# A SCRAMBLE FOR VALUE

On the interpretation and application of value-based health care in the Netherlands



Gijs Steinmann

## A Scramble for Value

L'afus

## **A SCRAMBLE FOR VALUE**

On the interpretation and application of value-based health care in the Netherlands

Gijs Steinmann

## Copyright © Gijs Steinmann 2023 All rights reserved.

Layout and print: proefschrift-aio.nl

ISBN: 978-94-93315-73-0

The research for this dissertation was conducted at the Erasmus School of Health Policy & Management, Erasmus University Rotterdam.

The research for this dissertation was financially supported by Zorginstituut Nederland.

## A Scramble for Value

# On the interpretation and application of value-based health care in the Netherlands

Een gedrang om waarde
Over de interpretatie en toepassing van waardegedreven zorg
in Nederland

Thesis

to obtain the degree of Doctor from the
Erasmus University Rotterdam
by command of the
rector magnificus

Prof. dr. A.L. Bredenoord

and in accordance with the decision of the Doctorate Board.

The public defence shall be held on

Wednesday 5 July 2023 at 13:00 hrs

by

Gijsbert Steinmann born in Rotterdam, the Netherlands



## **Doctoral Committee**

Promotors: Prof. dr. D.M.J. Delnoij

Prof. dr. A.A. de Bont

Prof. dr. H.M. van de Bovenkamp

Other members: Prof. dr. R.A. Bal

Prof. dr. D. Ruwaard Dr. L.B. Koppert

## **CONTENTS**

	Preface	viii
Chapter 1.	Introduction	1
Chapter 2.	Dutch consensus on value-based health care: a Delphi study	21
Chapter 3.	Redefining value: a discourse analysis on value-based health care	35
Chapter 4.	Value-based health care in translation: from global popularity to primary care for Dutch elders	63
Chapter 5.	Value-based redesign: the organizational structures of hospitals	87
Chapter 6.	Regulated markets and rationalized myths: the purchasing practices of Dutch health insurers	115
Chapter 7.	Discussion	141
	References	172
	Summary	190
	Samenvatting	196
	PhD Portfolio	204

#### **Preface**

This thesis has emerged from a research collaboration between the National Health Care Institute (ZINL) and Erasmus School of Health Policy & Management (ESHPM). As part of a larger network (*Academische Werkplaats Verzekerde Zorg*), the goal of this collaboration is the crossfertilization of research and policy. It has given rise to several research projects that are relevant to the role of ZINL, which includes an advisory role regarding the content of the national basic insurance package, and this is also the agency that regulates, collects, and disseminates the data on the quality of care that Dutch health care providers are obliged to publicly disclose. In the summer of 2018, the Ministry of Health Welfare and Sports launched its *Uitkomstgerichte zorg* program, which is strongly influenced by the internationally popular concept called valuebased health care (VBHC). ZINL was appointed as the government body that would oversee the program. A few months later, I started my PhD trajectory at ESHPM.

The work on this thesis started with the loosely defined goal to study VBHC in relation to the role of ZINL, particularly when it comes to promoting the quality, affordability, and accessibility of health care services in the Netherlands. It soon became clear to me, however, that I would first have to examine what exactly VBHC is. In the early stages of my research, figuring this out turned out to be a bit of a challenge (and I am always glad to notice that this does not just apply to me). While there was, by then, already a decent pool of academic literature on the topic, a quick dive into it could leave one confused and discouraged instead of refreshed and assured. One thing that seems virtually inevitable to me now, is that any such dive will involve an encounter with the writings of a person aptly surnamed "Porter." For me, it has been the work of Michael Porter that carried away most of the confusion and allowed me to gain entrance and competence in the land of VBHC. Accordingly, what I have researched can be summarized as the interpretation of Porter's vision on health care systems (i.e. VBHC) and its application in the Netherlands. I will lay out the main research questions in the introductory Chapter 1.

In light of preventing some confusion regarding my own work, let me explain why the cover of this thesis displays a caduceus—a two-snakeentangled staff that is topped with wings. It is a symbol that is probably best known for its relation to the figure of Hermes in Greek mythology. It is also known to be a mythological symbol that has (mistakenly) been allotted to the field of medicine: it has become the emblem of the US Medical Corps; it appears on several editions of a book titled Medical Sociology; and it was displayed on the cover of an early edition of the book Redefining Health Care (2006), which is co-authored by Porter, and may be regarded as the pioneering text on VBHC. On later editions of its cover, however, the caduceus is replaced by a red cross. Perhaps someone figured out that its relationship with medicine and healing rests on a confusion between Hermes' caduceus, with its two snakes and wings, and the single-snake-entangled Rod of Asclepius. Hermes has had a wide variety of powers and domains attributed to him, but unlike Asclepius, medicine has never been one of them.

There are a variety of additional reasons for why the caduceus strikes me as a proper image for the frontpage of this thesis. It is, as mentioned, iconic of the myths of Hermes, who, quite frankly, is rather fascinating. He would evolve into a god of fertility, boundaries, travelers, commerce, and orators—to name just a few of his features. He served as the messenger of the gods, who could travel seamlessly between the natural and supernatural worlds-and to this day, the formal study of interpretation is referred to as hermeneutics. It is in the role of boundarytraversing messenger, that Hermes became depicted prominently in the philosophical work of the Michel Serres (1930-2013). Serres, in turn, was highly influential on the work of Bruno Latour (1947-2022), and the work of Latour, in turn, has had quite an impact on research conducted by me and my colleagues at the Health Care Governance (HCG) department of ESHPM. For me and the purpose of this thesis, the caduceus symbolizes historical roots, myths, a curious combination of commerce and medicine, interpretation, traveling across boundaries, and finding a wonderful place to work.

Time for some acknowledgements. Doing a PhD has been a dream come true, not so much because of the degree, but because it is a job that I have

profoundly loved doing. And also because, in the years before starting this position, I was seriously longing for such an experience. In what should resemble somewhat of a chronological order, let me mention some of the people who have made this possible and others whose support has inspired me.

I'll start with my father, who is no longer with us, but who has always had my back—I'm sure he would be proud, and I'm sad I cannot tell him what a role model he has been. Mom: I think it was in my bachelor thesis where I wrote that I already owed you my eternal gratitude—that must have been a decade ago, and since then you have continued to support me in my search for a place in this world, while in the meantime showing me how to courageously deal with tragedy. Thank you for being a beacon of support and a haven of solace for me and my sister. Laura: you have grown into a true sparring partner, and I often realize you know so much that I do not. You should know that your climb from our high school to your current job at Erasmus MC is honestly both encouraging and impressive to me.

Over the years, there have been several extended family members whose support I'm particularly thankful for. Henk: thank you for being the best uncle I could have wished for. We are not as close as we used to be, but I cherish our bond, and I will always be grateful for offering me that excellent job opportunity (even though I'm glad I continued to long for something else). To Henk (the other one) and Tineke, thank you for your advice and your involvement both now and in previous years. To Jaap: thank you for reaching out, for your enthusiasm about my studies, and for calling me out on my sloppiness.

Aside from family, I would like to express my gratitude to several individuals who have invested time and effort in helping me and advising me in my pursuit of a PhD position—which reinforced my belief and commitment. From Utrecht University, both Rutger-Jan Scholtens and Yvonne van der Pijl have personally aided me—thank you! To NALACS in general and Christien Klaufus in particular: thank you for your appreciation back in 2015! From KU Leuven: thanks to Helder de Schutter and Patrick Pasteur.

Now to the people and organizations who have contributed more directly to my work at ESHPM. To start, I would like to express my gratitude to everybody at the HCG department, who have created such a wonderful place to work. From the books and the woodwork to the Monday afternoons, onto the kindness and shrewdness of my dear, dear colleagues-it has truly been a dream come true-thank you! Special thanks to Roland, who, if I remember correctly, basically (co-)built this warm and stimulating work environment from scratch. Thank you, Bert, Rik, Lieke, and others, for repeatedly contributing to group discussions in ways that remind me that I have much to learn. Thank you, Robert, Martijn, and others, for interesting conversations and helping me think differently about my own work. Thanks to Tineke for reminding me (indirectly) that the various sub-studies of a PhD trajectory will someday have to make up a coherent dissertation. Thanks to Marthe, for showing me how a lot of PhD-things are done. Thank you Tessa and Sabrina, for being my favorite colleagues. Thank you Oemar, for being so incredibly positive and compassionate, and for sharing my passion for Feyenoord (AKA de ware kampioen). Thank you Koray, for literally being the only person I know who I can actually talk to about basketball. Thank you Teyler, for being a friend I can talk to about almost everything else.

There are also some people outside of the HCG department who I'd like to mention. Thomas Reindersma—thank you for being a cheerful, helpful, and skillful colleague/friend at work. Kees Ahaus, thank your for giving me the opportunity to collaborate on what would eventually become chapter 2 of this thesis. Paul van de Nat, thank you for taking the initiative to collaborate on what are already multiple studies, and counting. Fabio Mieris, thank you for laying the groundworks for the chapter on organizational structures. Lonneke Timmers: thank you for your collaboration, your network has been invaluable for the chapter on insurers.

Concerning colleagues, I am definitely most grateful for my supervisors. Hester, I could not have whished for a better co-promotor. Your engagement and commitment have been truly outstanding, and I sincerely consider myself lucky with your supervision. If I ever get to supervise a PhD student myself, I honestly plan to remember and mimic the way you

did it. Antoinette, I have repeatedly thought to myself that asking you to stay on as my promotor has been a very wise decision. Your pragmatic advice has been immensely helpful to me on several occasions. Some of your deeper probes into my work have been a little less "welcome" (i.e. less easy to address), yet all the more stimulating—I hope to have lived up to your standards. Diana, the decision to hire me has changed my life. It has set me on a path I want to be on, and have longed to be on. You have given me my dream job, and access to a career path I had almost given up on. It is hard to express what this means to me, but I can honestly say that I have done my best to make the most out of this opportunity. While doing so, I have also had the pleasure to enjoy your highly professional guidance during four years of continuingly engaged supervision. A dream job, and a dream team of supervisors.

Ben & Peet, thank you for all those clothes and other stuff, plus the occasional baby advice—it has been more than welcome! To many other friends and family members: thank you for being the relationships that last!

Bárbara Cristina Morales González, thank you for your patience, for your jokes and never-ending sense of humor, for putting up with me, helping me understand the most basic math in the world (which sometimes allows me to pretend to others that I actually know something about statistics). Thank you also, for correcting me when I let go too much, and for letting me let go every now and then; for being the love of my life, and the mother and foundation of our little family. Thank you for your support and sacrifices over the last months, I realize it must not have been easy when Pablo needed so much care, and I "needed" to finish my PhD. Thank you as well, for all your other sacrifices, and for bringing magical love as well as practical reasoning to my life. Pablo: thank you for the unique level of joy and the special kind of purpose you have brought into our lives.

Gijs Steinmann Brussels, 2023

## INTRODUCTION

Good health is one of the most important preconditions for a good life. That is why countries spend a lot on health care and build complex institutions to create fair, effective and efficient ways to manage these resources. We call these health systems, but none of them are the same due to different historical pathways, different political preferences, different epidemiological challenges and many other differences (Jeurissen & Maarse 2021: viii).

For decades, health care systems around the world have been striving to deliver widely accessible high-quality care while also controlling costs (Figueroa et al. 2016). This has generated an increasingly wide variety of policies, ideas and initiatives targeted at both the internal management (i.e. organizational structures) as well as the external governance (i.e. accountability structures) of health care delivery (Bigelow & Arndt 2000; Trommel 2015; Hawthorne & Williams-Wengerd 2019; Meessen 2020). Much of those efforts are founded on presuppositions concerning the health care sector in comparison to other industries. In other words, some principles that apply to the management and governance of other fields of work are assumed to apply in health care as well (Folland et al. 2013).

There is, for instance, a general agreement that in health care, similar to other sectors, organizational structures matter (Lega & De Pietro 2005; Mintzberg 1979; 1997; Vera & Kuntz 2007). Put differently, it matters how the time and energy that goes into health care delivery is divided into tasks, how these tasks are allocated across roles, and how tasks and roles are coordinated. Hence, it is presupposed that organizational and managerial principles that apply elsewhere will generally apply in the health care sector as well (e.g. Mintzberg 1979; 1997). Additionally, similar to other sectors, it is widely recognized that it matters under what rules and regulations this work is conducted (Van de Bovenkamp et al. 2020; Meessen 2020). Therefore, it is not uncommonly presupposed that

the health care sector can be steered with regulations in ways similar to how other sectors are regulated (Trommel 2015).

Furthermore, it is widely believed that financial incentives matter in health care too. They can and often do influence the behavior of physicians, insurers, and patients alike (Chandra et al. 2012; Folland et al. 2013; Douven et al. 2015; Prager 2020). This is not to say that financial incentives invariably trump professional standards or other (intrinsic) motives; not at all. It is merely a recognition of the relevant potential for financial incentives to guide behavior (for better or worse). Hence, it is often presupposed that economic principles that apply to other sectors will eventually apply to health care as well (e.g. Folland et al. 2013; Schut & Varkevisser 2017).<sup>1</sup>

A major complicating factor, however, concerns the prevalence of multiple and often competing and confliction visions that have formed the basis for many existing policies and initiatives within health care systems (Helderman et al. 2005; Currie & Guah 2007; Van de Bovenkamp et al. 2014). Some prime examples of conflicting visions concern views that advocate state control versus those that embrace market mechanisms (Helderman et al. 2005; Van de Bovenkamp et al. 2014), and the contrast between a typical managerial rationale and professional autonomy (Freidson 2001; Waring 2007; Currie et al. 2012). Thus, among a myriad of challenges, health care systems are concerned with organizational structures, regulations, and incentives structures, all operating in an arena of competing visions and beliefs.

Against this background, it is of particular interest that over the course of the last decade and a half, a growing number of organizations from multiple stakeholder positions have been adopting a set of ideas called value-based health care (VBHC). VBHC advocates the realignment of the organizational structures and accountability structures of health care providers with the overarching goal of improving value for patients (Porter & Teisberg 2006; Porter & Lee 2013). Several scholars have taken note of VBHC's rise (Bonde et al. 2018; Ramsdal & Bjørkquist 2020), with

<sup>1</sup> It may be worthy to note that all three of these presuppositions are, of course, also empirically rooted claims.

some going as far as referring to a "global megatrend" (Kokko & Kork 2020). In the Netherlands as well, VBHC has seen a remarkable upsurge: it has officially been adopted into national health policies, multiple provider organizations have been trying to put its ideas into practice, and several health insurers have incorporated VBHC principles into their marketing and purchasing practices.

Accompanying all this popularity, however, comes a cloak of ambiguity concerning the exact meaning of VBHC, and related to this, a muddled and fragmented collection of implementation efforts-noticeable both within and across countries (Van Staalduinen et al. 2022). Indeed, several scholars have stated that VBHC lacks a commonly shared definition (Van Engen et al. 2022; Van Staalduinen et al. 2022). And scholarly interpretations, in particular, vary greatly. Some consider VBHC to be a "neoliberal mode of governing" (Triantafillou 2020); others see it as "part of a transformation [...] to new public governance, which emphasizes value creation for citizens [...]" (Kokko & Kork 2020: 1).2 Moreover, its implementation efforts have not just been varied and fragmented, but appear to be heavily dependent on local circumstances (Nilsson et al. 2017; Colldén & Hellström 2018; Ramsdal & Bjørkquist 2020). Considering all this ambiguity and local variation, VBHC can become a rather problematic topic: from an academic standpoint, it is unclear what this popular concept refers to, and how it can be studied and evaluated; from a practical and policy standpoint, all this ambiguity makes it difficult to recognize its practical effects, which hampers the translation of positive experiences across settings. Therefore, it is both timely and important to examine the meaning and practical effects of VBHC.

This thesis examines the meaning and application of VBHC in the Dutch health care system. My main research question is as follows: *How is value-based health care interpreted and applied in the Netherlands, and why does this occur the way it does?* 

<sup>2</sup> It has also been described as a "health policy framework to integrated care" (Busink et al. 2019); and as a "management concept" (Frederickson et al. 2015), or a "management innovation" (Nilsson et al. 2017).

By addressing this question, this thesis contributes to a better understanding of VBHC in general, a remarkably popular concept with global relevance. More specifically, my research should provide relevant insights for anyone interested in the challenges that lie ahead concerning its application. Moreover, it can provide insight into the context-dependency of VBHC's interpretation and application; in this case, it points to certain inner workings of the Dutch system that are not only shaping the application of VBHC, but also have implications for future programs and policies that target the external governance and internal management of health care delivery in the Netherlands.

In the following sections, I first outline my conception of VBHC as a coherent set of ideas. Then follows a description of the Dutch health care system, which constitutes my overarching research setting. Next comes a section that highlights the radical changes that VBHC's originators propose. Then follows a section in which I reflect on the ambiguity surrounding VBHC. In the final section of this introductory chapter, I account for my choices in methods and theoretical angles, and end with an overview of the remaining chapters.

### Value-based health care as a coherent set of ideas

For the purpose of this thesis, I will mainly rely on the publications of Michael Porter to distill what I consider to be a clarifying conception of VBHC, which I see first and foremost as a set of ideas developed by Porter and colleagues (Porter & Teisberg 2006; Porter 2008; 2010; Porter & Lee 2013). Not only have those writings provided me with a much-needed level of conceptual clarity and competence regarding my main research topic, but these have also been seminal publications, which are widely referred to as pioneering texts on VBHC, and often appear as the key sources on which efforts to implement VBHC are based (Van Staalduinen et al. 2022; Vijverberg et al. 2022).

At its core, VBHC is a set of ideas that advocates to (re-)align the organizational structures, the regulations, and the incentive structures of health care systems with the overarching goal of improving value for patients—with value being defined as the health outcomes that matter to patients, divided by the costs of achieving those outcomes (a definition summarized as  $value = \frac{outcomes}{costs}$ ) (Porter & Teisberg 2006; Porter 2010; Porter & Lee 2013). While this may sound relatively straightforward to some, VBHC's originators consider most health care systems to consist of structures, regulations, and incentives that are severely misaligned with value for patients (Porter & Teisberg 2006; Porter & Lee 2013). In their view, truly improving both the internal management (i.e. organizational structures) and external governance (i.e. accountability structure) of health care providers will require *radical transformations* (Porter & Teisberg 2006). And although this set of ideas has been developed with a focus on the U.S. health care system, Porter and Teisberg assert that "the principles we describe are universal" (2006: 374).

It should be noted that the abovementioned value equation serves, first and foremost, to formulate an overarching goal: to improve value by continuingly striving to achieve the best possible health outcomes for patients, and by continuingly striving to do so as cost-efficiently as possible.<sup>3</sup> At least for the purpose of this thesis, VBHC can be considered a set of ideas by Porter and colleagues regarding why this should be the overarching goal, and how this should be pursued.

As for the "why," a key presupposition within VBHC is that value in health care is that what matters most to patients (Porter 2010). Moreover, by relating outcomes to costs, this conception of value is intended to encompass both patient safety and efficiency, and thereby establishes an overarching goal that unites the interests of all system stakeholders. That, according to Porter and colleagues, is why improving value for patients should be the goal.

With that in mind, let me try to remove what I deem to be one lingering misconception about Porter's work on health care: the idea that VBHC is an approach that attempts to "account for the value of a phenomena" (Triantafillou 2020, emphasis mine). As others have correctly pointed out: "It should be noted that within the framework of VBHC, the intention has never been to actually calculate this ratio (as we shall see below, this is in fact not possible because we are not dealing with a single outcome)—it serves merely as an illustration of the fact that we can increase the value in different ways [...]" (Lindgren & Althin 2020).

This goal is what matters for patients and unites the interests of all actors in the system. If value improves, patients, payers, providers, and suppliers can all benefit while the economic sustainability of the health care system increases (Porter 2010: 2477).

As for the "how," another key presupposition within VBHC is that value in health care is created at the level of medical conditions<sup>4</sup> (or otherwise similar patient groups) over full cycles of care (Porter & Teisberg 2006; Porter 2008; 2010). The idea is that value is not created, and should not be measured and understood at levels as broad as hospitals or countries: a hospital could be highly efficient at achieving great outcomes for one medical condition, while realizing relatively low value on another. And the same line of reasoning applies to the level of medical specialties. Furthermore, value is not created on the level of individual activities, consultations, or interventions; these should be considered part of a chain of activities that together make up full cycles of care for patients with a particular condition (Porter & Teisberg 2006). Based on these two key presuppositions, Porter and colleagues provide three interrelated claims concerning how to pursue this goal, i.e. how the internal management and extremal governance of health care providers should be aligned with the goal of improving value for patients.

The first of their claims is that health care providers should realign their organizational structures with the goal of improving value on the level at which it is created. So, in order to achieve the best outcomes as cost-efficiently as possible, hospitals and physician practices should redesign their organizational structures by creating integrated practice units (IPUs) that coordinate the full cycle of services necessary to treat patients with a particular medical condition (or otherwise similar patient groups) (Porter and Teisberg, 2006: 167-77).

<sup>4 &</sup>quot;A medical condition (e.g., chronic kidney disease, diabetes, pregnancy) is a set of patient health circumstances that benefit from dedicated, coordinated care. The term *medical condition* encompasses diseases, illnesses, injuries, and natural circumstances such as pregnancy. A medical condition can be defined to encompass common cooccurring conditions if care for them involves the need for tight coordination and patient care benefits from common facilities" (Porter & Teisberg 2006: 44).

An IPU is a dedicated [multidisciplinary] team involving both clinical and nonclinical personnel who work together to provide the full care cycle for a group of patients with the same medical or behavioral condition or set of closely related conditions. IPUs are organized around the needs of patients (e.g., patients with low back pain), rather than around specialties or a particular intervention (e.g., spine surgery). They embody the central principle of a value-driven organization: to organize around customer needs, not the supply of particular services (Porter & Lee 2021: 3-4).

Second, health care providers should systematically measure and publicly report the outcomes and costs of their care cycles for each of the medical conditions they treat. By measuring what matters for patients, and by doing so on the right level of analysis, providers can truly learn about and improve the value of their services. It should be noted that with regard to outcomes—the results of care in terms of people's health over time—the goal is not to identify a single best metric, but a relevant set of outcome measures per medical condition (Porter & Teisberg 2006; Porter 2010).5 These can entail both clinical indicators (e.g. survival, blood levels, surgical complications) and patient-reported outcomes (e.g. quality of life, pain scores, time to return to work), and the relative importance of each specific outcome can vary between patients (Ibid.). Furthermore, making this information widely accessible is considered paramount by Porter and Teisberg (2006): this will enable referring physicians, patients, and insurers to all make more value-based decisions, and thereby spur the right kind of competition in health care, the kind that is based on value for patients. So, within VBHC, the availability of outcome information at the level of medical conditions is deemed absolutely vital to improving value. Although Porter and colleagues generally prefer a smaller over a larger government role, here they make an exception:

Results information is so vital to patient value in health care that it must be mandated. We advocate a systemwide government information strategy (Porter & Teisberg 2006: 343).

<sup>5</sup> See https://www.ichom.org/ for examples of sets of health outcome measures for a variety of medical conditions.

Once a minimum set of outcome measures and risk adjustments is established, government should mandate that every provider in a particular medical condition report the designated outcome measures and certify the accuracy of the information as a condition of practice. After a phase-in period, this data would be publicly reported (Ibid: 352).

The third of their claims concerns the payment structures within our health care systems. The idea is that in health care, payment structures should also be in line with value creation: with bundled payments for full cycles or episodes of care for patients with a particular medical condition (Porter & Teisberg 2006; Porter & Lee 2013: Porter & Kaplan 2016). The implementation of bundled payments—single payments for a bundle of services that fall within a predefined episode of care—would, at least in theory, realign the financial incentives with the goal of improving value. Rather than rewarding providers for the number of services they provide, bundled payments should incentivize providers to optimize the value creation of their care cycles (Porter & Teisberg 2006; Porter & Kaplan 2016). But although improvements in cost-efficiency could lead to providers yielding higher profit margins for certain bundles of services, it is important to note that within the system envisioned by Porter, the idea is not to reward high-value providers with financial bonusses (as is common within pay-for-performance schemes), but with more patients via referring physicians, patients, and insurers who make more valuebased decisions—which would also imply more patients receiving highvalue care (Porter & Teisberg 2006).

In sum, by synchronizing redesigned organizational structures with policies on measurement and reporting and alternative payment structures, and by aligning all of these with the goal of improving value for patients, VBHC's originators promise "dramatic improvements in value" (Porter & Teisberg 2006: 143). For most if not all health care systems, however, all of this would require structural transformations on multiple levels. Additionally, health care systems typically differ in their historical composition and socio-political idiosyncrasies, which may pose additional challenges for proponents of VBHC.

## The Dutch health care system (research setting)

The defining characteristics of the Dutch system derive from the historically rooted amalgamation of private initiative, professional selfregulation, government control, and corporatism, which eventually evolved into the Health Insurance Act (2006) (Schut 1995; Helderman et al. 2005; Van de Bovenkamp et al. 2014; Van de Ven 2015).6 Since 2006, the Dutch system is officially based on regulated competition, in which market mechanisms (primarily aimed at incentivizing improvements in quality and efficiency) among private (though generally not-for-profit) health care providers and private (mostly not-for-profit) health insurers,7 are combined with government regulation (primarily aimed at safeguarding accessibility for all citizens). In broad lines, insurers are encouraged to compete for members by offering attractive premiums, which should incentivize them to critically purchase health care provision, thereby stimulating providers to demonstrate quality and efficiency. A crucial piece of regulation concerns the mandatory health insurance package that each citizen is required to take on and each insurer must cover for each (potential) member (at an equal price irrespective of individual characteristics). This basic insurance package aims to ensure the accessibility and affordability of most health care services, covering family care, specialist care, and inpatient hospital care, among others (Maarse et al. 2016).

But government regulation goes beyond safeguarding accessibility. There are several government agencies whose operations set the parameters within which market mechanisms and competition may transpire (Varkevisser 2019). Of particular interest here is the National Health Care Institute (ZINL), an independent agency that guides regulation on which treatments and services will (not) be covered by the national

The original (Dutch) text of the Health Insurance Act can be found on https://wetten.overheid.nl/BWBR0018450/2023-01-01.

In the Dutch health care system, most private insurers are not-for-profit organizations, although one of the market leaders, Achmea, belongs to the few exceptions. For-profit providers are allowed and do exists, but not in the form of hospitals or nursing homes: for-profit hospitals or nursing homes are forbidden. Similar to most insurers, these are private not-for-profit organizations; public providers only exist in the form of municipal health agencies (Jeurissen & Maarse 2021).

basic insurance package, and this is also the agency that regulates, collects, and disseminates the quality information that providers are mandated to measure and report. Recent government initiatives have been directly aimed at increasing the availability of outcome information, with programs that were strongly informed by VBHC principles (Ministry of Health, Welfare and Sports (VWS) 2018; ZINL 2018). Thus far, however, this has proven to be easier said than done; there is an ongoing debate among various stakeholders on the use and public disclosure of outcome information.

Another defining feature concerns the strong gatekeeping role of general practitioners (GPs): in the Dutch system, patients need a referral from their primary care GP in order to receive specialist care (excluding first aid emergencies) (Smits et al. 2019). Accordingly, by quarterbacking access to specialist care, GPs may enact a rationing effect and potentially curtail some undesired supply-driven demand (Rotar et al. 2018). And in that gatekeeping role, Dutch GPs could potentially become the kind of value-based referring physicians envisioned by VBHC proponents (Porter & Teisberg 2006).

As mentioned at the start of this section, the Dutch system has traditionally included several corporatist arrangements—characteristic of Dutch politics and policy-making—in which the government shares decision-making powers with associated interest groups. Accordingly, the inner workings of the Dutch system of regulated competition partly rely on policymaking via processes of seeking consensus and bargaining among associations of medical professionals, provider organizations, health insurers, and patient representatives (Van de Bovenkamp et al. 2014). A recent prime example is the Integral Care Accord (VWS 2022), the result of a bargaining process among the Ministry of Health Welfare and Sport and the most dominant interest associations within the health care sector, containing agreements on total national spending for the following years, regional collaboration among providers, and the purchasing behavior of insurers (to name a few topics). In light of VBHC, another relevant example of a corporatist arrangement concerns the legislation on the specific information that can be made publicly available as indicators of quality of care, which requires consensual agreement among interest associations representing insurers, patients, and providers.

#### VBHC as a radical set of ideas

While I understand VBHC to be a coherent set of ideas developed by Porter and colleagues, I also consider it to be a rather radical set of ideas. For most health care systems, including that of the Netherlands, a widespread adoption and application of the abovementioned core principles of VBHC would entail radical transformations in the ways the health care sector is governed and in the way provider organizations are managed. Something Porter appears to acknowledge:

A value-based approach will require challenging conventional wisdom and making changes in structures and practice patterns that have been in place for decades (Porter 2008: 503-4).

With regard to organizational structures, VBHC advocates to (re) structure the organization of health care delivery around care cycles for medical conditions (i.e. to reorganize into IPUs). For most (Dutch) provider organizations, but especially for hospitals, this would indeed require radical changes.

