First, this research follows Wang et al. (2020) argumentation of reciprocity. This means that when, for example, medical leadership is perceived as helpful to the job, the physician will reciprocate with engaged and committed behavior to the concept (Wang et al., 2020; Wright & Nishii, 2013). This highlights that the way medical leadership behavior that is expressed, aligns with one's understanding of it. Secondly, this research builds on this assumption further by recognizing the potential shaping mechanism of personal and situational factors on medical leadership behavior. Therefore, the Conservation of Resources (COR) theory by Hobfoll (1989) is used to explain how different perceptions can shape behavior and personal and situational factors.

Conservation of Resources theory

The COR theory is originally a stress theory that has provided the recognition of the influence of both personal and situational factors in the occurrence of stress. The theory describes that individuals protect, invest and gain personal and situational resources to ensure a proper fit between the job and the individual (Meijerink et al., 2018). This means that a physician constructs a perception based on one's understanding of the 'what', 'how' and 'why' of medical leadership, and in turn makes an estimation of the resources that are needed to ensure a fit with the job. These resources entail personal characteristics, conditions, objects and energies which are of value to the individual (Hobfoll, 1989). Personal resources are often seen as individual characteristics regarding knowledge, skills or motivational states (Schaufeli & Taris, 2014). Alternatively, resources can also be provided by the environment or the organization, for example social support.

There are two underlying assumptions in the COR theory. First, individuals are motivated to gain and retain resources. The experience of sufficient resources leads to a "gain spiral," in which individuals take more risks to gain additional resources. Second, the experience of a lack of resources leads to stress through a "loss spiral," thereby leading to insufficient energy to retain or gain resources (Schaufeli & Taris, 2014). To contextualize these assumptions, physicians estimate what personal and situational resources are needed to ensure a fit with their job according to their perceptions of medical leadership. Previous research on Australian healthcare professionals in cancer care has illustrated that when healthcare professionals experience insufficient resources (e.g., knowledge or skills) needed to comply with the role perception, they often disengage from the job as a coping mechanism (Thanacoody, Newman & Fuchs, 2013). This disengagement is necessary for a physician to still provide patientcare while also decreasing the emotional exhaustion of extra demands. In contrast, if physicians experience sufficient resources, they are more likely to be motivated to gain additional resources and to show more committed behavior that aligns with the medical leadership perception (Thanacoody et al., 2013).

In summary, depending on the physician's role perception of medical leadership, an estimation is made of the demands and resources that are both present and needed to comply to this perception. Depending on the available resources, the physician shows either committed or disengaged behavior to medical leadership. The following section specifies personal and situational factors using the AMO framework.

2.4 Personal and situational factors: ability, motivation and opportunity framework

This research complements the existing literature by studying the personal and situational factors that are shaped by one's perception of medical leadership. The AMO framework is used as a guiding framework to structure and categorize the findings on personal and situational factors. Ability means that the individual possesses the knowledge, skills and competencies of the practice (Trullen, Stirpe, Bonache & Valverde, 2016). Motivation is explained by the willingness to perform the practice. Opportunity means that a work environment is created to allow the practice to be performed (Boxall & Purcell, 2016, p. 155).

There are three approaches of the AMO model which are often not clearly determined in literature. The first approach considers AMO as a way to bundle certain HR practices (Jiang, Lepak, Hu & Bear, 2012). The second approach sees AMO as model to determine individual characteristics that can affect outcomes (Boxall & Purcell, 2016, p. 156). The third approach, which this research follows, uses the model to contextualize research. The individual (ability and motivation) and situational (opportunity) factors are used to analyze the hindering and stimulating factors of medical leadership behavior. "It is coherent with a view of organizational actors as embedded in a social order which acts as a hindrance or a facilitator of individual behavior" (Sartirana, 2015, p. 19).

2.4.1 Personal factors

<u>Ability</u>

The ability aspect of the AMO framework entails the knowledge, skills and abilities of individuals to perform their job (Boxall & Purcell, 2016). The abilities of individuals are seen as the starting point for their ability to execute certain tasks. In terms of abilities, a differentiation can be made between hard skills and soft skills, but both are equally important (Knies et al., 2021). Hard skills often entail job-specific knowledge, including rules and procedures, whereas soft skills relate to personal development, such as providing feedback to others (Knies et al., 2021). As stated previously, the three aspects of the AMO framework interact with each other. This means that one's abilities also influence one's

motivation (Boxall & Purcell, 2016). One's development of abilities is also closely related to one's feelings of competence, which refers to confidence in one's obtained knowledge and skills in the execution of a task (Salas-Vallina, Pasamar, & Donate, 2021). According to the self-determination theory (SDT), feelings of competency, autonomy and relatedness are three basic human needs that stimulate intrinsic behavior (Deci, Olafsen & Ryan, 2017). Salas-Vallina et al. (2021) state that stimulating an individual's abilities creates feelings of competence. In turn, these feelings of competency and mastery shape one's interest in a positive way, whereas feelings of incompetence result in disinterest (Salas-Vallina et al., 2021; Legault, 2017). To contextualize this theoretical argumentation to medical leadership, a distinction must first be made between knowledge and skills in the healthcare sector. A brief discussion of the operationalization of the needed competencies for displaying medical leadership is then given.

Human capital in healthcare organizations is often focused on the enhancement of medical knowledge. This medical knowledge is vital for a physician to be able to perform their job. Physicians are obliged to complete a certain amount of credits, which can be obtained by following courses (Keijser et al., 2019). During their careers, physicians use these courses to maintain and update their medical knowledge, on which they are evaluated. For example, a surgeon is evaluated on their knowledge of and skills in operations. This system encourages physicians to dive deeper into the tacit knowledge of their specialization (Keijser et al., 2019). However, because medical leadership requires physicians to integrate both medical professionalism and business-driven logic (Noordegraaf et al., 2016), they must also develop knowledge about organizational processes. These organizational processes consist of financial processes, innovation, performance management, strategy-making and HR knowledge, among others (Berghout et al., 2017). Previous research on clinical managers (a formal leadership position) has found that a lack of knowledge in these fields can result in hesitant perceptions of leadership due to feeling "underprepared," causing clinical managers to see the manager position as a burden to their daily clinical work (Berghout et al., 2017).

In addition, Berghout et al. (2017) concluded in their research that, in addition to knowledge, soft skills (e.g., communication) are also important for clinical managers. However, training and evaluation in soft skills is often neglected (Berghout, 2020). Because of pressure to focus on the cost efficiency of healthcare and the increasing complexity of patients, physicians are increasingly asked to collaborate in networks of physicians of different specializations (Sallas-Vallina et al., 2021). Moreover, these networks may consist of not only peers but also a patient's family members who are partly responsible for their daily care. As a result, it is increasingly important for physicians to be competent in collaboration, communication and intra-departmental teamwork, among other skills (Keijser & Wilderom, 2016). This means that physicians should not be isolated in their knowledge and skills of medicine; they should also develop soft skills. What soft skills are the most important, however, remains unclear in literature.

To make the leadership development of physicians more concrete, Keijser et al. (2019) created a competency model for medical leadership that illustrates three elements that are important for one to develop: "me," "society" and "others." Multiple competencies are formulated in these three elements. In the "me" element, one must possess the competency to develop oneself, be a role model and take responsibility. In the "others" dimension, the competencies that are mentioned are the ability to coach individuals, connect with others and exert influence. Finally, the "society" dimension explains that a physician must be able to organize, possess knowledge of the sustainable use of resources and possess knowledge of entrepreneurship and innovation. Keijser et al. (2019) argue that these abilities are part of the "21st century physician" and will result in better healthcare outcomes. However, as stated previously,

while this competency framework provides a generic overview of the most important competencies, it does not specify which competencies are most important. It does, however, provide a starting point for physicians to work on their personal development, which can result in feelings of competence. Therefore, acquiring knowledge of organizational processes and developing soft skills can enhance a physician's feeling of competence in medical leadership.

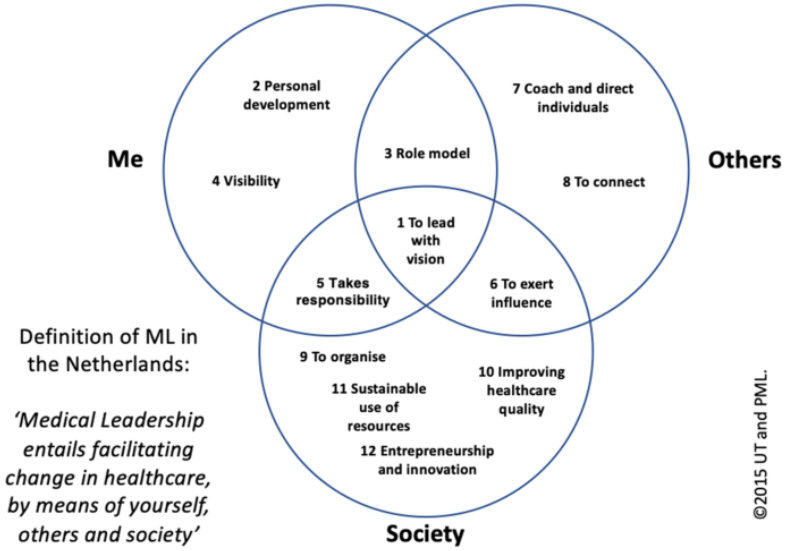


Figure 2: the Dutch competency framework (Keijser et al., 2019)

Motivation

Trullen et al. (2016) conducted a study on the motivation of line managers to execute HR practices. In their results, they state that the question "what's in it for me?" is an important element for motivation. This question revolves around the balance between costs and benefits (Denis & van Gestel, 2016). The motivational aspect of the AMO model has been thoroughly studied in HR literature. It is often operationalized in commitment (Knies & Leisink, 2013) or willingness to engage in a certain practice. The willingness, interest and motivation of an individual play an important role in their acquisition of a management role (Knies et al., 2021). This means that autonomous motivation largely determines an individual's willingness to take on a management role. "Autonomous motivation stems from the person itself (intrinsic) and states that people engage in an activity because they find it inherently enjoyable and satisfying" (Knies et al., 2021, p. 130). Examples of drivers of intrinsic motivation are skill utilization (this connects the A and M of the AMO model), personal growth and certain job characteristics (this connects the M and O of the AMO model). Moreover, it is important to note that "individuals may see and understand different things depending on their underlying motivations" (Wang et al., 2020, p. 152). This means that inherent motivation in medical leadership can also shape a physician's medical leadership behavior in a positive way.

In contrast, controlled motivation refers to the external obligation of an individual to behave in a certain way (Deci et al., 2017). This external obligation can be enforced through a reward but also through power dynamics (Deci et al., 2017). The extrinsic motivation can "kick-start" the desired behavior but may also result in a short-term vision of performance. An example of an extrinsic motivator is a monetary incentive that motivates an individual to express the expected behavior or attitude (Appelbaum et al., 2001). In general, extrinsic motivators are often perceived as negatively effecting management behavior, specifically if the individual takes on managerial tasks in addition to their current tasks (Knies et al., 2021). Moreover, the healthcare sector is generally restrictive regarding monetary rewards.

However, because independent physicians work as entrepreneurs and therefore determine their own reward systems, a monetary incentive can be an important motivator.

There is little existing literature about the role of motivation in medical leadership. Some previous literature has stated that motivation in general is an important aspect that influences a physician's medical leadership behavior, but the specific type of motivation is not mentioned (Sartirana, 2015; Berghout et al., 2019). Keijser and Martin (2019) state that medical leadership is "amplified by intrinsic motivation" (p. 100). In addition, Savage et al. (2020) state that a physician's motivation may influence their medical leadership behavior. The authors state that depending on the type of motivation, physicians can use medical leadership as either "a way to safeguard physicians' role, identity and influence" (p. 5) or as a driver to change, improve and innovate in medical care. Overall, although little literature exists on the role of motivation in medical leadership, it can be expected that motivation (both extrinsic and intrinsic) can shape one's medical leadership behavior.

2.4.2 Situational factors

The last aspect of the AMO framework, opportunity to perform, states that work environment and job characteristics are important factors in shaping an individual's behavior (Trullen et al., 2016). The overall work environment and job characteristics are crucial elements in the AMO framework because while an individual may have the capacity and willingness to perform, it is unlikely that they will show desired behaviors when in a constraining work environment (Sartirana, 2015).

Opportunity

As stated previously, motivation is interconnected with the opportunity factor of the AMO model (Boxall & Purcell, 2016). Some scholars have argued that motivation is intertwined with the characteristics of a job. These characteristics must entail intrinsic dimensions. An often mentioned intrinsic dimension is autonomy or discretionary room, indicating that "where individuals are offered greater freedom over how to do a job, and when their opinions are taken more seriously, their scope to influence outcomes is that much greater" (Boxall & Purcell, 2016, p. 157). However, more practical elements have also been mentioned. The overall work environment and the involved resources are often seen as factors that can shape an individual's ability to perform their job. Examples include the level of support one receives or the amount of time one has to actually perform the practice (Trullen et al., 2016). Support, either by a leader or by peers, can be seen as a coping mechanism when experiencing difficulties with a management role (Knies et al., 2021). Because independent medical specialists do not have a hierarchical manager, peer support may be even more crucial in medical leadership. Peer support can be given by sharing knowledge, expertise and experiences amongst professional colleagues to overcome difficulties. In addition, peer support can provide an individual with encouragement. Sartirana (2015) found that clinical doctors who took on a managerial position were more willing to take on this new role when they felt supported by their peers and felt that they had the freedom and authority to make decisions. When an individual feels supported by their work environment, they are often more open to taking on new challenges (Savage et al., 2020).

Time is also a valuable resource in the development of medical leadership. As stated above, personal development in terms of one's knowledge and skills is a long process that requires time (Keijser & Wilderom, 2016). Time is commonly mentioned as a factor that can hinder one's ability or willingness to engage in medical leadership, as a lack of time can be demotivating (Keijser & Martin, 2019; Berghout et al., 2017). Keijser and Martin (2019) state that a lack of time can cause one to perceive medical leadership as an unnecessary investment, as the time spent could be put to better use in clinical work. Time can also play an important role in the work of independent medical specialists. Because the

production pressure is high amongst these physicians, the benefits of personal development and extra managerial activities must be carefully weighted, as these benefits may shape whether the physician perceives medical leadership as a role overload or a valuable addition to their job.

Therefore, the way the work environment and the job itself are designed are important contextual factors within the aspect of 'opportunity'. This research recognizes and expects that the opportunity factor of the AMO model can function as an enabler or as a hindering element in shaping the physician's medical leadership behavior.

2.5 Expectations

The theoretical framework results in the construction of a conceptual model (see figure 2). This model consists of multiple elements.

First, the outer block illustrates the individual perception of medical leadership. This perception is analyzed both in theory and in the following empirical part of this research by the 'what', 'how' and 'why' components of the typology of Wang et al. (2020). This research expects that medical leadership perceptions will differ per individual, and can also differ per component.