IPUs represent a profound organizational change in health care delivery and [...] disrupts traditional specialty-level clinical work practices and lines of authority, as well as the flow of funds through specialty departments common in many health care organizations (Porter & Lee 2021: 2).

Indeed, the IPU model is not at all resembling how most of today's (Dutch) hospitals are structured. Hospital structures are usually designed around medical specialties, with organizational units that are based on the specific knowledge and skills (i.e. the functions) that are needed to perform certain complex tasks (Abernethy & Stoelwinder 1990; Lega & De Pietro 2005). For VBHC's originators, these functional designs are outdated and misaligned with value creation: "it is the overall care of a medical condition that creates value for the patient—not the radiology department, the anesthesiology group, or the cardiology group" (Porter & Teisberg 2006: 168). And although hospitals worldwide are increasingly overlaying their functional designs with multidisciplinary

teams (Liberati et al. 2016), such informal overlays are not enough for Porter and colleagues.

For an effective IPU leadership structure, each IPU should be a single profit-and-loss center. [...] A common mistake for hospital systems is to create multiple dotted-line relationships through which IPU leaders report to the legacy management structure. A positive working relationship with chairs can be beneficial, but the overarching goal of the IPU must be improving value for its patients. (Porter & Lee 2021: 12-3, emphasis mine).

Without question, VBHC advocates a radical reorganization of (hospitals') deep-seated traditional structures.

When it comes to the measurement and reporting of outcomes and costs at the level of medical conditions, the implications may be equally radical regarding the Dutch system. While deemed absolutely crucial, Porter and colleagues acknowledge the major challenges that lie ahead in this regard:

[T]he reality is that the great majority of health care providers (and insurers) fail to track either outcomes or costs by medical condition for individual patients. For example, although many institutions have "back pain centers," few can tell you about their patients' outcomes (such as their time to return to work) or the actual resources used in treating those patients over the full care cycle. [...] When outcomes measurement is done, it rarely goes beyond tracking a few areas, such as mortality and safety. Instead, "quality measurement" has gravitated to the most easily measured and least controversial indicators. Most "quality" metrics do not gauge quality; rather, they are process measures that capture compliance with practice guidelines. [...] The only true measures of quality are the outcomes that matter to patients. And when those outcomes are collected and reported publicly, providers face tremendous pressure—and strong incentives—to improve and to adopt best practices (Porter & Lee 2013: 56).

Although there certainly are exceptions, I hold it safe to say that the picture portrayed above roughly reflects the overall situation in the Netherlands when it comes to measuring outcomes at the level of medical

conditions, and even more so when it comes to measuring costs of care cycles. But while widespread and systematic measurement of health outcomes that matter most to patients would indeed entail changes for most Dutch providers, a more fundamental change would be the public reporting of those measured outcomes. Although Dutch providers are (mandatorily) reporting a lot of data to the National Health Care Institute, the bulk of this data concerns indicators of delivery structures and processes (81% in 2018), and only a minority (19%) concern outcome measurements (Bijl 2018).8

Regarding payment structures, VBHC advocates the installment of bundled payments for full cycles or episodes of care at the level of medical conditions. A widespread implementation of such bundled payments, however, would constitute a radical break with currently prevailing payment models. Common within many health care systems are fee-for-service (FFS) arrangements, in which, as the name suggests, providers receive a fee for each of the services they deliver. A general critique of FFS arrangements is that they emphasize (and incentivize to increase) the volume of service provision (Eijkenaar 2013). VBHC, by contrast, advocates a shift in focus from volume to value, and Porter and colleagues put forth bundled payments as their ideal contract model. In the Netherlands, however, recent studies on insurer-provider contracts reveal a persistent emphasis on volume, capacity, and cost control through annual budget ceilings (Maarse et al. 2016; Jeurissen & Maarse 2021; Gajadien et al. 2022). Hence, the VBHC idea of bundled payments presents a fundamental departure from the status quo within the Dutch system, as in others.

For example, the information providers are required to report to the National Health Care Institute in 2023 on five relatively common types of cancer (skin, breast, lung, large intestine, prostate) concerns 71 indicators in total, out of which 13 (18%) concern outcomes, 16 (23%) concern structures, and 41 (59%) concern process indicators. For both skin cancer and breast, no outcomes are mandatorily reported. Out of the outcomes that will be reported (for lung, colorectal and prostate cancer) none of these concern patient-reported outcomes (National Health Care Institute (ZINL) 2023).

## VBHC as an ambiguous set of ideas

The value-based healthcare (VBHC) concept was first proposed as solution to many of the ills of healthcare. Since then, we have seen the term "value" defined, used, confused, and interpreted in multiple ways. [Some refer to] the idea of *values* as a conviction or belief that individuals or social groups consider right, good, or desirable. [Others use] the term *value* in an economic sense of optimizing the use of finite resources. [T]hese two applications of the word value are often used interchangeably when the term VBHC appears. Unclear use of these two very different meanings makes it difficult to progress on how to define, operationalize and measure VBHC. Both meanings are important, but they point to very different concepts and assumptions (Hazelzet et al. 2021: 1-3).

The quote above nicely illustrates how multiple interpretations of the term "value" have contributed to the ambiguity that surrounds VBHC. To be clear, this thesis builds on the conception of value as it pertains to the work of Porter and colleagues—i.e. what is referred to as the "economic sense" in the quote above. Nonetheless, my analysis does leave room for other values as it pertains to individuals and societies: I incorporate these as the multiple normative assumptions and conflicting visions that operate within the Dutch health care system. Accordingly, these other values are part of the scramble that shapes the meaning and application of VBHC in the Netherlands.

There are, however, additional reasons for VBHC's cloak of ambiguity. While I feel confident in describing VBHC as a coherent set of ideas developed by Porter and colleagues, the literature on VBHC reveals anything but a coherent interpretation of the concept (Frederickson et al. 2015; Van Staalduinen et al. 2022; Vijverberg et al. 2022). And although I have personally found coherence in the work of Porter and colleagues (Porter & Teisberg 2006; Porter 2008; 2010; Porter & Lee 2013), this nonetheless concerns my perception. Moreover, while some scholars appear to share my reading of Porter and colleagues (e.g. Nilsson et al. 2017; Colldén & Hellström 2018), others have clearly interpreted this body of work differently (e.g. Triantafillou 2020; Landewé 2021; Runnels

et al. 2021; Hui et al. 2022). Undeniably, VBHC means different things to different people—even when it is considered a set of ideas developed by Porter and colleagues.

In partial overlap with different (scholarly) interpretations, there also appears to be a wide variety of practical applications of VBHC—again, even when the concept is, by and large, considered to be a set of ideas developed by Porter and colleagues (cf. Erichsen Andersson et al. 2015; Bonde et al. 2018; Colldén & Hellström 2018; Van Staalduinen et al. 2022). How VBHC takes shape in practice seems to be heavily dependent on local circumstances (Colldén & Hellström 2018; Nilsson et al. 2017; Ramsdal & Bjørkquist 2020).

What is more, the set of ideas developed by Porter and colleagues—what I refer to as VBHC—has itself not entirely remained consistent over time. Most prominently, the idea of *value-based competition*—really the be-all and end-all of Porter and Teisberg's (2006) seminal book—has gradually faded away in key publications on VBHC, up to the point that the very term competition does not appear in the article that outlines the "value agenda" by Porter and Lee (2013). So, VBHC can be regarded as a coherent set of ideas developed by Porter and colleagues (advocating radical changes), but one that has nevertheless seen some modifications over the years. And while having garnered global attention and recognition among both scholars and practitioners (Vijverberg et al. 2022), VBHC has been interpreted differently in scholarly work, and its practical applications have been characterized by locally varied adaptations.

## Research design

Since my goal is to unravel and grasp the essence of a phenomenon (i.e. the interpretation and application of VBHC in the Netherlands) rather than detailing its prevalence (e.g. how much it is mentioned or how often it is applied), this thesis relies heavily on qualitative research methods (Boeije 2010). These range from semi-structured interviews (Chapter 3 to 6) to document analysis (Chapter 3 and 4), a focus group (Chapter 5), and participant observation (Chapter 4). Chapter 2 constitutes somewhat of

an exception since it builds on the Delphi technique, which is technically a quantitative method that includes qualitative elements (Jones & Hunter 1995). All empirical chapters, however, make use of existing literature in the way that is typical of qualitative research: "mainly to understand what is going on in the field and to discover theoretical perspectives, including proper concepts to look at the social phenomenon of interest" (Boeije 2010: 5).

Concerning theoretical perspectives, my strategy has been one of utilizing (sociological) theories and concepts primarily as sensitizing tools (Blumer 1954). So, rather than remaining zealously loyal to a particular unified (social) theory or any fixed ontological standpoint or scientific paradigm, this thesis builds on the utilization of theory as "sensitizing concepts" that do not determine but guide the collection and analysis of empirical data (Ibid). Hence, I pragmatically employ theoretical perspectives and concepts as analytical lenses (Boeije 2010: 23) to shed new light on the meaning and bearing of VBHC within the Dutch health care system. Whenever possible, however, I do strive to actually define these sensitizing concepts—exactly because such definitions strengthen their potential for analytical guidance. Table 1 below provides a per chapter overview of the methods that are used, the main concepts that are built on, and the sub questions that are addressed. 10

<sup>9</sup> It may be worth noting that what does run through this thesis is a pluralist view of human perception: people perceive the world differently. My research both build on this premise and supports it as an empirical claim. But this claim should not be confused with pluralism an ontological standpoint. The point is that even if there would be but a single a single reality it will be perceived differently. I consider this claim well demonstrated and recognized on multiple levels of analysis (e.g. culture (Geertz 1973), morality (Haidt 2012), cognition (Sacks 1995)). And, at least for the purpose if this thesis, it all but nullifies the utility of me taking on a paradigmatic position on the nature of reality.

As indicated by the academic (sub)fields in which most of this thesis' theoretical perspectives are rooted, my analysis is by and large a sociological one, and since it specifically concerns the health care system as a segment of Dutch society, for the most part, I consider this a thesis in the subfield of medical sociology that includes partial elements of related fields of study, such as health services research, public administration, and medical anthropology.

**Table 1.** A summarized overview of the following empirical chapters

Chapter	Main concept(s)	Methodology	Research question
2. Dutch consensus on value-based health care: a Delphi study	Consensus	Delphi technique: two-round survey	To generate expert consensus on the most important aspects of VBHC.
3. Redefining value: a discourse analysis on value-based health care	Discourse; frame of reference	Discourse analysis: semi-structured interviews; document analysis	How is VBHC being interpreted by actors and organizations that monitor and influence the quality of care in the Netherlands?
4. Value-based health care in translation: from global popularity to primary care for Dutch elders	Translation (actor- network theory)	Case study: participant observation; semi-structured interviews; document analysis	How does VBHC transition from idea to application in primary care in the Netherlands?
5. Value-based redesign: the organizational structures of hospitals	Organizational structure; coordinating mechanisms; design parameters (organizational theory)	Semi-structured interviews; focus group	How are Dutch hospitals currently working toward value-based redesign: structural coordination around medical conditions over full cycles of care?
6. Regulated markets and rationalized myths: the purchasing practices of Dutch health insurers	Institutions, organizational legitimacy; institutional layering (institutional theory)	Semi-structured interviews	How insurers perceive the context in which the value-based purchasing of hospital care should take shape?

To gain insight into the meaning of VBHC in the Netherlands, Chapter 2 builds on the Delphi technique, an approach typically used for seeking consensus regarding phenomena that are uncertain or ambiguous (Jones & Hunter 1995; Hasson et al. 2000; Riddle & Tribble 2008). The discourse analysis of Chapter 3 confirms much of the consensus found in Chapter 2, but it also uncovers considerable disagreement on VBHC, revealing conflicting lines of reasoning that are based on underlying assumptions about the governance and management of health care in general. Chapter 4 borrows insights from actor-network theory (ANT), particularly the concept of translation (Callon 1986; Latour 1987), and highlights

how both the meaning and application of VBHC will inevitably entail adaptations to the original set of ideas: Dutch actors and organizations will use it and adapt it for their own purposes (cf. Latour 1987). Together, Chapter 2, 3, and 4 help understand why VBHC is interpreted the way it is within the context of the Dutch health care system. Chapter 5 uses Mintzberg's (1979) "design parameters" as a sensitizing tool to analyze how VBHC principles are being applied within the organizational structures of Dutch hospitals. Chapter 6 builds on institutional theory (Meyer & Rowan 1977; Hall & Taylor 1996; Thelen 1999; Scott 2004) to reveal how the application of VBHC principles by Dutch health insurers is constrained by multiple institutionalized rules and beliefs to which insurers are expected to conform. Together, Chapter 4, 5, and 6 offer insights into the reasons for why VBHC is applied the way it is in the Netherlands.

So, the following empirical chapters of this thesis can be subdivided into two parts: the first part (Chapter 2, 3, and a subpart of Chapter 4) consists of studies on how VBHC is interpreted in the Netherlands; the second part (Chapter 4, 5, and 6) consists of studies on the application of key VBHC principles (within a primary care organization, within hospitals, and within the purchasing behavior of insurers, respectively). In the first part, a scramble of visions and rhetoric emerges, and ideas about VBHC get mixed and moderated. In the second part, there looms an ongoing scramble among stakeholders, whereby the behavior of organizations and the individuals within them is constrained by traditional structures and (perceived) external expectations.

# DUTCH CONSENSUS ON VALUE-BASED HEALTH CARE

A Delphi study

#### Published as:

Steinmann, Gijs, Diana Delnoij, Hester van de Bovenkamp, Rogier Groote, and Kees Ahaus. 2021. "Expert Consensus on Moving towards a Value-Based Health care System in the Netherlands: A Delphi Study." *BMJ Open* 11 (4). doi:10.1136/bmjopen-2020-043367.

# **Background**

Value-based health care (VBHC) is a highly topical concept within many health care systems (Economist Intelligence Unit 2016, EIT Health 2020, Groenewoud et al. 2019). The concept was pioneered by Michael Porter and Elizabeth Teisberg, who propose an overarching goal for all stakeholders in health care: to optimize value for patients (Porter & Teisberg 2006). Thus far, however, it remains relatively unclear how to transition this popular idea into the actual establishment of a value-based system—despite Porter's attempts to outline just that (Ibid.; 2007; Porter 2008; Porter & Lee 2013).

Several studies report fragmented and muddled efforts to implement VBHC (Erichsen Andersson et al. 2015; Colldén & Hellström 2018; Ebbevi 2017) Some scholars attribute these instances to the "high level of abstraction" and "vagueness" in which VBHC was originally described (Colldén & Hellström 2018). Although we recognize that VBHC is an abstract concept, we believe its muddled implementation can at least partially be explained by its multifaceted composition.

VBHC was developed as a strategy that aims to inform all stakeholders in health care systems (Porter & Teisberg 2006). It is an extensive concept with far-reaching implications: its goal is to "transform health care" (Ibid.: 4). In a value-based system, all stakeholders share a common objective: value for patients—with value defined as a patient's health status (outcomes) divided by the recourses it took to achieve that status (costs). Importantly, Porter and Teisberg argue, value can only be understood at the level at which it is created: in addressing a medical condition, over full cycles of care (2006: 5, 99-105). Providers should thus realign their organizational structures, forming integrated practice units which focus on one or a few related medical conditions and cover full care cycles (Ibid.: 167-77). Payment structures should also be aligned with value, with bundled payments for full cycles (or episodes) of care (Ibid.: 265-67). Perhaps most importantly (according to these scholars) providers should actively engage in benchmarking: they should systematically measure, report and compare their outcome data. This would fuel value-based competition, and enable patients, payers, providers and policymakers to all

make more value-based decisions (Porter & Teisberg 2006). In sum, VBHC encompasses numerous aspects and requires a whole range of actions and practices in order to be implemented.

In this chapter we aim to identify the relative importance of the various aspects of this multifaceted concept. This is both timely and important, because although the recent uptake of VBHC has been described as remarkable (Groenewoud et al. 2019), it nonetheless remains unclear what practical steps should be undertaken, and what aspects should be prioritized on the road towards a more value-based system. In fact, as mentioned earlier, several studies report muddled implementation efforts (Colldén & Hellström 2018; Bonde et al. 2018), and it also appears that scholars employ different standards when they discuss the implementation of VBHC (cf. Van Egdom et al. 2019<sup>a</sup>; Garvelink & Van der Nat 2019; Van Egdom et al. 2019<sup>b</sup>). In addition, several scholars have stated that the way in which a multifaceted concept such as VBHC moves from idea to practice, is highly contingent on the particular intricacies within different health systems (Bonde et al. 2018; Dainty et al. 2018). Thus, uncertainty prevails when it comes to the actual implementation of VBHC.

In this chapter, we build on the Delphi method to identify the relative importance of various actions and practices in moving toward a value-based health care system in the Netherlands. The Dutch health care system is a particularly interesting case since it is based on regulated competition (VWS 2016). Moreover, the measurement and use of outcome data is increasingly becoming an important issue in Dutch health care policy (Ibid.). Several of VBHC's aspects (as outlined by Porter) are thus already in place.

Accordingly, our research question is: which aspects, actions and practices do Dutch experts agree on as important in moving towards a value-based health care system?

### **Methods**

The Delphi technique is a well-established research method to build consensus where considerable uncertainty exists, and where empirical evidence is (still) lacking (Jones & Hunter 1995; Hasson et al. 2000; Riddle & Tribble 2008; Saka et al. 2020). In this modified Delphi study, we explore Dutch expert consensus on the most important aspects of VBHC, and the actions and practices that will contribute to implement VBHC in the Dutch system.

We recruited our expert panel through purposive sampling. Ten experts were selected based on their known or stated expertise regarding value-based health care and the Dutch health care system. Nine panel members completed the first survey round: four females and five males who, at the time of the study, averaged nearly 23 years of experience in their current professional field, with eight out of nine members counting >10 years of experience regarding quality improvement. Additionally, these experts all have significant experience working with VBHC inspired initiatives, either through their profession within a hospital (n=5) or through their collaboration with health care organizations (n=4). Of the five participants working in a hospital, two are professors at an academic hospital, with a background in medicine; two are project leaders (value-based health care); one is a manager (quality). Of those not directly employed by health care providers, one has a managerial function at a hospital association; the remaining three work in health care consultancy.

We created an initial list of 39 items. The bulk of these items were derived from the pioneering literature on VBHC (Porter & Teisberg 2006; Porter 2008; 2009; 2010; Porter & Kaplan 2016; Porter et al. 2016). We complemented this with several items that—particularly within Dutch health policy—are strongly related to VBHC. Accordingly, these items were extracted from policy documents that directly deal with one or more aspects of VBHC (e.g. outcome measurements) (Schippers 2012; 2015; Hutink et al. 2016). These complementary items are warranted, since our study builds on the notion that the implementation of VBHC will vary between health systems and socio-political regions (Bonde et al. 2018; Dainty et al. 2018). Examples of item descriptions are: "assessing

the quality of a treatment cycle by measuring the achieved health status"; "creating integrated practice units (IPUs)"; and "learning from relating data on outcomes to data on costs of health care."

Our expert panel completed questionnaires during a two-round modified Delphi survey, in which they rated each item according to "how important you deem this item in moving towards a value-based health care system?" Scoring occurred on a four-point Likert scale: "very important" (1), "important" (2), "moderately important" (3), "not important" (4). The first survey was sent out in December 2017, the second in January 2018. Panel members were given three weeks to complete each questionnaire.

In line with previous Delphi studies (Minkman et al. 2009), we retained items after each round that were rated as "very important" (1), or "important" (2), by at least 80% of the experts, and excluded those rated as "not important" (4), or only "moderately important" (3), by more than 50% the experts. We expect the distribution of scores to be skewed towards agreement on importance. Therefore, our threshold for agreement on importance (≥80% scores very important or important) is higher than for agreement on non-importance (>50%) scores moderately or not important.

Importantly, after rating an item, each expert was asked whether they had suggestions to reformulate that particular item. Additionally, by the end of the survey round, experts also had the possibility to add new items to the list, as they saw fit. Suggested additions and reformulations would become part of the next survey round. The second survey round, therefore, consisted of both the reformulated and unchanged items that scored between inclusion and exclusion, plus the newly suggested ones from round one.

We thus conducted a *modified* Delphi study, particularly because we did not enable experts to revisit the aggregate scores of each item between survey rounds (Hasson et al. 2000). Since our goal was to generate consensus, we decided that only those items on which *no* consensus was reached in the first round would be presented to the panel again in the second round.

# **Findings**

Table 2 shows the flow of our Delphi study. Of the 10 experts that were recruited, 9 (90%) agreed to participate and completed the study. Our analysis of the second round of questionnaires revealed missing data regarding one of the panel members; we therefore omitted this expert's data for the entire second round (80% response rate).

Table 2. Results survey rounds 1 and 2

Response	Round 1 (90 %)	Round 2 (80%)
Number of Items	39	18
		(5 unchanged, 8 reformulated, 5 new)
Consensus Included	20 (45%)	12 (66,7%)
Consensus Excluded	6 (13,6%)	0 (0,00%)
Discordance Reformulated	8 (18,2%)	0 (0,00%)
Discordance Unchanged	5 (11,4%)	6 (33,3%)
Newly suggested items:	5 (11,4%)	0 (0%)

As the table shows, twenty items were included in the first round, i.e. rated as important (2) or very important (1) by at least 80% of the panel members. Additionally, six items were rated "moderately important" (3) or "not important" (4) by more than 50% of the experts and were therefore excluded. This entails that *no* consensus was reached on 13 of our initial 39 items. These items thus became part of the second round, as did 5 new items put forth by panel members. In the second survey round, another twelve items were included by the panel members, bringing the total number of included items to 32 (20+12).

See Table 3 below, for an overview of all 32 items that were included through expert consensus after two survey rounds. No consensus was reached on six items (see Table 4 for an overview). However, in the second survey round experts did not suggest new items, nor did they suggest any reformulations—thus indicating saturation was reached.

**Table 3.** Included Items (#1-#44) according to their mean importance score  $(\bar{x})$ , standard deviation (s) and round of inclusion (1 or 2)

of medical conditions, rather than for individual treatments/ procedures.  1,22 0,67 1 #4 Organizing delivery of care around full treatment cycles of medical conditions, rather than around individual procedures.  1,33 0,50 1 #28 Using patient reported outcome measures (PROMs) to evaluate the provision of care.  1,33 0,50 1 #34 Using dashboards or scorecards to assess and visualize performance.  1,38 0,52 2 #43 Learning to optimize the relationship between health outcomes and costs.  1,38 0,52 2 #23 Assessing the quality of the provided care based on the patient's recovery process after treatment(s).  1,44 0,73 1 #12 Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a practitioner's perspective.  1,44 0,73 1 #9 Including a patient representative in the improvement team i order to ensure expert input from the patient perspective.	x	s	Rot	ınd item	Item description
of medical conditions, rather than for individual treatments/ procedures.  1,22 0,67 1 #4 Organizing delivery of care around full treatment cycles of medical conditions, rather than around individual procedures.  1,33 0,50 1 #28 Using patient reported outcome measures (PROMs) to evaluate the provision of care.  1,38 0,50 1 #34 Using dashboards or scorecards to assess and visualize performance.  1,38 0,52 2 #43 Learning to optimize the relationship between health outcomes and costs.  1,38 0,52 2 #23 Assessing the quality of the provided care based on the patient's recovery process after treatment(s).  1,44 0,73 1 #12 Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a practitioner's perspective.  1,44 0,73 1 #9 Including a patient representative in the improvement team is order to ensure expert input from the patient perspective.  1,44 0,73 1 #20 Reducing the amount of performance measures that are used to view data and share data with others, with the aim of improving the provision of care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Poscribing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,66 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focuses on collecting and analyzing existing data from patient records.	1,00	0,00	1	#26	
cycles of medical conditions, rather than around individual procedures.  1,33	1,11	0,33	1	#21	
evaluate the provision of care.  1,33	1,22	0,67	1	#4	cycles of medical conditions, rather than around
visualize performance.  1,38	1,33	0,50	1	#28	
outcomes and costs.  1,38 0,52 2 #23 Assessing the quality of the provided care based on the patient's recovery process after treatment(s).  1,44 0,73 1 #12 Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a practitioner's perspective.  1,44 0,73 1 #9 Including a patient representative in the improvement team i order to ensure expert input from the patient perspective.  1,44 0,73 1 #20 Reducing the amount of performance measures that are used Reducing from relating data on outcomes to data on costs of health care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 0,71 1 #17 Creating integrated practice units (IPUs)  1,66 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,33	0,50	1	#34	e
patient's recovery process after treatment(s).  1,44 0,73 1 #12 Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a practitioner's perspective.  1,44 0,73 1 #9 Including a patient representative in the improvement team i order to ensure expert input from the patient perspective.  1,44 0,73 1 #20 Reducing the amount of performance measures that are used to view data and share data with others, with the aim of improving the provision of care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,73 1 #18 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,38	0,52	2	#43	
1,44 0,73 1 #12 Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a practitioner's perspective.  1,44 0,73 1 #9 Including a patient representative in the improvement team is order to ensure expert input from the patient perspective.  1,44 0,73 1 #20 Reducing the amount of performance measures that are used to least the care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,38	0,52	2	#23	
order to ensure expert input from the patient perspective.  1,44 0,73 1 #20 Reducing the amount of performance measures that are used  1,44 0,73 1 #35 Learning from relating data on outcomes to data on costs of health care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,44	0,73	1	#12	Delivering a desired and sustainable outcome from a patient's perspective, rather than an optimal outcome from a
1,44 0,73 1 #35 Learning from relating data on outcomes to data on costs of health care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,44	0,73	1	#9	Including a patient representative in the improvement team in order to ensure expert input from the patient perspective.
health care.  1,50 0,53 2 #5 Developing a technological/digital platform that can be used to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,44	0,73	1	#20	Reducing the amount of performance measures that are used.
to view data and share data with others, with the aim of improving the provision of care.  1,56 0,53 1 #27 Establishing clear and realistic expectations for patients.  1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,44	0,73	1	#35	0
1,56 0,53 1 #16 Reducing waste (e.g. the waste of time, material and/or staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,50	0,53	2	#5	to view data and share data with others, with the aim of
staff capacity).  1,56 0,73 1 #13 Ensuring the general safety of patients when undergoing treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,56	0,53	1	#27	Establishing clear and realistic expectations for patients.
treatment.  1,63 0,52 2 #2 Striving to make individual health insurance as affordable as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,56	0,53	1	#16	
as possible.  1,63 0,74 2 #41 Describing the care process in care pathways, in which the goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,56	0,73	1	#13	, ,
goals and the "evidence-based" key interventions (who does what, and at what time) are established.  1,63 1,06 2 #1 Providing or aiming to provide universal coverage (health insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,63	0,52	2	#2	0
insurance).  1,67 0,71 1 #17 Creating integrated practice units (IPUs)  1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,63	0,74	2	#41	goals and the "evidence-based" key interventions (who does
1,67 0,71 1 #6 Assigning a data or business intelligence manager (or team) who focusses on collecting and analyzing existing data from patient records.	1,63	1,06	2	#1	
who focusses on collecting and analyzing existing data from patient records.	1,67	0,71	1	#17	Creating integrated practice units (IPUs)
1,67 0,71 1 #14 Avoiding over and underuse of health care services.	1,67	0,71	1	#6	who focusses on collecting and analyzing existing data from
	1,67	0,71	1	#14	Avoiding over and underuse of health care services.

Table 3. Continued

1,67	1,00	1	#22	Assessing the quality of a treatment cycle by measuring the achieved health status.
1,67	1,00	1	#30	Structuring payments for health care so that they cover the costs of a full cycle of care, rather than having separate payments for individual procedures.
1,75	0,71	2	#7	Developing a standardized step-by-step plan (roadmap) that health care providers can use to transition into value-based providers.
1,75	0,71	2	#8	Appointing a change manager (an expert in the field of value-based health care) who helps health care providers transition into "value-based" providers.
1,75	1,04	2	#29	Using patient reported experience measures (PREMs) to evaluate the provision of care.
1,78	0,67	1	#10	Using a patient's physical well-being in assessing the outcome of health care delivery.
1,78	0,67	1	#38	Creating predictive models that enable medical specialists to provide information concerning a patient's future health status.
2,00	0,50	1	#25	Choosing and adapting indicators from ICHOM sets (standardized outcome measurements for various medical conditions).
2,00	0,53	2	#44	Identifying and removing the barriers raised by privacy legislation that obstruct the path towards value-based health care delivery.
2,00	0,93	2	#11	Using the patient's mental well-being as an outcome indicator in assessing health care services.
2,00	0,93	2	#42	Striving to standardize outcome indicators in such a way that different groups of patients can be compared with one another.

Table 3 shows the 32 items that are included based on their consensually perceived importance in moving towards a VBHC system. The items are rank ordered, first by mean  $(\bar{x})$ , secondly by standard deviation (s). The mean  $(\bar{x})$  indicates the average score of the item (i.e. its perceived importance) according to our panel (rated by each member on a 4-point scale). An item's standard deviation (s) was primarily used to rank order items with a similar mean, and can be regarded as a secondary indicator of overall agreement among panel members. The table also displays whether items were included in round 1 or 2.