Secondly, the inner block of the conceptual model shows the distinction between personal and situational factors. These factors are, in theory and the following empirical part, structured using the AMO model. Personal factors include ability and motivation, whereas the opportunity factors falls under situational factors. Besides the AMO factors, this research expects that other contextual factors, possibly more related to the healthcare sector in general or specific job characteristics of physicians, also may be of importance. Furthermore, this research expects that these personal and situational factors may be experienced as hindering or stimulating for displaying medical leadership behavior.

Lastly, as medical leadership behavior is not specified in existing literature, this research expects that the role perception can shape the behavior. This connects the outer and inner blocks of the conceptual model. This means that the different role perceptions can also lead to difference in medical leadership behavior. Moreover, as the COR theory explains, it is expected that a physician makes an assessment, based on the role perception, of the present and necessary personal and situational factors in order to display the behavior that corresponds to the role perception.

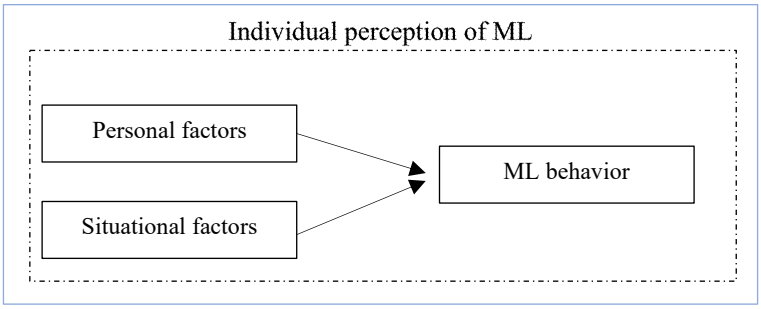


Figure 2: Conceptual model

3. Method

The following chapter elaborates on the methodological part of this research. First, the context of the Dutch healthcare sector and partnerships will be explained (3.1). This is followed by an explanation of the research design (3.2 and 3.3) and the procedure (3.4). Furthermore, an overview of the characteristics of the sample is presented (3.5). Lastly, the data analysis (3.6) and consideration of research quality (3.7) is described.

3.1 Setting: Context of the Dutch healthcare sector

Similar to other Western European countries, the Dutch healthcare sector has strong business and market mechanisms (i.e., performance measurement, competition, parsimony in allocation of resources) (Scholten & van der Grinten, 2002; Denis & van Gestel, 2016). In public organizations, these mechanisms increase performance, cost efficiency and quality of care (Boxall & Purcell, 2016). To enhance and maintain cost effectiveness and availability of care to all citizens, the Dutch government introduced the Health Insurance Act in 2006 (Scholten & van der Grinten, 2002). The act states that health insurance companies must negotiate with healthcare providers on the cost of care and quality standards. This has resulted in the rise of management as a safeguard for performance and efficiency (Berghout, 2020). Medical leadership can be seen as a response to rise of management (Denis & van Gestel, 2016).

The Netherlands has a unique structure of physician employment. Around 30% of Dutch physicians work as entrepreneurs in a partnership (Denis & van Gestel, 2016). A partnership is a group of medical specialists who work as equal partners without a hierarchal leader and are collectively responsible for the group's productivity (Scholten & van der Grinten, 2002). Every partnership is part of a Cooperation of medical specialists within a hospital. This Cooperation discusses medical matters with the board of directors. For example, multiple dermatologists work together in a partnership. Two of the dermatologists represent their partnership in the Cooperation of medical specialists in their hospital. The Cooperation discusses medical-related matters and finances together with the hospital's board of directors.

Due to their entrepreneurial status, physicians who are part of a partnership are paid according to their level of productivity in patient care and may therefore receive higher monetary rewards than physicians who work under hospital-employment. This means that independent medical specialists benefit from greater productivity per hour (SEO economisch onderzoek, 2010). In the Netherlands, political discussion has been held about whether all independent medical specialist should transition to hospital employment. However, because this topic falls outside the scope of this research, the discussion is mentioned but not thoroughly studied.

Moreover, different internal dynamics exist among physicians who are part of a partnership compared to hospital-employed physicians because partners are treated as both an employee and employer. Partners in a partnership are required to run all parts of the business themselves, which may entail quality control, financial processes, innovation, teamwork, leadership and efficiency in addition to their medical work. Additionally, monetary compensation is rarely given for these extra tasks. This means that all new ideas, innovations and methods of working must be democratically determined. All partners evaluate initiatives and processes together and collectively decide how resources (human and financial) are allocated. There is no one leader who decides what will be implemented. In this form of collaboration and decision-making, consensus and a clear vision is required.

3.2 Design of the study

This study used a qualitative research design to answer the research question. This research method is relevant for studying medical leadership because it provides data about respondents' opinions and interpretations of medical leadership. As stated earlier in the theoretical framework, there is no one definition of medical leadership. To create conceptual clarity, this study used a phenomenological strategy to seek out physicians' perceptions of medical leadership (Ritchie, Lewis, McNaughton Nicholls & Ormston, 2014). Previous literature has also stressed the importance of qualitative research in the study of medical leadership. Specifically, Savage et al.'s (2020) thematic synthesis of existing literature on the relationship between medical leadership and performance argues for more fundamental qualitative studies to further "explore the mechanisms behind the connections" (p. 2) and their contextual factors.

Moreover, qualitative research allows for the contextual factors that respondents consider important to their medical leadership behavior to be studied. Wang et al. (2020) make a strong plea for qualitative research on employee perceptions. The authors state that the contingency perspective of HR literature is important for balancing the development of strong standardized measures without neglecting cultural and social contextual factors (Wang et al., 2020). The respondents in the present study work in a partnership setting, which can be of importance to their interpretations and meaning-making of the concept.

In epistemology, knowledge is often acquired though inductive and deductive reasoning, both of which were used in this research. Induction was used in this study because respondents were asked open questions without a predefined structure. For example, because this research did not use one definition of medical leadership, it was unable compare the respondents' answers to a set definition. Deduction was also used in this study. As stated in the theoretical framework, the typology of Wang et al. (2020) and the AMO model were used to structure and categorize the respondents' answers. For example, the AMO model was used to probe for information about contextual factors during the interviews. The theories were used as a starting point to narrow and structure the interview process.

3.3 Semi-structured interviews

Meaning-making is an essential aspect of an interview process. This research used semi-structured interviews to study respondents' opinions and views of social contexts and to compare different interpretations of the concept of medical leadership. The semi-structured interviews consisted of a discussion of a fixed number of topics but still allowed for follow-up questions to be asked to create more in-depth results.

Prior to the data collection process, a list of seven general topics was created (see appendix A). The first topic consisted of the background information of the research, the informed consent and the overall introduction. The second category consisted of direct questions about the work context of the respondent. For example, the respondent was asked about their tenure and the characteristics of their partnership. This was followed by the third topic, which was comprised of questions about the respondent's perception of medical leadership. This third topic was divided into three sub-sections that addressed the "what," "how" and "why" of the typology of Wang et al. (2020). In each sub-section, some follow-up questions were formulated. These were demonstrated by the use of indents throughout the topic list wherever follow-up questions were listed. The fourth topic focused on medical leadership behavior. This topic also included sub-sections that addressed the "what," "how" and "why" of Wang et al.'s typology. In addition, a differentiation was made between 4a) "medical leadership behavior is displayed" and 4b) "medical leadership behavior is not displayed." This differentiation was made to

prepare the interviewer for all possible answers. The contextual factors were addressed in the fifth topic, in which the respondent was asked about the possible stimulating and hindering factors that they experience regarding medical leadership behavior. Probing questions were also formulated for this topic and were indicated in the topic list through the use of indents. The sixth topic consisted of one question that asked the respondent's opinion of other potential views of medical leadership. Finally, the seventh topic consisted of the closing of the interview.

3.4 Procedure

After the topic list was created, independent medical specialists were invited to participate in an interview and were asked to schedule an interview date. The invitation detailed the purpose of the interview, its length (45 minutes) and information about informed consent. All respondents were informed about the procedure of the interview, the data collection and the data analysis. Moreover, informed consent was given verbally by the respondents before the start of the interview (see appendix B). All interviews were conducted between April 26 and June 2, 2021. Due to COVID-19 safety measures, almost all interviews were conducted using MS-teams; only one respondent explicitly asked to meet face-to-face at the hospital at which they worked. After the interviews were conducted, they were transcribed, the recordings were deleted and the transcripts were saved in a secure database.

3.5 Sample

Specific information about the work context of independent medical specialists is provided in section 3.1. The sampling method that was used in this research was snowball sampling. One independent medical specialist was asked to help gather respondents for this study. Because medical specialists can be a "closed" group, an insider was helpful for gathering respondents. The main criterion for this sample was that the medical specialist should be working in a partnership. This research focuses on independent medical specialists in general, which implies that close attention was paid to the diversity of the sample in terms of gender, specialization and tenure. This resulted in an overall sample of 23 independent medical specialist working across five different general hospitals in the Netherlands. The sample consisted of the following characteristics: the average tenure was 14.6 years; the gender distribution was 13 female physicians and 10 male physicians; and the partnership sizes were 7 small (1–10 partners), 8 medium (11–20 partners) and 8 large (21 or more partners) partnerships. Table 1 provides a breakdown of the different specializations.

Table 1: specializations of the sample

Specialty	**No. of respondents (*N = 23*)**
Dermatology	3
Pathology	3
Gastro-entrologist	2
Hematology	2
Gynecology	2
Ophthalmology	2
Neurology	2
Oncology	1
Orthopedy	1
Radiology	1
Urology	1
Clinical microbiology	1
Surgery	1
Plastic surgery	1

3.6 Analysis

All data that was gathered from the interviews was analyzed. As stated previously, all interviews were transcribed, and the recordings were then deleted. Some personal information of the researcher was mentioned during the interviews. However, because this information is not of value to this research, this information was not included in the transcripts. In addition, information that could potentially harm the anonymity of the respondents was not included in the transcripts; this information was replaced by a word in brackets. For example, when a respondent stated the name of the hospital at which they worked, the hospital name was indicated using {naam}.

Nvivo12 was used as the primary coding program in this research. The transcripts were uploaded in Nvivo12, and classifications were assigned to each transcript. The file classifications contained information regarding the participant's tenure, tenure in their partnership, the partnership size and their different roles within the partnership. This allowed for different characteristics of the sample to be analyzed. For example, it allowed for an examination of the hindering and stimulating factors of only physicians with a longer tenure.

The data collection and data analysis were not two separate stages in this research. After an interview was transcribed, open coding was used to highlight important information. By using this strategy, the interviewer could improve the interview questions and probing questions after every interview was conducted. In addition, a table of hindering and stimulating factors that respondents mentioned during the interviews was created. After every interview, the mentioned factors were inserted into the table to create an overview. This table was later amplified by data of the perception and behavior, resulting in the summary of results (see table in section 4.5, page 43).

Open coding was used to structure the data according to the information in the transcript. An example of a code that was observed at this stage is "taking responsibility," which was mentioned by a participant as a characteristic of medical leadership. In addition, the interviewer kept notes of observations that were made during the interview, such as conflicting answers or changing perceptions. After open coding the interview, axial coding was applied. This allowed for the existing information and codes to be categorized and structured. Some codes were merged into one overlapping category. To add to the previous example, the code "taking responsibility" was added to the "what" aspect of medical leadership perception. In addition, the existing codes were differentiated further into contextual information (e.g., how the healthcare system in the Netherlands is organized) and information that specifically addresses the topic of this research (e.g., examples of medical leadership behavior). After this information was structured, selective coding was used to organize the information based on the literature review. The perceptions of medical leadership were differentiated into "what," "how" and "why." In addition, the hindering and stimulating factors were assigned according to the AMO model. Moreover, sub-codes were identified in each of the main codes. For example, the sub-code "time" was created in the "opportunity" category of AMO model. Specific attention was paid to the information that respondents provided regarding other topics, such as whether medical specialists should be independent or employed by a hospital. All information was analyzed and assessed for added value. The coding structure can be found in appendix C.

3.7 Research quality

Every research can be assessed on its validity and reliability. Both aspects are critically evaluated during this research. The process will be described per aspect.

Validity

Validity entails whether the research is actually measuring what it aims to study. Validity can be divided into internal and external validity (Straits & Singleton, 2011). The internal validity of this research is considered using the theoretical framework that was constructed prior to the data collection. Using a literature study, the typology of Wang et al. (2020) and the AMO framework provided a solid structure for this research. Specifically, the topic lists were constructed based on the literature to specify the scope of the interviews. In addition, the first two interviews were considered as test interviews, after which both transcripts were critically evaluated by the researcher and supervisor. Based on this evaluation, some questions were formulated differently but the structure of the topic list remained the same. Moreover, during the interviews, the interviewer often summarized the respondent's answers and checked whether this summary was valid according to the respondent. This respondent validation was used to make sure that the researcher understood correctly what the respondent was stating (Bryman, 2015).

Furthermore, this research contained a small sample in which meaning-making of the respondents in a specific context is most important. The validity of this qualitative research entails the accurate description of unique context and characteristics of independent medical specialists, also called thick description (Bryman, 2015). Medical specialists working in a partnership is distinctive compared to hospital-employed physicians. At the beginning of every interview, the respondent was asked to accurately describe the characteristics and work context of their partnership. This description was used to contextualize their meaning-making in other topics of the interview. All in all, by accounting the details of this unique context, the meaning-making of the respondents can be put in context (Bryman, 2015).

Theoretical generalizability also involves external validity. Wang et al. (2020) created the what, how and why typology and in their research the authors focused on the implementation of HR practices. As this research did not focus on HR practices, but builds on the underlying theoretical assumptions of the typology, the theoretical generalizability of the structure of the model can be of relevance to other studies as well. Furthermore, the COR theory is often used to explain the occurrence of stress. This research highlights that the COR theory can also be of relevance to explain the interaction between work context and behavior, while not specifically focusing on stress. As this is done in previous research as well (Meijerink et al., 2018), the COR theory can be theoretical generalizable. Moreover, the ability, motivation and opportunity factors of the AMO-model were studied in this research. The mechanisms of this model highlighted the stimulating and hindering factors which can potentially be used in other research on medical leadership as well.

Reliability

The reliability of a research involves the degree of consistency in results of a research (Straits & Singleton, 2011). The reliability of this research was maintained by a relative large number of interviews that was conducted. By conducting 23 interviews, this research tested the consistency of the data. In addition, in qualitative research transparency of the research process is of importance (Bryman, 2015). Prior to the interviews all respondents were informed about the processing of their data and were assured that their participation in this research cannot be detected. This information was given to prevent social desirable answers as much as possible. Transparency of the analysis of the data was given earlier in this chapter (3.6).

4. Results

After the interview data was collected, an analysis of the gathered data was conducted. The data was categorized and structured using the "what," "how" and "why" typology of Wang et al. (2020) and the AMO model. The following sections describe the data in more detail. The respondents' individual perceptions of medical leadership are first described using the typology of Wang et al. (2020). This is followed by a presentation of the data on the medical leadership behavior of the respondents. Third, the hindering and stimulating factors are discussed using the AMO framework. Finally, other topics that were frequently mentioned during the interviews are described. These include contextual factors that can be of importance to the empirical study of medical leadership. Quotes are inserted in the analysis to add clarification. Due to the confidentiality of personal information, only respondent numbers (which were assigned randomly) are presented.

4.1 Individual perception of medical leadership

All respondents were asked about their first idea or definition of the concept medical leadership. Some respondents had an immediate response, while others hesitated because they found medical leadership to be a complex, vague and broad concept. However, all respondents were certain that a medical leader must be medically trained. This means that a manager or hospital director with a business (or other business-related) background cannot be a medical leader.

> There are different types. That is what I think. You have medical leadership towards your patients, towards your partnership and the hospital. It is depend on these levels. There is not one overarching medical leadership. (R10)

This quote summarizes the perceptions of the respondents. Based on the findings in the data, not one overarching perception of medical leadership is given. Instead, based on the data, four types of medical leadership were identified: the societal leader, leadership in everything but being a doctor, leader in day-to-day work and personal leadership.

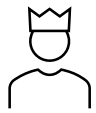
Figure 3: four different types of medical leadership perception

Some respondents indicated at the start of the interview that medical leadership consists of these types, while other respondents only mentioned one type at first, before indicating that multiple types of medical leadership exist after some reflection. An example of the latter is that one respondent initially perceived medical leadership as being related to management activities but concluded at the end of the interview that medical leadership is a multi-level concept. Still other respondents concluded that medical leadership consists of merely one type. Moreover, only a small number of respondents were actively aware of the concept, whereas the majority of the respondents "are not consciously working on this every day" (R1).

Respondents were asked what medical leadership was explicitly not according to their perspective. Multiple respondents indicated that, irrespective of the type of medical leadership that was mentioned, a medical leader must not work only for money, only provide the most expensive care, be egocentric, have no commitment or be "contrary to the oath of Hippocrates" (R18). These respondents indicated that these requirements are related to the ethical responsibility of a medical specialist to provide the best care.

> The goal is that you provide the best care for the lowest costs. That is important for the Cooperation of medical specialist, hospital and the partnership. But it also has a societal importance. I mean, of course, you can offer expensive treatment which is not necessarily effective but generates more income for us. But then you are not performing well at all, in my opinion. (R8)

All four types of medical leadership are discussed below, and the "what," "how" and "why" of each type are elaborated upon.



The societal leader

Some respondents' initial perception of medical leadership was that it is a societal leadership role. It is important to note that this type of leadership was often mentioned by respondents who indicated that medical leadership consists of different types. Well-known medical specialists, such as Diederik Gommers, Marcel Levi or Erik Scherder, were mentioned as examples of this type of leadership. Some respondents also mentioned recent experiences with medical specialists who became societal leaders during the COVID-19 crisis.

> If you ask me now who showed medical leadership then I name one colleague. She had no experience but is an extravert person. She felt responsible and the need to take charge in this situation. And everyone listened to her. (R13)

A charismatic personality and the ability to lead by example were often mentioned as characteristics of a societal leader. Moreover, many respondents stated that a societal leader is a medical specialist who has a strong opinion, represents the profession, is visible and is a strong advocate of the medical profession. The goal of this leadership type is to promote the interests of professionals and create more visibility for medical specialists. Many respondents who mentioned this type of medical leadership also went into more detail about other types. Some initially associated medical leadership with more well-known leaders in the healthcare sector, but after being asked for a more detailed description of medical

leadership, they concluded that medical leadership is expressed in medical specialists more than in well-known leaders.

Leadership in everything but being a doctor

> You assume you become a medical specialist and I will only work in that specific area. … When I just started in the partnership, the finances needed to be managed by a partner. Everyone thought it was a good idea that I would do that. But I never did economics at school. So, I thought alright let's see where this takes me. So yes, you are financial expert, a teacher, a manager, a nice person, a strict person and a doctor. And somewhere in between you also need to enjoy it. It is a diverse and challenging job. Only doing the same surgeries is also tiring after a while. (R20)

As mentioned in the above quote, many respondents associated medical leadership with the extra roles and activities associated with patientcare. It is important to note that no hierarchy is applicable to how these roles are assigned. These extra activities can be divided into management activities and specialty-related activities (science, education etc.).

Management

Management activities can include representing the partnership in the Cooperation of medical specialists, finances, human resources, quality monitoring and innovation, among others. In most partnerships, extra activities are divided equally among partners based on personal preference. Some tasks are clustered into an extra role that an individual can take on. For example, the chairperson of the partnership is responsible for representing the partnership in the hospital.

> No, it is a not a hierarchical or formal position. One is more like a captain of the team. That person communicates with the board of directors, knows the finance flows, is aware of the quantity measures, divides the tasks in the partnership and is engaged in representing the position of the partnership in the hospital. (R3)

In this role, the medical leader is visible in both the partnership and the hospital. Moreover, a strong vision is required to focus on long-term goals. To achieve these goals, it is essential for the medical leader to have a helicopter view and good communication skills. Moreover, according to the respondents, although this type of medical leader has no hierarchical position, it is essential that they be a role model. The medical leader should be able to motivate others, create a support base for change and promote shared values. Empathy and the ability to recognize someone's need for support are also essential in this role. These aspects are all important to improve patient care, the organization of care, partnership efficiency and effectiveness, the connection between stakeholders and job satisfaction.

Medical

In addition to the aforementioned management roles, specialty-related roles were also mentioned by the respondents. A physician can be a medical leader when they are fully specialized in one specific topic and are a scientific leader in their field. Some respondents also mentioned that healthcare is currently more project-focused. For example, the use of artificial intelligence is becoming more prominent in healthcare. Some medical specialists take charge of these projects and therefore act as medical leaders.

In this role, the medical leader must be an advocate for the project, a motivator of others and someone with a vision and good communication skills.

The role of teacher or educator was also mentioned in reference to this type of medical leader. In this sense, a medical leader is someone who takes the lead in teaching young physicians and organizing this process. In this role, the medical leader also acts as a coach to the younger generation. As such, is important for the medical leader to be receptive to and willing to act on feedback. Empathy was also mentioned because the medical leader must be able to recognize when someone needs support. The respondents also mentioned the societal importance of educating "future medical specialists."

In relation to medical aspects, the goal of a medical leader was stated to be the improvement of patient care and the organization of this care. Respondents indicated that in taking up these roles, their ambitions were fulfilled and they experienced more job satisfaction.

Leadership in the day-to-day job

Another frequently mentioned perception of medical leadership is that every medical specialist is a medical leader in patientcare. This perception was most often mentioned by medical specialists who meet with patients. When consulting with patients, medical specialists often perceive themselves as the leader of the treatment process. They are the go-to person who organizes the care process for the patient, and they often do so with physicians from other specialties.

> When a patient comes in with cancer, then I need to start a multi-disciplinary oncology meeting. I need to consult the oncologist and I need to make sure that the patient's surgery is planned. I also need to communicate with the GP and with family members. And of course the nurses and other staff are also involved. I am responsible for leading and guiding the whole process. (R15)

More experienced physicians also mentioned that this process has changed during their career. In the past, medical specialist decided which treatment a patient would receive. Today, physicians are required to make decisions in a more collaborative manner, in which they explain the existing treatment options and then choose the best treatment together with the patient. This change in the method of working has also changed the role of the profession from a directive leader to a more guiding leader.

> "In the old days, the doctor was like a king. He told the patient what needed to be done. Now it is more a guiding and supporting role. You also need to advise the patient in what choices to make. That is the new leadership compared to 20 years ago." (R15).

Another important element that was often mentioned is that every medical specialist carries a societal responsibility. Every medical specialist should provide the best care for patients but should also be aware of the costs of this care. Many respondents mentioned that the most expensive care is not always the best care.

> The patients sometimes want different things than society. Society want to have cost effective care but the patient only sees their own problem. You need to show leadership in this. You need to listen to the wants and needs of the patient and try to balance this out with the needs and wants of society. If you do this the patient feels heard while costs are contained. (R5)

In other words, a medical specialist should have excellent medical expertise, but they must also decide on the most efficient care for their patients. As stated in the above quote, communication skills and empathy are essential. Moreover, respondents mentioned that in an acute situation, the medical specialist is the main responsible person and must show medical leadership in making critical decisions and delegating tasks to others. The respondents indicated that medical leadership in the day-to-day job leads to an improvement in patientcare, a shift in healthcare toward being more cost efficient and a general improvement in the satisfaction of all people involved in the job.

Personal leadership

Finally, a few respondents (all of whom had received medical leadership training) stated that medical leadership is also expressed in the way one acts toward oneself. The majority of respondents who mentioned this type of leadership did so at the end of the interview when asked "what would you say to the next generation of physicians about medical leadership?" After reflecting on this question, the respondents indicated that personal leadership is also a type of medical leadership.

> Regarding medical leadership? Take care of yourself and protect yourself, so be a leader for yourself. Do not work yourself to death. Start working part-time as a woman, as a man too by the way. Especially with the meetings in the evening. If you can't distance yourself from it in the weekends, then it keeps going. You won't be able to provide the high quality care. There are many burnouts amongst young physicians. (R19)

Three main aspects were mentioned in this category. First, because the profession of a medical specialist is a demanding job, it is important for a medical specialist to show leadership in setting personal boundaries, as stated in the above quote. The ability to delegate tasks and knowledge of personal limits are important in this area. In addition, medical specialists in partnerships are not facilitated by a structure of career planning. As such, one aspect of medical leadership is taking charge of one's own career and "doing things that energize you" (R18). Finally, respondents also mentioned that medical leadership revolves around getting to know oneself—in terms of both strengths and limitations—and getting to know others by creating awareness of different personalities and methods of working. Many respondents indicated different personalities by referencing colors (e.g., DISC personalities), showing that not every medical leader acts the same. According to the respondents, personal leadership results in better teamwork, work-life balance, personal development and job satisfaction.

The figure below summarizes the four perceptions of medical leadership.

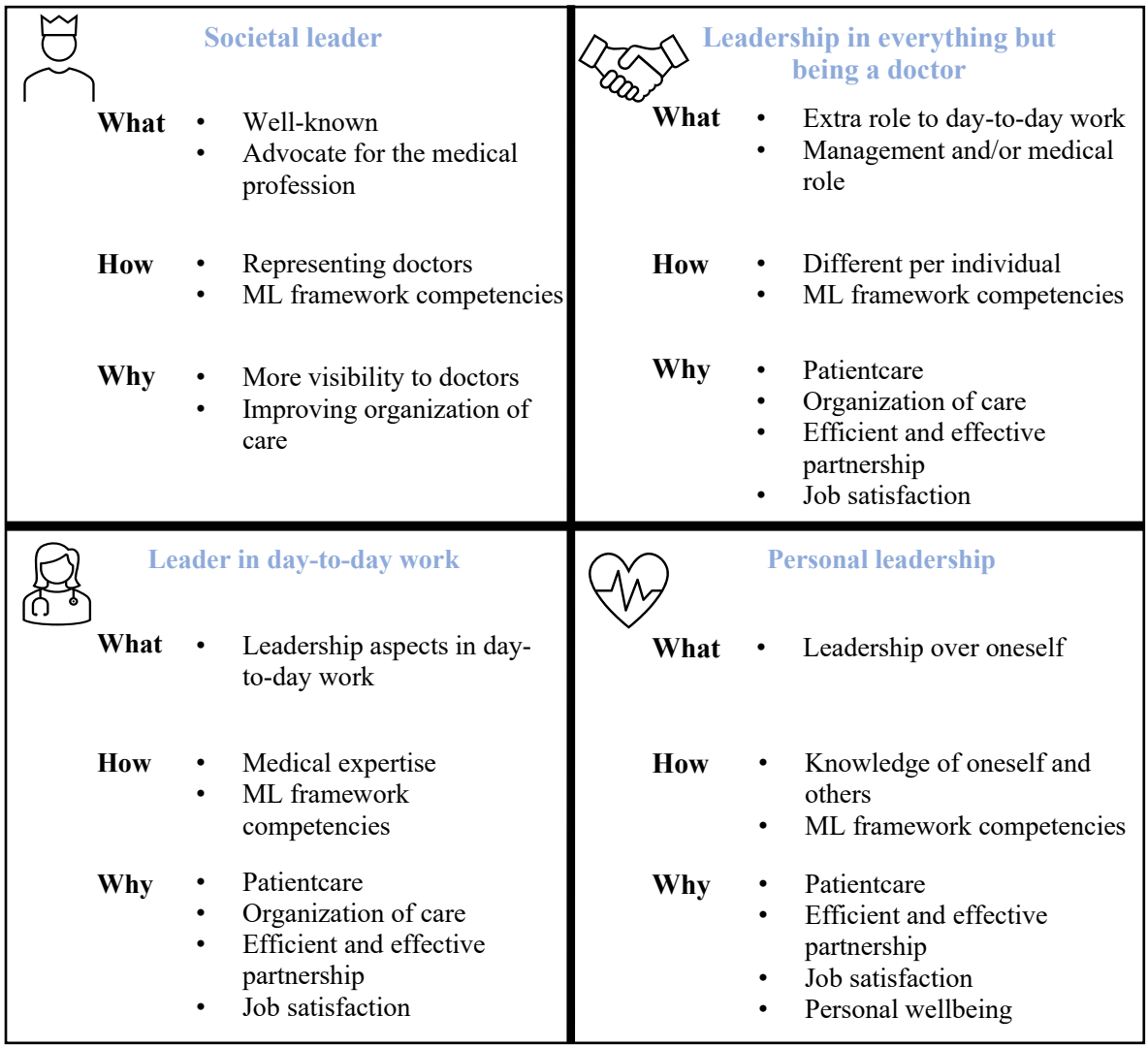


Figure 4: summary of medical leadership perceptions

4.2 Medical leadership behavior

All respondents were asked whether they expressed medical leadership behavior themselves. In their description of their perception of medical leadership, many respondents stated that every medical specialist can be a medical leader in their own way. However, when these respondents were asked "what do you do regarding medical leadership?" the initial response of some respondents was "the funny thing is that I don't consider myself a medical leader. I see myself primarily as a doctor, and I can always fall back on that" (R3). Moreover, this question helped some respondents to reflect on their profession. For example, some respondents stated that "I see myself as a doctor, not as a medical leader. Well, when I think about it longer, right now maybe I'm a medical leader in my daily work" (R7). This indicates that the perception of medical leadership changed when some respondents began to reflect on their own behavior. Other respondents who had a clear idea of medical leadership gave examples of their own medical leadership behavior as a reference.

The respondents who stated that they display medical leadership behavior described this behavior in reference to various types of medical leadership. Some respondents also referred to their past experiences in management roles. In addition, most respondents were asked if they could grade their medical leadership behavior from 1–10. Most respondents were hesitant to grade themselves. A follow-

up question asked about the respondents' strong points and points of improvement in reference to medical leadership. The responses to this question were different for every respondent.

A societal leader

None of the respondents indicated that they display medical leadership behavior as a societal leader.

Leadership in everything but being a doctor

Some of the respondents stated that they express medical leadership behavior in extra activities or roles, either in management or in extra medical-related roles. These respondents were asked what their role was and what characterized their medical leadership behavior.