According to experts, the most important practice in moving towards VBHC in the Netherlands is to involve patients in shared decision-

making. Experts unanimously agree on the high importance of this item (#26). Other high ranking items on which experts agree are: to standardize performance measures for full treatment cycles of medical conditions (#21); to organize delivery of care around these full treatment cycles (#4); to use patient reported outcome measures (PROMs) for evaluating care provision (#28); to use dashboards or scorecards to assess and visualize performance (#34); to learn how to optimize the relationship between health outcomes and costs (#43); and to assess the quality of care based on the patient's recovery process after treatment(s) (#23).

After two rounds of questionnaires, six items remained on which no consensus could be reached. In other words, these items were neither rated (very) important by  $\geq 80\%$  of the experts, nor were they rated moderately or not important by  $\geq 50\%$ . These six items are shown in Table 4.

**Table 4.** Items with expert discordance after two survey rounds, according to their mean importance score  $(\bar{\mathbf{x}})$  and standard deviation (s).

Ī.	s	item	Item description
1,63	1,19	#31	Applying an incentive structure that stimulates providers to improve outcomes of care, rather than increasing volume.
1,75	0,89	#18	Updating and reformulating protocols and regulations iteratively in order to improve the quality of care.
1,88	0,83	#24	Assessing the quality of a treatment cycle based on the sustainability of a patient's health.
1,88	0,83	#39	Comparing the data of different IPUs or multidisciplinary teams in order to benchmark performance.
2,00	0,76	#37	Revising and reformulating existing measures continuously, and continuously developing new measures that are used to evaluate health care delivery.
2,38	0,92	#40	Basing the payment of health care services on the actual costs, and not on pre-arranged rates.

Experts did not reach consensus on the idea that the payment of health care delivery should be based on actual costs, rather than predetermined price rates (#40). Our panel also could not agree on the importance of the continual revision and improvement of standardized measures (#37), and the same applies to the repeated revision of general protocols

and regulations (#18). Additionally, no consensus was reached on the importance of benchmarking based on outcome data (#39). Disagreement also remained regarding the issue of quality assessment based on the sustainability of a patient's health (#24). Similarly, experts did not agree on the importance of incentivizing providers to improve their treatment outcomes (#31).

### **Discussion**

Our Delphi study identified expert consensus on the relative importance of aspects, actions and practices in moving toward a value-based health care system. Consensus was reached on 32 items that are deemed important (Table 3). In round 2, no new items were put forth, and there were also no suggestions for reformulation, thus indicating that saturation was reached. In the second round, six items remained on which experts did not agree sufficiently for either inclusion or exclusion.

Our most eye-catching finding concerns the consensus on the importance of shared decision-making (SDM). Experts unanimously rated this particular item (#26) as "very important" in moving towards a value-based health care system—which demonstrates a unique level of agreement, unmatched by any other item in this study. Interestingly, SDM is by no means a fundamental aspect within the pioneering literature on VBHC (Porter & Teisberg 2006; 2007; Porter 2008; 2010). In contrasts to SDM, which specifically concerns the deliberate discussion of treatment options, this body of work emphasizes the value-adding options patients have (or should have) in choosing amongst health care providers. Recently, it has been argued that the original VBHC concept, and the framework of market-based choices on which it rests, deemphasizes patients' personal values in life (Groenewoud et al. 2019). Perhaps our panel's unanimous agreement indicates that the incorporation of SDM may add a more personal dimension to VBHC-which has been advocated by some scholars (Van Deen et al. 2016).

In addition, multiple items reveal that experts agree on the importance of recognizing *full care cycles for medical conditions* as the relevant level

of analysis in health care. This applies to the organization of health care delivery (#4 & 17), its performance measurements (#21), and its payment structures (#30). This resonates with the literature on VBHC, particularly with the work of Porter, who repeatedly states that value in health care is created at the level of medical conditions, over full cycles of care (Porter & Teisberg 2004; 2006; Porter 2008).

Several items on which consensus was reached relate to the importance of outcome information (e.g. #22, 25, 28). Our panel agreed, for instance, that it is important to assess the quality of a treatment cycle by measuring the achieved health status (i.e. outcomes) of patients (#22). This overall emphasis on outcome measurement also corresponds with the literature (Porter & Teisberg 2006; Porter 2010; Porter et al. 2016).

Regarding outcomes, this correspondence may seem relatively straightforward, since the central tenet of VBHC is that all stakeholders must aim to improve value for patients, with value defined as health outcomes per unit of costs (Porter & Teisberg 2006; Porter & Lee 2013). However, our panel did *not* display similar correspondence regarding costs—the denominator of value ( $value = \frac{outcomes}{costs}$ ). Dutch experts thus appear to prioritize measuring outcomes over measuring costs, which may reflect other studies that indicate that when VBHC is being implemented, the costs of care attain relatively little attention (Erichsen Andersson et al. 2015; Nilsson et al. 2017).

One of the items on which our panel did not agree concerns the importance of comparing and benchmarking providers performance data (#39). Accordingly, and strikingly, experts did not reach consensus regarding the importance of one of the most foundational aspects of VBHC-theory:

Providers need to be compared on results, and excellent providers rewarded with more patients. Information about results [outcomes versus costs], which is appropriately risk adjusted, must become the critical driver of behavior in the system – by referring physicians, by health plans, by patients, and by providers themselves (Porter & Teisberg 2006: 102).

Faced with the challenge to establish a value-based system in the Netherlands, it appears that although Dutch experts agree on the importance of multiple aspects of Porter's original conceptualization of VBHC, they also blend in additional concepts (e.g. SDM), while bypassing others (e.g. benchmarking). It will require additional research, however, to determine the extent to which our study represents the range of Dutch expert opinion on this issue.

#### Limitations

One potential limitation of this study is that our panel consisted entirely of *Dutch* experts. However, we were interested in the implementation of VBHC in the Dutch system, and it therefore made sense to invite Dutch experts to participate. Accordingly, this has enabled us to demonstrate how, in the Netherlands, VBHC is being adapted and blended with other concepts such as shared decision-making. Additionally, experts might have been influenced by the particular items that were first presented to them, and this could have affected their scoring. To counterbalance this potential bias, however, experts could reformulate existing items, while also being able to suggest new ones as they saw fit—both of which they did (see table 2).

#### Conclusion

In this chapter we identified expert consensus on the relative importance of a variety of concepts and practices for moving towards a value-based health care system. Accordingly, our study provides additional insight regarding several important steps within the implementation of VBHC—a topical concern within many health care systems. However, our study also reveals considerable contrast with the pioneering literature on VBHC. Perhaps our findings, based on a Dutch expert panel, are a precursor to a process of implementation of VBHC in the Netherlands that deviates from the original concept—which has been observed elsewhere (Ericksen Andersson et al. 2015; Colldén & Hellström 2018). In such circumstances, some scholars have questioned whether VBHC is actually being implemented or, upon closer look, primarily serves as an inspiring idea (Nilsson et al. 2017).

# **REDEFINING VALUE**

A discourse analysis on value-based health care

### Published as:

Steinmann, Gijs, Hester van de Bovenkamp, Antoinette de Bont, and Diana Delnoij. 2020. "Redefining Value: A Discourse Analysis on Value-Based Health Care." *BMC Health Services Research 20* (1). doi:10.1186/s12913-020-05614-7.

# **Background**

Today's remarkable popularity of value-based health care (VBHC) is accompanied by considerable ambiguity concerning the very meaning of the concept. Several scholars have noted this ambiguity, with explanations ranging from the concept being diluted in academic literature (Fredriksson et al. 2015), to VBHC being a highly ambiguous concept in and of itself (Colldén & Hellström 2018), and to VBHC being adopted and adapted within various local contexts (Ibid.; Bonde et al. 2018). This chapter elicits an alternative conception. We aim to map the ambiguity by examining how VBHC is discursively framed and explore the presuppositions that give shape to diverging rationales. Our qualitative study fills a literature gap by conducting a discourse analysis specifically focused on the various ways VBHC is interpreted, thereby also contributing to a better understanding of VBHC in general, and some of the challenges that lie ahead regarding implementation efforts.

### The origins of VBHC

It feels safe to say that the core principles of VBHC are laid out in Redefining Health Care (2006) by Michael Porter and Elizabeth Teisberg (2006). They argue that value in health care consists of what matters most to patients: the health status they achieve (outcomes) and the price they must pay for it (costs). Therefore, providers should focus on generating maximum value for their patients by helping them achieve the best possible outcomes and by doing so in a cost-efficient way. Importantly, value is created at the level of medical conditions, over full care cycles (Porter & Teisberg 2006: 99-105). Providers should structure their organizations in alignment with the goal of value: forming integrated practice units whose dedicated work focusses on one or a few related medical conditions, or specific patient groups, with coordination over the full cycle of care (Ibid.: 167-77). Payment structures should also be aligned with value: bundled payments should cover full cycles (or episodes) of care (Ibid.: 265-67). Perhaps most importantly (according to Porter and Teisberg), providers should start measuring and reporting outcome data on each of the medical conditions they treat (Ibid.: 7). The widespread availability of outcome information will enable professionals to learn, to improve, and to refer patients to the providers that perform

best. Moreover, this will unleash the right kind of competition, the kind that is based on value. When providers compete on value, they will have to demonstrate good health outcomes at a competitive price in order to attract patients, which means they are also compelled to work as efficiently as possible (Porter & Teisberg 2006). The general idea is that "if value improves, patients, payers, providers, and suppliers can all benefit while the economic sustainability of the health care system increases" (Porter 2010: 2477).

### The ambiguity surrounding VBHC

The conceptual ambiguity surrounding VBHC is conspicuously evident in academic publications. To some scholars, VBHC is primarily a "management concept" (Fredriksson et al. 2015) or a "management innovation" (Colldén & Hellström 2018; Nilsson et al. 2017); to others, it is basically a business "strategy" for both providers and payers (Groenewoud et al. 2019); others see it as a "governance regime" (Bonde et al. 2018), or a "health policy framework to integrated care" (Busink et al. 2019). Additionally, while the importance of outcome measurements for VBHC is generally well established, the range of its utility remains debated. Whereas some argue that outcome measurements seem less valuable regarding chronic diseases (Ebbevi 2017), others argue that such measurements are actually particularly applicable to chronic conditions (Lui et al. 2016). Similar dissonance can be observed regarding the idea of value-based payment: while some scholars include pay-for-performance and capitation as value-based methods (Conrad 2015), these payment models are explicitly declared invalid by others (Porter & Teisberg 2006). Against this background, some suspect VBHC to be another one of those management concepts in health care (e.g. like Lean), whose promising start eventually grows into little more than a buzzword (Fredriksson et al. 2015).

Perhaps it should not come as a surprise that underneath this cloak of ambiguity, VBHC has been adopted and implemented in fragmented and multifarious ways (Colldén & Hellström 2018; Ebbevi 2017; Erichsen Andersson et al. 2015). These developments may well contribute to the ambiguity. In fact, the observation that the implementation of VBHC requires the concept to be "translated" (i.e. adopted and adapted) into multiple local contexts is indeed brought forth to explain the ambiguity

(Colldén & Hellström 2018; Bonde et al. 2018). Another, perhaps slightly provocative explanation, is that the meaning of VBHC is being diluted due to a lack of understanding by knowledge producers, particularly within academic writings (Fredriksson et al. 2015). Alternatively, it has also been stated that VBHC is a highly ambiguous concept in and of itself (Colldén & Hellström 2018).

Although the above-mentioned accounts may well be part of the story, we claim that a more profound comprehension can be found. We argue that all concepts, including VBHC, acquire meaning within a frame of reference (Geertz 1973; Peterson 1999; Peterson & Flanders 2002). An important part of the ambiguity that surrounds VBHC is that the concept is being perceived differently within different frames of reference. These frameworks of perception are often founded upon deeply rooted presuppositions and convictions. An important aim of this chapter is to explore the underlying assumptions that give shape to various interpretations of VBHC. We thus investigate and map the ambiguity that surrounds VBHC by conducting a discourse analysis on VBHC in the Netherlands. Our main question is: How is VBHC being interpreted by actors and organizations that monitor and influence the quality of care in the Netherlands?

The Netherlands forms an interesting setting, as its health care system is based on regulated competition, and the concept of VBHC is currently being adopted by a variety of organizations, including national policy institutions. Moreover, outcome measurements form an important theme within Dutch health policy. There is, however, an ongoing debate between various stakeholders on the use and public disclosure of these outcome data. Therefore, it is both relevant and timely to explore the interpretation of VBHC in the Netherlands.

#### The Dutch context

In 2006, the same year in which Porter and Teisberg published *Redefining Health Care*, the Dutch Health Insurance Act came into force. This was a significant regulatory overhaul. By law, private insurance companies were now charged with the task of stimulating the quality and efficiency of health care providers (mainly through selective contracting); while

competition for members among insurers should refrain them from excessively increasing annual premiums. This entailed an increased demand for adequate quality information, which would allow all participants in the system (including patients and government agencies) to usefully compare and evaluate providers (and insurers). Since 2014, health care providers are legally required to report quality information to the National Health care Institute. In recent years, outcome measurements are increasingly becoming part of this requirement.

### Methods

We have conducted a discourse analysis that aims to map the various ways in which VBHC is being interpreted in the Netherlands. Discourse analysis is a particularly well-suited approach to uncover the foundational presuppositions that shape the rhetorical use of ambiguous concepts (Cheek 2004; Boivin et al. 2009).

Within this chapter, "discourse" refers to: a set of statements and expressions regarding a certain issue (e.g. VBHC); conjoined by shared assumptions (which are not always expressed explicitly); often framing the way people think, talk, and write about that issue; with the potential to guide actions and decisions (Watson 1994; Cheek 2004). Although such an understanding recognizes that discourses may frame action, we do *not* depart from a deterministic conceptualization of discourse (Alvesson & Kärreman 2000). Additionally, this chapter does *not* elaborate on the power/knowledge relations that may harness discourses and dictate social realities—as is customary in (Foucauldian) critical discourse analysis (Hodges et al. 2008; cf. Newton 1998). Rather, this study departs from the presupposition that all concepts, including VBHC, acquire meaning within a particular frame of reference (Peterson 1999; Peterson & Flanders 2002). We examine how certain (deeply rooted) assumptions and frames of reference generate particular interpretations of VBHC.

We have conducted our discourse analysis accordingly: analyzing statements and expressions regarding VBHC, which were gathered through semi-structured interviews (n=23) and document analysis (n=22).

Thereby building on the notion that discourses materialize in such textual representations (Cheek 2004; Greenhalgh et al. 2012; Lang 2019).

#### Selection

Our study attains a *national* orientation: we are interested in national discourses. This focus on national debates is particularly relevant regarding the Dutch health care system: the country has a centralized health policy framework, in which several influential sector associations, which represent particular stakeholders, operate on a national level. Therefore, through purposive sampling (Green & Thorogood 2009), we selected our documents and interviewees with the aim to gather statements and expressions that are relevant on a national scale.

Between March and July 2019, we have conducted 23 semi-structured interviews with representatives of government bodies (the Ministry of Health, Welfare and Sports, and the National Health Care Institute), national branch/sector associations, several representatives of insurer companies, and provider representatives (mostly members of the executive or supervisory board). In addition, two of the interviewees are academics specialized in health policy and management in the Netherlands. The interviews were audio recorded and lasted 55 minutes on average, with verbatim transcripts averaging 7000 words.<sup>11</sup>

As mentioned, we complemented our interviews with document analysis, thereby diversifying our dataset, which should strengthen our findings. Our national orientation also shaped the document selection: we searched for *official publications*, that are publicly accessible, established by nationally active actors and organizations. The respective documents (n=22) were all searched for online, selected based on their relevance to the topic (VBHC), and their national orientation. Only recently published documents were considered applicable, in order to avoid as much as possible, the possibility that the statements in the documents were related to structurally different circumstances and events than the interviews. Resultantly, the oldest document consists of a ministerial letter to parliament from October 2015; a text we considered too relevant

<sup>11</sup> See Supplementary file 2, on https://doi.org/10.1186/s12913-020-05614-7, for the interview guide that was developed for this study.

to exclude. We halted our search for additional documents in December 2019, when our data-analysis reached a point of saturation regarding our main question.

### **Analysis**

QDA software (Atlas.ti) was used for structuring the analysis. Roughly speaking, the process of analysis consisted of three stages. Firstly, we developed an initial coding scheme (Green & Thorogood 2009), which was established through the open thematic coding of the first five interviews. The main goal of this scheme was to develop a structural set of codes with brief descriptions of the cluster of themes and topics that fall under each code—which would be utilized to label the data, enabling a structured and focused analysis with deliberate comparison in and between texts. The coding scheme was developed by GS, in correspondence with the feedback received from HB, DD and AB. The second stage was initiated by the increased amount of data and characterized by the sequential re-reading of the texts and the re-evaluation and adaption of the coding scheme. Transcripts and documents were co-read by HB. In the third stage, the process of coding increasingly became intertwined with interpretation. This fully launched the analysis of the coded texts: guided by the main research question -and informed by our definition of discourse-we searched for patterned expressions and conjoined lines of reasoning, including a specific search for coherence and discordance. Particularly during this stage, the main author wrote regular analytical reports which were reviewed by each author and discussed in team sessions.<sup>12</sup>

# **Findings**

Our analysis revealed four diverging discourses on VBHC in the Netherlands. Interestingly, shared decision-making (SDM) is a core part of VBHC, in all four discourses. Before elaborating on this second observation, let us first describe the different discourses (see Table 5 for an overview).

<sup>12</sup> See Supplementary file 2 (a COREQ checklist) on https://doi.org/10.1186/s12913-020-05614-7 for additional insight into our methods.

Table 5. Four discourses on VBHC

	Patient	Governance	Professionalism	Critique
	Empowerment			
VBHC	Framework for improving patients' position regarding medical choices	Toolkit to steer and incentivize providers	Methodology for optimizing health care delivery	Dogma of manufacturability
Assumption	Patients in disadvantaged position, inequality in patient doctor relation	Incentives can improve behavior of medical professionals	Professionals intrinsically motivated to serve patients interest and deliver value	Health care is too complex for standardized value
Main use of outcome info	Choice information (for patients)	To stimulate professionals	Professional learning and improving	Learning and within patient-doctor relation
SDM	End goal: would require and demonstrate empowered patients.	Way to enable patients to act upo outcome information.	Way to improve care delivery and create value for individual patient.	Great: addressing individual needs in cooperative relation.

#### Four discourses on VBHC

Firstly, there is what we have labeled a *Patient Empowerment* discourse (PEMP), in which VBHC is chiefly portrayed as a framework for strengthening the position of patients regarding their medical decisions. Secondly, we have identified a *Governance* discourse (GOV) in which VBHC is primarily construed as a mechanism to steer and regulate care providers toward value for patients. Third, there is a *Professionalism* discourse (PROF), in which VBHC is predominantly construed as a methodology for the organization and improvement of health care delivery. Fourthly, we have identified a *Critique* discourse (CRI), which is characterized by a specific form of critique of VBHC, particularly its emphasis on measurement and standardization.

# Patient Empowerment (PEMP)

Within PEMP, the interests of patients are cardinal, and a central premise is that VBHC can be an important framework in addressing these interests:

Look, if you believe in adding *value*, then that means that you *optimally* include the patient in the course of events. That you optimally involve them in the story. That is the basis. So, and that is quite difficult, is the patient being taken seriously enough? I see a lot of places in health care where that simply doesn't happen enough (IP 7).

Moreover, this discourse builds on the viewpoint that the position of patients within the Dutch health care system requires improvement. The following quote by former minister Schippers nicely illustrates this notion:

In the past, the position of patients regarding health care insurers and doctors was weak. [...] Information about the quality of the care that was delivered was also unavailable to these patients. [T]his requires enormous catching-up (Schippers 2015).

In this line of reasoning, patients can and should be empowered by providing them relevant information that can help them in their medical decisions, e.g. which provider and what treatment. Accordingly, PEMP frames information provision as a moral obligation, something patients are entitled to:

I see that as my right. Yes, and based on that [information] I am supported to make a good choice for one provider versus another one who is just not performing as well. [I]f there is data available that shows that one is better than the other, shouldn't I simply be able to choose that one? (IP 17).

Within PEMP, the capacity to choose becomes a goal in itself. Choice empowers patients and should be facilitated through adequate access to relevant information. Therefore, this discourse advocates an increased provision of relevant information to patients:

The starting point for this next phase is that more information becomes available [...] so that the patient can better choose 'which consultation room he or she will end up in' and that 'in that consultation room the right decisions can be taken jointly' (VWS 2018).

Enabling patients to choose for themselves is thus seen as a step forward; an improvement from past times when "patients took the doctor's advice for granted" (Schippers 2015). A presupposition underlying this discourse is that the advice given by doctors will not always match the interests of patients. Therefore, the position of patients requires

strengthening, and VBHC is discursively portrayed as a strategy toward patient empowerment.

### Governance (GOV)

Within the governance discourse (GOV), VBHC is primarily adopted as a mechanism to steer and incentivize care providers toward better outcomes and lower costs (i.e. higher value). A core premise is that the incentives that are built into health care systems influence provider behavior. This entails the notion that external parties such as government agencies and insurance companies can and should incentivize providers. Relative to the other discourses, within GOV the financial side of health care gains significance, also regarding VBHC:

The more you produce, the more money you get paid. That is an incentive that does not necessarily lead to more value for the patient (IP 5).

Within GOV, steering efforts to induce improvements are deemed desirable. Particularly financial incentives and payment structures such as bundled payments are seen as a useful tool in generating optimal care delivery. This idea of incentivizing applies to individual providers but also concerns more structural phenomena regarding the organization of health care.

With bundled payments, you will also see that you get different organizational relations. Now it [money] goes either to the gynecologists or to the midwives, and with such a bundled payment it goes to the gynecologists and the midwives, and you have to arrange that as efficiently as possible. [T]hen you'll get another conversation. Yes, I certainly believe that. So, I think (I thought about it this morning) yes health care is still very strongly supply-driven. That is still the case. We pretend it isn't, but it is. Particularly in maternity care I can see this: we actually know that we should organize it differently, but we just don't do it. Because of our own work enjoyment; our own wallet; and so on (IP 4).

For GOV, VBHC seems like a particularly well-suited framework to incentivize and steer care providers, since the idea of value *combines* 

outcomes and costs. In doing so, VBHC simultaneously addresses costefficiency and quality of care, and thus merges two orientations that are sometimes thought to be at odds with one another. Within this line of reasoning, VBHC establishes a "common language" (IP 20) for external parties and the providers they regulate.

So VBHC is a new bridge, to let economists and clinicians talk to each other. That is part of what VBHC is (IP 25).

The *Governance* discourse presupposes that medical professionals will not automatically work toward optimal value. This assumption is comparable to the previously mentioned presupposition in PEMP (that the interests of medical professionals will not automatically match those of patients), however, in GOV the answer is not empowering patients, but incentivizing professionals. In this light, VBHC becomes a discursive framework to align incentives with value for patients.

### Professionalism (PROF)

While within PROF it is recognized that the perspective of patients should indeed be more adequately addressed, this notion is nested in a broader understanding of VBHC as a model for organizing and improving health care delivery. With the objective of patient value in mind, VBHC constitutes a methodology in health care facilities. Crucial to this value-based framework is an emphasis on continuous improvement.

[W]hat is of paramount importance to me about actually implementing the VBHC methodology, is that you create a culture in which our medical professionals are constantly searching to improve the value for their patient, in a data-driven way. [...] A culture where you're constantly looking for improvement (IP 5).

An important element of VBHC as a methodology and a culture of continuous improvement is a renewed focus on medical conditions as the relevant organizational units (as opposed to the traditional medical specialties).

Organizing care around the condition instead of the specialty. In order to provide value to patients, health care needs to be organized differently [...]. By multidisciplinary teams, around conditions, through the entire chain and from the perspective of the patient (Federation of Medical Specialists 2018).

It is noteworthy that PROF generally stands highly enthusiastic toward VBHC, yet within this discourse, some level of restraint is also advised. Essentially, it is argued that for VBHC to reach its full potential, we must be careful not to let it become an "economic" or "management" tool (Federation of Medical Specialists 2018), but instead preserve the alignment with the *intrinsic motivations* of professionals—to improve the quality of care.

If we're going to impose this from the outside, top-down, again through some nationwide program [...] then we won't make it (IP 15).

In general, PROF considers the intrinsic motivations of medical professionals to be aligned with the interests of patients: to deliver the best possible care. The idea that we need external parties to incentive professionals is therefore refuted:

That's the idea of VBHC, that you still need to give professionals an incentive to do what's good—everyone wants to do good (IP 16).

The Federation of Medical Specialists (FMS) further illustrates this conviction when they portray their vision for the future:

In 2025, all parties involved in care and well-being will work together in a health care system in which the needs of the patient serve as the starting point. For most health care professionals, this goes without saying, and is already the starting point for the work they do. Unfortunately, many feel that the health care system with its rules and protocols prevents them from providing optimum health care and being able to meet the needs of the patient (FMS 2017).

So, whereas the previous discourses (PEMP and GOV) presuppose that it will require additional efforts to secure the alignment of the choices and motivations of medical professionals with the interests of patients and the

goal of value, the underlying assumption of PROF is quite the opposite: it is external regulations that hamper the optimal utilization of professionals' intrinsic motivations. From this viewpoint, optimizing patient value requires the facilitation of professional expertise through interprofessional learning and improvement. It is within this line of reasoning, that VBHC is discursively framed as a methodology for health care delivery.

### Critique (CRI)

Whereas the previous three discourses all portray a positive attitude toward VBHC, the fourth discourse we identified takes a highly critical stance. This critical discourse (CRI) goes beyond being worrisome about some of the potential disadvantages of VBHC (as we have seen within PROF); it rebukes some of its core principles. Within CRI, VBHC is portrayed as a dogma of manufacturability, which falls short in recognizing the immense intricacies in health care. In particular, the critique concerns the emphasis that is placed on aggregated measurements:

Look, if you ask me 'what do you see as the biggest disadvantage of that VBHC concept?'—that is that it *thinks* that value can be measured at the group level. And also, that it is really based on the idea that you can grasp *the good*—good care—in a couple of numbers. That's a second (IP 16).

CRI not only rebukes the emphasis VBHC puts on standardized outcome measurements; their critique goes deeper: they question the validity of large-scale standardization in health care by linking it to a belief in the manufacturability of good care. This belief, that the highest quality care can be measured and (re)produced systematically, is mistaken according to CRI:

[T]hat *focus* on those outcomes, that is a type of utopia of manufacturability. An [...] approach like 'something is only good when its consequence is *measurably good*.' Well, I think that is a reduction of reality. [...] The good is much richer than merely numbers (IP 16).

Instead of assuming that with aggregated data medical professionals can manufacture value, CRI advocates a more personal approach that recognizes the importance of relationships:

It really all departs from the same presumption. Namely: if we have the right instrument, then we will change reality. And that is what I myself always object to. Against those means-end reasonings. As if the context, the preferences of people, are casually put between brackets. They don't count for the moment. While I think that if there is anything in health care, then it is that the care is made in the relation itself. The relation between patients and practitioners, or between practitioners themselves (IP 22).

Within this line of reasoning, instead of aiming for standardization and comparability, health care delivery should attend to differences. The medical "attention that people need can be different for each person" (IP 16). Health care should thus be personalized. However, "that personal focus of care is lost in the measurement at group level" (IP 16).

I think there should be much more of that individualization: what does it mean for me? And that's not the same as absorbing my preferences into an aggregated dataset, and then saying, 'oh you belong to that group, and with that group, we will do this' (IP 22).

Within CRI some of the core premises of VBHC are refuted. Particularly the emphasis on aggregated and standardized measurements is seen as undesirable to health care delivery. A better approach would be to recognize relational complexities and to further personalize care. CRI thus presupposes that health care—and the people that organize, deliver, and receive it—forms a sphere of intricacies that cannot be adequately addressed by an approach that departs from a standardized notion of value. It is from this presupposition, that VBHC is discursively framed as a dogma of manufacturability.

### Divergencies on outcome measurements

While each discourse recognizes the important role of outcome measurements regarding VBHC, this issue—what to do with outcome information—nevertheless remains highly contested. Indeed, it is particularly in relation to outcome measurements that the discourses exemplify conflicting lines of reasoning.

### Patient empowerment on outcome information

Within PEMP, the purpose of outcome information is first and foremost to strengthen the position of patients in relation to medical professionals and the workings of the health care system. Highly illustrative for this line of reasoning is the title of a 2018 report by the National Health care Institute: *More control for patients through more outcome information* (ZINL 2018).

As mentioned, within PEMP, it's the ability to make an informed choice that empowers patients—outcome data is seen as particularly useful in this regard:

If good outcome information is available, the patient and caregiver can together make a choice regarding the diagnostics and treatment that is most suitable for that patient. Outcome information is also needed to choose a care provider that meets the wishes of the patient (ZINL 2018).

As you may recall, PEMP states that it is a patient's right to have access to relevant information. Therefore, such information must become widely available and, furthering this logic, PEMP advocates transparency of outcome measurements:

Transparent, meaning public, outcome information helps patients in choosing a health care provider, choosing a treatment together with the practitioner, and [...] must, therefore, be available [...] to provider *and* patient (ZINL 2018).

To recap PEMP's view, the position of patients should be strengthened through more adequate information provision, which will encourage better choices. Outcome information, publicly accessible, is framed to be a means to this end.