Management

Some respondents indicated that they show medical leadership behavior in management roles, such as being the chairperson of the partnership, a board member of the Cooperation or other roles. A frequently mentioned characterization of medical leadership behavior was creating a support base for change. To create this support base, many of the respondents with a management role stated that, in addition to their patientcare work, they also work on motivating colleagues and other stakeholders. Due to the equality principle of a partnership, bottom-up decision-making is an important element in this type of medical leadership behavior. However, the respondents also stated that it is impossible to have 100% support regardless of how good a medical leader is, as some people are resistant to change.

> That is a hard question. Regarding management, I don't consider myself performing very well. I'm not very competent in all the numbers. (R12)

An often mentioned characterization of medical leadership behavior was creating a support base for change. To create this support base, many of the medical leaders in a management role were, apart from their patientcare, working on how to motivate colleagues and other stakeholders. Due to the equality principle of a partnership, bottom-up decision-making is an important element in this medical leadership behavior. However, the respondents also stated that no matter how good of a medical leader one is, one hundred percent support base is not possible, as some people are resistant to change.

> When starting an initiative you need to create a support base in which people feel heard. … Someone needs to see the added value of it. (R2)

The respondents also mentioned that a clear vision is important for an effective partnership. When a medical leader in a management role creates a collectively shared vision, everyone involved knows what they are working for. This also allows the chairperson to ensure that all partners fulfill their responsibilities toward achieving the vision. Because there is no hierarchy within partnerships, a shared vision and goals ensure that partners can hold each other accountable for their results and behavior. The respondents stated that due to this accountability, it is essential for a medical leader to be able to both give feedback and receive feedback from others. They also mentioned that trust between partners is essential.

> You need to make sure that you are a trustworthy partner towards your partnerships and the hospital. If you are in charge of something, you need to do it. And I need to trust that every partner does what he/she is supposed to do. (R3)

In addition to streamlining the internal dynamics within the partnership, medical leadership behavior was characterized by listening to and supporting other personnel. The respondents indicated that a medical leader should be concerned not only with patients but also with the supporting staff. The respondents recognized that the job satisfaction of all colleagues, including the supporting staff, is essential to achieving good results.

> You need to listen to the supporting staff as well. You should be concerned with their needs, worries, performance and give them compliments. … I think that I accept my colleagues and the supporting staff and see their individual value. I accept that what is true for me is not necessarily true to them. I can listen and make concessions. (R20)

There is a clear distinction between respondents who have done a medical leadership (or similar) training before and the respondents who did not. The first group has a clear view on what their medical leadership behavior is and how they express it. For example, communication techniques are often mentioned as ways to motivate others. These are seen as 'tools' they can use. The second group who did not participate in medical leadership trainings mention that they show medical leadership behavior based on their gut feeling. "You do this based on a gut feeling. I do this with the best intentions but that won't always mean it is the best way" (R1). These respondents often state that personality plays a role in which some medical specialists are more prone to act as leaders than others. Moreover, the respondents also indicate that medical leadership behavior entails learning by trial and error.

> I don't know how to do this. We will find out if it works or not after a while. (R10)

Medical

Many respondents indicated that, due to the equality principle of their partnership, they are required to do extra activities, such as taking part in the quality committee or writing protocols. These respondents stated that they show medical leadership behavior by taking part in these extra responsibilities. A clear vision was mentioned as important for this type of medical leadership behavior. For example, a member of the quality committee must know how to measure quality and know what the quality standards are. Similarly, when taking on the role of an educator, one must have a vision for how the next generation of medical specialist should be trained. Coaching ability and communications skills were also mentioned as important irrespective of the extra activity that the respondents were involved in. Finally, showing initiative to improve healthcare, even if it is only a small step, was characterized as medical leadership behavior.

> For example, starting a scientific research. That is what I did. You need to take initiative and take charge of this. On this micro level, I show medical leadership behavior. (R13)

In the medical aspect of 'leadership in everything but being a doctor', the respondents felt more comfortable than in management. The following respondent stated that medical leadership behavior is shown in the role of educator. "I give myself an 8 in supervising" (R19).

Leadership in day-to-day work

The respondents' perceptions of medical leadership in day-to-day work were very similar to their descriptions of their own day-to-day medical leadership behavior. This is because every respondent considered themselves to be a doctor, in which leadership behavior is naturally displayed.
The respondents who stated that they show medical leadership behavior in their day-to-day work were all confident in this leadership behavior in relation to their medical knowledge and experience. This expertise was frequently described as the result of a learning process of trial and error:

> Someone who has performed 6000 hip surgeries does a better job than someone who had done 100 hip surgeries. (R2)

According to the respondents, a key element of this type of medical leadership behavior is good preparation. A doctor's duty is to prepare consultation meetings, despite the fact that this must be done in their free time. If consultation meetings are well-prepared, patients can be better guided in the treatment process. Patience, the ability to listen, empathy and communication skills are all key competencies. In addition, a good medical leader is able to monitor time well in a consultation. It is important to ensure that a patient feels heard while also keeping in mind that the maximum time for a consultation is 10 minutes. According to the respondents, medical leadership behavior in day-to-day work involves taking charge of the treatment process while also providing cost-efficient care.

Personal leadership

Very few respondents indicated explicitly that they showed personal leadership behavior. To be specific, not all respondents who perceived personal leadership as a type of medical leadership also expressed this behavior.

> Medical leadership is also about setting personal boundaries. I'm terrible at that. (R4)

The ones who were showing personal leadership stated that it was important to monitor one's energy and to set personal boundaries. This is necessary to persevere in a demanding job.

> It is about awareness of your personal energy. Not staying in the rat race, and thinking at 12 o'clock oh I needed to go to the toilet. … Dividing your energy over the day and make sure to have some energy left when you leave work. (R23).

Not displaying medical leadership behavior

A few respondents, many of whom are physicians with a longer tenure, stated that they are not medical leaders. These respondents often considered medical leadership to be a leadership position in the partnership or a management role. These respondents stated that they are "just" medical specialists focusing on patient care.

> I never had the ambition to do management activities. I like my specialty and having contact with patients. Everything around that doesn't interest me a lot to be honest. (R8)

The fact that these respondents do not consider themselves medical leaders does not mean that they are not involved in committees, for example. As stated previously, every partner in a partnership is required to be involved in some extra activities.

The following figure summarizes the corresponding behavior to the four medical leadership types.

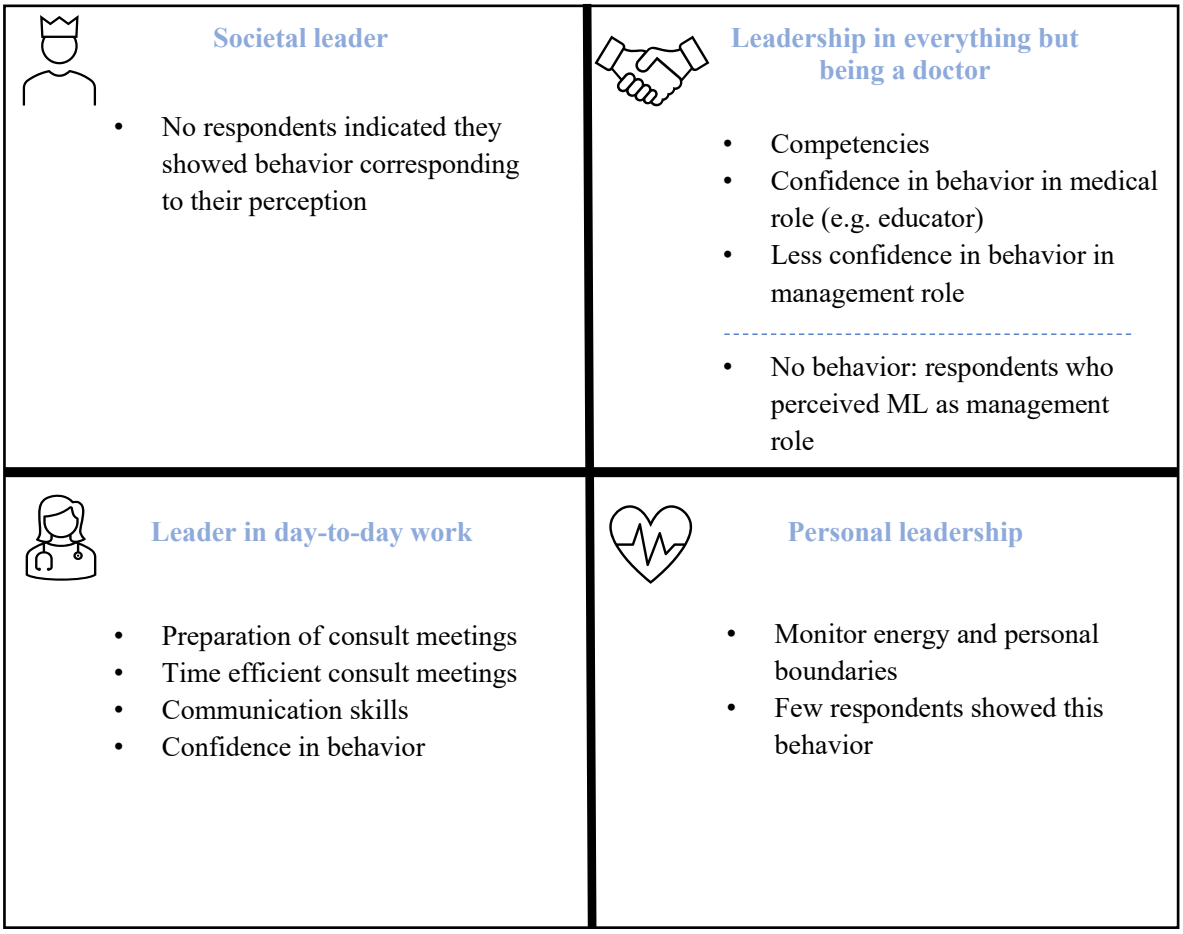


Figure 5: summary of medical leadership behavior

4.3 Hindering and stimulating factors: AMO framework

Respondents were asked about the hindering and stimulating factors they have experienced in medical leadership. These factors are structured into three categories according to the AMO framework: ability, motivation and opportunity. In each category, the hindering and stimulating factors for each type of medical leadership are described.

4.3.1 Ability

The ability aspect of medical leadership was a category that the respondents had a strong opinion about. Those who followed medical leadership trainings were also more aware of the concept.

First, respondents reported that a discrepancy exists between the knowledge and skills that medical specialists are required to have and the actual knowledge and skills that they are trained in, irrespective of the type of medical leadership. They stated that medical school mostly focuses on the acquisition of medical knowledge.

> We are only taught in medical knowledge. But you also need to learn how to work cost efficiently. I had no idea how much things cost. Or how to talk to the health insurance companies or how to work together with other disciplines or with the board of directors. (R9)

Nevertheless, almost all respondents felt that medical leadership is something that is trainable. The respondents indicated that some personalities are more inclined to leadership than others but that everyone can be trained in leadership skills.

Leadership in everything but being a doctor

Almost all respondents indicated that they felt that they had a lack of knowledge and skills to perform this medical leadership behavior adequately. The most mentioned aspects in which the respondents experience a lack of knowledge in are: healthcare finances, healthcare management, writing business cases and project management and change management. Less frequent mentioned fields are: marketing, psychology (motivate others), strategic management (how to develop a vision and a mission), ICT, performance management and human resource management. In addition, the respondents indicated they experienced a lack of skills in: negotiation, management skills, communication skills, group reflection, delegation of tasks and provision of feedback.

The respondents often stated that management activities are executed by those who want to do them but that these are not necessarily the best people for the job. As a result, daily boards are sometimes not professional: “everyone does what they think is best.” Some respondents who were interested in management activities stated that they educated themselves in the relevant knowledge and skills by reading books and following trainings. These respondents stated that they did this due to personal interest but also felt that it is necessary to be able to perform the tasks adequately: “I felt like my tool box was empty in that area” (R1). The trainings that respondents followed included medical leadership training, mindful leadership training, healthcare MBA and various management trainings (negotiation, healthcare management etc.). All respondents who followed the trainings were very positive about them. Other respondents stated that due to time and money constraints, they were unable to prioritize attending management trainings and instead mostly attended medical trainings.

Educator

All respondents indicated that in order to become an educator, all medical specialists need to follow teaching trainings. These are mandatory. In this way, the respondents stated that this helped to adequately fulfil this role. Some respondents who are involved in teaching young doctors stated that they saw the knowledge gap that young doctors experience. Some respondents explained that they took initiatives themselves to educate in small bits of healthcare management, for example:

> They [students] don’t know how a health insurance company pays the hospital. They don’t know how we get our salary. They have no idea what aspects play a role in that. They don’t know anything about quantity agreements. I like to teach them this. That is part of medical leadership. (R22)

Other respondents stated that young doctors can attend partnership meetings to let them observe what working in a partnership means.

Leadership in day-to-day work

Some respondents who perceived medical leadership as being expressed in day-to-day patientcare and who had a longer tenure stated that they lack knowledge of how to conduct conversations with patients. These respondents felt that they had received excellent medical training but that it has been difficult to transfer information to patients, particularly at the start of their career.

> Now I talk to you about it for 45 minutes, I realize that when you start as a doctor, you can do a lot but know a little. You learn by trial and error and sometimes this can be a negative experience. … How do you manage your consults? You don't know how your colleagues work because the door of the consulting room is always closed. … You learn a bit from you teacher and then you develop your own style by trial and error. … In the end the consulting room is kind of a black box. (R7)

However, respondents with a shorter tenure indicated that they received a great deal of training in techniques for communication with patients. This is something that was introduced recently in medical school. However, these respondents did indicate that they have a lack of knowledge in healthcare finances despite being required to work in a cost-efficient manner.

Personal leadership

The respondents that expressed personal leadership behavior mentioned that they were all trained in this. Without training, they felt less competent in this. The respondents stated that in various management trainings more attention is given to personal leadership. However, these respondents also mentioned that it is important to prioritize these personal leadership trainings. All respondents were very positive about them.

> You can apply this to many aspects. I give my kids also tips and tricks about communication or how to deal with your teacher. Medical leadership can be beneficial in all facets of life. You learn a lot about yourself, about your strengths and weaknesses. You grow as a person. Also when things don't go as planned. I recommend it to everyone. You should not do it alone but with the group. (R16)

Ideal situation

Many respondents argued that every medical specialist should be trained in medical leadership knowledge and skills. In addition, respondents who feel that every medical specialist should be a medical leader stated that leadership courses should be more integrated in the personal development of doctors. Many of the respondents who have followed management or leadership trainings are convinced that the knowledge and skills that are taught are useful for everyone and in every aspect of life: "Apart from work, I have kids and a wife. I learned that I negotiate all day" (R10). These respondents explained that these skills and knowledge are important because doctors are educated medically until they graduate but are often overwhelmed by the extra tasks and activities in which a doctor must be involved, such as healthcare costs, once they enter a partnership. The respondents stated that medical specialists must develop medical leadership knowledge and skills on their own after graduation.