### Governance on outcome information

Within GOV, outcome information is portrayed as an important tool to incentivize providers. The following quote, from a publication of an insurer company in which they outline their vision, is highly illustrative: We stimulate higher quality, with better outcomes of care as the central focus. [...] Based on our value-oriented approach, we have, for a few years, increasingly been making tangible agreements on (among others) quality measurement, quality comparison and quality improvement in relation to cost. This requires clear outcome indicators (Menzis 2029).

Although the idea of transparency of outcome data is generally seen as positive within GOV, it is stated that making outcome information publicly accessible should serve a function. Keeping in mind the aim to stimulate improvements, GOV questions whether large-scale transparency of outcome measurements will be the best way forward. Existing quality registries (which in the Netherlands are *not* open to the public) may already have the desired, incentivizing effect.

This is already going for years, of course, because we've had quality registries for years. [...] And yes indeed, then you want to do it just as good as the neighbor. So, it is more like an incentive, indeed, to do it better. But we've been seeing this for years: that is the effect of those quality registries (IP 2).

In sum, GOV frames outcome information as an instrument to incentivize professionals. Transparency can be desirable as long as it is functional. Nevertheless, even without transparency, GOV construes outcome information mainly as a tool to stimulate providers.

#### Professionalism on outcome information

Whereas some advocate (mandatory) transparency of outcome information, PROF displays a different mode of reasoning. Although it is recognized that patients should indeed be optimally informed, it is predominantly within the doctor's office that this optimization should take place.

The efforts should primarily be aimed at making useful outcome information available in the doctor's office and the conversation between patient and doctor (FMS 2018).

Within PROF though, the main purpose of outcome data is to enable the continuous improvement among medical practitioners, its use within the doctor's office is the next step.

We first started to use it, and this still has the emphasis, on group level [...] and that is what we are going to try to interpret and try to improve. And now we are more and more trying to make that step to *individual* patient-level, in which you actually also *discuss* those outcomes with patients (IP 8).

So, according to PROF, the primary purpose of outcome measurements is to foster meaningful improvements. In this line of thought, transparency of outcome information—especially when obligated—is seen as illadvised. The power of outcome information lies in its learning potential, which threatens to be hampered when its gobbled up by the forces of external accountability.

You first and foremost want to use those numbers well yourself, to see 'where can we improve and what do I need for that.' [...] If this really wants to work, and if this really wants to play a part in learning and improving, then we should also make those forms of accountability less national, less abstract and far away, but rather much closer by [in the communication] with patients and health insurers (IP 14).

In addition, when faced with the argument that transparency could enable patients to choose between providers, PROF questions whether this would be a positive thing:

That whole idea from a while back, you know the 'market' and so on, 'the patient who chooses' and that being an important driver of improvements [...] Although it could help [...] that is not the driver. We ourselves have an important responsibility, our own, to make sure that the care is as good as possible [...] that should simply remain at the top. And we should not transfer that [responsibility] to a patient, who will then choose with their feet. (IP 14).

To summarize, within PROF, outcome information should primarily be a tool for interprofessional learning and improvement. Patient-choice should not drive improvements, this should come from the internal motivations of professionals. This discourse argues against transparency, which is seen as an external accountability tool, with objectives that are at odds with learning and improvement.

### Critique (CRI) on outcome information

Within CRI, outcome information can be a useful source—among others—that may fuel the conversations and relations amongst professionals and between and professionals and their patients.

If you would really be willing to use it as an indication, as a start of a conversation, then it could, of course, be beneficial. When that standardized information is not the norm, but rather a tool to start the conversation (IP 22).

A big concern within CRI though, is that outcome data will not nourish conversations but instead stifle medical practice by becoming the oversimplified standard of good care, a "reduction of reality" (IP 16). This will particularly be the case when external parties such as insurers will hold providers accountable for their outcomes:

[E]ach number is valuable, but needs a story. You need more. It's only part of the story. And my big fear for VBHC and outcome-based payment is reductionistic assessment. So, pretending as if it is simple, based on numbers. And that is bad for health care (IP 16).

Typical for this critical discourse, the rationale relates to the stifling effects of standardization on a personalized approach to care:

As an accountability tool, and with its cost-reducing promises related to the role of insurers, outcome information will very much limit the potential of the patient-doctor conversation. Instead of a helpline, it will grow into a mandatory requirement that must be met, just like the current guidelines and protocols (IP 22).

Within CRI, transparency of outcomes is perceived disturbingly, and the idea that this might lead to better health care is refuted. Instead, CRI presupposes that the *effects* of transparency are undesirable.

When you make all that data transparent to everyone, then certain mechanisms will come into effect, which causes all kinds of manipulations on that data to take place. Therefore, I think, that's something that you don't want (IP 25).

Then you'll brush up those numbers and you'll get a nice feigned reality (IP 16).

In sum, within CRI, outcome information is regarded as a potentially useful helpline within the patient-doctor conversation and could also serve interprofessional learning. However, standardized measurements will never tell the whole story of the myriad intricacies that correlate in the search for good care. Such numbers should therefore not become the standard by which external parties judge health care providers. Accordingly, CRI argues against the transparency of outcomes.

### Common ground

While the statements on measuring and reporting outcomes reveal the starkest differences between the four discourses, common ground can be found. Within each discourse, it is stated that outcome information should eventually be used within the doctor's office and become part of the shared decision-making process regarding medical treatments. Moreover, within each discourse, shared decision-making (SDM) is perceived to be a core element of VBHC. This incorporation of SDM into VBHC is significant since SDM was by no means a defining characteristic of the original concept (cf. Porter & Teisberg 2006, 2007; Porter 2008; 2010). As will unfold below, this emphasis on SDM goes hand in hand with a redefined understanding of patient value.

#### SDM as a core element of VBHC

A prevailing idea in the Netherlands is that the specific outcomes that matter to patients will often vary greatly between individuals. This is where SDM nicely blends in: it is framed as a mechanism to address the specific needs and interests of individual patients.

[T]o us, it [VBHC] really starts with the right conversation in the doctor's office, so that is the basis to us. [...] And that is let's say, really the individual care provision [...]. And that's why I think that in the doctor's office you need to very carefully look at 'what's important for this individual patient' (IP 18).

It is by relating the notion of patient value so strongly to the individual and his or her medical decisions, that SDM is brewed into the idea of VBHC. Although a few of our interviewees stated that there are differences between the two frameworks, the bulk of them portrayed SDM as a key element of VBHC. Several participants regard SDM as the very core of VBHC (IP 2, 14, 15, 17, 18, 21, 25) a viewpoint best illustrated by the statement that "shared decision-making is the *condicio sine qua non* of value-based health care" (IP 17). Similarly, multiple official publications—e.g. government reports (VWS 2018; ZINL 2018), insurer publications (Menzis 2018), and statements by provider associations (FMS 2018; NFU 2019)—also showed a deep entanglement of the two.

As mentioned, the fusion of VBHC with SDM occurs in all discourses. Within the *Patient Empowerment* discourse (PEMP), SDM is seen as a crucial component of VBHC—as a tool for strengthening the position of patients. The idea here is that a genuinely *shared* decision-making process would be the embodiment of the improved position of patients:

What it is all about is that every patient must be able to participate in decisions about their treatment, on an equal footing. [...] Shared decision-making requires a different, equivalent interplay with patients (IP 25).

The Governance discourse (GOV), also embraces SDM, but primarily as a way to actively incorporate patients in VBHC—as a mechanism to incentivize providers:

By making the value of care the central focus, and by aiming the incentives in health care at it, a common goal emerges for patients, care providers and health care insurers (Menzis 2018).

But I think that if we truly want patients to use it, that we should really go all-in on Shared Decision-Making. Namely, the fact that patients will realize that they can choose under those circumstances (IP 9).

In addition, the *Professionalism* discourse (PROF) also perceives SDM as a crucial component of VBHC—as a methodology. Within this discourse though, it primarily becomes a way to improve health care delivery by customizing medical treatments:

The patient is our partner in value-based health care. Together with the patient, the health care professional discusses what really matters to him or her. Based on personal treatment objectives, health care professional and patient together decide on the treatment that will be followed. [...] That way, we deliver customized care for each unique patient (NFU 2019).

Lastly, within *Critique* discourse (CRI), SDM is basically seen as the uniquely positive aspect of VBHC—as a dogma of manufacturability—since ideally, this could enable the personalization of care:

In a kind of positive explanation, I would consider VBHC as an attempt to, what I find nice about it is that it could lead to a much more personalized form of care. That's what I really consider its most important aspect. [...] However, it then concerns, each time, the individual patient. What does that one need? (IP 25)

SDM is thus construed to be a key element of VBHC within each discourse (albeit on slightly different terms). This incorporation not only emphasizes the importance of the patient-doctor relationship for generating value, it also insists on recognizing the patient as an *individual*. Together, this emits a conceptualization of patient value that alters from how the concept was initially put forth.

### Redefining value

Our study shows a trend in which value is being redefined. The original concept—with the fraction  $value = \frac{outcomes}{costs}$ —is regarded as too narrow and too economic.

[W]e considered the approach based solely on Porter too narrow. So, defining value as outcomes versus costs [...] we really found that to be too narrow (IP 14).

In the Netherlands, patient value is discursively framed not so much as a strategic goal for the health care system (cf. Porter & Teisberg 2006; Porter & Lee 2013), but as something that ought to emerge from an interactive patient-doctor relationship which tends to the individual needs of each patient. Within this revised understanding of patient value, the *conversation* between a medical professional and a patient gains significance:

[T]he one-on-one conversation with the patient. That's where we really want to emphasize 'what do you find important as a patient?' You as an individual. [T]here's a leap from population to individual, and it's taken in that conversation (IP 14).

"A leap from population to individual". This metaphorical leap, we believe, is illustrative of the manner in which patient value is being reconfigured in the Netherlands; where value in health care is perceived to be not so much determined (economically) by a set of aggregated outcome data that come at a certain price, but rather becomes a matter of informed customization in the doctor's office.

### **Discussion**

In the growing body of literature on VBHC, the work and impact of Michael Porter is inescapable. Indeed, it is hard to even find papers that mention VBHC but do not refer to Porter (not impossible though (e.g. Moriates et al. 2019)). However, as should be clear from the background section of this chapter, assuming that this implies a coherent conception of VBHC would be misguided. Instead, VBHC is conceptualized ambiguously in scholarly work (cf. Fredriksson et al. 2015; Bonde et al. 2018; Groenewoud et al. 2019), which is mirrored in multifarious and fragmented implementation efforts (Colldén & Hellström 2018; Ebbevi 2017; Erichsen Andersson et al. 2015) and shines through in our discourse analysis.

Our research indicates that the ambiguity surrounding VBHC is largely due to the concept being perceived differently through different frames of reference—which rest upon often deeply rooted presuppositions. VBHC is not, in essence, a particularly ambiguous concept—at least not necessarily more or less than other concepts. Instead, the concept is perceived differently by a variety of individuals and organizations, who employ different frames of reference, which manifest themselves in the way they think and talk about value in health care. Therefore, while it is certainly possible that some scholars "miss the point" (Fredriksson et al. 2015) when writing about VBHC, we argue here that underlying presuppositions frame one's point. In other words, assumptions confine aims, perceptions and (mis)representations (Peterson 1999; Peterson & Flanders 2002).

Next to mapping VBHC's conceptual ambiguity, our discourse analysis aimed to uncover the way(s) VBHC is interpreted by actors and organizations that monitor and influence the quality of care in the Netherlands. We identified four discourses, each characterized by a set of statements and particular lines of reasoning; conjoined by underlying presuppositions (see Cheek 2004, Watson 1994).

In the Patient Empowerment discourse (PEMP), VBHC is chiefly portrayed as a strategy for strengthening the position of patients regarding their medical decisions. PEMP is the articulation of VBHC and the foundational presupposition that patients need to be empowered, since health care providers may have their own interests. The Governance discourse (GOV) also builds on the assumption that the intrinsic motivations of providers are not necessarily aligned with the goal of patient value. Within GOV, however, this issue is seen as best addressed by steering and incentivizing providers. Accordingly, within GOV, VBHC is primarily adopted as a mechanism to incentivize care providers toward better outcomes and lower costs. By contrast, the Professionalism discourse (PROF) is a manifestation of the presupposition that the intrinsic motivations of medical professionals are already in line with those of patients and the notion of patient value. In PROF, VBHC is construed as a methodology for health care delivery, emphasizing continuous improvement. Lastly, in the Critique discourse (CRI), VBHC

is deemed to be a dogma of manufacturability; one that mistakenly claims that the highest quality care can be produced and measured systematically. CRI presupposes that health care forms a sphere of intricacies that cannot be adequately addressed by an approach that departs from a standardized notion of value.

In the Netherlands, despite the discursive divergencies, there are two general ways in which each discourse contrasts with the pioneering literature on VBHC. Firstly, shared decision-making (SDM) is deeply ingrained in the conception of VBHC. While it would be hard to argue that SDM forms a central element of VBHC as it was originally outlined (cf. Porter & Teisberg 2006; 2007; Porter 2008; 2010), it could very well be argued that SDM constitutes a major component of VBHC *in the Netherlands*. Recently, other scholars have advocated the incorporation of SDM and individual patient preferences when implementing and evaluating VBHC (Van Deen et al. 2016), which may reflect an earlier call to combine biomedical individualization with the relational aspects of SDM, in order to truly personalize medicine (Burke et al. 2014).

Secondly, the issue of *competition* among providers has been conspicuously absent in most of the texts we analyzed. This absence is noteworthy, since the idea of value-based competition forms the undeniable cornerstone of Porter and Teisberg's thesis (Porter & Teisberg 2004; 2006; 2007). In fact, in *Redefining Health Care* (2006), the term "value-based health care" appears exactly once (as an adjective, p. 162). Instead, throughout the book, the authors speak of value-based competition. Interestingly, while scholars often refer to Porter and Teisberg's (2006) work as the pioneering text on VBHC, the preeminence of *competition* is rarely acknowledged sufficiently (a notable exception being Groenewoud et al. 2019). This confirms our earlier claim that—in academic texts as well—frameworks of reference tentatively determine what VBHC is perceived to be.

Furthermore, the label "value-based health care" will not only be perceived and utilized diversely in thought and (academic) writing, it will also continue to engender varying and probably contrasting practical initiatives, which will be evaluated differently, according to different standards (cf. Van Egdom et al. 2019<sup>a</sup>; Garvelink & Van der Nat 2019;

Van Egdom et al. 2019<sup>b</sup>). Therefore, although we tend to agree with the notion that VBHC requires empirical evidence (Ebbevi 2017; Garvelink & Van der Nat 2019; Van Egdom et al. 2019<sup>b</sup>), this chapter conveys a primal issue; namely: *evidence of what?* In light of differing perceptual frameworks and diverging discourses, we strongly urge scholars to be particularly deliberate when researching and writing in relation to VBHC.

Our study has at least two important limitations. Firstly, our analysis focused specifically on the Netherlands: its particular health care system and health policy climate may clearly inhibit the comparability of our findings. Moreover, scholars have stated that the way in which VBHC (as a concept) manifests itself is contingent upon specific local and regional complexities (Bonde et al. 2018; Dainty et al. 2018). As our study shows that the concept of VBHC is being perceived differently *within* the Dutch context, we strongly encourage future research regarding discourses on VBHC within other systems and regions.

The second main limitation of this study concerns the fact that we have focused primarily on what is said and written, not on what is acted out. It goes without saying that people's actions may contradict their words; it was, however, beyond the scope of this study to investigate how and to what extent the four discourses relate to actual decisions and practices concerning VBHC. We therefore advocate additional research regarding practical implementations of VBHC.

#### Conclusion

Our current study is vital since our discourse analysis demonstrates that the meaning of VBHC—including its perceived implications for action—depends greatly on the frame of reference a certain actor or organization brings to bear in relating to this concept. Moreover, the various discourses (which may differ between countries) will shape current and future debates on VBHC (Schmidt 2008; Stevens et al. 2018). The decisions that result from these debates may have a significant impact: they will regulate what exactly will be measured and reported when it comes to outcomes; these decisions will thus affect how providers will be held accountable; they will construct standards of good (i.e. valuable) care; they may influence the way insurers will structure their payment;

they could influence patients' decisions, both regarding treatments and regarding providers; plus they may have an impact on the conversations in the doctor's office.

Accordingly, these discourses will profoundly shape the diverse manners in which VBHC moves from an abstract concept to the practical provision and administration of health care. Therefore, policymakers, health care administrators and practitioners would be wise to at least take the validity of different logics and their entrenched presuppositions into consideration when they truly aim for more value for patients. We hope our study may contribute to this end.

# VALUE-BASED HEALTH CARE IN TRANSLATION

From global popularity to primary care for Dutch elders

## Under review:

Steinmann, Gijs, Hester van de Bovenkamp, Antoinette de Bont, and Diana Delnoij. "Value-based health care in translation: from global popularity to primary care for Dutch elderly patients."

# **VALUE-BASED REDESIGN**

The organizational structures of hospitals

#### Published as:

Steinmann, Gijs, K. Daniels, Fabio Mieris, Diana Delnoij, Hester van de Bovenkamp, and Paul van der Nat. 2022. "Redesigning Value-Based Hospital Structures: A Qualitative Study on Value-Based Health Care in the Netherlands." *BMC Health Services Research* 22 (1). doi:10.1186/s12913-022-08564-4.

## **Background**

The organizational structures of hospitals have repeatedly been criticized for impeding coordination, hampering efficiency, and delivering suboptimal patient care (e.g. Lega & De Pietro 2005; Vera & Kuntz 2007; Porter & Lee 2021). Moreover, much of this critique is supported empirically (Vera & Kuntz 2007; Ludwig et al. 2010; Cook et al. 2014; Hartnick et al. 2020). In this regard, the recent and widespread uptake of value-based health care (VBHC) is of particular interest since a key component of VBHC concerns the redesign of organizational structures (Porter & Teisberg 2006; Porter 2008; Porter & Lee 2021).

Although parallels exist between VBHC principles and approaches such as process-based design (Vera & Kuntz 2007), VBHC distinguishes itself by the way it defines and emphasizes value. In health care delivery, the argument goes, value consists of that what matters most to patients: the health status they achieve (outcomes), and the resources needed to reach that status (costs) (Porter & Teisberg 2006). By relating outcomes to costs, value encompasses efficiency, and establishes an overarching aim for health care systems: to optimize value by continuously striving to achieve the best outcomes as efficiently as possible (Ibid.). A foundational premise within VBHC—especially regarding organizational design—is that value is created at the level of medical conditions, over full cycles of care (Porter & Teisberg 2006: 99-105). The idea is that value is not created at levels as broad as organizations such as hospitals, or at levels as narrow as separate medical specialties or procedures, but over a full cycle of interdependent activities that linked together generate value for patients with a particular medical condition (Porter & Teisberg 2006: 44-51 & 203; Porter 2008)

For hardline VBHC proponents, a deep appreciation of this premise comes with three interrelated implications. The first is that providers should start to systematically measure both the outcomes and costs of their care cycles for each of the medical conditions they treat (Porter & Teisberg 2006; Porter 2008; Porter & Lee 2021). Second, provider organizations should realign their organizational structures with the goal of value and the level at which it is created. Thus, rather than organizing around medical specialties, hospitals ought to create integrated practice

units (IPUs) that coordinate the full cycle of services necessary to treat patients with a particular medical condition (Porter & Teisberg 2006: 167-77). In our subsections below, we elaborate on this implication and the notion of value-based redesign. Third, the payment structures (i.e. procurement contracts) should also be in line with value creation: with bundled payments for full cycles or episodes of care for patients with a particular medical condition (Porter & Teisberg 2006: 265-7).

While the pioneering work on VBHC has informed a range of health policies across the globe (Sarkies et al. 2015; Smith et al. 2015; Makdisse et al. 2018; Kokko & Kork 2020), the actual reorganization into value-based hospital structures remains unclear and understudied (Erichsen Andersson et al. 2015; Colldén & Hellström 2018; Makdisse et al. 2018). This study aims to provide a deeper understanding of how hospitals realign their organizational structure with the creation of value for patients. Our research zooms in on the Netherlands, a country in which VBHC is high on the national health policy agenda, and where multiple hospitals have started implementing VBHC principles (NFU 2018; Santeon 2021). Therefore, we examine how Dutch hospitals are currently working toward value-based redesign: structural coordination around medical conditions, over full cycles of care. Accordingly, we offer insight into the various ways in which value-based redesign is established in practice.

## The structuring of hospitals

In general, all organized activity requires both a division of labor into specific tasks, plus the coordination of those tasks. An organizational structure, basically speaking, refers to the way in which task allocation and coordination are designed (Mintzberg 1979: 2). Most of today's hospitals are structured around medical specialties, with organizational units that are based on the specific knowledge and skills (i.e. the functions) that are needed to perform certain complex tasks (Abernathy & Stoelwinder 1990; Lega & De Pietro 2005). Thus, hospitals typically have what is called a functional design: an organizational structure based on specialized skills (Mintzberg 1979; Lega & De Pietro 2005).

A main benefit of the functional design is that it facilitates contact and communication among similar (medical) specialists, thus supporting the continual transmission of complex skills (Ibid.). A downside, however, is that these structures are prone to pose workflow problems, resulting from a lack of coordination between organizational units (Mintzberg 1979). This can become particularly problematic when the specialized activities within the various units are highly dependent on one another—such as in hospitals (Lega & De Pietro 2005; Porter & Lee 2021). Consequently, much of the criticism on hospitals' functional design revolves around issues of interdependency and a lack of coordination between units (Abernathy & Stoelwinder 1990; Lega & De Pietro 2005; Vera & Kuntz 2007; Porter & Lee 2021).

## Value-based redesign

Value-based redesign—task allocation and coordination around medical conditions over full cycles of care—would disrupt hospitals' traditional structures (Porter & Teisberg 2006; Porter 2008; Porter & Lee 2021). According to the pioneering scholars on VBHC, such disruption is critical: improving value for patients will require a "fundamental restructuring" of the way health care delivery is organized (Porter 2008).

A value-based approach will require challenging conventional wisdom and making changes in structures and practice patterns that have been in place for decades (Porter 2008: 504).

In practice, however, profound structural changes such as these are highly challenging, particularly in organizations such as hospitals, where a highly professionalized workforce operates within firmly established traditional structures (Lega & De Pietro 2005; Rogers et al. 2020). Additionally, most of the changes professed by hardline VBHC proponents are primarily described conceptually, and several scholars have expressed the need for a deeper connection with real-life organizational complexities, including more explicit guidance that can aid providers in their internal reorganization process (Makdisse et al. 2018; Van der Nat 2021).

In this chapter, we build on Henry Mintzberg's (1979) research synthesis on the structuring of organizations, in which he elaborately deals with, among other topics, the mechanisms by which organizations arrange and coordinate their work, and the reasoning behind them. Mintzberg is a renowned scholar in the field of management and organization studies, and his widely cited "The Structuring of Organizations" (1979) remains highly relevant today—something our current study re-emphasizes. Here, in order to examine how Dutch hospitals work towards value-based redesign, we particularly build on his conceptualization of "design parameters" (Mintzberg 1979). For Mintzberg, organizational design essentially comes down to "turning the knobs" that affect the division of labor and modify the mechanisms that coordinate work within an organization. In slightly more technical terms, these knobs are labelled as the "design parameters" of organizational structures (Ibid.: 65).

In Table 7, we list Mintzberg's eight design parameters (first column); we describe the main ways in which each parameter can be used to organize the division and coordination of work (second column); and we outline our own conceptualization of "value-based design parameters" (third column), referring particularly to value-based redesign: task allocation and coordination around medical conditions over full cycles of care. The first and second column are strictly based on Mintzberg's (1979) compelling synthesis of research on organizational structures; the third column is derived from our own synthesis of Mintzberg's design parameters and Porter's seminal texts on VBHC (Porter & Teisberg 2006; Porter 2008). Thus, our conceptualization of "value-based design parameters" refers to potential "knobs" that can be turned to modify the mechanisms that coordinate the interdependencies between the various people and activities involved in treating patients with a particular medical condition.<sup>13</sup>

For an elaboration on the theory from which Table I is derived, see Additional file 1 on https://doi.org/10.1186/s12913-022-08564-4.

**Table 7.** A synthesis of Mintzberg's design parameters and Porter's VBHC principles.

Design parameter	Mode of coordination and division	Value-based design parameter	
	of tasks		
1. Unit size	Usually, units with more members will rely more on various forms of standardization for coordination; smaller units allow for more frequent and immediate interactions, and can thus more easily rely on mutual adjustment and interpersonal relationships.	Value-based sizing refers to the process by which size of organizational units is taken into consideration regarding coordination around medical conditions, over full cycles of care.	
2. Unit grouping	By grouping positions (i.e. employees with roles and tasks) into units, an organization establishes its formal authority structure, which enables coordination through direct supervision. Additionally, grouping encourages frequent (informal) communication among unit me	Establishing value- based organizational units around medical conditions (instead of specialty-based departments).	
3. Liaison devices	These devices facilitate mutual adjustment, mainly through informal communication, <i>between</i> units. They constitute contacts (liaisons), such as meetings and positions, that overlay the formal structure to spur coordination across unit boundaries.	Points of contact between units that are aimed at the coordination of activities around a medical condition (over the full cycle of care).	
4. Planning and control systems	These systems generate the standardization of <i>output</i> (the results of work). Plans specify a desired standard; controls assess whether a standard is achieved.	Utilizing outcome and cost measurements as value-based performance indicators.	
5. Training and indoctrination	Enabling coordination through the standardization of skills, norms, and specialized knowledge.	Propagating information and knowledge on VBHC within the organization.	
6. Job specialization	Key parameter for the division of labor; enables the organization to match people to tasks, fostering specialization and efficiency.	Task delegation specifically aimed at coordination of care cycles	
7. Formalization of behavior	Standardizes work processes through predetermined regulations; activities are tightly coordinated, thus formalizing workflow.	Establishing clinical pathways for groups of patients with a particular medical condition.	
8. De-centralization	Altering the way in which decision- making power is distributed within the organization. Decentralization refers to the dispersal of decision-making power.	Value-based decentralization occurs when value-based units acquire more decision- making power.	

For the purpose of our study, "unit grouping" is a particularly relevant

design parameter since the notion of an IPU can be regarded as the ideal type of organizational unit within VBHC-theory. However, within this study, we distinguish these ideal type IPUs from what we conceive of as "value-based units." In the context of hospitals, an IPU would acquire and manage its own budget, and ideally be an independent profit-and-loss center (Porter & Lee 2021). Thus, next to shifting lines of authority, reorganizing into IPUs would break up the traditional flow of funds through specialty departments (Ibid.). What we conceive of as value-based units, however, does not necessarily imply a shift in financial structures. Nevertheless, these value-based units are *formally grouped* together into distinctive parts of the organization (e.g. in a breast cancer department); they are assigned official authority within the hierarchy of a hospital. Accordingly, they differ from inter-unit multidisciplinary *teams*, which are informal parts of the organization (i.e. liaison devices that overlay the formal structure).

#### **Methods**

In order to explore the ways in which Dutch hospitals are working towards more value-based structures, this qualitative study made use of semi-structured interviews and a focus group for data collection. Throughout the research, we have built on our synthesis of organizational design parameters (Mintzberg 1979) and VBHC (Porter & Teisberg 2006).

## Setting

Our research focuses on the organizational structures of hospitals (outpatient specialty clinics do not fall within the scope of this study). In hospitals—relatively large health care organizations that provide a wide range of services out of a traditionally well-established functional structure—the organizational changes professed by hardline VBHC proponents seem particularly challenging.

The Netherlands forms an interesting setting as the concept of VBHC is currently being adopted by a variety of organizations, including national policy institutions, health care insurers, hospitals and other provider organizations (NFU 2018; Santeon 2021). The Dutch health care system

is characterized by regulated or managed competition. Roughly speaking, insurers are encouraged to compete for members by offering attractive premiums, which should incentivize them to critically purchase health care provision, thereby stimulating providers to demonstrate quality and efficiency. A crucial piece of regulation concerns the mandatory health insurance package that each citizen is required to take on and each insurer must cover for any (potential) member (at an equal price irrespective of individual characteristics). This basic insurance package aims to ensure the accessibility and affordability of high-quality health care provision, covering family care, specialist care, and inpatient hospital care, among others (Maarse et al. 2016).

In total, the Netherlands currently counts 69 hospitals (including eight academic hospitals). Within the system of regulated competition, all of these hospitals are private not-for-profit organizations (Klopper-Kes et al. 2011). The academic hospitals are required to contractually employ their medical specialists (i.e. have them on payroll, similar to all nursing and most other staff). However, the majority of medical specialists working in general hospitals are not salaried employees, but self-employed consultants within a closed hospital system. The contractual relation between consultants and the hospital is not arranged on an individual level but through a so-called "corporation" of medical specialists (*Medisch Specialistisch Bedrijf*). In essence, these corporations form within-hospital firms; they collectively negotiate contracts with a hospital, and fees are divided internally among members, usually differing between medical specialties (Klopper-Kes et al. 2011).

## Sampling

Keeping our main objective in mind, we made use of purposive sampling (Green & Thorogood 2009), targeting hospitals that explicitly claim to be working toward value-based organizational structures. Therefore, we built on our professional network combined with grey and academic literature on VBHC in the Netherlands, which led us to list sixteen hospitals. Next, we contacted each hospital via e-mail. We briefly explained our research before asking 1) whether the respective hospital is indeed working on value-based organizational structures around medical conditions; 2) if so, whether we could interview a suitable representative from within the

organization. In most cases, our professional network allowed us to either directly contact a potentially suitable hospital representative, or to contact a particular hospital employee in search for a referral; in other cases we contacted the hospital secretariat. In the end, we left it up to the potential interviewee to determine—based on the background information we provided about our research topic and objectives—whether he or she would be a suitable representative.

#### Data collection

Between April and November 2020, we conducted a series of semistructured interviews with representatives of Dutch hospitals. For this study, we composed an interview guide founded upon our theoretical framework.<sup>14</sup> Hence, questions focused on the ways in which hospitals are (attempting to) coordinate health care delivery around medical conditions, over full cycles of care.

We complemented our interviews with a focus group, for which we again made use of purposive sampling. Accordingly, we focused on the Linnean Initiative: an open multidisciplinary knowledge-network that aims to accelerate the implementation of VBHC in the Netherlands. One of their nine workgroups focusses specifically on the transition towards integrated practice units (IPUs). Within this IPU-workgroup the frontrunners in the field of value-based care in the Netherlands are considering this issue and are developing a step-by-step plan to build towards an archetypal IPU" (Linnean 2022<sup>16</sup>). We organized an online focus group in which the members of this IPU-workgroup would discuss our theoretical framework and our initial findings from the interviews, which we briefly presented beforehand. Through their hands-on expertise and their active involvement in an independent national knowledge-network, the data out of this focus group was used to strengthen our findings.

The interviews were conducted by either the first author (GS) or the

The interview guide can be found on https://doi.org/10.1186/s12913-022-08564-4 (Additional file 2).

<sup>15</sup> See https://www.linnean.nl/default.aspx for information on the Linnean Initiative.

<sup>16</sup> See https://linnean.nl/werkgroepen/default.aspx for information of the Linnean workgroups.

third (FM). At the time of the interviews, the first author was a male PhD Candidate with an educational background in cultural anthropology, whose research focusses on VBHC in the Netherlands. The third author was a male student within the bachelor program Health Sciences, Health care Policy and Management (Gezondheidswetenschappen, Beleid & Management Gezondheidszorg), and was doing an internship at a VBHC department in a Dutch general hospital at the time of the study. Next to the first and third author, the focus group was also attended by the second author (KD): a female PhD Candidate with and educational background in health care policy and management, doing her research out of the same hospital department (VBHC) where the third author was doing his internship. Together, the first, second, and third author conducted the data analysis.

## **Analysis**

Both the interviews and focus group were recorded and transcribed verbatim. All transcripts were analyzed through deductive coding (Linneberg & Korsgaard 2019). We converted our theoretical framework into a coding scheme, in which the design parameters (see Table 7) formed the initial codes. Although we employed a predominantly theory-driven deductive coding process, we did remain sensitive to relevant findings that would not fit easily into the initial coding scheme (Linneberg & Korsgaard 2019).<sup>17</sup>

The entire coding process, from the development of the initial coding scheme to the coding of all transcripts, was conducted by two primary coders (first and second author). A third of the transcripts was coded in tandem, the other two thirds were coded individually by both coders, who discussed all conflicts and potential adaptations or additions to the coding scheme. Accordingly, we aimed to reduce variability within our analysis (Berends & Johnston 2005). From October 2020 onwards, all authors met regularly in group sessions to discuss preliminary findings and earlier drafts of this chapter.

An overview of our coding scheme can be found on https://doi.org/10.1186/s12913-022-08564-4 (Additional file 3).

## **Findings**

Representatives of eleven hospitals agreed to partake in an interview (n=11); three hospitals refused to partake due to Covid-19; one declared not to fulfil our selection criteria; another one did not respond to our request. Out of the eleven interview participants, nine represent a general hospital, and two represent an academic hospital. At the time of the interviews, four participants worked as a "Program Manager VBHC", and one as a "Project Lead VBHC". An additional four worked on a hospital's organizational strategy and innovation: two as an "Advisor", one as a "Project Manager", and another one as a "Program Director." We also interviewed a "Chair Oncological Center" and a "Medical Director." Interviews lasted 57 minutes on average.

Regarding the focus group, seven out of ten members of the Linnean Initiative's IPU-workgroup participated in a 90-minute digital session. The focus group consisted of two hospital employees who we interviewed before; two employees of hospitals from which we interviewed someone else; three health care consultants; and one delegate of a government institution.

Our synthesis of Mintzberg's design parameters and Porter's principles of VBHC—see Table 7 for an overview—has formed the basis of our analysis and laid the groundwork for this section. Thus, each of the following subsections deals with a separate design parameter and how these are utilized by Dutch hospitals to coordinate work in line with the principles of VBHC. In our description, we stick to Mintzberg's (1979) terminology (e.g. "unit grouping", "standing committee", "liaison devices", "indoctrination"). When quoting respondents we refer to them with a particularly assigned number in parentheses; expressions from the focus group are referred to by number twelve (12).

#### Unit size

In each of the interviews the topic of unit size was brought up by the researcher. However, none of our respondents indicated that value-based sizing—the process by which size of organizational units is taken into consideration in relation to enhanced coordination—was a particularly relevant item.

We have chosen to not express that in a number of millions or a number of employees, but rather just to check with common sense: what would be good homogenous groups [of patients] for which you can put together an [value-based] unit (7).

Thus far, the issue of size was only relevant in relation to the number of team leaders, or the core set of team members who would meet and regularly discuss inter-unit affairs.

## Unit grouping

The concept of "value-based grouping" refers to the establishment of hospital units around medical conditions. Within Dutch hospitals, the considerations concerning the formation of units were relatively comparable. For instance, most interviewees expressed the belief that value-based units could indeed enable closer collaboration among everyone involved in treating patients with a particular medical condition. However, hospitals had acted upon this recognition in different ways.

I think you have two possible change strategies. One is that you have an idea, top-down, and you force it upon the organization, based on some kind of blueprint. [O]r, you let it arise organically from practice, bottom up, because the demand for a new organizational structure comes up. And that is the choice [our hospital] made (2).

Most hospitals were opting for a more bottom-up approach when it comes to value-based grouping. Accordingly, several hospitals had started "pilots" (1, 11,) in which they established multidisciplinary teams around a relatively small number of medical conditions. Respondents stated that the idea would be to eventually create more of these teams, and to incrementally carve these teams into the formal organizational structure.

Multidisciplinary, around a medical condition, we have now four [teams]. [E]ach of those [multidisciplinary teams] has a daily leadership board. [A] s the daily management of the team, the leadership board is responsible for the quality of care within such a team. [N]ow, we are mainly concerned with really working from within those multidisciplinary teams, that people know each other, know the process that a patient goes

through, and know what the most important objectives are and shape that into a whole. [W]hat we are working towards, is that these teams will be incorporated into the organizational structure (3).

But in small parts, of course. You could first start with those three integrated units with which we have started. So, a gradual transition (1).

Not all hospitals applied such an incremental approach. One, in particular, had consciously made a different choice regarding the grouping into units around medical conditions:

We discussed that this was going to be the new reality, and that means that people have just switched from A to B. [T]hen, that also means that everyone around [those medical conditions] that those people are just added to another flow. So, we have discussed it and said: listen we are going to organize it differently. [W]e made various patient flows, what we call [value-based units]. So, for example, the breast cancer flow contains the doctors, nurses, the breast cancer department, they are all added to this patient flow, and together they are responsible for finances and quality (7).

In sum, respondents widely recognized that grouping into units around medical conditions could enable hospitals to better address the interdependencies of various activities that are needed to care for patients. Yet, most hospitals were hesitant to radically transform their traditionally functional unit-structure into multidisciplinary value-based units around medical conditions.

#### Liaison devices

Rather than switching to units around conditions, most hospitals were trying to increase coordination *between* their functional units through various types of liaison devices.

## Liaison positions

To start, hospitals were making use of liaison positions. In fact, most hospitals had appointed a VBHC manager precisely to foster inter-unit coordination around medical conditions.

I work as a program manager VBHC. [S]o yes, in essence, I am responsible for setting up and continuing the VBHC program within our organization. So, the roll-out of care around medical conditions. And adding value, for the patient (1).

More specifically, these managers were assigned the task to coordinate the work conducted in several distinct units; they should have a "primarily supporting role" and "help teams organize themselves around a clinical pathway as best as possible" (11). Some respondents stated that in their hospitals these managers are usually approached by a group of medical specialists, who then ask for support related to VBHC. In other organizations it was usually the other way around, and managers had to actively search for potential cooperation.

I go to the highest manager below the executive board and ask "hey, on which medical conditions do you want to work in light of VBHC?" Because I need to know what is interesting for the hospital. Then, I go to that physician [...] and we discuss the matter one-on-one. Afterwards, we see who else we need to include, but it usually starts with me and a specialist. From there, I'll work things out, and discuss with the physician how to get things of the ground (8).

At the time of the interviews, some hospitals had a single VBHC manager, who was operating relatively autonomously, but it was not uncommon for hospitals to have several managers with complementary roles in a VBHC management team. The exact composition of these VBHC management teams varied considerably between hospitals. In some organizations, the program-manager was accompanied by a single medical specialist (a medical manager). Others had appointed a few more members, each focusing on a specific aspect of VBHC (e.g. one focusing on building a data infrastructure, one on work-process optimization, one on cost-measurement) (10). Overall, the primary role of these VBHC managers was to foster communication between separate units that are involved in the full cycle of care for a medical condition. In practice, they were often doing this by utilizing another type of liaison device.

## Standing committees

In order to facilitate mutual adjustment, hospitals had commonly established what Mintzberg (1979: 163) labels "standing committees," referring to institutionalized meetings that take place regularly and enable inter-unit communication. In general, these committees are not temporal project teams, but permanently woven into the official structure (Ibid.). So, in hospitals, "value-based" committees somewhat resemble value-based units in that they bring together a multidisciplinary group of employees around a medical condition. However, these committees are not official units, *they are liaisons*, overlaying the formal (functional) structure.

Within the project we did not just look at the organizational structure, but also at the meetings and consultation structure that goes with it, and we have set that up so that you can exchange and switch faster [...] so, more of different levels, putting different disciplines together (6).

At the time of our data collection, developing these liaison "committees" had been *much more common and widespread than actual formation of units* around a medical condition. In a common pattern, these committees started with a kick-off meeting, in which a large multidisciplinary group partook in determining the overarching mission and goal of the multidisciplinary inter-unit teamwork. After the kick-off, hospitals moved on to regular meetings—monthly had been a common timeframe—to discuss their performance with a select group of delegates from the various specialties involved.

It is a periodic meeting in which basically the team gets together, who are involved in the care of the medical condition. [A]nd in such a meeting, based on KPIs, they look at which outcomes can be improved. A nurse will also join, so basically everyone who should be involved, so someone from business intelligence also joins. And yes, then you will basically determine "which KPI now requires the most attention, and which actions are we going to [undertake] to improve it" (1).

Now, although these value-based committees are not actual units, in some hospitals these committees did form the basis for the "pilots" in which the

value-based units around a medical condition were being experimented with (see the subsection on unit grouping). When committees would, eventually, evolve into formal units, this would give rise to another form of liaison.

#### Matrix structure

As we have seen, at the time of our interviews, several Dutch hospitals were forming multidisciplinary units around a medical condition. However, this does not imply they were intending to sacrifice their functional units. Instead, they were conceiving of a transition toward a matrix structure—an organizational design that combines functional and value-based units.

We are trying to insert a kind of matrix structure. When you look at an organizational structure, then you'll see the specialties on the vertical lines, and the care paths horizontally run through them. At this moment, the [hospital name] has chosen not to make the switch, and maybe we will never do that, because in the end it will be a matrix anyway. You want coordination within the specialties, but you also want coordination across specialties (9).

Not everyone appeared to be convinced though, of the desirability of such a matrix structure. A recurring theme—regarding the matrix structure, but also regarding value-based redesign in general—was that the end goal, the ideal structure, should be determined along the way.

A disadvantage of a matrix organization is that it will generate a lot of coordination at the intersections between vertical and horizontal management. If that is going to cause a lot of hassle, this can be a reason to eventually switch completely, in one direction or the other (3).

In sum, what applies to the (possible) transitions toward matrix structure, in many cases applies to the use of all liaison devices: hospitals were utilizing them with caution; incrementally tweaking and experimenting with various types of connections between units.

#### Planning and control systems

Value-based planning and control systems refer to utilization of outcome and costs measurements as performance indicators. Whether concerning project teams or official units, all hospitals were engaged in some type of value-based performance measurement.

#### Outcome measurements

All hospitals we spoke to were actively involved in outcome measurements, thus trying to optimally standardize the outputs of their services—in this case, referring to the effects of these services on patients' health. The way in which these measurements were used, however, differed from one hospital to the next. Most notably, there were differences regarding the issue of benchmarking and comparison with other providers. Some hospitals had formed collaborations in which they were benchmarking their outcome data:

The approach of [hospital name] is that you benchmark the scorecard and when you see differences these will be discussed. And when you think one of the hospitals is doing something which leads to better results, then the others will adopt that—free of obligation, for the time being (3).

Several hospitals had been able to establish such benchmark-partnerships, and the ones that had not did seem to recognize the potential benefits of these collaborations; some explicitly expressed the desire to form such partnerships in the future (7). Although not all hospitals were, at the time of the interviews, involved in external benchmarking, all of them were either developing or already making use of dashboards for *internal* reflection.

We are building quality dashboards, some of which are already implemented. [A]nd we use those to continuously improve the care paths, for the [multidisciplinary] teams, but we also use them for reporting to the board of directors (2).

Next to standardizing work output, value-based performance measurements seemed to have generated a boosting effect on the collaboration among team members by creating a sense of shared responsibility for particular goals:

They really start to cooperate better; being aware of each other's problems and also solving those better with each other. [B]etween different specialties, nurses but doctors too, they will really look much better at that dashboard together: this is what we find important, this is what patients find important in terms of treatment and outcomes, and we actually think this is important too. They make dashboards that much more belong to them, which also makes them put much more effort into improvement. (7).

#### Costs measurements

When it comes to value-based performance measurement, costs seemed to have gotten relatively little attention compared to outcomes. While all Dutch hospitals were involved in outcome measurement, several hospitals had not (yet) utilized cost measurements in their efforts to create more value-based coordination. This was exemplified by one respondent when s/he was asked whether their multidisciplinary teams are accounting for costs:

No, not yet actually. On the cost side we are struggling quite a bit to make that insightful. That is also not our focus. Our focus is: we want to improve the outcomes of care, from the philosophy that the costs will then lower automatically (9).

Among those that were measuring costs, approaches differed. Some were making use of "cost drivers"—with proxy indicators such as length of stay, without immediately connecting these indicators to hard currency (5). Several hospitals, however, had been using cost price calculations, and some had hired an external agency to make this work (11). Moreover, these costs measurements were increasingly becoming part of the dashboards that enable multidisciplinary teams to evaluate their performance.

In sum, at the time of our data collection multiple hospitals had been struggling to gain insight into the costs of their services, yet others seemed to have made steps by incorporating cost price indicators into their performance dashboards. These differences between hospitals though, may have been related—at least partly—to the degree of official

commitment from the highest levels of the organizations, and the recourse allocation that comes with it.

#### Training and indoctrination

In order for organizational redesign to be successful, whether sweepingly or incrementally, it was widely recognized that a solid support base among all levels of the organization is crucial.

Tell the story. Explain why you do this and repeat it. Repeat it. Repeat it. Repeat it. Repeat it. Repeat it. And explain, each time, this is the reason why we do this, we think changing this will work better. So, don't begin by telling them what you are going to change, but first just start by creating the setting in which makes sense to change (5).

In order to generate a deep and widespread support base within the organization, Dutch hospitals utilized particular tactics. Some were applying a focused but unofficial approach, in which the executives first "look for the right informal leaders and convince them," and then, through these informal leaders, they try to get everyone else on board (7). But while several hospitals were handling their "indoctrination" (Mintzberg 1979: 97-9) informally, others had officially developed internal training programs, specifically focusing on VBHC.

We are actively involved in training within those [multidisciplinary teams]. Both specifically for the daily leadership and also broader. [N]ext tot that, we have set up a general training program in which within the [multidisciplinary teams] they can use this training. On the one hand, that is really about clear knowledge, so "what is value-based health care, what are those [multidisciplinary teams], why do we do this, how does this match the developments in the Dutch health sector?" On the other hand, knowledge and education for a specific [multidisciplinary team] (3).

So, with regard to the provision of training and value-based "indoctrination," some hospitals had relatively formalized frameworks in place. Others, however, found themselves making "baby steps" in developing a more coherent program (11). Additionally, there were cases

in which the leadership was not actively propagating VBHC-theory—even when VBHC was part of the official hospital strategy.

Really including the leadership of the hospital in that vision, that's still missing for us. I think that this is also essential for success on the long term. [T]that somewhere there will be turning point from bottom-up to also top-down management. [T]hat element is still missing, for us to make that switch. Because that does seem like a very nice one, when you can combine that with the bottom-up enthusiasm (12).

To conclude, regarding value-based indoctrination, an important distinction we noted between the approaches of various hospitals relates to the degree of official commitment to value-based redesign, particularly from the higher levels of the organization.

#### Job specialization

Value-based job specialization concerns the division of labor that is explicitly related to VBHC. Ideally, job specialization enables organizations to effectively match individual workers to their specific tasks (Mintzberg 1979: 70-9). Within Dutch hospitals, the issue of value-based job specialization was primarily relevant regarding the leadership of multidisciplinary teams, rather than the task division within those teams. This is because the actual tasks that most personnel would need to perform are usually not affected by VBHC-initiatives; what would change is *with whom* people will collaborate on a day-to-day basis (7).

When it comes to appointing the leadership roles within the multidisciplinary teams—the daily management referred to in the subsection on unit grouping—hospitals varied in their approach. Within some hospitals, the composition of this leadership was determined organically, usually depending on the enthusiasm of particular individuals, and had thus been different from one team to the next (10). Others had clearly defined a particular set of roles for each of their multidisciplinary teams, with a clinical leader, an administrative manager, and a leading nurse, for example (1). The importance of the composition of this leadership was widely recognized, and several interviewees referred to this daily management when they were asked about a vital lesson they have learned:

For me, a big lesson is the importance of a good leader above those [multidisciplinary] teams. And is also a challenge were facing. Currently, the leaders are the ones that took initiative, but they are not always the best leaders. That is something we definitely have to deal with (9).

One of the lessons is that appointing a daily leadership—formally through an application procedure—that has been very beneficial (3).

In sum, some Dutch hospitals had come to develop official application procedures for the daily management of multidisciplinary teams, while others were—thus far—favoring a more organic approach.

#### Formalization of behavior

In general, as a design parameter, "formalization of behavior" refers to the predetermined standardization of work processes (Mintzberg 1979: 81-3). In health care delivery—particularly in the context of VBHC clinical pathways for medical conditions have been a widely used form of standardization that enables a sequence of interdependent activities to be tightly coordinated beforehand.

In 2016, we started with internal VBHC clinical paths. Kind of a combination of Lean and VBHC. So, really trying to streamline the processes, measuring the right outcome indicators, assessing those, and steer on that basis (8).

All of the hospitals we spoke to were involved in the development and implementation of clinical pathways around medical conditions. In many cases, however, this continued to be work-in-progress.

#### Decentralization

For the purpose of this study, value-based decentralization refers to the process by which value-based units acquire greater organizational autonomy. As with other design parameters, most Dutch hospitals had been hesitant to turn this knob. For some, it remained questionable why and to what extent such autonomy is even desirable: In my opinion you should first have results, in a small setting, and then see "what have we learned from this? What works and what doesn't?" In terms of ICT [information and communications technology], dashboards, indoctrination, all those variables you take into consideration. And those, you scale up, before you start looking at structures, systems, architectures (12).

Some hospitals were starting to experiment, on small scales, with more autonomy for their value-based pilot units. In particular, this concerned financial autonomy: value-based units with their own budget control.

[T]he current integrated [value-based] units, they will start next year with sort of their own budget. You could call it a "shadow budget." [A] nd for new integrated units we've set aside a kind of mandate to give them some financial leeway so that they control their own development. So, there is already something like a budget. But we are also seriously considering, thinking about "can we really autonomize them entirely?" That's a question we'll be taking about (1).

A recurring theme regarding decentralization, but also more generally regarding value-based redesign, was the notion of a gradual transition towards more value-based structures. Interestingly, in many cases, the final stage of this transition was not clearly envisioned, but seen as something that will be determined later on, based on the experiences and lessons learned during that incremental process.

## **Discussion**

This research combines theory on value-based health care with theory on organizational structures, and explores how Dutch hospitals currently work towards value-based redesign: structural coordination around medical conditions, over full cycles of care. Our study demonstrates that Mintzberg's (1979) organizational design parameters offer a useful framework to analyze the implementation of value-based health care delivery.

Interestingly, while the core literature on VBHC depicts value-based redesign as a fundamental change, with radical and sweeping implications (Porter & Teisberg 2006; Porter 2008; Porter & Lee 2021), our study portrays a different picture; one of incremental redesign, with hospitals applying a variety of design parameters to various degrees.

The design parameter that best illustrates this contrast is unit grouping. Although one hospital did establish value-based units (through a top-down approach), most hospitals we spoke to are hesitant, at least for the time being, to (re)group into units around medical conditions. Rather, these organizations aim to spur coordination through various liaison devices, such as intermediary managers and regular multidisciplinary team meetings, leaving the original functional units intact. This contrasts with the authentic notion of integrated practice units (IPUs)—which concerns, above all, a *basis for grouping* in health care organizations (Porter & Lee 2021).

Whereas our current study describes the use of liaison devices (rather than unit grouping) to enhance coordination between functional units in terms of applying VBHC principles, this can also be seen as the manifestation of a broader trend in which hospitals worldwide are trying to overlay their functional designs with multidisciplinary teams (Liberati et al. 2016). This trend within hospitals, in turn, parallels a more general tendency seen in many sectors whereby organizations increasingly become "process-oriented," emphasizing workflow interdependencies instead of functional structures (Kohlbacher 2010).

When it comes to organizational structures, VBHC coincides with the idea of process orientation, although there are some defining characteristics. Similar among both though, is the belief that the traditionally functional structures of hospitals are flawed organizational designs that can and should be overcome (Vera & Kuntz 2007; Porter 2008; Porter & Lee 2021). To do so, a process-based design would be built on the premise that in order to optimize quality and efficiency, an organization should be structured around its core business processes (Vera & Kuntz 2007). Accordingly, process orientation contrasts with the old and nowadays controversial dictum in organization theory that "structure follows

strategy" (Miller 1986). Instead, these scholars propose that "structure follows process" (Vera & Kuntz 2007; Kohlbacher 2010). VBHC-theory also appears to profess process orientation, but only as a consequence of seeing the specific processes (i.e. care cycles) of addressing medical conditions as the chain of activities that generates value for patients. Within this framework, it is first and foremost the creation of value that should determine organizational structures (Porter 2008). Hence, if there would be a VBHC-variant of the old dictum, it might be something like "structure follows process follows value creation," or maybe just "structure follows value."

Whatever the phrase, the point would be that health care organizations should structurally coordinate their work activities such that value for patients is optimized. And hardline adherents of VBHC are convinced that this requires a radical transformation towards IPUs for medical conditions, rather than just overlaying a (dys)functional structure (Porter 2008; Porter & Lee 2021).

However, an important finding of our study, one that mirrors accounts on process orientation (Reijers 2006), is that the prevailing existence of a functional structure does not imply a complete absence of value-based redesign. Indeed, our study demonstrates that although the more radical switch to value-based units remains rare in the Netherlands, this does not preclude other forms of value-based redesign to take hold. For example, aside from the aforementioned liaison devices, hospitals utilize planning and control systems (i.e. outcomes and costs measurement) to upgrade coordination around medical conditions. Scorecards and dashboards containing outcome measurements are universally used for internal evaluation, but not all hospitals participate in benchmarking with other organizations. And although the use of cost measurements is less prevalent, several hospitals conduct cost accounting and relate this to outcome data. None of the hospitals we spoke to, however, actually measures or estimates patient costs over full cycles of care.

Overall, Dutch hospitals aim for *incremental redesign*. And in doing so, these organizations employ a variety of design parameters to various degrees. They generally envision a transition towards *more* value-based

structures, but this is usually described as a "slow process," starting with "experiments" and "pilots," characterized by "baby steps." Moreover, the envisioned end point of this transition—the quintessential design—remains unclear; the idea being that this will be determined along the way. So, even when the core principles of VBHC are widely embraced, many of our interviewees do not acknowledge IPUs to be the pinnacle of structure in health care.

For several reasons, an incremental approach to value-based redesign may well be more viable than the radical transformations professed by Porter (Porter 2008; Porter & Lee 2021). To start, organizations generally tend to hang on to their structures for relatively long periods of time (Mintzberg 1979; Miller 1986) and this appears to apply to hospitals as well. Additionally, profoundly changing well-established behavioral patterns is often resisted (Mintzberg 1979) and studies have well-documented such resistance within health care organizations (Liberati et al. 2016). This may at least partially explain why, in reality, most organizational restructuring does not occur radically, but incrementally: through continuous modifications of existing structures (Mintzberg 1979: 105). Moreover, the long history of the functional design of hospitals has left deep imprints on work practices, professional identities, and social norms within these organizations (Liberati et al. 2016). This type of historical impact is not easily swept away, and creating multidisciplinary units in hospitals by itself is not enough to overcome the extensive reliance on disciplinary boundaries in everyday health care delivery practices (Ibid.). Breaking down these "invisible walls" will require additional time and effort (Ibid.). Therefore, an incremental approach to value-based redesign (rather than a radical one) seems better suited to do justice to the history of medicine (rather than sweeping it away), while also allowing interdisciplinary collaboration to evolve over time (rather than enforcing it immediately), and thus appears (as far as we can tell) a more viable avenue for the adoption of VBHC principles than the (fundamentalistic) one professed by their originators (cf. Porter & Teisberg 2006; Porter 2008; Porter & Lee 2021).

This study has at least four important limitations. Firstly, it should be noted that while Mintzberg's design parameters have proven to be highly useful for analyzing value-based redesign, our use of this framework has

undoubtedly shaped our findings. Secondly, our study focusses on Dutch hospitals; the existing policies, regulations and financial arrangements in the Dutch health sector have likely molded how these organizations may or may not pursue a more value-based design. Thirdly, we have interviewed only one representative per hospital, most of whom did not have a clinical role. Interviewing only one (non-clinical) representative per hospital may have generated biased pictures of what is happening within the individual hospitals, which could potentially have spilled over to our aggregate findings. Fourthly, while our conceptualization of "value-based design parameters" may be useful for analyzing and implementing VBHC, it was beyond the scope of this study to examine the effects of utilizing these design parameters on performance. We strongly encourage future research regarding the results of value-based redesign.

## Practical implications

Hospital executives, managers and leading physicians who want to upgrade coordination around medical conditions have a variety of organizational knobs to turn, to various degrees. Our study indicates that many providers will likely favor incremental redesign over radical transformation. Considering hospital units, rather than radically regrouping the entire organization into units around medical conditions, a more incremental approach could be one in which a hospital first experiments with one or a few condition-based pilot-units (around breast cancer or maternity care, for example). Depending on how the pilot proceeds, modifications can be made, such as granting more financial autonomy to the respective unit.

If, at least for the time being, (most) traditional specialty units are left intact, coordination around medical conditions can still be enhanced in various ways. For instance, hospitals could appoint one or more (value-based health care) managers, whose roles are first and foremost to foster inter-unit communication and coordination. A common way to do this is by forming multidisciplinary teams around a medical condition, with members from various specialty units meeting on a regular basis. One point of discussion during these meetings can be how to improve value for patients with a similar medical condition—based on value-based performance measurements (e.g. outcomes and costs).

It is widely recognized that structural changes, whether sweepingly or incrementally, will benefit from a solid support base across all levels of the organization. Concerning value-based redesign in Dutch hospitals, systematically propagating information (through training programs, for instance) has been regarded a useful way to generate awareness and support throughout the organization.

Multiple Dutch hospitals initially struggled with the composition of the leadership of their multidisciplinary teams. Their experiences indicate the characteristics of these leaders matter: it is probably good to have multiple leaders, each representing a particular organizational component (e.g. administrative, nursing, business intelligence); and several hospitals have come to favor official application procedures over automatically granting leadership to the most enthusiastic physicians.

Ideally, hospitals would not have to repeatedly develop all of these approaches by themselves. Instead, the path towards more value-based structures could be built on the efforts and lessons of others. Therefore, we encourage providers to gather information, evaluate proceedings and report on their experiences; this can give rise to a knowledge base on which value-based redesign may be founded.