These respondents were also asked whether they felt that the development of medical leadership should be someone's own responsibility or facilitated by another party (e.g., by the partnership or hospital). There was no consensus among the respondents over whether medical leadership should be trained in medical school or afterward. Most respondents stated that in an ideal situation, the partnership would provide more time for management activities and for educating oneself in medical leadership. In addition, because the hospital and the partnership are interdependent, it is to the benefit of the hospital that medical specialists are competent medical leaders. Many respondents stated that the hospital should facilitate medical leadership development. Moreover, some respondents stated that both medical specialists and the board of directors in the hospital should be trained in leadership knowledge and skills. According to the respondents, this will help the two parties "speak each other's language better."

The respondents had varied opinions on whether these trainings should be voluntary or not. Some respondents stated that personal interest in management trainings is important and that nobody should be forced to follow the trainings. However, they also stated that it is important for medical specialists to be aware of that these trainings exist, as many are unaware of them and the potential benefits that they can provide. Other respondents stated that all medical specialists should be required to follow medical leadership trainings.

> Of course you need to train all specialists and everyone should be taking these trainings. Chemistry was not my favorite course at school, but I'm a doctor so I should have this knowledge. This is the same to medical leadership. You cannot simply do something and see where it takes you. It is too important for that. (R12)

Experience

Respondents with a longer tenure mentioned that both their medical and non-medical experience helped them in their medical leadership. They stated that they learned by trial and error and now experience more a feeling of 'been there done that'. The experience in both extra activities and medical work stimulates them to improve their medical leadership.

> I learned by trial and error. I developed my own style after years of experience. That style is not based on a theoretical background. (R7).

> When you start you break out in cold sweat. You think that everything is very complicated but gradually you find ways to get things done or to influence things. (R8)

4.3.2 Motivation

All respondents stated that in order to be able to be a medical leader, one must feel intrinsically motivated to do so, irrespectively of the type of medical leadership. Most respondents define their motivation for medical leadership as a passion, an inner drive, a hobby or an ambition.

Leadership in everything but being a doctor

The field in which a medical specialist expresses medical leadership behavior depends on their personal preference. Most respondents stated that it is important to follow ambitions, which can vary in medical leadership in a teacher role, science, management or patient care.

> You really need to enjoy it, otherwise you will be burned out after 2 years. (R16)

However, some respondents added that intrinsic motivation does not guarantee competence. These respondents stated that medical leadership requires one to go “all-in” because leadership behavior is often not stimulated by an external force but by an intrinsic motivation to perform well or to improve.

> I don’t think money is a motivating factor. (R8)

None of the respondents mentioned money as a motivator for displaying medical leadership behavior. This is because income is not generated directly from medical leadership. Instead, medical leadership behavior, especially in terms of extra activities, is often an investment of time and money. In some partnerships, medical specialists receive half a day per week to spend on medical leadership activities. However, the medical specialist is not performing patient care during this time and is therefore not generating income.

> One must feel intrinsically motivated. It costs time and money. Especially the latter, is for a lot of people an issue. So it should be an investment from both sides. (R20)

Some respondents were also asked about what would happen if no partner is motivated to take on certain roles or activities. The respondents mentioned that partners should take on the role that they enjoy the most and that they are most interested in. However, this sometimes results in no partner being willing to take on a certain role, especially in small partnerships. In such cases, one person typically “sacrifices” themselves to take on this unwanted role after thorough discussion between partners. Examples of reasons why a role may be unwanted are that it demands a great deal of time, can cause a great deal of stress or requires certain capabilities (e.g., networking and negotiating) that medical specialists are not necessarily trained in. Moreover, the respondents stated that not doing the undesired activity or activities is not an option because the current healthcare system requires medical specialists to perform all activities. The following quote describes an example of such a situation.

> We now have a new chairperson of the partnership but that person initially did not want to do it because of the family situation. But eventually, someone needs to do it. Now we just hope that person will perform well. (R9)

The respondents who experienced similar situations in the partnership stated that these situations are unfavorable.

Leadership in day-to-day work

As this type of medical leadership is very closely related to the choice of the medical profession, intrinsic motivation is very important. The respondents also stated that if a partner is mostly focused on providing patientcare and has a limited amount of extra tasks, the medical specialist still need to have an inner drive to be involved in the partnership and healthcare. Moreover, commitment to a long-term vision and mission is essential for achieving goals and ultimately healthcare innovations.

> But in the end, I became a doctor and I love it. I would not not be a doctor. I think working with patients is fantastic. But I do experience that if you develop medical leadership competencies that you can help more patients, instead of one, because you try to change the system. (R12)

Personal leadership

The respondents who displayed personal leadership behavior were passionate about this. However, some also stated that it initially felt as a necessity to persevere in the demanding job.

> I want to continue my personal development. … The most interesting part is that when you work with colleague one or patient a, you are exhausted the rest of the day. But someone else can energize you. How is that possible? (R23)

No medical leadership behavior

The respondents who felt that they did not display medical leadership behavior stated that they never felt the motivation and interested to do so. These respondents considered medical leadership behavior to be management activities. The hindering element that some respondents mentioned was that it sometimes feels as if they are expected to be motivated to do "everything but being a doctor" despite their lack of interest. Moreover, they felt that their personality was different than a "leaders' personality." These respondents also mentioned that they felt that a lack of knowledge affected their motivation to be involved in medical leadership.

> If you don't have a lot of knowledge, you are less motivated to be involved and you enjoy it less. (R5)

4.3.3 Opportunity

When asked about the hindering and stimulating factors that they experienced in the work context of medical leadership, most respondents mentioned time as a hindering factor. Moreover, a majority of respondents mentioned support as a stimulating factor. Both factors are discussed below in reference to the different medical leadership types.

Time - hindering

The respondents who did not consider time to be a hindering factor explained that medical leadership is part of a medical specialist's job and therefore an element that a medical specialist must deal with. Nevertheless, many respondents did consider time a hindering factor. The respondents often stated that they felt as if every medical specialist must be a "superman" in the sense that they must know everything and able to do everything. The respondents stated that this ability to do everything is an illusion and that balancing ambitions and resources (time and money) can be a challenge, irrespective of tenure.

Leadership in everything but being a doctor

> Time. These kind of things are all done in your day-off or in weekends or evenings. You know, the older generation determines the culture in which one works. When you are young you presume that this is the way to do things. And that says that all these extra things are done in your own time. During your work time, you do your patient care. I expect when I get more space in my day to execute these tasks, I would perform better. (R1)

The above quote illustrates that knowledge of how to balance patientcare and "leadership in everything but being a doctor" is transferred from one generation to another. In some partnerships, this idea of balance is different because the partnership provides half a day a week to spend on extra activities (both

management and medical). Most respondents indicated that this is not enough time but that they are happy to at least receive some time for these activities. Some respondents also stated that working in evenings or weekends is a consequence of the high salary they receive. Income is generated from patientcare and there is typically no monetary compensation for extra activities.

> I first worked fulltime but when I got a management role, I decided to work only 3 days so that I could spend the rest of the days on the management role. I wanted that. I did not receive any monetary compensation for this. I did this next to my patient care. (R16).

Some respondents were also asked whether they are willing to earn less income if this meant they would receive more time to work on extra activities. All respondents who were asked this question answered "yes." They emphasized the importance of collectively deciding priorities and making choices.

Some respondents mentioned that they would like to have more time for reflection to improve teamwork and individual performance.

> Just to think about or reflect alone or in the group about what goes right and what can be improved, and how we can improve. In my case, there is no time available for that. (R14)

Work-life balance

Respondents also reported that they struggle to balance patientcare, medical leadership and their private life. Some respondents work part-time to cope with the pressure. Others stated that doctors are often expected to do everything but that it is necessary to set boundaries and prioritize. Work-life balance was mentioned specifically by some respondents as a difficult element in their work. The respondents realize that rest is important to provide the best care but also that engagement in the partnership and patientcare sometimes comes first.

> There are two marriages, the partnership and at home. You cannot do both at the same time. (R6).

Leadership in day-to-day work

In day-to-day patient care, some respondents stated that they have 10 minutes for a consultation and that this is sometimes not enough to show adequate medical leadership behavior.

> We got 10 minutes per patient. It used to be 5 minutes. … But still it is sometimes not enough to really apply shared decision making with patients. Some patients understand everything well but others don't. … I would like to do something about that time management. (R15)

Personal leadership

The respondents who engaged in personal leadership stated that they are very aware of how to spend their time. They stated that it can still be challenging to balance both their work and personal life but that leadership trainings have helped them to do so.

Computer systems – hindering

The computer systems are designed to maintain bureaucracy and to monitor the decisions that a doctor makes. However, these systems tend not to be very flexible. This is only mentioned in 'leadership in day-to-day work'.

Support – stimulating

The stimulating factor of support was mentioned by many respondents. Because the respondents did not associate the different types of medical leadership with specific types of support, no differentiation according to medical leadership type is described. However, four general levels of support were mentioned by the respondents: management support, team support, peer support and support from the hospital's board of directors.

Non-medical support

The respondents indicated that non-medical support is needed in every aspect of their job. They require support from the supporting staff in both their department and the hospital. Respondents indicated that innovation projects and the organization of healthcare would be difficult without this supporting staff.

> Your team, your assistants and nurses. Otherwise the projects won't be successful. You need a good collaboration with all your stakeholders. (R16)

Managerial support

Furthermore the interaction with managers, who are not medically educated, and medical specialists is also mentioned often. There is a division in the respondents perception about this aspect. Some respondents explained the effective interactions with managers and medical specialist, while other respondents state that the struggles they experience with managers.

The successful interactions between medical specialists and managers are often described as "speaking each other language" and "complementing each other". The antithesis applies for the respondents who struggled. They felt the gap between the managers world and the physicians world. In addition, the managerial support to write business cases or project plans was insufficiently competent or available.

Some respondents indicated that medical specialists can be the creative thinkers and seeing opportunities. The managers should complement this process by being a sparring partner in terms of costs, marketing and effectiveness. One respondent explained the effective interaction with the partnership manager and the medical specialists as follows.

> The partnership manager should not comment on how I should do my patient care. But he can say we should have a vision and make a long-term plan. … He does things that we cannot do and he can also do it better. We then go to the board of directors. If I should do all those things by myself in my free time it will turn out into nothing. That is the way to professionalize. … Do not imagine that a medical specialist has any knowledge of HR. We do have a say in it but the partnership manager is highly involved in this. The recruitment and feedback meetings. That is how you professionalize things. That side is with the partnership manager, so that we can concentrate ourselves on the patient care. (R15)

Team building and diversity

Many respondents indicated that diversity within the partnership is important. They explained that partners must complement each other in personality, experience and skills because no individual partner is a "superman" who can do everything. Moreover, the respondents indicated that a balance should exist between "leadership in everything but being a doctor" and "leadership in day-to-day work."

In addition to the diversity of the partnership, team building was also mentioned as a stimulating element. The team spirit of the partnership and the ability to collectively work toward a shared goal

were mentioned as stimulating factors in medical leadership. The partners must be able to help each other within the group.

> It is about the performance of the team. Marco van Basten did not need to defend and Hans van Breukelen didn't need to score. But it was a fantastic team. It is about who does what and one's strengths and weaknesses. (R18)

Peer support

Peer support (outside the partnership) was also mentioned as stimulating for respondents, such as in the form of intervision groups or a role model. Peer support ensures that difficulties in both work and private life are discussed, and it can also serve as an inspiration to improve medical leadership.

(Lack of) support from the hospital's board of directors

Many respondents explained contextual aspects of the dependency between the effectiveness of the partnership and the hospital's board of directors. The respondents gave background information about the conflicting stakes and elaborated further on the benefits of support of the hospital's board of directors.

Two main factors in this interaction are mentioned namely, on the one hand, the conflicting stakes and, on the other hand, the dependency between the partnership and the hospital. First, the respondents explained that part of their success to improve healthcare is dependent on the board of directors of the hospital. This interaction was specified as a balancing act because the board of directors of the hospital is not their employer but a stakeholder for the partnership. In this way, the board of directors, the Cooperation of medical specialists and the partnership need to collaborate and negotiate regarding medical topics and financial aspects. The contradicting stakes are mentioned as a barrier for improvement. For example, a respondent stated that the board of directors is often thinking from a hospital finance perspective whereas medical specialists are primarily arguing from a medical perspective.

> As medical leader you can have great ideas about things and how to implement these. But you are often in conflict with the board of directors. That you cannot implement your plans the way you want to. I think that medical leadership can be emotionally demanding sometimes. You need a lot of patience with certain people. Sometimes that can be exhausting for the greater goal. (R3)

In addition, the bureaucratic system within the hospital is mentioned as a barrier for change because it slows down improvement processes. Moreover, some respondents stated that regarding financial topics, the hospital is run as a business but "as a business it is quite amateurish" (R12). To be specific, the hospital culture is described by some respondents as conservative and containing a mindset of 'cannot do' instead of 'let's see what we can do'.

On the other hand, respondents mention that they realize that they are an essential part in the reputation of the hospital. The performance of the partnership is also effecting the reputation of the hospital. In turn, this reputation is of value to, for example, health insurance companies who provide the finances but also innovation projects of external stakeholders. The respondents indicated that their effort to improve their partnership also serves a greater purpose which is improving the reputation of the hospital. Both the partnership and the hospital are dependent on each other and should support each other.

4.3.4 Other

Respondents mentioned also other hindering factors that do not fall under the opportunity factor.

Waiting lists

A few respondents indicated that the willingness to shorten waiting list is very high but there is no money available to do so. X amount of money is available per month for care, irrespectively of the demand of care.

New measures from the board of directors of the hospital

Some respondents stated that the medical profession is increasingly designed to keep up with checklists of the board of directors of the hospital. For example, the quality standards of care or new projects. These new measures increase the work pressure and amount of meetings one needs to attend.

4.4 Context: Partnership and hospital-employed discussion

As stated in the method chapter, there is a political discussion on whether medical specialists should all be hospital-employed. Even though this is not the topic of this research, almost half the respondents mentioned this discussion without being asked about it. Most respondents started this topic by stating that probably more medical leadership is shown amongst medical specialists in a partnership.

> I think that in a partnership more leadership is shown. More commitment at least. Also more knowledge of financial processes, and how it all works with healthcare processes and health insurance companies. And that you also understand how important these things are. That works better than in hospital-employment. (R5)

In addition, partnerships often have a lot more freedom to organize and structure their work because they do not have an employer. That makes every partner responsible for the performance of the 'business'.

> The problem [with hospital-employment] is that you take out the drive for improvement. That has something to do with medical leadership. The physicians in a partnership have the idea that they should improve the hospital. (R2)

An often mentioned reason is that in a partnership most healthcare improvements are set up after "the billable hours" (R17), whereas hospital-employed specialists are including these activities into their work day. The respondents mention that they also earn more money than hospital-employed specialists but that this makes up the balance for all the extra "non-billable" hours in weekends and evenings. In addition, the respondents indicated that when they are required to transition to hospital-employment they will not do as much work in the evenings or weekends.