#### Conclusions

Value-based redesign is not necessarily a matter of radical changes or binary choices between traditional structures on one side, and value-based designs on the other. Instead, inspired by the idea to achieve the best outcomes as efficiently as possible, hospitals are *incrementally exploring various ways* to improve coordination around medical conditions over full care cycles. Our study demonstrates that Mintzberg's (1979) organizational design parameters offer a useful framework to analyze the implementation of value-based health care delivery. Hopefully, our conceptualization of "value-based design parameters" offers guidance to providers who find themselves in search for more value-based structures. Moreover, we hope the framework we sketched here can assist research on and the evaluation of what works—e.g. which knobs might be turned, to what degree, in which contexts—in terms of value for patients.

# REGULATED MARKETS AND RATIONALIZED MYTHS

The purchasing practices of Dutch health insurers

## Under review:

Steinmann, Gijs, Hester van de Bovenkamp, Antoinette de Bont, Lonneke Timmers and Diana Delnoij. "Regulated markets and rationalized myths: an institutional perspective on value-based purchasing in the Netherlands."

# DISCUSSION

This thesis revolves around a set of ideas on the external governance and internal management of health care delivery called value-based health care (VBHC). More specifically, it concentrates on the interpretation and application of this set of ideas within the Netherlands—one of many countries across the globe in which VBHC has quickly become both popular and influential among a variety of stakeholders within the health care sector (Economist Intelligence Unit 2016; Groenewoud et al. 2018; Kokko & Kork 2020; Ramsdal & Bjørkquist 2020). Despite its global popularity, however, the meaning of VBHC remains ambiguous, and this is particularly noticeable in academic publications (Fredriksson et al. 2015; Erichsen Andersson et al. 2015; Van Staalduinen et al. 2022). Moreover, its practical applications have been characterized by locally varied adaptations (Nilsson et al. 2017; Bonde et al. 2018; Colldén & Hellström 2018), and these often entail significant omissions of the original set of ideas developed by Porter and colleagues (Porter & Teisberg 2006; Porter & Lee 2013). So, despite its remarkable popularity, all that ambiguity and local variation can make it particularly challenging—not just for researchers, but for policymakers and health care providers ass well—to grasp the essence and evaluate the effects of VBHC within health care systems. This thesis addresses that challenge.

Accordingly, my research has explored the following questions: What is the meaning of VBHC in the Netherlands? How is it applied within the Dutch health care system? And why does this take place the way it does? As I have argued in the introductory chapter, answering these questions stipulates qualitative research, with methods suitable for in-depth analysis that can unravel the essence of a phenomenon (Boeije 2010). Ergo, this thesis is based on a variety of qualitative methods, ranging from semi-structured interviews (Chapter 3 to 6) to document analysis (Chapter 3 and 4), participant observation (Chapter 4), and a focus group (Chapter 5), Moreover, I have applied these methods to collect data on both the

perceptions and practices of a variety actors and organizations who operate at different levels of the Dutch health care system. This ranges from surveying expert opinion and studying stakeholder perspectives (Chapter 2 and 3, respectively), to participating in a VBHC-inspired project within a primary care organization (Chapter 4), to analyzing the organizational structures of hospitals (Chapter 5), and examining how health insurers perceive their own purchasing practices (Chapter 6). This combination of various methods and diverse data sources has allowed me to acquire a rich data base in which multiple (sometimes conflicting) perspectives are represented.

Furthermore, to sharpen my analysis of this data, I have made use of several theories and concepts, including *discourse* (Watson 1994; Cheek 2004; Chapter 3), *translation* (Callon 1986; Latour 1987; Chapter 4) *design parameters* and *coordinating mechanisms* (Mintzberg 1979; Chapter 5) and *institutional theory* (Meyer & Rowan 1977; Thelen 1999; Chapter 6). Using such concepts, and theory in general, primarily as sensitizing tools (Blumer 1954) has enabled me to examine the meaning and application of VBHC from different angles. As will unfold in this concluding chapter, the analytical application of different theoretical lenses on data that represents multiple stakeholders and organizations has elicited several overlapping conclusions.

## The meaning of VBHC in the Netherlands

A critical challenge I addressed in the early stages of my research was to gain comprehension of VBHC and find my way through the ambiguity that surrounds the concept (Frederickson et al. 2015; Van Staalduinen et al. 2022; Hazelzet et al. 2021). Personally, I found solace and coherence in the work of Porter. However, as outlined in the introduction of this thesis, this may have enabled me to grasp and define my research topic, but it has not resolved the more important issue of VBHC meaning different things to different people. In part, this is because some interpretations are explicitly not founded on the work by Porter and colleagues (e.g. Lewanczuk et al. 2020), and because some consider Porter's work in need of profound amendments (e.g. European Commission 2019). More

important for this thesis, however, is that even among scholars who explicitly base their conceptualization of VBHC on the publications by Porter and colleagues, interpretations vary considerably, and sometimes even outright oppose one another (cf. Triantafillou 2020; Kokko & Kork 2020). Therefore, my first two empirical studies were specifically aimed at drawing out clarity and a better understanding concerning the meaning of VBHC in the Netherlands, including its perceived implications for action (Chapter 2 and 3). And Chapter 4 complemented these studies by examining how VBHC was interpreted within a project aimed at improving primary care services.

Both the Delphi technique (the method of Chapter 2) and discourse analysis (the main sensitizing concept and means of analysis of Chapter 3) are commonly used to examine phenomena that are uncertain or ambiguous (Jones & Hunter 1995; Hasson et al. 2000; Cheek 2004; Riddle & Tribble 2008; Boivin et al. 2009). And both explore *meaning*: these research tools are used to examine what the phenomenon under study implies for groups of people. Their particular orientation and objectives tend to differ, however. Delphi studies typically look for consensus, and, like the mythical Oracle of Delphi, the method was originally developed for forecasting purposes (Jones & Hunter 1995; Hasson et al. 2008). Discourse analysis, on the other hand, is often used to uncover the underlying assumptions or socio-historical roots of different discursive frames (Boivin et al. 2009; Cheek 2004). I have used both research tools accordingly.

Chapter 2 builds on the Delphi technique to draw out consensus on the most important ideas and practices for VBHC in the Netherlands. In this study, the one and only distinct idea which a Dutch expert panel unanimously considered to be "very important" was shared decision-making (SDM). And the pivotal importance of SDM later re-emerged in the discourse analysis of Chapter 3. Although we uncovered four diverging discourses, each rooted in their own underlying presuppositions, they found their common ground in framing SDM as a core component of VBHC.<sup>18</sup> Strikingly, SDM is by no means part of the original set of ideas

<sup>18</sup> In chapter 4, this phenomenon paralleled by interpretations of VBHC that basically equate to what is commonly labelled personalized care (Peppercorn et al. 2011).

by Porter and colleagues (Porter & Teisberg 2006; Porter & Lee 2013), yet it has become crucial to the meaning of VBHC in the Netherlands.

In hindsight, our Delphi study has forecasted much of the consensual contours of a Dutch version of VBHC. In addition to the importance of SDM, there also seems to be considerable agreement among a variety of stakeholders regarding the importance of several aspects of the original set of ideas developed by Porter and colleagues. For instance, practitioners, managers, government agents, insurers, and consultants alike, all generally agree that providers should measure health-related outcomes that matter to patients (Chapter 2 and 3), and it is generally recognized that care cycles for medical conditions are the proper level of analysis when it comes to the creation and evaluation of value for patients (Chapter 2).

But this Dutch version of VBHC shows additional deviations from the original set of ideas. My research indicates that in the Netherlands, VBHC tends to evoke a relative overemphasis on outcome measurement compared to cost measurement (Chapter 2, 4, 5), and this lopsided image is confirmed by several other studies (Moleman et al. 2022; Heijsters et al. 2022; Westerink et al. forthcoming).<sup>19</sup> Additionally, there appears to be a tendency within Dutch interpretations to directly relate the idea of measuring and monitoring costs to the role and responsibilities of insurers (Chapter 4) rather than providers (cf. Porter & Teisberg 2006; Porter & Lee 2013; Porter et al. 2013). Moreover, the idea of value-based competition is not part of the meaning of VBHC in the Netherlands (Chapter 3); yet the idea of value-based competition really is the centerpiece of the pioneering book by Porter and Teisberg (2006). Dutch stakeholders, however, tend to disagree about the very idea of benchmarking performance, and the same applies to the idea of an incentive structure that would stimulate outcome improvement (Chapter 2; cf. Porter & Teisberg 2006).

This picture does not solely apply to Netherlands (Erichsen Andersson et al. 2015; Nilsson et al. 2017; Vijverberg et al. 2022), but it nonetheless seems clear that when it comes to current efforts to put VBHC to practice, Dutch providers prioritize the measurement of outcomes over that of costs (Moleman et al. 2022; Heijsters et al. 2022).

So, this thesis certainly reveals something akin a consensual interpretation of VBHC, which involves general agreement on the importance of several aspects of the original set of ideas developed by Porter and colleagues, but leaves out certain components of the original version (e.g. competition), deemphasizes others (e.g. cost measurement), and also adds new concepts into the mix (e.g. SDM). There is, however, also considerable disagreement on the meaning of VBHC, including its perceived implications for behavior and regulation within the Dutch health care system (Chapter 2 and 3).

The discourse analysis of Chapter 3, in particular, has uncovered the presence of different and sometimes outright conflicting ways of interpreting VBHC. These different viewpoints appear most prominently around questions concerning outcome information: who should be able to access those measurements and for what purpose (Chapter 3). Although, as mentioned, the importance of outcome measurement is generally agreed upon, the purpose of this information remains a highly contested issue—and this reflects different views on the prime purpose of VBHC in general, which in turn, not only represent conflicting interests, but are indicative of more profound underlying assumptions about the health care system. Let me unpack this last point a bit more.

Our discourse analysis showed that there are people<sup>20</sup> who advocate public transparency of outcome information; they see this, or at least frame this, as the rights of patients; who they assume to be in an unfairly disadvantaged position when it comes to their medical decisions (e.g. choices among various treatment options and between various providers) (Chapter 3). Others, however, profess an opposing line of reasoning: outcome information should primarily serve professional learning and improvement; they see, or at least frame, transparency to impede learning and improvement; and they assume that relying on the intrinsic motivation of professionals is, in the end, what is best for health care systems.<sup>21</sup> When it comes to VBHC, these opposing views diverge in the desire to apply its principles *externally* onto health care providers

<sup>20</sup> Although there may be overlap, these "people" should not be equated to stakeholders.

<sup>21</sup> Chapter 3 describes two additional lines of reasoning with underlying assumptions (i.e. four discourses on VBHC).

(e.g. by the government mandating the reporting of outcome data, or by insurers imposing value-based contract models), versus a desire to rely on the intrinsic motivation of provider organizations and the professionals within them (Chapter 3).

Accordingly, by building on discourse analysis (Boivin et al. 2009; Cheek 2004), Chapter 3 not only reveals diverging and opposing interpretations of VBHC in the Netherlands, but uncovers the presuppositions about the functioning of health care systems that lay at the root of these conflicting viewpoints. Table 8 provides an overview of four discourses on VBHC, including the underlying assumptions from which they derive. A critical contribution of Chapter 3 is the insight it provides into the ambiguity surrounding VBHC by revealing different and opposing interpretations. Additionally, the Chapter also highlights that some aspects of the original set of ideas by Porter and colleagues remain highly contested in the Netherlands. This particularly concerns the idea of outcome information being disclosed publicly.

**Table 8.** Four discourses on VBHC in the Netherlands

	Patient Empowerment	Governance	Professionalism	Critique
VBHC	Framework for improving patients' position regarding medical choices	Toolkit to steer and incentivize providers (externally)	Methodology for optimizing health care delivery (internally)	Dogma of manufacturability
Assumption	Patients are in a disadvantaged position: inequality in patient- doctor relation	Incentives can improve medical professionals' decision-making	Professionals are intrinsically motivated to serve patients interest and deliver value	Health care is too complex for standardized value
Main use of outcome information	Choice information (for patients)	To stimulate professionals	Professional learning and improving	Learning and within patient-doctor relation

Adapted from Chapter 3. Redefining value: a discourse analysis on value-based health care

To conclude, the first part of this thesis reveals several conflicting assumptions and opposing lines of reasoning regarding the health care sector in general, and VBHC in particular. Nonetheless, these chapters

also reveal a consensual Dutch interpretation of VBHC, which has adopted some elements of the original set of ideas, neglected and deemphasized others, and also blended in new ones. Thus, based on my research, the meaning of VBHC in the Netherlands can be roughly outlined as follows: a coherent but partially contested set of ideas inspired by (rather than copied from) the work of Porter and colleagues, which adopts the overarching goal to improve value for patients, predominantly through a focus on the measurement of outcomes that matter to patients, and for which shared decision-making is considered essential.<sup>22</sup> Before providing an analysis of the underlying reasons for why this occurred as such, I will first outline my main findings regarding the application of VBHC.

## The application of VBHC in the Netherlands

Three empirical chapters have examined how VBHC is applied in the Netherlands: within a primary care organization (Chapter 4), within hospitals (Chapter 5) and within the purchasing practices of health insurers (Chapter 6). Each chapter builds on a distinct set of research tools in the form of theoretical lenses and sensitizing concepts (Blumer 1954; Boeije 2010: 23). Yet, these separate studies on the application of VBHC in the Dutch health care system—within different types of organizations, and building on different concepts and theories—have given rise to several overlapping conclusions.

Chapter 4 builds on participant observation in a project in which a primary care organization was working towards a new care center for elderly patients, with service delivery based on the principles of VBHC applied to primary care (Porter et al. 2013). Here, we analyzed how VBHC transitions from the original set of ideas to a local application by borrowing insights from actor-network theory (ANT), particularly the concept of translation (Callon 1986; Latour 1987; Sismondo 2004). Using "translation" as a sensitizing tool has enabled me to perceive the meaning and application of VBHC as a relational effect, dependent on its interaction with a local context. The chapter concludes that this particular primary care

<sup>22</sup> Details on the original set of ideas by Porter and colleagues can be found in the introductory chapter of this thesis.

project exemplifies VBHC's ability to "enroll allies" by converging their interest towards a common goal—to improve value for patients—and this ability probably plays a big part in its global popularity. Moreover, VBHC has affected behavior within this primary care organization in that it stimulated interaction across disciplines. It brought together a multidisciplinary group of primary care professionals, had them discuss potential ways to improve value for patients, which has led to several mini business cases (the project deliverables), most of which focused on increased communication and coordination across primary care disciplines.<sup>23</sup>

The observation that *VBHC* affects behavior in the form of increased multidisciplinary interaction and coordination is a crucial one, and not only applies to the primary care organization of Chapter 4, but is mirrored in our study of the organizational structures of hospitals in Chapter 5.

Whereas Chapter 4 uses insights from social theory in the form of ANT, with translation as a sensitizing concept, chapter 5 builds on organizational theory, primarily the classical work of Henry Mintzberg (1979) on organizational structures, with *design parameters* and *coordinating mechanisms* as sensitizing tools. Mintzberg's conception of organizational structures, and particularly the idea of design parameters (ibid) has enabled me to recognize that health care organizations have a wide range of options when it comes to the application of VBHC (Chapter 5). Reorganizing into units at the level of medical conditions (i.e. IPUs) concerns just one potential design parameter (namely "unit grouping"). And although Porter and colleagues consider it a pivotal one (Porter & Teisberg 2006; Porter & Lee 2021), my research suggests that IPUs are very rare, and perhaps even nonexistent within Dutch hospitals.<sup>24</sup>

<sup>23</sup> These included, for instance, a plan for closer collaboration with a geriatrician for elderly patients with relatively complex care needs, and a primary care path for osteoarthritis that involved more, and more regular and standardized, multidisciplinary collaboration.

<sup>24</sup> That is, as long as one adheres to the original description of IPUs, which concerns, above all, an official organizational unit that is part of the formal authority structure and operates independently of specialty-based lines of authority and has its own cost and revenue streams (Porter & Teisberg 2006; Porter & Lee 2021). The term IPUs is sometimes equated to multidisciplinary teams (cf. Heijsters et al. 2022), which would be mistaken in my opinion, as will be further explained in a later subsection.

Nonetheless, Chapter 5 reveals a pattern of incremental redesign in which Dutch hospitals employ a variety of design parameters to various degrees. Common among all is that they serve to modify the mechanisms by which the multiple tasks of care cycles for patients with a certain medical condition are coordinated. For example, hospitals utilize planning and control systems (Mintzberg 1979: 148-60), particularly in the form of outcome measurements, to upgrade coordination aimed at improving value. Indeed, the most widespread application of VBHC probably concerns the measurement of health-related outcomes at the level of medical conditions, including patient-reported outcomes, conducted by providers (Chapter 5).<sup>25</sup> And rather than regrouping into IPUs, these organizations aim to spur coordination through various "liaison devices" (Mintzberg 1979: 161-80), such as intermediary managers and regular multidisciplinary team meetings.

Chapter 4 and 5 lead to the overlapping conclusion that, when it comes to provider organizations, the application of VBHC in the Netherlands is characterized by the goal to improve value for patients, mainly by focusing on and measuring outcomes that matter to patients, the improvement of which is pursued (internally) in the form of multidisciplinary collaboration and coordination at the level of medical conditions or otherwise similar groups of patients.

Whereas as Chapter 4 and 5 focus on providers, Chapter 6 studies the application of VBHC principles within a different type of organization: health insurers. More specifically, we examine the perspective of Dutch insurers on their application and the overall applicability of value-based purchasing concerning hospital care. Here, we build on insights from institutional theory (Hall & Taylor 1996; Thelen 1999; Greenwood et al. 2008) to frame our analysis, and we reveal how the purchasing behavior of Dutch private health insurers is constrained by a historically rooted tangle

<sup>25</sup> For the purpose of this thesis, I consider such efforts applications of VBHC to the extent that they are part of explicit efforts to improve value for patients or project or programs that are based the work of Porter and colleagues. Moreover, this claim is largely based on chapter 4 and 5, which concerned a project that literally aimed to organize health care delivery based on VBHC principles, several interviews with program managers or project leaders "VBHC", and a focus group with members of the Linnean Initiative, an open Dutch network of people who strive to put VBHC to practice.

of socio-political norms and expectations. This includes, for instance, the dominance of self-regulation by medical professionals, and society's deep-seated belief in the quality of all Dutch hospital services, both of which restrain the purchasing behavior of insurers. Although there are examples of bundled payment contracts at the level of medical conditions, these payment models are the exception within a system where budgeting hospitals remains the rule. In sum, we can conclude that, as of yet, Dutch health insurers are practically unable and perhaps also unwilling to critically and widely apply the ideas popularized by Porter and colleagues.

So, it is clear that VBHC has been affecting behavior within the Dutch health care system. Provider organizations, in particular, have not only started to perceive it as a relevant and useful set of ideas, but they have been actively putting some of these ideas to practice (Chapter 4 and 5). Next to a focus on outcomes that matter to patients, it has stimulated professional interaction at the level of medical conditions or otherwise similar patient groups, and generally increased coordination across medical disciplines (Chapter 4 and 5). Additionally, it has also ushered some insurers to develop and implement bundled payment contracts, albeit rarely (Chapter 6). Thus far, however, the influence of VBHC has not generated fundamental changes to either organizational structures (Chapter 4 and 5) or payment structures (Chapter 6).

## The conservative application of a radical set of ideas

Overall, the application of VBHC in the Netherlands can be described as both incremental and selective, but perhaps most aptly as a conservative application of a radical set of ideas. VBHC is indeed popular in the Netherlands; the goal to improve value for patients, in particular, is embraced by a variety of organizations and stakeholders. But compared to the original set of ideas developed by Porter and colleagues, my research indicates that its (consensual) meaning has not simply been adapted, but moderated such that it is rid of its radicalism. Moreover, its applications have been quite conservative: they conform to traditional structures and practices. Table 9 provides an overview of VBHC's radical origins and its conservative applications in the Netherlands.

**Table 9.** From the original ideas with radical implications to a moderate version with conservative implications.

Original idea	Radical implication	Moderate version	Conservative implication
Measure and report outcomes and costs of care cycles for medical conditions	Measurements can be used for both internal management and external accountability.	Measure outcomes, but not costs, and no public reporting.	Outcome data will only be used for internal evaluation, <i>not</i> for external accountability.
Organize into IPUs at the level of medical conditions	Radical restructuring of organizations; responsibility for value creation at the level of organizational units for medical conditions	Organize multidisciplinary teams at the level of medical conditions.	No radical restructuring. No official responsibility: costs are made, and incomes are generated in specialty-based units.
Move to bundled payments at the level of care cycles medical conditions	Radical restructuring of payment models, with financial incentives to improve value at the level of medical conditions.	Bundled payment is a nice idea but too risky and too complicated for wide-spread implementation.	No radical restructuring: the practice of budgeting prevails and will constrain the occasional implementation of any alternative payment model.

As outlined in Chapter 1, the original set of ideas developed by Porter and colleagues contains three interrelated claims on how to realign the internal management (i.e. organizational structures) and the external governance (i.e. accountability structures) with the goal of improving value for patients (Porter & Teisberg 2006). The first is that providers should (be mandated to) systematically measure and report the outcomes and the costs of their care cycles (ibid). The second is that providers should organize themselves into IPUs: organizational units that group a multidisciplinary team whose combined skills and knowledge can address the full cycle of care for patients with a particular medical condition (or otherwise similar care needs) (Ibid; Porter & Lee 2021). And the third claim concerns the payment structures: providers and

payers should move to bundled payments for care cycles or episodes of care (Porter & Lee 2013; Porter & Kaplan 2016). As shown by Table 9, each of these three original claims entails rather radical implications, and each time we see a modified Dutch version with a much more conservative form of application.

Conservative measurement—As mentioned, my research indicates an emphasis on the measurement of outcomes relative to that of costs (Chapter 2, 4, 5). In fact, when it comes to the application of costs measurement, nothing in my data hints at even a single provider who systematically measures the actual costs of its care cycles.<sup>26</sup> In the Netherlands, the original idea of systematic measurement *and* public reporting of both outcomes *and* costs has, thus far, primarily translated into a focus on outcome measurement. And although there are

<sup>26</sup> The topic of costs is a good example of a theme on which Porter and colleagues have provided me with clarity, some of which may be relevant to readers as well: "To put it bluntly, there is an almost complete lack of understanding of how much it costs to deliver patient care, much less how those costs compare with the outcomes achieved. [...] Making matters worse, participants in the health care system do not even agree on what they mean by costs. When politicians and policy makers talk about cost reduction [...] they are typically referring to how much the government or insurers pay to providers—not to the costs incurred by providers to deliver health care services. Cutting payor reimbursement does reduce the bill paid by insurers and lowers providers' revenues, but it does nothing to reduce the actual costs of delivering care. Providers share in this confusion. They often allocate their costs to procedures, departments, and services based not on the actual resources used to deliver care but on how much they are reimbursed. But reimbursement itself is based on arbitrary and inaccurate assumptions about the intensity of care. [...] We need to abandon the idea that charges billed or reimbursements paid in any way reflect costs. In reality, the cost of using a resource—a physician, nurse, case manager, piece of equipment, or square meter of space—is the same whether the resource is performing a poorly or a highly reimbursed service" (Kaplan & Porter 2011: 4&6).

exceptions,<sup>27</sup> Dutch health care providers generally do not publicly report data on their treatment outcomes in terms of patients' health over time (aside from what is mandated of course). While my research suggests that many providers are measuring outcomes that matter to patients, making such measured outcome data transparent is the exception rather than the rule. Accordingly, when it comes to VBHC in the Netherlands, the idea of outcome measurement is crucial, but its meaning is moderated and induces a relatively conservative form of application: it is primarily used for providers' internal improvement efforts, not so much for the purpose of external accountability.

Conservative organization—Within hospitals, the application of VBHC commonly entails the formation of multidisciplinary teams aimed at improving outcomes for patients with a particular medical condition (Chapter 5). Such teams, however, should not be confused with the idea of integrated practice units (IPUs) promoted by Porter and colleagues (cf. Porter & Teisberg 2006: 167-77; Porter & Lee 2021). Unlike IPUs, the multidisciplinary teams within Dutch hospitals usually do not constitute actual organizational units; they do not have (to manage) their own budget; and they are not part of the formal decision-making structure of hospitals (Chapter 5). More fundamentally, they do *not* constitute a radical break with the traditionally specialty-based organizational structures (cf.

<sup>27</sup> To some degree, the Santeon group, a collaboration of seven hospitals, can be regarded an exception in this regard. One of their programs (Samen Beter) is based on VBHC principles, and includes the publication of reports that contain outcome measurements which they are not mandated to report. From the perspective of VBHC and the idea of outcome transparency, these reports can be regarded a step in the right direction, but, as of yet, not as groundbreaking (in my estimation). The Samen Beter program currently focusses on 15 medical conditions, but these do not all have a public report with outcome data; several of their reports are relatively out of date; and many of the outcomes that are reported are part of what is mandated by the National Health Care Institute. But for lung cancer, for example, they have published mortality rates on multiple time periods which go beyond what is mandated, and for prostate cancer, their report includes data on two patient reported outcome measurements (urinary incontinence and sexual dysfunction), both of which go beyond what is mandated. The reports can be found on their website (some are also available in English): https://santeon.nl/aandoeningen/. Overall, the Santeon hospitals have forthrightly gone beyond what is mandated regarding the provision of insights into the outcomes of their treatments.

Porter & Teisberg 2006: 167-77; Porter & Lee 2021). Rather, they embody what is referred to as "liaison devices" in organizational theory (Mintzberg 1979: 161-80): lines of communication *between* specialty-based units that informally overlay the formal organizational structure (Chapter 5). Instead of generating the radical organizational restructuring professed by VBHC's originators, my research reveals an incremental application within the confines of traditional specialty-based structures (Chapter 4 and 5)—which are thereby conserved rather than replaced.

Conservative payment—Chapter 6 reveals that whereas providers adhere to traditional organizational structures, Dutch health insurers adhere to historically rooted payment structures. And although some insurers have made use of bundled payments contracts, this type of value-based contract is relatively rare. When it comes to hospital care in particular, contract negotiations are first and foremost about budgets: the total sum euros for which hospital "A" can bill insurer "B" next year. This type of payment, which essentially amounts to budgeting, has its roots in a time before the Health Insurance Act (2006), when the national government would assess and determine the annual budget of each hospital (Broertjes 1992). Within the post-2006 system of regulated competition, however, private (though mostly not-for-profit) insurers were assigned the role of prudent purchasers of care who would negotiate contracts based on the quality and prices of hospital services (Varkevisser 2019). But rather than prudent purchasing strategies or value-based contract models, the historically rooted practice of budgeting has prevailed. Chapter 6 reveals how the practice has become so institutionalized that it is now basically taken for granted in the eyes of Dutch health insurers. Therefore, when it comes to hospital care, the application of bundled payments or any other type of alternative payment model will have to take place within the conservative confines of budgets.

In sum, my research reveals that within the context of the Dutch health care system, the popularity of VBHC has, as of yet, not brought about the radical changes espoused by its originators. Rather, it translates into moderated interpretations and applications that conserve and operate within traditional structures. In the consensual Dutch version of VBHC, there is a strong focus on outcome measurement compared to cost measurement, and the original idea of public reporting (for external

accountability) is essentially sidelined and supplanted by the idea to use outcome information for the purpose of SDM. At its core, the application of VBHC in the Netherlands comes down to provider programs and projects aimed at measuring and monitoring health outcomes and efforts to improve these through multidisciplinary liaisons. As shown by Chapter 6, organizations such as insurers, who could theoretically play a role in applying VBHC through external accountability and incentive structures, appear practically unable to do so effectively. Overall, my research has uncovered a conservative pattern of application of what was originally a rather radical set of ideas.

# Why?

To explain why VBHC has acquired its particular meaning and mode of application in the Netherlands, in this section I will build on three main concepts: *translation* (Callon 1986; Latour 1987); the *professional bureaucracy* (Mintzberg 1979; Lega & De Pietro 2005); and *institutional layering* (Mahoney & Thelen 2010; Van de Bovenkamp et al. 2014). In addition, my analysis in the following subsections will take special account of some defining characteristics of the Dutch health care system, and set the stage for the concluding section of this thesis.

#### The translation of VBHC in the Netherlands

A key point of what is sometimes referred to as "translation theory" (Røvik 2016; Colldén & Hellström 2018) is that the spread of innovations and ideas is (1) heavily dependent on the ability to converge interests, and (2) will inevitably entail transformations to the original (Latour 1987). As described in Chapter 4, VBHC appears to be highly capable of converging interests toward a common goal (i.e. to improve value for patients). An important conclusion of this chapter, in line with the idea of translation, is that VBHC transforms in ways that enable it to acquire a growing support base. Seen from a translational perspective, when the spread of the original set of ideas developed by Porter and colleagues involves omissions and adaptations, this implies that people are tied to alternative interests and resources, which counteract Porter's claims (cf. Latour 1987: 140).

Now, a defining feature of the Dutch health care system, and Dutch politics in general, is the constellation of associated interest groups that are officially involved in decision-making processes (Schut 1995). Indeed, as reaffirmed by Chapter 6, many of the inner workings of the Dutch system are dependent on consensual outputs of corporatist arrangements that facilitate bargaining among interest associations. An important example of such an arrangement concerns the regulation on the information that providers are obliged to report publicly. By law, the details of such publicly available information (e.g. specific outcome measurements) should first collectively be agreed upon by organized interest associations that represent insurers, patients, and providers (including professionals). Since, as we have seen in Chapter 3, the issue of outcome transparency remains a highly contested point of debate in the Netherlands, this corporatist arrangement (reflective of a more general political culture of consensus seeking) explains why this element of the original set of ideas has not been copied into the Dutch version.