> I won't take meetings or calling with you after 5 o'clock. Instead, I will do that at 3.30 p.m. so that I can go home earlier. (R19)

> We do scans in evenings and in weekends and we need to process these. Maybe the next generation wants to be hospital-employed and want to earn less to have more time to live a life. That is a valid reason. But I do think that where you have 1 independent medical specialist, you need 2 hospital-employed specialist. Healthcare won't get cheaper I presume. (R9)

4.5 Summary of results

The table below illustrates a summary of this chapter. The four leadership types are described on top. For every of these types, on the left side, the 'what', 'how' and 'why' components are differentiated, followed by the corresponding behavior and the different AMO factors.

	Societal leader	**Leadership in everything but being a doctor**		**Leadership in day-to-day work**	**Personal leadership**
What	- Well-known - Face of profession - Advocate - Diederik Gommers - Marcel Levi	<u>Management</u> - Partnership representative - Role model - Coach - Finances - Performance management - Innovation	<u>Medical</u> - Educator - Coach - Scientists - Innovation	- Taking charge of the care process - Main responsible person	- Self-awareness - Career development
How	- Taking charge - Promoting interests - Representing doctors - Clear vision	- Taking charge - Observe and act - Vision - Motivator of others - Communication - Helicopter view - Negotiate - Delegate	- Taking charge - Observe and act - Motivator of others - Communication	- Delegate and work multi-disciplinary - Communication - Empathy - Setting boundaries - Motivator of others	- Delegate - Setting boundaries - Rest - Communication - Interest in others
Why	- More visibility to doctors - Improving organization of care	- Improving patient care in the short-and long-term - Improving the organization of care - Partnership effectiveness and efficiency		- Improving patient care - Cost efficient care - Job satisfaction	- Better team work - Better work-life balance - Personal development - Job satisfaction

		- Connecting stakeholders - Improving job satisfaction					
Behavior	No behavior	Most respondents indicated that their actual medical leadership behavior is not coherent to the perception.	Because this involves the medical side of the profession, respondent's perception matched their behavior	Respondents recognized leadership aspects in their daily work. This is why their behavior and perception of this type of medical leadership match. They feel confident in this type of medical leadership.		Not all respondents who recognized this type of leadership also expressed this behavior. Very few respondents showed this behavior.	
Ability		<u>Hindering</u>	<u>Stimulating</u>	<u>Hindering</u>	<u>Stimulating</u>	<u>Hindering</u>	<u>Stimulating</u>
		Lack of knowledge and skills	Gaining more knowledge and skills	Lack of knowledge and skills in communication and cost efficiency	Gaining more knowledge and skills	Lack of knowledge and skills	Gaining more knowledge and skills
		Medical leadership trainings are expensive and time consuming	Having experience		Having experience	Medical leadership trainings are expensive and time consuming	
		Discrepancy between expectancy and ability				Discrepancy between expectancy and ability	

Motivation		Discrepancy between expectations and motivation	Personal interest, ambition or passion		Personal interest, ambition or passion		Personal interest, ambition or passion
			Inner drive to do better and make the world better		Inner drive to do better and make the world better		Inner drive to do better and make the world better
			Money does not play a role				
Opportunity		Time for: ▪ Innovations ▪ Extra activities ▪ Meetings ▪ Reflection ▪ Education	Support: ▪ Peer ▪ Intervision ▪ Teambuilding ▪ Managerial ▪ Hospital's board of directors	Time for: ▪ Patient care ▪ Reflection	Support: ▪ Peer ▪ Intervision ▪ Teambuilding ▪ Managerial ▪ Hospital's board of directors	No time for reflection	
		New measures from the board of directors		Computer systems			
				Waiting lists			
Other		Personality – certain personalities are more prone to leadership than others		Personality – a certain type of personality is more prone to leadership than others		Personality – certain personalities are more prone to leadership than others	
Observation		Larger partnerships have more managers and production doctors		▪ Specialties that do patient consultations ▪ Respondents who do not have management ambitions		Respondents who have an interest in medical leadership	

5. Discussion and conclusion

In the previous chapter, the empirical was analyzed and described. This chapter connects the empirical data to the theoretical framework (5.1), whilst describing the theoretical implications and providing suggestions for further research. This is followed by an answer to the main question of this research (5.2). Moreover, practical implications in the form of recommendations are formulated (5.3). This is followed by an elaboration of the limitations of this research (5.4). Lastly, some final conclusions are given (5.5).

5.1 Discussion

A critical discussion is described of medical leadership perceptions, behavior and personal and situational factors. Moreover, this research has a number of implications for science, both for HRM literature and medical leadership literature. This section is structured using the different components of the conceptual model. 5.1.1 provides an integration of medical leadership literature and the typology of Wang et al. (2020), which is followed by an elaboration on the theoretical implications. 5.1.2 discusses the findings on role perception, behavior and personal and situational factors. This section also describes additional interpretations about the typology and AMO model. Finally, 5.1.3 elaborates on the discussion of the personal and situational factors and its theoretical implications.

5.1.1 Perception: integration of medical leadership literature and the typology of Wang et al. (2020)

This research investigated the conceptual ambiguity of medical leadership in literature and in practice. After gathering empirical data, the theoretical conceptualizations of medical leadership can be connected to the empirical data of medical leadership perception. This research used the typology of Wang et al. (2020) to structure individual perceptions. Wang et al. (2020) differentiated individual perceptions into what, how and why.

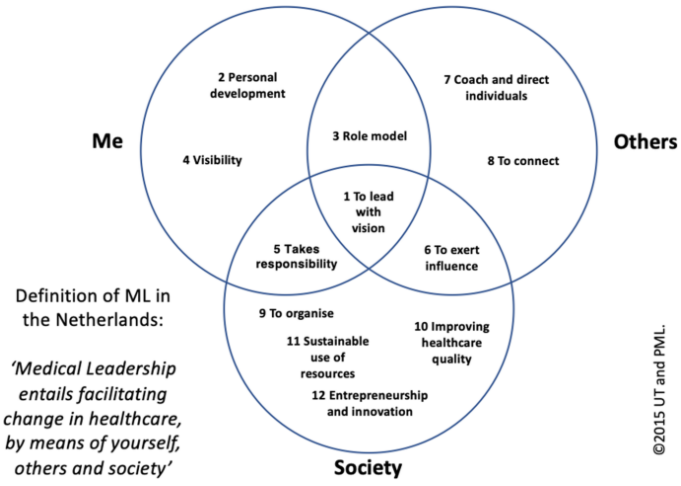
<u>What</u>

The ‘what’ aspect of the typology is concerned with the content or understanding of a concept, which can shape certain attitudes or behaviors. In the context of medical leadership, the “what” concerns perceptions of the role of medical leadership. Existing literature on medical leadership has identified two roles: the formal and informal role.

It seems that this distinction is valid in this research as well. From data analysis, in the ‘what’ aspect a differentiation is made between the formal and informal medical leadership role. As previous literature on medical leadership states, the formal medical leadership positions are often hierarchical positions, for example medical managers or head of departments (Berghout et al., 2017). This can be related to the ‘societal leader’ medical leadership type, in which well-known physicians are illustrations of this medical leadership type. This can be interpreted as the ‘heroic’ leader (Berghout et al., 2017), which seems the stereotypical perception of leadership. On the other hand, the medical leadership literature also states that medical leadership is an informal role which is displayed by every medical specialist. This research nuances this statement by further differentiating this informal role into the three medical leadership types of ‘leadership in everything but being a doctor’, ‘leadership in day-to-day work’ and ‘personal leadership’.

How

The "how" aspect illustrates the collective understanding of expectations and rewards for individual behavior. It was apparent in this research that different personality types and different work contexts can influence perceptions of how medical leadership should be displayed. Although this research cannot specify one type of behavior that is characteristic of medical leadership, multiple similar competencies were mentioned in regard to "how" medical leadership should be displayed. These competencies are all integrated in the Dutch Medical Leadership competency framework (Keijser et al., 2019).



All competencies in this framework are mentioned in the data of this research, sometimes using different wording. The competencies are also classified and given more nuance by using the typology of Wang et al. (2020). However, the competency "communication" is not included in the framework despite it being frequently mentioned by the respondents. This competency is mentioned in the CanMeds model (Keijser et al., 2019). Moreover, competencies 2 ("personal development"), 10 ("improving healthcare quality") and 11 ("sustainable use of resources") in the framework are not perceived as competencies in this research. Instead, these are defined as goals of medical leadership.

Overall, the competency framework offers a well-founded basis for the perception of "how" medical leadership should be displayed. However, the framework is meant to be compatible with every medical specialist, which is often mentioned as a drawback of the model. This can be confirmed by this research, which determined that medical leadership is tailored to each individual due different personality types and personal preferences. By illustrating the different types of medical leadership, this research complements the competency framework by adding more nuance. The table below offers a comparison between the Dutch Medical Leadership competency model and the medical leadership types outlined in this research.

Table 3: comparison between Dutch ML Competency Framework and this research's findings

Dutch ML competency framework	**ML type**	**What**	**How**	**Why**
1. To lead with vision	All		x	
2. Personal development	Personal leadership			x
3. Role model	All	x		
4. Visibility	Societal leader Leadership in everything but being a doctor		x	
5. Take responsibility	All	x	x	
6. To exert influence	Societal leader Leadership in everything but being a doctor		x	
7. Coach and direct others	All	x	x	
8. To connect	All		x	
9. To organize	Leadership in everything but being a doctor		x	

	Leadership in day-to-day work			
10. Improving healthcare quality	All			x
11. Sustainable use of resources	Leadership in day-to-day work	x		x
12. Entrepreneurship and innovation	Leadership in everything but being a doctor	x		

Why

Lastly, the 'why' aspect highlights the perceived goal of a concept. There is an overall consensus on what the goals are of medical leadership. These goals can be divided into three levels.

Table 4: Different levels of medical leadership goals

Levels	**Goals**
Me	▪ Job satisfaction ▪ Personal wellbeing
Partnership	▪ Effectiveness and efficiency ▪ Job satisfaction
Society	▪ Improving patientcare ▪ Organization of care ▪ Cost efficient care

Most often patientcare was mentioned as the primary goal, especially with little awareness of medical leadership. This means that the internal attribution (Wright & Nishii, 2013) is that medical leadership is a tool for quality enhancement. On the other hand, the external attribution (Wright & Nishii, 2013) of medical leadership is perceived as the compliance to standards of cost efficient care created by the external stakeholders. Interestingly, when there is little awareness of the concept, the 'why' of medical leadership seems to be mainly focused on achieving goals for either the patients or compliance to rules.

Furthermore, it seems that more awareness of medical leadership also brings more focus to the potential benefits for the individual (personal wellbeing) and the team (job satisfaction). As stated earlier, these individual and team goals are in the competency framework described as means to achieve better healthcare outcomes or change in healthcare. This interpretation fits the current communication style in the healthcare sector, which is very patient-focused (Federatie Medisch Specialisten, 2021). However, the fact that personal and team goals were considered outcomes in this research, highlights the notion that healthcare goals are considered broader than patientcare.

In sum, the integration of HRM literature on individual perceptions and the medical leadership literature shows that both disciplines can complement each other. In addition, the findings of this research stress the importance of awareness in the forming of a perception of medical leadership, in the terms of cognition, competencies and goals.

Implications typology of Wang et al. (2020)

First of all, the typology of Wang et al. (2020) provides a solid structure to study individual perceptions and is not limited to perceptions of implemented HR practices due to two reasons.

First, the scope of Wang et al. (2020) was limited to individuals' perceptions of top-down HR practices. However, this research illustrates that underlying theories of 'what,' 'how' and 'why' are still valid when there is no employer-employee relationship. As stated previously, this research argues for a broader scope of HRM literature, as argued by Lepak and Snell in 1999. The applicability of the typology of Wang et al. (2020) in this research illustrates that HRM literature is useful in many different employment contexts.

Secondly, the integration of the typology with the existing medical leadership literature in the previous section illustrates that the typology can be applied on other concepts than HR practices. This means that the typology is applicable to a broader range of concepts, due to the comprehensive body of underlying theories on, amongst others, sensemaking and information-processing (Wang et al., 2020). In this research, the typology helped to create more nuance and detailed data on the perceptions on medical leadership. Specifically, the combination of the three aspects of 'what', 'how' and 'why' provided a more complete understanding on for example, how present the concept of medical leadership was in the mind of physicians, what characterizes medical leadership and what not and how medical leadership can help to achieve goals on different levels. This also means that it is recommended in further research to use all three components when studying individual perceptions.

Despite providing more detailed data, the findings of this research illustrate that there is some overlap in the components. To be specific, the 'what' and 'how' component are not strictly distinctive. It seems that, for example, 'taking responsibility' can be considered a part of the 'what', while others state that *by* 'taking responsibility' medical leadership is shown which is more related to the 'how' component. Moreover, this overlap in components occurs also between the 'how' and 'why' components. On the one hand, the findings of this research illustrate that personal development is considered a separate goal in the 'why' component, while on the other hand, earlier research found that personal development can also be a tool to achieve healthcare goals, which correspond to the 'how' aspect. The overlap in components was not a problem in this research because the research method of interviews made it possible to capture these nuances, yet future research should not neglect this when using this typology on other concepts. The typology is a well-founded structure for individual perceptions but further research is needed to study the applicability of the typology in combination with other research methods (e.g. quantitative research).

Lastly, a valuable contribution of this research is its determination that not only is behavior shaped by individual perceptions but the opposite is also true: when an individual is confident in their own behavior, this can also shape their perceptions. In addition, it seems that with an unclear perception of medical leadership, the own behavior is taken as reference and in turn influences one's perception of medical leadership. Research on individual perceptions is now often focused on the mechanism of perceptions shaping behavior. For example, the process model of SHRM constructed by Wright and Nishii (2013) describes that perceptions of HR practices will lead to reactions in an affective, cognitive or behavioral way. In addition, also outside the scope of HR literature, individual meaning-making and perceptions can "act as a springboard to action" (Weick, Sutcliffe & Obstfeld, 2005, p. 409). It is therefore recommended that future studies should take the reverse mechanism also into account.

<u>Implications medical leadership literature</u>

Empirical data concluded that there is not one collective perception of medical leadership. Instead, four different types of medical leadership perception were found namely, 'the societal leader', 'leadership in everything but being a doctor', 'leadership in day-to-day work' and 'personal leadership'. Only the societal leader is perceived as a formal role, while the other three types are described as informal roles.

This is contrasting to the majority of the medical leadership literature which consider medical leadership as a formal leadership role (Berghout et al., 2017). This research recognizes that by studying independent medical specialists, formal roles are less available. Yet, the fact that informal roles are recognized most in this research highlights the notion of that medical leadership cannot be generalized across studies. To be specific, it is important that further research emphasize the unit of analysis regarding studying a formal or informal role in order to create conceptual clarity.

Furthermore, in the findings of this research it is often mentioned that medical specialists should adhere the type of medical leadership behavior according to their own interests and strengths. This means that some types of medical leadership are more applicable to a physician than another type, while for other physicians all medical leadership types can be of relevance. This emphasizes the notion that no more generic competency frameworks need to be developed, as Berghout argues (2020). Yet, it also emphasizes that medical leadership should not solely be considered as a reconfiguration of the whole medical profession (Berghout, 2020); it asks for more nuance than that. Instead, this research recommends further research to study medical leadership according to the four medical leadership types and to investigate whether some medical leadership types are more relevant to some contexts, in terms of specialties, tenure groups or hospital types.