More generally, for VBHC to spread, and influence behavior in the consensus-driven health care system of the Netherlands, it will have to moderate some of its original claims. Since interest associations of providers and medical professionals have acquired a powerful position in the corporatist landscape of the Dutch health care system (Lombarts & Klazinga 2001), VBHC would have to either converge their particular interests, or modify and conform itself in order to gain their support and affect their behavior. As will unfold in the following subsection, a closer look at VBHC's conservative mode of application indicates an additional and more specific pattern. In the Netherlands, the application of VBHC by and large conforms to a rationale of professional autonomy.

### The professional bureaucracy

In 2018, a few months before I started my PhD research, the Dutch Federation of Medical Specialists (FMS) published a position paper in which they argued *against* VBHC becoming either a "management tool" or an "economic tool" (FMS 2018; Chapter 3). Although VBHC has actually been labeled a typical "management concept" (Fredriksson et al. 2015; Colldén & Hellström 2018) which conceptualizes value "in an economic sense" (Hazelzet et al. 2021), we can nevertheless conclude that the application of VBHC in the Netherlands, thus far, appears to conform to the non-economic position of the FMS. The economic aspects of the original set of ideas (e.g.

costs measurement and payment structures) are either deemphasized or ignored, and its application conforms to a line of reasoning that emphasizes the intrinsic motivation of medical professionals rather than financial incentives and external accountability structures. This subsection builds on the concept of the *professional bureaucracy* to help explain why this is the case.

As mentioned, the organizational IPU structure advocated by VBHC's originators entails a "radical shift" from the traditional (function-based) structure designed around medical specialties to a (market-based) structure designed around medical conditions (or otherwise similar patient needs) (Porter & Teisberg 2006: 168). Porter and colleagues see the traditional way hospitals are organized as outdated legacies of a past century of everincreasing medical specialization (Porter & Lee 2021). What these scholars overlook, or at least not fully appreciate in my estimation, is that alongside developments in medical specialization (i.e. increasingly differentiated expertise) there have also been many years of professionalization—a process in which professionals acquire authority over the methods and the conditions of their work, sometimes up to authority over the assessment of that work by way of self-regulation (DiMaggio & Powell 1983; Torres 1988; Lombarts & Klazinga 2001).<sup>28,29</sup>

Hence, the previous century has seen medical professionals both specialize and professionalize, and hospitals around the world, including those of the Netherlands, have grouped them into specialty-based units and given them a great deal of autonomy. Accordingly, hospitals have become what organizational scholars refer to as *professional bureaucracies*: the organization is dominated by highly skilled professionals, who operate relatively autonomously but are guided by mechanisms of professional self-regulation and the predetermined (i.e. bureaucratic) standards they have internalized during their training

While the two are related, professionalization within the field of medicine can occur independent from the level of expertise within a particular medical specialty. For more insight into the distinction see Hall (1968) and Döhler (1993).

<sup>29</sup> This in turn, could be seen as a logical consequence of the nature of the work done by medical professionals, which requires highly complex task applied to an environment of relatively predictable customer demands (i.e. groups of patients with certain care needs.) (Mintzberg 1979).

(Mintzberg 1979; Abernathy & Stoelwinder 1990; Lega & De Pietro 2005; Andreasson et al. 2018).<sup>30</sup> As the field of medicine thrived in the 20<sup>th</sup> century, so did its professional bureaucracy.

Enter Porter and colleagues, whose set of ideas not only includes a radical reorganization of hospitals, but also contains threats to professional autonomy with the promotion of performance measurement in the form of both the effectiveness (outcomes) and the resource efficiency (costs) of the work of medical professionals (cf. Abernethy & Lillis 2001).

Chapter 2, 4, and 5 have outlined the relative overemphasis on outcome measurement compared to cost measurement in the Netherlands, which has been confirmed by several other studies (Heijsters et al. 2022; Moleman et al. 2022; Westerink et al. forthcoming). And as described earlier, this emphasis on outcome measurement primarily entails its usage by providers for internal improvement efforts, not so much for external accountability purposes. Furthermore, my research suggests that the relative underemphasis on cost measurement practically implies that systematic measurement of actual costs of care cycles by providers is highly exceptional, and virtually non-existent within hospitals (see Chapter 5). Both of these phenomena—providers preserving and using outcome measurements internally as well as their non-engagement in cost measurement—are related to, and can at least partially be explained by the aforementioned history of professionalization and self-regulation of medical professionals in the Netherlands.

Now, an important difference between the idea of outcome measurement versus that of costs is that outcomes are commonly used as indicators of the *quality* of care—in fact, Porter and colleagues consider them the only real indicators of quality (Porter & Lee 2013). And in the Netherlands, medical professionals have acquired the historically rooted authority to self-regulate their work in terms of quality standards (Van de Bovenkamp et al. 2014; Chapter 6). So, as of yet, decision-making based on the interpretation of outcome data firmly lies in the hands of

<sup>30</sup> More precisely, professional bureaucracies such as hospitals are decentralized yet still bureaucratic in that most of the behavior and decision-making is predetermined and thus effectively standardized (Mintzberg 1979: 86).

autonomous professionals. And outcome measurements, therefore, are mostly applied as useful tools in serving patients, but not so much as top-down accountability mechanisms (especially when they are not reported publicly). Effectively, associations of self-regulating professionals determine how outcome measurement shall be used, and the professional bureaucracy has restricted their application for external accountability purposes.

Whereas outcome measurements primarily indicate the effects of complex professional work processes, costs measurements would indicate the efficiency of work processes and how much of a hospital's resources are spent on them. Moreover, decision-making over resource allocation typically does *not* fall under professional autonomy (Moleman et al. 2022). Accordingly, Porter and colleagues propose an accountability mechanism that lies outside the scope of professional autonomy, and could potentially undermine it.31 This helps explain why cost measurement has not been part of the way in which VBHC is put to practice in the Netherlands. Another reason is that the idea of measuring the costs of care cycles is considered relatively unhelpful in professional bureaucracies in general, especially when it comes to hospitals and their specialty-based organizational units (cf. Mintzberg 1979; Porter & Lee 2013; 2021). This is because care cycles for patients with a particular medical condition usually involve a variety of a hospital's specialty-based units, none of which carries responsibility for the costs of a full care cycle; they all have their own budget, and they are not in control of the costs made by other units (Mintzberg 1979). This is, in fact, one of the reasons why Porter and colleagues advocate a switch to IPUs, which would establish multidisciplinary units that carry responsibility for both the outcomes and the costs of their care cycles.

We can conclude that an important part of the explanation for why VBHC is being applied selectively within Dutch hospitals, is that its

<sup>31</sup> The use of costs measurement as performance metrics can lead to increased managerial scrutiny and decreased professional discretion in decision-making. Since costs-considerations are typically not part of the autonomy of medical professionals, insights into costs of care cycles could evoke some organizations who face the need to control costs to impose more top-down decision-making and standardization, thereby threatening professional autonomy.

applications are restricted by highly professionalized layers of red tape. More specifically, this application takes shape conservatively because of the decades of professionalization that have given medical professionals the self-governing authority to determine the conditions of their work, including how and to what extent the application of VBHC influences those conditions. This conformation to established structures and practices brings me to another useful concept that can help explain the way VBHC is and is not applied in the Netherlands: institutional layering.

#### Institutional layering

In general, institutional theory constitutes a body of work that reveals how behavior in many fields of work, health care being one of them, is often guided, both formally and informally, by historically rooted (i.e. institutionalized) rules and beliefs (Meyer et al. 1994; Steinmo 2008). What the concept of institutional layering adds to this understanding, is that attempts to change these behavioral guides (i.e. changing the rules of the game), by regulatory reforms for example, will often not wash away previously dominant rules and beliefs, but alter their significance by layering slight modifications (Mahoney & Thelen 2010; Van de Bovenkamp et al. 2014). This has important implications for the applicability of Porter's original set of ideas.

In Chapter 6, where we examine the purchasing behavior of Dutch health insurers, our analytical framework is based on insights from institutional theory (Meyer & Rowan 1977; Hall & Taylor 1996; Thelen 1999; Scott 2004), sensitized by the concept of institutional layering (Mahoney & Thelen 2010; Van de Bovenkamp et al. 2014). Our analysis reveals how the purchasing practices of health insurers—and the application of VBHC principles within them—conform to prevalent socio-political norms and historically rooted payment practices. Although the market-oriented reforms of the Health Insurance Act (2006) have officially—on paper—paved the way for private health insurers to apply value-based contract models and other prudent purchasing practices, their actual purchasing behavior is restricted by the (perceived) need to adhere to prevalent beliefs of the wider society (e.g. that all health care that is prescribed in the Netherlands is both needed and of good quality). Moreover, insurers also conform to professional self-regulation; to a political culture of

seeking consensus through corporatist arrangements; and to a history of budgeting as the way to pay for hospital care.

As institutional theorists teach us, when structures and practices are institutionalized, they often become taken for granted as socially and normatively legitimate by the actors and organizations they affect (Meyer & Rowan 1977; Lawrence & Suddaby 2006). This thesis has touched upon several institutionalized structures and practices within the Dutch health care system, including professional self-regulation; corporatist arrangement that facilitate bargaining and seeking consensus among interest associations; specialty-based organizational structures; and the practice of budgeting. These have become so ingrained and normalized through an ongoing history of conformed behavior, that the practicality of radically alternative ideas such as those promoted by Porter and colleagues is severely limited. Put differently, the application of VBHC in the Netherlands is path dependent: constrained by past trajectories (cf. Thelen 1999: 387).

At face value, ideas such as outcome transparency, IPUs, and bundled payments may appear highly logical, but their practical applicability shrivels when the established structures they are supposed to change are taken for granted as natural and normatively legitimate by the wider society, and even more so when they are also deemed desirable by their direct stakeholders. VBHC's popularity notwithstanding, there are no pathbreaking IPUs in Dutch hospitals, there are path dependent multidisciplinary liaisons; bundled payments are the idealized exception, budgeting is the institutionalized norm; and self-regulating professionals by and large determine how they will be held accountable for the outcomes of their work. Hence, the application of VBHC in the Netherlands is characterized by conformity to the socio-political institutions that guide behavior within its health care system. Accordingly, it forms a contemporary addition to the much broader incremental processes of institutional layering, in which the dominance functional-designs, budgeting, and professional self-regulation endures, albeit in a slightly altered fashion over time.

# **Implications**

During the past four years, I have come across so much popularity and enthusiasm when it comes to VBHC, yet even more so, I have come to believe that all this popularity constitutes but a thin layer of veneer compared to the profoundness of the historically rooted structures and practices that Porter and colleagues wish to reform. At the time of this writing, VBHC is indeed a very popular concept within the Dutch health care system. The idea of "value for patients," in particular, has garnered widespread attention and appreciation. Many providers have adopted the goal to improve value for patients, with value defined as the outcomes that matter to patients divided by the costs for achieving those outcomes. In my estimation, however, this overarching goal is probably the only element of the original set of ideas developed by Porter and colleagues that is directly copied into the meaning of VBHC in the Netherlands (Porter & Teisberg 2006; Porter & Lee 2013). Within the Dutch system, improving value, or trying to do so, generally concerns the measurement of outcomes that matter to patients followed by efforts to improve those outcomes by way of intensified multidisciplinary collaboration, and through SDM. But the application of VBHC will not entail the kind of profound restructuring advocated by Porter and colleagues. An important conclusion of this thesis is that, within the Netherlands, the original set of ideas is applied selectively in ways that conserve traditional structures, including organizational designs, payment practices, and a self-regulating professional bureaucracy.

From a rationalistic standpoint, the set of ideas promoted by Porter and colleagues may make a lot of sense, but it is not its rationale that determines its meaning and application within health care systems: the original ideas contain ramifications that are simply too radical for, and too disconnected with the historically rooted structures and socio-political traditions on which the Dutch health care system is founded. While radical ideas such as the transition to IPUs and bundled payments may seem valid theoretically, my thesis suggests a disconnect with established structures that results in their practical vanity.

In the following paragraphs, therefore, I will outline implications and recommendations that are in line with the conservative ways in which VBHC is applied within the Netherlands. In doing so, I will presume that improving value for patients is a worthwhile goal. In fact, I consider the renewed focus on outcomes that matter to patients probably VBHC's best achievement thus far. But in addition to outcomes, I will also presume the importance of costs in recognition of the limited resources at both the national and individual level. Moreover, I will presume that by and large, both the outcomes that matter to patients and the costs that are needed to achieve those outcomes can be measured (e.g. Van der Nat et al. 2022; Leusder et al. 2022). Although it may not be possible to measure everything that is important to each individual, I think we should measure what we want to improve in pursuit of more value for patients (Liu et al. 2017).

#### Policy implications

A critical implication of this thesis is that the practical effects of national health policy programs or popular ideas such as VBHC—that target the external governance (i.e. accountability structures) of Dutch health care providers—are likely to be dependent on and constrained by prevalent socio-political institutions (see Chapter 6, and previous sections of the current chapter, in particular). In general, national policymakers would be wise to carefully consider the institutional context—the prevalent norms and beliefs that guide behavior and interaction within and between organizations—in which their policies ought to take effect. An institutional perspective suggests, for instance, how the consensus seeking political culture and the institutionalized corporatist arrangements of the Dutch health care system will make it tremendously difficult for official policies to generate their objectives when these are *not* de facto supported by the organized interests of medical professionals.

In the Dutch system, effectively pursuing contested policy objectives that lack the widespread support of medical professionals and their organized interest associations, such as transparency of outcome measurements and selective contracting, would essentially require a transformation of the norms and beliefs on which the current functioning of the system is founded. As historical institutionalism teaches us, transforming

the historically rooted "rules of the game"—i.e. institutional change—typically comes in two varieties. The first and more common variety is *evolutionary* (slow, gradual, incremental, and path dependent); the second is *revolutionary* (swift, radical, sweeping, haphazard) (Mahoney & Thelen 2010). This implies that proponents of ideas or policies that contradict currently prevailing institutional structures and practices—e.g. consensual decision-making among interest associations, budgeting hospitals—will generally have to revert to either long-term strategies of incrementalism, or to take up revolutionary agendas and go the proverbial war (or somehow do both at the same time). My research suggests an empirically based preference for the first and more common variety. Not only does this match how VBHC is applied, but it also matches the history of the Dutch health care system in general:

The evolution of health care in the Netherlands is marked by the absence of any radical changes Instead, the current health care system has more or less evolved out of a series of incremental changes, dictated by the logic of path dependency. One exception to this was the introduction of a compulsory sickness fund scheme in 1941. Ironically, after almost forty years of fruitless attempts by the government to set up a social health insurance scheme, it took a war to accomplish this aim, with the German occupying power simply imposing it upon the Dutch (Helderman et al. 2005: 190-1).

Since my research indicates that the application of VBHC has, thus far, entailed incremental and conservative changes rather than radical ones, and since this picture fits well within the history and policy-making traditions of the Dutch health care system, I recommend policymakers adopt a long-term incremental strategy when it comes to objectives that would require institutional change.

In hindsight, and with an institutional perspective in mind, the rather radical policy objective of the *Uitkomstgerichte zorg* program, to have widespread outcome data publicly available within a handful of years (VWS 2018; ZINL 2018), seems practically unfeasible without the de facto widespread support of self-regulating medical professionals. When it comes to outcome transparency, therefore, I would recommend focused

rather than sweeping initiatives that could incrementally contribute to more of such transparency over time (assuming that policymakers consider such transparency desirable). These initiatives could involve seeking out and developing "coalitions of the willing," for instance, and selectively facilitate public reporting among those providers who are actually willing to contribute to outcome transparency. Relatively less nationally standardized and more incremental approaches will likely be more feasible, and although their objectives are inherently less ambitious, they should also require considerably fewer public resources.

When it comes to payment structures of specialist care, policy makers should recognize the deep-seated nature of the practice of budgeting hospitals-including the wide range of stakeholder interests and the various norms and expectations that have taken root around it (see Chapter 6). This means recognizing that officially creating openly negotiable prices is not the same as creating market mechanisms. As suggested in Chapter 6, today's hospital DBC prices mainly have an administrative function and ceremonially represent a purchasing market within the prevailing practice of budgeting. Nevertheless, these openly negotiable prices may have the potential for incremental developments in which they would gradually come to function in ways that approximate the type of market mechanisms the Health Insurance Act (2006) intended to establish. Overall, I would recommend the adoption of a long-term strategy with policies that embrace an incremental approach, rather than a revolutionary agenda—the type that would be aimed at the swift and widespread implementation of bundled payment contracts, for example that fails to recognize the prevalence of budgeting and the institutional context in which it is embedded.

At the time of this writing, there are some indications that popularity and attention within the Netherlands is shifting from VBHC to the newly adopted policy framework called "Passende zorg," or Appropriate care (AC).<sup>32</sup> Essentially, AC can be seen as a policy response to forecasts of ongoing increases in total health expenditure combined with a rapidly aging population. Its main goal is to strengthen the sustainability of the

For example, the health care news website Qruxx.nl used to be focused explicitly on VBHC, but it has now transitioned into a news site concerning "Appropriate care."

Dutch system by striving to spend the limited public funds as effectively as possible in terms of sustaining and improving people's health, and to foster improvements through collaboration among providers and other organizations such as insurers (ZINL 2022). AC has become the central theme of the current national health policy agenda. This thesis strongly suggests, however, that as with VBHC, the application of AC will be affected by its institutional context. At least in the Netherlands, promotors of ideas like VBHC or AC would be wise to recognize and consider the dominance of the professional bureaucracy—to name one crucial institutional element.

### Research implications

This thesis demonstrates the importance of taking different stakeholder perspectives into account when it comes to the analysis of VBHC in the Netherlands, and I am confident that this holds true for research on other types of policies and ideas that address the external governance and internal management of health care delivery. Take the idea of AC, for example, the newly developed health policy framework that is embraced by a variety of Dutch stakeholders, championed by national government agencies such as the ministry (VWS). My research suggests that in ways similar to VBHC, the meaning of AC is likely to be contested; its interpretation will be context-dependent; and its perceived implications will probably be shaped by stakeholder interests, as well as already deeply rooted convictions about the health care system. Not unlikely, its contested and context-dependent meaning will spill over to its application. I have already advocated to recognize the importance of the institutional context in which AC ought to take shape, and there looms a special role for researchers in this regard: to unravel and distill how and why AC is shaped and constrained by historically rooted "rules of the game." The current AC policy framework contains a specific set of assignments directed at the purchasing behavior of health insurers (ZINL 2022). Since we have already seen (see Chapter 6) how a de jure purchasing assignment is far from the same as its de facto realization, I strongly encourage future research (preferably starting soon) on the application of AC. And an institutional perspective may once again offer a useful analytical lens in this regard.

Speaking of analytical lenses, my research demonstrates the utility of applying a variety of theories and concepts as sensitizing tools (Blumer 1954). This thesis shows how such an approach can strengthen the development of in-depth understandings of (socio-political) phenomena, based on several analytical angles that offer complementary and overlapping conclusions. It allows for research that is not restricted by any particular paradigm or ontological standpoint, yet still embedded in scientific theory. Additionally, this thesis shows how new valuable insights can emerge from research that is embedded in the activities of multiple organizations and that recognizes the validity of various stakeholder perspectives. My research, including some of the most important conclusions of this thesis, is strongly influenced by the voices of health care professionals, government employees, health care managers, and, last but not least, insurers. I recommend research endeavors that recognize the validity of different perceptions—theoretically, empirically, as well as normatively—which leaves room for the appreciation of both rationalistic ideas and socio-political entanglements.

My endorsement of the utility of a variety of sensitizing concepts and theoretical angels, however, hinges on the explicitness with which scholars use their concepts and theories. The social sciences, in particular, appear prone to trends of "semantic inflation" (Haslam 2016), in which the meaning of concepts, especially the more popular ones within a field, does not just change over time—which is to be expected in light of changing societal circumstances—but gets diluted and stretched out to cover an increasingly wide range of phenomena with a lack of clear distinction (Ibid; Alvesson & Blom 2022).

Equally frustrating is the tendency of overexploiting a popular term by adding more and more (vague and poorly defined) meanings to it, thereby making its boundaries unclear and the concept increasingly unwieldy [...]. This leads to significant confusion and makes navigating in intellectual fields difficult. As a result, both theoretical thinking and communication between scholars (and others) become problematic (Alvesson & Blom 2022: 59).

As hinted before, I personally experienced something akin the frustration described above in relation to the ambiguous use of the term "value-based health care." The approach I took regarding VBHC, as well as regarding the main sensitizing concepts of the empirical chapters (e.g. discourse, translation, institution), has not only been fruitful in terms of enabling analysis, but may be useful for future research, especially for starting researchers or those new to a subfield who—speaking from experience—can easily get "lost in the wilderness" of ambiguously defined yet dominantly popular concepts (Alvesson & Blom 2022).

In short, my approach has been to take a deliberate dive into the literature, including the pioneering and thus sometimes older texts on the topic (e.g. Latour 1987; Mintzberg 1979; Meyer & Rowan 1977), as well as recent publications, with the goal to gradually and carefully develop a definition of the concept at hand, which should not only function to grasp its (subjective) meaning, but, more importantly, should make the concept applicable as a distinct unit of analysis (e.g. a research subject) or a demarcated analytical lens (i.e. theoretical framework).

Eclecticism is self-defeating not because there is only one direction in which it is useful to move, but because there are so many: it is necessary to choose (Geertz 1973: 5).

The implication here is not that there is a single best definition out there to be found; the point is that deliberately developing a specified definition will aid researchers in grasping and reflecting on the concepts they use (Alvesson & Blom 2022). Moreover, it can provide them with explicitness and eloquence in explaining their analyses and their findings to their peers (Ibid). And, if constructed with sufficient care, such conceptual explicitness can fruitfully contribute to new forms of research and analysis (Geertz 1973: 91). Whereas the vagueness of much conceptual work in social science subfields can estrange them from one another, and certainly from other scholarly disciplines, carefully specified definitions should aid interdisciplinary comprehension. Looking at some of my own work, I am not advocating singular definitions of concepts like "institution," and neither do I take issue with the existence of multiple and sometimes conflicting definitions (cf. Alvesson et al. 2019). Rather, I am arguing

for the utility of developing specified definitions so as to provide (new) researchers from various subdisciplines with high resolution signposts that reveal rather than conceal meaning (Geertz 1973: 3-5; Alvesson & Blom 2022).

#### Practical implications

As mentioned, I would probably consider the renewed and intensified focus on outcomes that matter to patients the most important contribution of VBHC in the Netherlands, and I can only cheer this development: let's measure what matters to patients, and let's measure what we want to improve. This thesis has shown, however, that the flipside of this focus on outcomes concerns a underemphasis of costs. Considering that the Netherlands is one of the many countries that are experiencing trends of total health expenditure that some financial analysts depict as "spiraling" and "simply unsustainable" (Gerecke et al. 2015: 4), the time seems ripe to connect the dots and measure and monitor the actual costs of care cycles and relate them to outcomes that matter.

Crucially, the actual production costs endured by providers should be distinguished from billed charges—especially in the Dutch context considering its budgeting practices. The prices of services may be known, but these do not necessarily (and in many cases not at all) reflect actual costs (Kaplan & Porter 2011; Chapter 6). To the best of my knowledge, the following statement still remains largely applicable to the Dutch health care system:

For a field in which high cost is an overarching problem, the absence of accurate cost information in health care is nothing short of astounding. Few clinicians have any knowledge of what each component of care costs, much less how costs relate to the outcomes achieved. In most health care organizations there is virtually no accurate information on the cost of the full cycle of care for a patient with a particular medical condition (Porter & Lee 2013).

As mentioned before, clinicians, on average, appear to lack the motivation necessary for rigorous cost monitoring. But over the years, I have met

some clinicians who are willing to gain more insights into the actual costs of their care cycles, and I am confident that some managers are willing to play a role in this regard. Again, I think seeking out coalitions of the willing might be a good start here.

Now, the cost measurement system recommended by Porter and colleagues is time-driven activity-based costing (TDABC), which offers a step-by-step way to measure both the direct and indirect costs of a chain of interrelated activities (i.e. a care cycle) (Kaplan & Porter 2011). Although some previous efforts have been hampered by the specialty-based organizational structures of hospitals (Keel et al. 2017), systematic reviews of the literature on TDABC generally show positive results and future potential in terms of cost control and process improvement (Ibid; Leusder et al. 2022). And while traditional organizational structures may form obstacles, Leusder and colleagues (2022) do consider the method applicable to multidisciplinary teams. Moreover, they advocate the inclusion of medical professionals:

Our review highlights the need to involve medical professionals in this process, both when implementing costing methods as well as when evaluating the results. Future cost measurement studies, and hospitals looking to implement TDABC, should involve multidisciplinary teams. Studies that have involved medical professionals in the process of measuring costs and then using the findings were able to improve care paths through improvement initiatives and/or dashboards (Leusder et al. 2022: 10).

If we recognize that the costs of health care services matter to patients, as well as to providers, payers, and the wider society, both now and in the future, hopefully there will be multidisciplinary coalitions of the willing that attain to the actual costs of their care cycles.

### Conclusion

My research has shown how VBHC has, as of yet, not generated radical changes, but it has given rise to incremental applications in terms of the governance and management of health care delivery. Specialtybased organizational structures are, by and large, left intact, and the same applies to the dominance of professional self-regulation regarding accountability structures, as well as the prevalence of budgets in terms of payment structures. Yet, within these historically rooted structures, VBHC has generated a renewed focus and increased attention to outcomes that matter to patients. Plus, it has boosted multidisciplinary collaboration and coordination aimed at improving those outcomes. In and of itself, this may be regarded quite an accomplishment: not bad at all for a foreign bunch of (neoliberal management) ideas that are covered with a cloak of ambiguity. What is more, the application of VBHC in the Netherlands may only be in its infancy. Indeed, one of the co-authors of Chapter 5 was recently quoted in an interview as depicting VBHC in the Netherlands as "an unstoppable train" (Tulp 2023). Now, I am perfectly open to the idea that the application of certain aspects of Porter's ideas the measurement of health outcomes and efforts to improve them, for example—is an ongoing movement that is unstoppable. Instead of a speedy and straightforward train, however, I metaphorically picture slowmoving soil creep, in which upper layers of sediment are in a gradual slide, reshaping some of the landscape's characteristics along the way. Moreover, I envision some structures with roots that go deep enough so that they remain firmly in place, in spite of all the unstoppable movement around them.



#### References

- Abernethy, Margaret A., and Anne M. Lillis. 2001. "Interdependencies in Organization Design: A Test in Hospitals." *Journal of Management Accounting Research* 13 (1): 107–29. doi:10.2308/jmar.2001.13.1.107.
- Abernethy, Margaret A., and Johannes U. Stoelwinder. 1990. "The Relationship between Organisation Structure and Management Control in Hospitals: An Elaboration and Test of Mintzberg's Professional Bureaucracy Model." *Accounting, Auditing & Accountability Journal* 3 (3). doi:10.1108/09513579010142616.
- Alvesson, Mats, and Dan Kärreman. 2000. "Varieties of Discourse: On the Study of Organizations through Discourse Analysis." *Human Relations* 53 (9): 1125–49. doi:10.1177/0018726700539002.
- Alvesson, Mats, and Martin Blom. 2022. "The Hegemonic Ambiguity of Big Concepts in Organization Studies." *Human Relations* 75 (1): 58–86. doi:10.1177/0018726720986847.
- Alvesson, Mats, Tim Hallett, and Andre Spicer. 2019. "Uninhibited Institutionalisms." *Journal of Management Inquiry* 28 (2): 119–27. doi:10.1177/1056492618822777.
- Andreasson, Jörgen, Erik Ljungar, Linda Ahlstrom, Jonas Hermansson, and Lotta Dellve. 2018. "Professional Bureaucracy and Health Care Managers' Planned Change Strategies: Governance in Swedish Health Care." Nordic Journal of Working Life Studies 8 (1): 23–41. doi:10.18291/njwls.v8i1.104849.
- Berends, Lynda, and Jennifer Johnston. 2005. "Using Multiple Coders to Enhance Qualitative Analysis: The Case of Interviews with Consumers of Drug Treatment." Addiction Research & Theory 13 (4): 373–81. doi:10.1080/16066350500102237.
- Berwick, Donald M., Thomas W. Nolan, and John Whittington. 2008. "The Triple Aim: Care, Health, and Cost." *Health Affairs* 27 (3): 759–69. doi:10.1377/hlthaff.27.3.759.
- Bigelow, Barbara, and Margarete Arndt. 2000. "The More Things Change, the More They Stay the Same." *Health Care Management Review* 25 (1): 65–72. doi:10.1097/00004010-200001000-00008.
- Bijl, Edith. 2018. "Aandeel Uitkomstindicatoren in Vier Jaar Ruim Verdubbeld -Qruxx: Kennisplatform Voor Passende Zorg." Qruxx. Bohn Stafleu van Loghum. July 26. https://www.qruxx.com/aandeel-uitkomstindicatoren-in-vier-jaar-ruim-verdubbeld/.
- Blumer, Herbert. 1954. "What Is Wrong with Social Theory?" *American Sociological Review* 19 (1): 3–10. doi:10.2307/2088165.