5.1.2 Role perception, medical leadership behavior and personal and situational factors

The data analysis revealed that identification with the medical leadership types is important in order to show corresponding behavior. The ideal role perception and the actual displayed behavior are not always corresponding. First, a possible explanation is given on the identification with medical leadership, which is followed by an explanation of the (not) corresponding behavior according to the COR theory.

First, as the physicians indicated that they do not perceive themselves as medical leaders, a gap in role identity may be an influencing factor. This gap occurs when there is a mismatch with an individual's identity and the work that one needs to do (Andersson, 2014). The context of working in a partnership constitutes that medical specialists are all required to take on extra activities or roles. This research investigated whether these extra roles and activities have become a part of the medical identity. It can be concluded that generally extra roles and activities, that are related to management, are still perceived as extra to the patientcare, while more medical-related activities or roles (e.g. educator) can be more integrated in the day-to-day work which is less often experienced as extra. In the latter case, it seems that there is no 'violation' of the medical identity. Instead, when taking on managerial activities and roles, these are experienced as 'extra' as they do not constitute to the medical identity (Andersson, 2014). This means that 'leadership in everything but being a doctor' can also be interpreted as a hybrid-identity of a medical specialist and a manager.

Second, according to the COR theory, depending on the physician's role perception of medical leadership, an estimation is made of the demands and resources that are both present and needed to comply to this perception (Meijerink et al., 2018). Depending on the available resources, the physician shows either committed or disengaged behavior to medical leadership. This means that when the physician's perception is close to the primary medical job (e.g. medical leadership in day-to-day work), the physician may experience sufficient resources and may know how to gain more resources in order to display the corresponding behavior. This gain spiral may explain the coherence in medical leadership behavior and perception. Further reflection on this theory is given in section 5.1.3.

It can be concluded that the closer the medical leadership type is to the primary job of a medical specialist, the more coherent the behavior is to the perception. The figure below illustrates that

'leadership in day-to-day work' is closest to the job of a medical specialist, and has the most corresponding behavior. Additionally, 'personal leadership' can be integrated in day-to-day work and in managerial activities, which makes it less close to the job of a medical specialist and less corresponding behavior is displayed. The same applies to 'leadership in everything but being a doctor', specifically for the managerial part of it. Finally, no behavior was noted in the role of a societal leader, and it differs a lot from the job of a medical specialist.

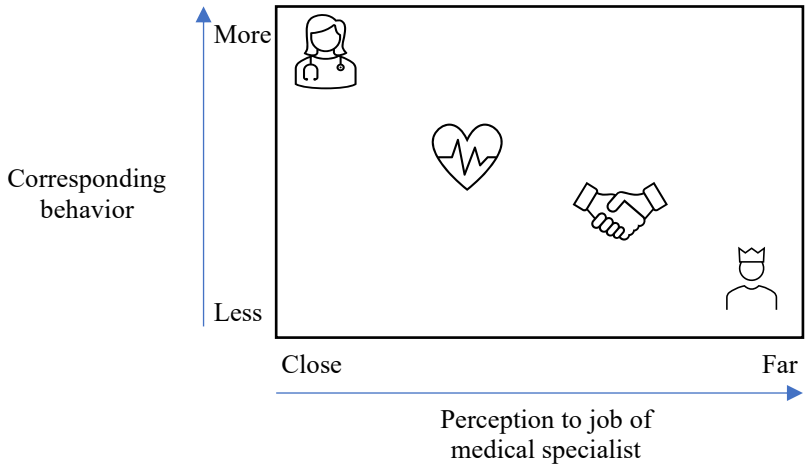


Figure 6: perception and corresponding behavior and medical leadership types[1].

Perception and AMO

Additional findings came to light after the data analysis with regards to role perceptions and personal and situational factors; it is not a one-way street. Instead, it seems that there is a mutual connection between two components ("what and "how") of the typology of Wang et al. (2020) and the ability and motivation aspects of the AMO framework.

Ability and "what"

Because the "what" aspect revolves around awareness and cognition (Wang et al., 2020), it seems that a greater awareness (e.g., obtained by trainings) of medical leadership is also expressed in a clearer perception of the concept. Limited cognition or awareness of medical leadership results in the tendency for the perceived "what" to be alternated or broadened after further reflection on the concept or on one's own behavior. It was apparent in this research that some medical specialists and partnerships do not reflect on this concept in their daily work unless individuals pay specific attention to it. However, many respondents did state a desire for more time to reflect on individual medical leadership and partnership performance.

Motivation and "why"

The findings of this research illustrate that intrinsic motivation is important in displaying medical leadership behavior, as was expected. It seems that this intrinsic motivation is focused on the purpose of the job of a medical leadership namely, improving patientcare or the organization of care (aspects named in the "why"). This means that, one the one hand, it can be argued that the perception of the goal of medical leadership (e.g., improving patientcare) creates motivation to display medical leadership behavior. On the other hand, it can also be argued that a physician's intrinsic motivation to, for example,

1 = leadership in day-to-day work; = personal leadership; = leadership in everything but being a doctor; = societal leader

improve healthcare leads to a more positive perception of medical leadership. “Individuals may see and understand different things depending on their underlying motivations” (Wang et al., 2020, p. 152). This illustrates that motivation and the “why” or the goal of medical leadership correspond.

5.1.3 Personal and situational factors

This research aimed to identify what personal and situational factors play a role in certain medical leadership behavior. The respondents of this research were open about these factors but some indicated that this was not something they were used to talk about. The empirical results show that all three AMO factors play an important role in medical leadership behavior, as was expected in the theoretical framework. First, the empirical results of the AMO components are applied to literature, whilst explaining the added value of the AMO to this research and further research. Lastly, an interpretation is given on the discussion between partnership and hospital-employment.

First of all, the findings of this research illustrates that all three AMO factors are of importance to medical leadership. Before reflecting more on the three separate components, it is important to state that the AMO framework is a good structure to *identify* personal and situational factors. However, additional theories are needed to investigate *why* these factors are experienced as hindering and stimulating and *how* these correspond to medical leadership behavior. That is why the different AMO components are complimented with additional literature.

A lack of ability was considered as hindering in all the medical leadership types. However, there is a distinction noticed. When managerial tasks need to be executed, it seems that both hard and soft skills are underdeveloped, for example, healthcare finances and negotiation skills. In contrast, when the medical leadership type requires medical knowledge (in day-to-day work or in the educator role) only soft skills seem to be lacking, for example, time management or communication skills. Knies et al. (2021) describe that the gap in both hard and soft skills also often exists amongst people managers. The authors highlight that often seniority or expertise plays a role in getting managerial tasks rather than competence. The findings of this research seem to confirm this conclusion when applied to medical leadership. In line with the SDT, enhancing abilities in both hard and soft skills create feelings of competence (Salas-Vallina et al., 2021). It becomes apparent that by participating in trainings, more confidence in medical leadership behavior is created. This means that the findings illustrate that stimulating abilities favor engagement in medical leadership behavior.

Furthermore, intrinsic motivation was determined to be an important element in medical leadership behavior. The autonomous motivation is displayed in the fact that medical specialists characterize their motivation as ambition, a hobby or passion. In contrast, extrinsic motivation in terms of monetary reward was not applicable, yet a form of controlled motivation was detected (Deci et al., 2017). This is displayed in the fact that all independent medical specialists are required to fulfil extra roles or activities, extra to their patientcare. It seems that if the physician is not motivated and interested in these activities, it is experienced as a burden and an obligation enforced by the partnership or hospital.

In addition, time is experienced as the prime hindering factor in medical leadership. To be specific, it was stated that by dedicating more time, medical leadership behavior can be optimized. This findings is in line with previous literature on medical leadership (Berghout et al., 2017).
Computer systems were also experienced as hindering to medical leadership. This administrative burden is a well-known hindering factor in the healthcare sector. HRM research confirms this, as red tape is often associated with less identification with the job and less commitment (Leisink, Borst, Knies & Battista, 2019).

In contrast, various types of support were perceived as a stimulating factor for medical leadership. Peer support, support from non-medical personnel and support from the hospital's board of directors were all considered to be stimulating factors. This finding is in line with extensive HRM literature on support as a job resource (Schaufeli & Taris, 2014). "Social support can be emotional (e.g. the provision of sympathy), affirmative (e.g. having one's thoughts and opinions recognised and supported), or tangible (e.g. through the provision of financial resources) information or advice" (Thanacoody et al., 2013, p. 1844). Support, especially peer support, serves as a way of coping through asking recognition, empathy or advice to deal with difficulties in medical leadership. As there is no hierarchical manager to ask for support, peer support seems an essential ingredient of partnerships.
The COR theory illustrates that social support can function as a coping mechanism to high demands and is related to maintaining identities (Golembiewski, 2000). This means that, for example, physicians who identify with 'leadership in everything but being a doctor' will seek support of peers in the similar role.

Political discussion partnership versus hospital-employment

Finally, the political discussion on partnership versus hospital-employment seems to be an urgent topic amongst independent medical specialists. The political discussion revolves around whether all medical specialists should be hospital-employed instead of in a partnership. The structure of working in a partnership has been increasingly criticized due to the fact that independent medical specialists earn more compared to hospital-employed physicians. This research analyzes the discussion from two perspectives, yet these do not cover the full discussion due to its complexity.

First, the discussion seems to create uncertainty amongst independent physicians. Some respondents indicated that they wanted to work specifically in a partnership due to the high levels of autonomy. Working in a partnership creates a sense of ownership over the effectiveness of both the "firm" and one's own medical work, resulting in high levels of engagement and commitment to both patients and societal goals. It is apparent that hospital-employment results in a different work design, in the sense of less autonomy and discretionary room. According to the Job Demands and Resources (Demerouti, Bakker, Nachreiner & Schaufeli, 2001), autonomy is an important job resource to be able to cope with high job demands and is associated with work engagement. This means, and this confirmed by the findings of this research, that the decrease in autonomy and discretionary room of hospital-employment may result in a different coping with job demands (Demerouti et al., 2001); physicians will compensate the decrease in autonomy in less engagement and commitment (e.g., not working overtime).

On the other hand, the decrease in autonomy may potentially get compensated with organizational support. This organizational support can be expressed in the form of supporting practices for team or individual development (Boxall & Purcell, 2016). The findings of this research illustrate that respondents are open to an external structure for medical leadership development, in terms of trainings organized by the Cooperation of medical specialists or the hospital's board of directors. In the situation of hospital-employment, the hospital is responsible for facilitating this.

A final note about this discussion is that in order to create more insight in the discussion, it is recommended to study physicians' perceptions of each employment structure and to investigate whether these correspond with reality. It seems that in the perception of either the partnership structure or hospital-employment, preconceptions play a role. A closer understanding of the perceptions can potentially overcome more dichotomization.

Implications AMO framework

This research shows that the AMO framework provides a solid base for the analysis of contextual factors because it considers both individual and situational variables (Knies et al., 2021). The importance of all three aspects —ability, motivation and opportunity— is highlighted in this research. The AMO model provides a solid structure for the analysis of contextual factors that directly impact the individual (Knies et al., 2021). Moreover, it can be applied in multiple contexts. However, this research argues that caution is needed when applying this framework to institutionally complex sectors. The healthcare sector is highly institutionalized and contains conflicting demands (Noordegraaf et al., 2016), that can influence the work of physicians, such as newly implemented quality measures or political discussions about hospital employment. This means that in the analysis of contextual factors, the indirect institutional context cannot be neglected. Therefore, it is recommended that further research complement the AMO framework with institutional literature when studying highly institutionalized sectors.

Implications COR theory

The COR theory is of added value to the existing medical leadership literature because it provides insight in how perceptions, behavior and resources correspond (Mijerink et al., 2018). It is recommended to further enhance the knowledge on resource-building to understand how medical leadership perception and behavior can correspond better. For example, an important finding is that some physicians have developed tailor-made coping strategies to deal with the high demands of their job. For example, to cope with the discrepancy between expected knowledge and taught knowledge, some physicians indicated that they began reading books or following trainings. Because this coping behavior seems to touch upon the HRM concept of job crafting behavior, it is recommended that future research study this concept further in relation to medical leadership. According to research by Meijerink, Bos-Nehles and de Leede (2018) job crafting is a resource-building mechanism in line with the COR theory. Job crafting behavior is defined as "self-initiated behaviors that employees take to shape and change their jobs" (Zhang and Parker, 2018, p. 126). Job crafting literature has taken both the personal and work contexts into account. The personal perspective focuses on self-initiated behavior in shaping one's job according to one's strengths and interests, while the work perspective states that individuals proactively change the hindering demands and stimulating resources of their job (van Leeuwen et al., 2021). Because independent medical specialists are bound to self-initiated behavior due to their entrepreneurial work context, job crafting literature might offer valuable knowledge to the existing medical leadership literature.

5.2 Conclusion: answering the main question

The last five years there has been an increase in research about medical leadership, yet conceptual ambiguity exists. This conceptual ambiguity is also displayed in practice as previous literature has concluded that some physicians advocate for medical leadership, while others seem to be 'allergic' to the term. This research aimed to create more clarity on this ambiguity by studying independent medical specialists' role perception of medical leadership, medical leadership behavior and personal and situational factors. The following research question was formulated:

How does an independent medical specialist's role perception of medical leadership shape medical leadership behavior and personal and situational factors, and, how do both these factors shape medical leadership behavior?

Role perception was analyzed using the "what", "how" and "why" typology of Wang et al. (2020) on individual perceptions. Moreover, role perception was expected to shape both medical leadership behavior and personal and situational factors. This can be explained by the Conservation of Resources

theory (Hobfoll, 1989), which states that depending on the role perception of medical leadership, an estimation is made by the physician of the present and needed personal and situational resources for this perception. If the needed resources are present a gain spiral will result in more engagement in medical leadership behavior, while a loss spiral will result in disengagement. The personal and situational resources were structured by using the ability, motivation and opportunity (AMO) framework; ability and motivation are considered personal factors, while opportunity is considered a situational factor.

Qualitative research showed that independent medical specialists' medical leadership perception can be divided into four types namely: "the societal leader", "leadership in everything but being a doctor", "leadership in day-to-day work" and "personal leadership".

The behavior that is coherent with these perceptions differed depending on the medical leadership type. To be specific, no behavior that aligned the societal leadership perception was reported. In addition, it seems that a gap exists between the perceptions of "leadership in everything but being a doctor" and "personal leadership" and the behavior of these leadership types. This contrasts with "leadership in day-to-day work," in which the perception of this medical leadership type is coherent with the behavior. Two additional important findings were that (1) more awareness of medical leadership resulted in clearer perception, while (2) little awareness of the concept resulted in the formation of a perception of medical leadership based on one's own behavior. This illustrates a mutual connection between perception and behavior. All in all, the closer the medical leadership type is to the primary job of a medical specialist, the more consistent the behavior is with the perception.

Moreover, this research investigated whether certain personal (ability and motivation) and situational factors (opportunity) hindered or stimulated medical leadership behavior. All three AMO factors are considered equally important. There seems to be a gap between the expected knowledge and taught knowledge in every medical leadership type, which is considered hindering. In contrast, obtaining new knowledge is perceived as stimulating. Moreover, experience is considered to be a stimulating element in medical leadership, while a lack of experience is perceived as hindering. Furthermore, intrinsic motivation is considered crucial to medical leadership behavior due to the lack of extrinsic motivation. This raises a question about whether more extrinsic motivators should be available to stimulate medical leadership behavior. Finally, regarding the work context, a lack of time is considered extremely hindering. In contrast, support by colleagues, non-medical personnel and the hospital's board of directors are considered important stimulating elements in displaying medical leadership behavior. Lastly, again a mutual connection was observed between "what" and ability component, and the "why" and motivation component.

5.4 Practical implications: recommendations

The findings of this research can provide valuable information about medical leadership and its practical implications. These recommendations are all derived from the findings in this research.

Medical specialist

This research teaches that medical leadership is expressed in multiple ways and is perceived according four different types of which none is more important than the other. It is important that one medical specialist can recognize multiple medical leadership types and can act to this. It is recommended to reflect on every medical leadership type and identify personal strengths and weaknesses. In addition, the findings of this research illustrate that it is important to gather and develop the resources that are needed to behave according to the medical leadership perception. It is recommended to balance both personal and situational resources as this research demonstrates that both are needed. This concretely

means that abilities, motivation and the work context (e.g. time and support) are equally important. Strengthening resources prevents stress, results in more job satisfaction and better performance.

Medical specialists were asked what they recommended young physicians regarding medical leadership. Their recommendations can be summarized as follows: do things that energize you, use your strengths, take care of yourself, support your medical and non-medical peers and take time for personal development.

Partnership

This research recognizes that partnerships are confronted with conflicting goals. For example, providing some time to the chairperson of the partnership means more wellbeing for the colleague but more patientcare for others. It can be challenging to balance multiple goals, for example personal development, team job satisfaction, cost efficient care and high quality patientcare. The results of this research illustrate that, besides personal reflection, team reflection is also needed. Shared values and a mission and a vision are important elements to create cohesion in the group. This is, in turn, needed to collaborate with each other.

In addition, it is recommended to develop a long-term strategy on the type of human capital that is needed for the long-term. In this succession planning, this research teaches that a shared understanding within the partnership of what medical leadership is and how and to what purpose it should be expressed is important. For example, in two years a new chairperson of the partnership needs to be appointed. It is recommended to start a learning and development plan for a partner to be able to take on the role in the future. When a medical specialist is prepared (in abilities, motivation and opportunity) to take on different medical leadership roles, competence will be more important than availability. This increases the professionalization of the partnership management. The more professionalized the partnership management is, the more able the partner is to represent the partnership amongst peers and managers. Another long-term suggestion is that in the recruitment of new partners the type of medical leadership that is needed for the partnership can be considered.

Furthermore, as support was mentioned as an important stimulating factor of medical leadership, it is recommended that ample attention is paid to the partnership culture. This includes norms and values between partners, trust, openness to feedback and reflection on collective performance.

Lastly, this research teaches that medical specialists are working a lot on managerial activities. It is recommended to invest in an effective working relationship with managers, irrespectively of the size of the partnership. As often is stated, a medical specialist cannot do everything and the support of a manager can be an added value to the professionalization of the partnership.

<u>Consider creating a structure for medical leadership education</u>

A lack of knowledge and skills for certain medical leadership tasks is often mentioned in this research. The findings also state that, due to the lack of external incentives that stimulate medical leadership, not all medical leaders are investing in these knowledge and skills. On the one hand, personal development should be one's own responsibility. On the other hand, suggestions are made to incorporate medical leadership development (especially 'leadership in everything but being a doctor') in an educational structure. Three types of suggestions can be made namely, (1) include it in the medical study, (2) the partnership should create a sort of career path and (3) the Cooperation or the hospital's board of directors should facilitate this. By creating an educational structure, unexperienced physicians are guided in their

medical leadership development in regards of tacit (e.g. healthcare finances) and implicit knowledge (personal development).

Medical leadership training agencies
This research highlights the importance of contextual factors in medical leadership. It is therefore recommended to design interventions, like trainings, that do not only focus on individual development but also pay specific attention to the work context of the medical specialist.

5.4 Limitations and suggestions for further research

This research recognizes a number of limitations. In response to these limitations, suggestions for future research are given.

First, this research used a snowball sampling method. Even though this method is useful to gather respondents in more 'closed' populations, it is possible that the sample consisted of physicians who were more interested in medical leadership already. In addition, the sample in this research consisted of 14 different specializations. For some specializations, only one respondent participated, which may not be illustrative for the entire specialization. However, this research ensured that there was a proper division between supporting, considering and surgical specialties. Further research can include more physicians from more specializations in order to explore if more tailor-made approaches can be developed toward medical leadership in different specialties. In conducting such studies, triangulation, for example surveys and interviews, can be used to create more confidence in data while maintaining the focus on contextual aspects (Bryman, 2015).

Second, the sample for this research consisted of independent medical specialists, which is unique to the Netherlands. This means that the results of this research are not representative of medical specialists in other countries. Nevertheless, independent medical specialists are mostly characterized as working autonomously, having an entrepreneurial mindset and working on both medical and non-medical tasks. Because healthcare sectors in other countries (e.g., England) also work on medical leadership and delegate non-medical activities to professionals (Warren & Carnall, 2010), this research can still provide a basis for further research. Moreover, this research emphasizes the importance of both personal and situational context for medical leadership perceptions and behavior. This illustrates that further research on medical leadership ought to be careful when constructing new generic models or frameworks and should instead study the effect of contextual factors of individuals, the direct work environment and the country's healthcare sector on medical leadership.

Finally, this research only interviewed medical specialists. Future research could expand upon this group by also interviewing supporting staff and nurses, as this research concluded that these team members are vital in medical leadership behavior. Moreover, the COVID-19 crisis had led to nurses becoming more involved in policy-making in hospitals (Wallenburg, Felder, Kuijper, & Bal, 2021, 7 april). Their role in the efficiency and effectivity of care has also become more widely known. Moreover, because nurses suffer from high levels of turnover and personnel shortage, an increasing number have transferred from hospital employment to self-employment to cope with the demands of the job (Commissie Werken in de Zorg, 2019). This again stresses that different types of employment should not be neglected in medical leadership and HRM research. Therefore, it is recommended that future research on medical leadership be expanded to other groups besides medical specialists.

5.5 Final words

It can be concluded that *a* medical leader, in the sense of one overarching type, does not exist. Medical leadership is something that all physicians define together as individuals, in the hospital or in the partnership. It is about improving healthcare in big and small things. Yet, it only works when care of patients, colleagues and oneself are rightly balanced and equally important, like the Hippocratic oath describes for such a long time.

Dutch medical Oath

Based on the Hippocratic Oath 400 B.C. (Westerveld et al., 2015)

I swear/promise to practise the art of medicine as well as I can for the benefit of my fellow man.

I will take care of the ill, promote health and relieve suffering.

I put the interest of the patient first and respect his convictions.

I will not harm the ***patient.***

I will listen and will inform him well.

I will keep secret what has been entrusted to me.

I will further the medical knowledge of ***myself*** *and others.*

I acknowledge the boundaries of my possibilities.

I will adopt an open and testable attitude and I know my responsibilities towards ***society.***

I will further the availability and accessibility of health care.

I will not misuse my medical knowledge, not even under pressure.

This is how I will honour the profession of medical doctor.

I promise

Or

So help me God

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Appendices

Appendix A: Topic list

1. **Achtergrond informatie**

- Introductie
- Doel van het onderzoek – er is geen goed of fout
- Structuur van het interview – duur 45 minuten
- Opname en vertrouwelijkheid
- Informed consent opnemen
- Vragen voorafgaand het onderzoek

2. **Controle variabelen**

- Kunt u iets vertellen over uw werk?
    - Hoe lang werkt u al als {specialismen}?
    - Hoe lang werkt u al in deze maatschap?
    - Uit hoeveel mensen bestaat uw maatschap?
    - Kunt u wat vertellen over de taakverdeling binnen de maatschap?

3. **Kijk op/perceptie van ML – rolopvatting**

- What: Wat verstaat u onder medisch leiderschap?
    - Wat is het volgens u wel en wat is het volgens u niet?
        - Kunt u een voorbeeld geven van situatie of van een persoon waarin u vond dat medisch leiderschap juist wel of niet werd getoond?

- How: Wie zou ML volgens u moeten uitvoeren?
    - 1 persoon: hoe zou de rol van deze persoon er dan uit zien?
    - Meer mensen: Zou iedereen ML allemaal op dezelfde manier moeten uitvoeren?
        - Zijn er verschillen in rollen en verantwoordelijkheden tussen personen?

- Why: Wat is volgens u het doel dat met medisch leiderschap gediend wordt?

4. **ML gedrag**

- What: Wat doet u zelf aan medisch leiderschap?

4a. Wel:

- How: Kunt u een voorbeeld geven van een situatie waarin u medisch leiderschap vertoonde?
    - Wat ging er goed in deze situatie en wat ging er minder goed?

- Why: u zei als antwoord op een eerdere vraag (zie bovenstaande why) dat {dit} het doel is van ML, in hoeverre draagt uw medisch leiderschap bij aan dit beoogde doel?

4b. Niet:

- Waarom doet u zelf niet aan medisch leiderschap?
    - Hoe uit zich dit in uw dagelijks werk?

- Kunt u een voorbeeld geven van een situatie waarin u vond dat een medisch specialist medisch leiderschap vertoonde?

5. Belemmerende en bevorderende factoren - AMO

- Wat voor belemmerende en bevorderende factoren beïnvloeden uw (mogelijke) uitvoering van medisch leiderschap?
  - Zijn er nog belemmerende en bevorderende factoren die meer bij u zelf liggen of in de context van uw werk (maatschap, ziekenhuis)?
  - Om u een idee te geven: kennis van management, draagvlak in de maatschap, interesse of betrokkenheid in management, vertrouwen

  → Bij onvoldoende antwoorden: Welke bevorderende of belemmerende factoren spelen een rol bij anderen denkt u?
    - Uit de literatuur of uit eerdere gesprekken bleek dat {deze factor} ook een belangrijke rol speelt, hoe ervaart u dat?
    - Zou u dan ook bereid zijn om er {tijd of geld} in te investeren?

6. Visie op differentiatie in de literatuur

- Afhankelijk van het antwoord op de vragen in categorie 2:
  - In de literatuur wordt medisch leiderschap ook regelmatig aangeduid als een informele, formele of verandering van werk (leg dit uit). Wat vindt u van deze andere perspectieven?

7. Afsluiting

- Overige zaken die van relevantie kunnen zijn voor het onderzoek
- Tips of opmerkingen voor de komende interviews
- Kent u iemand in uw netwerk die ook bereid zou zijn aan dit onderzoek mee te werken?
- Uitleg van de volgende stappen in dit onderzoek: de analyse en pseudonimiseren
- Bedankt!

Appendix B: Informed consent template

Informatie over deelname onderzoek 'Medisch Leiderschap'

{Datum}

Beste {name},

In de maand mei zullen interviews plaatsvinden voor het onderzoek "Medisch Leiderschap onder vrijgevestigde medisch specialisten". Via dit document wordt u op de hoogte gesteld van het doel van het onderzoek en wat uw deelname aan het onderzoek precies inhoudt. Uw deelname wordt zeer op prijs gesteld. Voorafgaand het interview kunt u mondeling toestemming geven op onderstaande informatie.

Het onderzoek over Medisch Leiderschap
Het doel van het onderzoek is inzicht te krijgen in de manieren waarop vrijgevestigde medisch specialisten kijken naar medisch leiderschap. Het onderwerp van het interview zal daarom voornamelijk gecentreerd worden rondom uw ideeën over medisch leiderschap en welke factoren belemmerend of bevorderend zouden kunnen werken. Gedurende het onderzoek staat de onderzoeker onder begeleiding van een hoogleraar.

Uw deelname aan het onderzoek
Als u akkoord gaat met deelname aan dit onderzoek zal er eenmalig een interview met u worden afgenomen. In verband met de maatregelen rondom COVID-19, zal het interview hoofdzakelijk digitaal plaatsvinden. De videoconferentieprogramma's die kunnen worden gebruikt zijn MS Teams of Skype, u kunt hierin uw voorkeur aangeven. Na het afspreken van de datum en tijd van het interview, zal de onderzoeker een uitnodiging sturen met de benodigde praktische zaken over het interview. Een interview duurt maximaal 45 minuten.

Rechten en plichten
Uw deelname aan het onderzoek is vertrouwelijk en vrijwillig. U heeft het recht om zich te allen tijde terug te trekken uit het onderzoek, ongeacht de reden hiervoor.

De datamanagement van het onderzoek
In de analyse van de data staat vertrouwelijkheid centraal. Na het interview worden alle gegevens gepseudonimiseerd en opgeslagen conform de regels van de universiteit. De procedure zal er als volgt uit zien.

- Uw naam zal nergens worden vermeld. De onderzoeker waarborgt de vertrouwelijkheid zodat uw deelname aan het onderzoek niet te herleiden is.
- Het interview zal worden opgenomen zowel met een telefoon als met een laptop. De opname van het interview wordt in een beveiligde map opgeslagen. De geluidsopname is van belang om de data op een correcte manier te kunnen uitwerken en te analyseren.
- Na het transcriberen van de interviews zullen de opnames worden verwijderd. Alleen de onderzoeker en de begeleider vanuit de opleiding hebben toegang tot de transcripten van het interview. U kunt ten allen tijde uw eigen transcript opvragen bij de onderzoeker. De transcripten worden conform de privacyregels van zowel de Universiteit Utrecht als de wet AVG in een beveiligde server opgeslagen voor maximaal 1 jaar. Bij een voldoende afronding van dit onderzoek zullen de transcripten meteen worden verwijderd.

- De volledige scriptie zal worden gepubliceerd in de scriptiebank van de Universiteit Utrecht. Hierbij zijn al uw gegevens gepseudonimiseerd en uw deelname zal niet te herleiden zijn.

Indien u verder nog vragen heeft kunt u altijd contact opnemen met de onderzoeker via onderstaande gegevens.

Nogmaals veel dank voor uw deelname.

Met vriendelijke groet,

Roos Mulder
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T: 0623163110

TOESTEMMINGSVERKLARING

voor deelname aan wetenschappelijk onderzoek

'Medisch Leiderschap onder vrijgevestigde medisch specialisten'
Versie 1.0, d.d. {datum}

- Ben ik geïnformeerd over het onderzoek;
- Heb ik de schriftelijke informatie gelezen;
- Heb ik de mogelijkheid gekregen om vragen te stellen over het onderzoek;
- Heb ik de gelegenheid gekregen om over mijn deelname aan het onderzoek na te denken. Ik weet dat deze geheel vrijwillig is;
- Weet ik dat ik het recht heb om te allen tijde de toestemming die ik verleen weer in te trekken en mijn deelname aan het onderzoek stop te zetten zonder opgaaf van redenen.

U kunt uw toestemming voor bovenstaande punten mondeling geven voor de start van het interview.

Appendix C: Coding structure