- Boeije, Hennie. 2010. Analysis in Qualitative Research. Los Angeles, CA: Sage.
- Boivin, Antoine, Judith Green, Jan van der Meulen, France Légaré, and Ellen Nolte. 2009. "Why Consider Patients' Preferences?: A Discourse Analysis of Clinical Practice Guideline Developers." *Medical Care* 47 (8): 908–15. doi:10.1097/mlr.0b013e3181a81158.
- Bonde, Morten, Claus Bossen, and Peter Danholt. 2018. "Translating Value-Based Health Care: An Experiment into Healthcare Governance and Dialogical Accountability." Sociology of Health & Illness 40 (7): 1113–26. doi:10.1111/1467-9566.12745.
- Boonen, Lieke H., and Frederik T. Schut. 2010. "Preferred Providers and the Credible Commitment Problem in Health Insurance: First Experiences with the Implementation of Managed Competition in the Dutch Health Care System." *Health Economics, Policy and Law* 6 (2): 219–35. doi:10.1017/s1744133110000320.
- Broertjes, J.C. 1992. "Functiegericht Budgetteren En Budgetgericht Functioneren." *NTvG*. NTvG. February 4. https://www.ntvg.nl/artikelen/functiegericht-budgetteren-en-budgetgericht-functioneren.
- Burke, Wylie, Susan Brown Trinidad, and Nancy A. Press. 2014. "Essential Elements of Personalized Medicine." *Urologic Oncology: Seminars and Original Investigations* 32 (2): 193–97. doi:10.1016/j.urolonc.2013.09.002.
- Busink, Ellen, Bernard Canaud, Peter Schröder-Bäck, Aggie T.G. Paulus, Silvia M.A.A. Evers, Christian Apel, Sudhir K. Bowry, and Andrea Stopper. 2019. "Chronic Kidney Disease: Exploring Value-Based Health care as a Potential Viable Solution." *Blood Purification* 47 (1-3): 156–65. doi:10.1159/000496681.
- Callon, Michel. 1986 "The Sociology of the Actor-Network: The Case of the Electric Vehicle." In *Mapping the dynamics of Science and Technology*, edited by Michel Callon, John Law, and Arie Rip, 1st ed., 19–34. London, England: Palgrave Macmillan Ltd.
- Chandra, Amitabh, David Cutler, and Zirui Song. 2012. "Chapter Six Who Ordered That? The Economics of Treatment Choices in Medical Care." In *Handbook of Health Economics*, edited by Mark V. Pauly, Thomas G. Mcguire, and Pedro P. Barros, 1st ed., 2:397–432. Oxford, UK: Elsevier.
- Cheek, Julianne. 2004. "At the Margins? Discourse Analysis and Qualitative Research." Qualitative Health Research 14 (8): 1140–50. doi:10.1177/1049732304266820.

- Colldén, Christian, and Andreas Hellström. 2018. "Value-Based Healthcare Translated: A Complementary View of Implementation." *BMC Health Services Research* 18 (1). doi:10.1186/s12913-018-3488-9.
- Conrad, Douglas A. 2015. "The Theory of Value-Based Payment Incentives and Their Application to Health Care." *Health Services Research* 50 (S2): 2057–89. doi:10.1111/1475-6773.12408.
- Cook, David, Jeffrey E. Thompson, Elizabeth B. Habermann, Sue L. Visscher, Joseph A. Dearani, Veronique L. Roger, and Bijan J. Borah. 2014. "From 'Solution Shop' Model to 'Focused Factory' in Hospital Surgery: Increasing Care Value and Predictability." *Health Affairs* 33 (5): 746–55. doi:10.1377/hlthaff.2013.1266.
- Cresswell, Kathrin M, Allison Worth, and Aziz Sheikh. 2010. "Actor-Network Theory and Its Role in Understanding the Implementation of Information Technology Developments in Healthcare." *BMC Medical Informatics and Decision Making* 10 (1). doi:10.1186/1472-6947-10-67.
- Currie, Graeme, Andy Lockett, Rachael Finn, Graham Martin, and Justin Waring. 2012. "Institutional Work to Maintain Professional Power: Recreating the Model of Medical Professionalism." *Organization Studies* 33 (7): 937–62. doi:10.1177/0170840612445116.
- Currie, Wendy L, and Matthew W Guah. 2007. "Conflicting Institutional Logics: A National Programme for It in the Organisational Field of Health care." *Journal of Information Technology* 22 (3): 235–47. doi:10.1057/palgrave. jit.2000102.
- Dainty, Katie N, Brian R. Golden, Rosemary Hannam, Fiona Webster, Gina Browne, Nicole Mittmann, Anita Stern, and Merrick Zwarenstein. 2018. "A Realist Evaluation of Value-Based Care Delivery in Home Care: The Influence of Actors, Autonomy and Accountability." *Social Science & Medicine* 206: 100–109. doi:10.1016/j.socscimed.2018.04.006.
- Deephouse, David L, Leigh Plunkett Tost, and Marc C Suchman. 2017. "Chapter 1: Organizational Legitimacy: Six Key Questions." In *The SAGE Handbook of Organizational Institutionalism*, edited by Jonathan Bundy, Royston Greenwood, Christine Oliver, Thomas B Lawrance, and Renate E Meyer, 2nd ed., 27–54. Thousand Oaks, California: SAGE Publications Ltd.
- Deephouse, David L, and Suzanne M. Carter. 2005. "An Examination of Differences between Organizational Legitimacy and Organizational Reputation." *Journal of Management Studies* 42 (2): 329–60. doi:10.1111/j.1467-6486.2005.00499.x.

- DeWalt, Kathleen M, and Billie R. DeWalt. 2011. *Participant Observation: A Guide for Fieldworkers*. Lanham, Maryland: Altamira Press.
- DiMaggio, Paul J., and Walter W. Powell. 1983. "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." American Sociological Review 48 (2): 147. doi:10.2307/2095101.
- Döhler, Marian. 1993. "Comparing National Patterns of Medical Specialization: A Contribution to the Theory of Professions." *Social Science Information* 32 (2): 185–231. doi:10.1177/053901893032002002.
- Douven, Rudy, Remco Mocking, and Ilaria Mosca. 2015. "The Effect of Physician Remuneration on Regional Variation in Hospital Treatments." *International Journal of Health Economics and Management* 15 (2): 215–40. doi:10.1007/s10754-015-9164-2.
- Ebbevi, David. 2017. "Value-Based Health Care: Challenges in Moving Forward." Dissertation, Stockholm, Sweden: Karolinska Institutet. Karolinska Institutet.
- Economist Intelligence Unit. 2016. "Value-Based Healthcare: A Global Assessment." *Findings and Methodology*. The Economist. https://impact.economist.com/perspectives/sites/default/files/EIU\_Medtronic\_Findings-and-Methodology\_1.pdf.
- Eijkenaar, Frank. 2011. "Key Issues in the Design of Pay for Performance Programs." *The European Journal of Health Economics* 14 (1): 117–31. doi:10.1007/s10198-011-0347-6.
- EIT Health. 2020. "Implementing Value-Based Health Care in Europe: Handbook for Pioneers." *Eithealth.eu*. European Union. https://eithealth.eu/wp-content/uploads/2020/05/Implementing-Value-Based-Healthcare-In-Europe\_web-4. pdf.
- Erichsen Andersson, Annette, Fredrik Bååthe, Ewa Wikström, and Kerstin Nilsson. 2015. "Understanding Value-Based Healthcare an Interview Study with Project Team Members at a Swedish University Hospital." *Journal of Hospital Administration* 4 (4): 64. doi:10.5430/jha.v4n4p64.
- European Commission, Expert Panel on effective ways of investing in health. 2019. "Defining Value in 'Value-Based Healthcare." *Public Health* | *Publications*. European Commission. July 30. https://health.ec.europa.eu/system/files/2019-11/024\_defining-value-vbhc\_en\_0.pdf.
- Falkenström, Erica, and Stefan Svallfors. 2022. "The Knowledge-Management Complex: From Quality Registries to National Knowledge-Driven Management in Swedish Health Care Governance." *Politics & Policy* 50 (5): 1053–66. doi:10.1111/polp.12497.

- Federatie Medisch Specialisten. 2017. "Vision Document Medical Specialist 2025." *Demedischspecialist.nl*. Federatie Medisch Specialisten. https://demedischspecialist.nl/sites/default/files/FMS\_visiedoc\_MS2025(eng)\_2017\_PL\_v02(lr).pdf.
- —. 2018. "Standpunt Value Based Healthcare." Demedischspecialist.nl. Federatie Medisch Specialisten. July 26. https://demedischspecialist.nl/sites/default/files/Standpunt%20Federatie%20Value%20Based%20Healthcare.pdf.
- Felder, Martijn M, Hester H van de Bovenkamp, Marlies M Maaijen, and Antoinette A de Bont. 2018. "Together Alone: Organizing Integrated, Patient-Centered Primary Care in the Layered Institutional Context of Dutch Healthcare Governance." *Journal of Professions and Organization* 5 (2): 88–105. doi:10.1093/jpo/joy006.
- Figueroa, Jose F, Yusuke Tsugawa, Jie Zheng, E John Orav, and Ashish K Jha. 2016. "Association between the Value-Based Purchasing Pay for Performance Program and Patient Mortality in US Hospitals: Observational Study." *BMJ*, i2214. doi:10.1136/bmj.i2214.
- Fligstein, Neil. 2001. "Social Skill and the Theory of Fields." *Sociological Theory* 19 (2): 105–25. doi:10.1111/0735-2751.00132.
- Folland, Sherman, Allen C. Goodman, and Miron Stano. 2013. "Chapter 1. Introduction." In *The Economics of Health and Health Care*, 7th ed., 1–19. London, UK: Routledge, Taylor & Francis Group.
- Fredriksson, Jens Jacob, David Ebbevi, and Carl Savage. 2015. "Pseudo-Understanding: An Analysis of the Dilution of Value in Health care." *BMJ Quality & Safety* 24 (7): 451–57. doi:10.1136/bmjqs-2014-003803.
- Freeman, Richard. 2009. "What Is 'Translation'?" *Evidence & Policy* 5 (4): 429–47. doi:10.1332/174426409x478770.
- Freidson, Eliot. 2011. "8 The Assault of Professionalism." In *Professionalism: The Third Logic*, 179–97. Cambridge, England: Polity.
- Gajadien, Chandeni S., Peter J. Dohmen, Frank Eijkenaar, Frederik T. Schut, Erik M. van Raaij, and Richard Heijink. 2022. "Financial Risk Allocation and Provider Incentives in Hospital–Insurer Contracts in the Netherlands." *The European Journal of Health Economics* 24 (1): 125–38. doi:10.1007/s10198-022-01459-5.
- Garvelink, Mirjam M., and Paul B. van der Nat. 2019. "Moving Forward with Value Based Healthcare: The Need for a Scientific Approach." *European Journal of Surgical Oncology* 45 (7): 1299. doi:10.1016/j.ejso.2019.03.029.
- Geertz, Clifford. 1973. *The Interpretation of Cultures: Selected Essays*. New York, NY: Basic Books.

- Gerecke, Götz, Jennifer Clawson, and Yves Verboven. 2015. "Procurement: The Unexpected Driver of Value-Based Health Care." *BCG Global*. Boston Consulting Group. December 8. https://www.bcg.com/publications/2015/medical-devices-technology-procurement-unexpected-driver-value-based-health-care.
- Goodrick, Elizabeth, and Trish Reay. 2016. "An Institutional Perspective on Accountable Care Organizations." *Medical Care Research and Review* 73 (6): 685–93. doi:10.1177/1077558716641832.
- Green, Judith, and Nicki Thorogood. 2009. *Qualitative Methods for Health Research*. London, England: SAGE.
- Greenhalgh, Trisha, Rob Procter, Joe Wherton, Paul Sugarhood, and Sara Shaw. 2012. "The Organising Vision for Telehealth and Telecare: Discourse Analysis: Table 1." *BMJ Open* 2 (4). doi:10.1136/bmjopen-2012-001574.
- Greenwood, Royston, Christine Oliver, Kerstin Sahlin, and Roy Suddaby. 2008. "Introduction." In *The Sage Handbook of Organizational Institutionalism*, edited by Royston Greenwood, Christine Oliver, Kerstin Sahlin, and Roy Suddaby, 1st ed., 1–46. Thousand Oaks, California: SAGE.
- Groenewoud, A. Stef, Gert P. Westert, and Jan A. Kremer. 2019. "Value Based Competition in Health Care's Ethical Drawbacks and the Need for a Values-Driven Approach." *BMC Health Services Research* 19 (1). doi:10.1186/s12913-019-4081-6.
- Haidt, Jonathan. 2012. The Righteous Mind: Why Good People Are Divided by Politics and Religion. London, England: Penguin Books.
- Hall, Peter A., and Rosemary C. Taylor. 1996. "Political Science and the Three New Institutionalisms." *Political Studies* 44 (5): 936–57. doi:10.1111/j.1467-9248.1996.tb00343.x.
- Hall, Richard H. 1968. "Professionalization and Bureaucratization." *American Sociological Review* 33 (1): 92–104. doi:10.2307/2092242.
- Hartnick, Chris, Mahek Shah, Steven M. Coppess, Alisa Yamasaki, Kaalan E. Johnson, Jeremy Prager, Christopher T. Wootten, Thomas Gallagher, Evan Propst, and Robert S. Kaplan. 2020. "Assessing the Value of Pediatric Aerodigestive Care." NEJM Catalyst 1 (4). doi:10.1056/cat.19.1132.
- Haslam, Nick. 2016. "Concept Creep: Psychology's Expanding Concepts of Harm and Pathology." *Psychological Inquiry* 27 (1): 1–17. doi:10.1080/104784 0x.2016.1082418.
- Hasson, Felicity, Sinead Keeney, and Hugh McKenna. 2000. "Research Guidelines for the Delphi Survey Technique." *Journal of Advanced Nursing* 32 (4): 1008–15. doi:10.1046/j.1365-2648.2000.t01-1-01567.x.

- Hawthorne, Susan C.C., and Anne Williams-Wengerd. 2019. "Effective' at What? on Effective Intervention in Serious Mental Illness." *Health Care Analysis* 27 (4): 289–308. doi:10.1007/s10728-019-00367-9.
- Hazelzet, Jan A., Johan Thor, Boel Andersson Gäre, Jan A.M. Kremer, Nico van Weert, Carl Savage, and Glyn Elwyn. 2021. "Value-Based Health care's Blind Spots: Call for a Dialogue." *F1000Research* 10: 1314. doi:10.12688/f1000research.75578.1.
- Heijsters, Florence A., Fenna G. van Breda, Femke van Nassau, Marije K. van der Steen, Piet M. ter Wee, Margriet G. Mullender, and Martine C. de Bruijne. 2022. "A Pragmatic Approach for Implementation of Value-Based Healthcare in Amsterdam UMC, The Netherlands." *BMC Health Services Research* 22 (1). doi:10.1186/s12913-022-07919-1.
- Helderman, Jan-Kees, Frederik T. Schut, Tom E. van der Grinten, and Wynand P. van de Ven. 2005. "Market-Oriented Health Care Reforms and Policy Learning in the Netherlands." *Journal of Health Politics, Policy and Law* 30 (1-2): 189–210. doi:10.1215/03616878-30-1-2-189.
- Hodges, Brian David, Ayelet Kuper, and Scott Reeves. 2008. "Qualitative Research: Discourse Analysis." *BMJ* 337 (7669): 570–72. https://www.jstor.org/stable/20510756.
- Hui, Ferdinand K, Phillip Phan, T.Y. Alvin Liu, Kimia Ghobadi, and Andrew Menard. 2022. "Is There a Market for Sustainable Healthcare?" *Journal of Sustainable Marketing* 3 (1): 4–16. doi:10.51300/jsm-2022-56.
- Hutink, Henk, Anco de Jong, Claartje Hülsmann, Eva Piller, Maarten Fresz, Nico Rozing, and Tamara Moll. 2016. "Leidraad Kwaliteitsregistraties." *Rijksoverheid. nl.* Zorginstituut Nederland. January. https://www.zorginstituutnederland.nl/binaries/zinl/documenten/publicatie/2016/01/15/leidraad-kwaliteitsregistraties/Leidraad+Kwaliteitsregistraties.pdf.
- Jeurissen, Patrick, and Hans Maarse. 2021. "Preface." In *The Market Reform in Dutch Health Care: Results, Lessons and Prospects*, viii-ix. Copenhagen, Denmark: World Health Organization Regional Office for Europe.
- Jones, J., and D. Hunter. 1995. "Consensus Methods for Medical and Health Services Research." *BMJ* 311 (7001): 376–80. doi:10.1136/bmj.311.7001.376.
- Kaplan, Robert S., and Michael E. Porter. 2011. "How to Solve the Cost Crisis in Health Care." *Harvard Business Review* 4: 47–64.
- Keel, George, Carl Savage, Muhammad Rafiq, and Pamela Mazzocato. 2017. "Time-Driven Activity-Based Costing in Health Care: A Systematic Review of the Literature." *Health Policy* 121 (7): 755–63. doi:10.1016/j. healthpol.2017.04.013.

- Klopper-Kes, Hanneke A. H. J., Nienke Meerdink, Celeste P. M. Wilderom, and Wim H. Van Harten. 2010. "Effective Cooperation Influencing Performance: A Study in Dutch Hospitals." *International Journal for Quality in Health Care* 23 (1): 94–99. doi:10.1093/intqhc/mzq070.
- Kohlbacher, Markus. 2010. "The Effects of Process Orientation: A Literature Review." *Business Process Management Journal* 16 (1): 135–52. doi:10.1108/14637151011017985.
- Kokko, Petra, and Anna-Aurora Kork. 2020. "Value-Based Healthcare Logics and Their Implications for Nordic Health Policies." *Health Services Management Research* 34 (1): 3–12. doi:10.1177/0951484820971457.
- Landewé, Robert B. 2021. "The Unsustainable Bubble of Disease-Modifying Antirheumatic Drugs in Rheumatology." The Lancet Rheumatology 3 (4). doi:10.1016/s2665-9913(21)00013-8.
- Lang, Alexander. 2020. "The Good Death and the Institutionalisation of Dying: An Interpretive Analysis of the Austrian Discourse." *Social Science & Medicine* 245: 112671. doi:10.1016/j.socscimed.2019.112671.
- Latour, Bruno. 1987. Science in Action: How to Follow Scientists and Engineers through Society. Cambridge, MA: Harvard Univ. Press.
- Law, John. 2009. "Actor Network Theory and Material Semiotics." Chapter. In *The New Blackwell Companion to Social Theory*, edited by Brian S. Turner, 141–58. Chichester, England: Wiley-Blackwell.
- Lawrence, Thomas B., and Roy Suddaby. 2006. "Institutions and Institutional Work." In *The SAGE Handbook of Organization Studies*, edited by W R Nord, T B Lawrence, C Hardy, and Stewart R Clegg, 2nd ed., 215–54. London, UK: Sage.
- Lega, Federico, and Carlo De Pietro. 2005. "Converging Patterns in Hospital Organization: Beyond the Professional Bureaucracy." *Health Policy* 74 (3): 261–81. doi:10.1016/j.healthpol.2005.01.010.
- Leusder, Maura, Petra Porte, Kees Ahaus, and Hilco van Elten. 2022. "Cost Measurement in Value-Based Healthcare: A Systematic Review." *BMJ Open* 12 (12). doi:10.1136/bmjopen-2022-066568.
- Lewanczuk, Richard, Anderson Chuck, Kathryn Todd, and Verna Yiu. 2020. "Value in Healthcare: Designing an Integrated Value-Based Healthcare System." *Health carePapers* 19 (1): 59–64. doi:10.12927/hcpap.2020.26154.
- Liberati, Elisa Giulia, Mara Gorli, and Giuseppe Scaratti. 2016. "Invisible Walls within Multidisciplinary Teams: Disciplinary Boundaries and Their Effects on Integrated Care." *Social Science & Medicine* 150: 31–39. doi:10.1016/j. socscimed.2015.12.002.

- Lindgren, Peter, and Rikard Althin. 2020. "Something Borrowed, Something New: Measuring Hospital Performance in the Context of Value Based Health Care." *The European Journal of Health Economics* 22 (6): 851–54. doi:10.1007/s10198-020-01209-5.
- Linnean. "Home." *Linnean.nl*. Linnean initiatief. Accessed March 31, 2022. https://www.linnean.nl/default.aspx.
- —. "Werkgroepen." *Linnean.nl*. Linnean initiatief. Accessed March 31, 2022. https://linnean.nl/werkgroepen/default.aspx.
- Linneberg, Mai S., and Steffen Korsgaard. 2019. "Coding Qualitative Data: A Synthesis Guiding the Novice." *Qualitative Research Journal* 19 (3): 259–70. doi:10.1108/qrj-12-2018-0012.
- Liu, Tiffany C., Kevin J. Bozic, and Elizabeth Olmsted Teisberg. 2017. "Value-Based Healthcare: Person-Centered Measurement: Focusing on the Three C's." Clinical Orthopaedics & Related Research 475 (2): 315–17. doi:10.1007/s11999-016-5205-5.
- Lombarts, M.J.M.H, and N.S. Klazinga. 2001. "A Policy Analysis of the Introduction and Dissemination of External Peer Review (Visitatie) as a Means of Professional Self-Regulation amongst Medical Specialists in the Netherlands in the Period 1985–2000." *Health Policy* 58 (3): 191–213. doi:10.1016/s0168-8510(01)00158-0.
- Ludwig, Martijn, Frits van Merode, and Wim Groot. 2009. "Principal Agent Relationships and the Efficiency of Hospitals." *The European Journal of Health Economics* 11 (3): 291–304. doi:10.1007/s10198-009-0176-z.
- Maarse, Hans, and Patrick Jeurissen. 2020. "Private Health Insurance in the Netherlands." In *Private Health Insurance History, Politics and Performance*, edited by Sarah Thomson, Anna Sagan, Elias Mossialos, and Jonathan North, 349–76. European Observatory on Health Systems and Policies. Cambridge: Cambridge University Press.
- Maarse, Hans, Patrick Jeurissen, and Dirk Ruwaard. 2016. "Results of the Market-Oriented Reform in the Netherlands: A Review." *Health Economics, Policy and Law* 11 (2): 161–78. doi:10.1017/s1744133115000353.
- Mahoney, James, and Kathleen Anne Thelen. 2010. "A Theory of Gradual Institutional Change." In *Explaining Institutional Change: Ambiguity, Agency, and Power*, edited by James Mahoney and Kathleen Thelen, 1–37. Cambridge, UK: Cambridge University Press.
- Makdisse, Marcia, Marcelo Katz, Pedro Ramos, Adriano Pereira, Sandra Shiramizo, Miguel Cendoroglo Neto, and Sidney Klajner. 2018. "What Is a

- Value Management Office? an Implementation Experience in Latin America." *Value in Health Regional Issues* 17: 71–73. doi:10.1016/j.vhri.2018.02.002.
- March, James G, and Johan P Olsen. 2004. "The Logic of Appropriateness." *ResearchGate*. January. https://www.researchgate.net/publication/5014575\_ The\_Logic\_of\_Appropriateness.
- McMaster, Tom, Richard T Vigden, and David G Wastell. 1977. "Technology Transfer: Diffusion or Translation?" Chapter. In *Facilitating Technology Transfer through Partnership*, edited by Tom McMaster, Enid Mumford, E Burton Swanson, Brian Warboys, and David Wastell, 64–75. New York, NY: Springer.
- Meessen, Bruno. 2020. "Health System Governance: Welcoming the Reboot." BMJ Global Health 5 (8). doi:10.1136/bmjgh-2020-002404.
- Menzis. 2018. "Prospectus Waardegericht Inkopen Borstkankerzorg." Waardegericht Inkopen MSZ. Menzis. December 11. https://www.menzis.nl/zorgaanbieders/-/m/publieke-sites-site-redactie-bieb/menzis/zorgaanbieders/downloads/zorgsoorten/medisch-specialistische-zorg/contractering/inkoopbeleid-2019/prospectus-waardegericht-inkopen-borstkankerzorg 12112018.pdf.
- —. 2019. "Visie 2020: Waardegericht Zorginkoop." Menzis Voor Zorgaanbieders. Zorginkoop. Menzis. https://www.menzis.nl/zorgaanbieders/zorginkoop.
- Meyer, John W, and Brian Rowan. 1977. "Institutionalized Organizations: Formal Structure as Myth and Ceremony." *American Journal of Sociology* 83 (2): 340–63. doi:10.1086/226550.
- Meyer, John W, John Boli, and George M Thomas. 1994. "Ontology and Rationalization in the Western Cultural Account." In *Institutional Environments and Organizations: Structural Complexity and Individualism*, edited by W. Richard Scott and John W. Meyer, 9–27. Thousand Oaks, California: Sage Publications.
- Miller, Danny. 1986. "Configurations of Strategy and Structure: Towards a Synthesis." *Strategic Management Journal* 7 (3): 233–49. doi:10.1002/smj.4250070305.
- Ministry of Health Welfare and Sports. 2016. "Het Nederlandse Zorgstelsel." *Rijksoverheid.nl.* Ministerie van Volksgezondheid, Welzijn en Sport. January 10. https://www.rijksoverheid.nl/documenten/brochures/2016/02/09/hetnederlandse-zorgstelsel.
- 2018. "Ontwikkeling Uitkomstgerichte Zorg 2018-2022." Rijksoverheid.
   nl. Ministerie van Volksgezondheid, Welzijn en Sport. July 2. https://

- www.rijksoverheid.nl/documenten/rapporten/2018/07/02/ontwikkelinguitkomstgerichte-zorg-2018-2022.
- —. 2022. "Integraal Zorgakkoord: "Samen Werken Aan Gezonde Zorg." Rijksoverheid.nl Ministerie van Volksgezondheid, Welzijn en Sport. September 16. https://www.rijksoverheid.nl/onderwerpen/kwaliteit-van-de-zorg/documenten/rapporten/2022/09/16/integraal-zorgakkoord-samen-werken-aan-gezonde-zorg.
- Minkman, M., K. Ahaus, I. Fabbricotti, U. Nabitz, and R. Huijsman. 2009. "A Quality Management Model for Integrated Care: Results of a Delphi and Concept Mapping Study." *International Journal for Quality in Health Care* 21: 66–75. doi:10.1093/intqhc/mzn048.
- Mintzberg, Henry. 1979. The Structuring of Organizations: The Synthesis of the Research. Englewood Cliffs, NJ: Prentice-Hall.
- 1997. "Toward Healthier Hospitals." Health Care Management Review 22 (4):
   9–18. doi:10.1097/00004010-199710000-00005.
- Moleman, Marjolein, Teun Zuiderent-Jerak, Marianne Lageweg, Gianni L. van den Braak, and Tjerk Jan Schuitmaker-Warnaar. 2022. "Doctors as Resource Stewards? Translating High-Value, Cost-Conscious Care to the Consulting Room." *Health Care Analysis* 30 (3-4): 215–39. doi:10.1007/s10728-022-00446-4.
- Moriates, Christopher, Victoria Valencia, Sara Stamets, Joseph Joo, Jonathan MacClements, LuAnn Wilkerson, Elizabeth A. Nelson, Kevin Bozic, and Susan M. Cox. 2019. "Using Interactive Learning Modules to Teach Value-Based Health Care to Health Professions Trainees across the United States." *Academic Medicine* 94 (9): 1332–36. doi:10.1097/acm.0000000000002670.
- National Health Care Institute. 2018. "Meer Patiëntregie Door Meer Uitkomstinformatie in 2022." Rapport | *Zorginstituut Nederland*. Ministerie van Volksgezondheid, Welzijn en Sport. August 14. https://www.zorginstituutnederland.nl/publicaties/rapport/2018/06/28/rapport-meer-patientregie-door-meer-uitkomstinformatie-in-2022.
- —. 2022. "Kader Passende Zorg." Advies | Zorginstituut Nederland. Ministerie van Volksgezondheid, Welzijn en Sport. June 28. https://www.zorginstituutnederland.nl/publicaties/adviezen/2022/06/28/kaderpassende-zorg.
- —. 2023. "Transparantiekalender." Zorginzicht. Zorginstituut Nederland. https://www.zorginzicht.nl/transparantiekalender.
- Newton, Tim. 1998. "Theorizing Subjectivity in Organizations: The Failure of Foucauldian Studies?" Organization Studies 19 (3): 415–47. doi:10.1177/017084069801900303. Nfukwaliteit.nl. Nederlandse Federatie van

- Universitair Medische Centra.
- NFU, Consortium Kwaliteit Van Zorg. 2018. "Bouwstenen voor werken aan waardegedreven zorg." *Nfukwaliteit.nl*. Nederlandse Federatie van Universitair Medische Centra https://nfukwaliteit.nl/pdf/Bouwstenen\_voor\_werken\_aan\_waardegedreven\_zorg.pdf.
- —. 2019. "Position Paper Waardegedreven Zorg." Nfukwaliteit.nl. Nederlandse Federatie van Universitair Medische Centra. https://nfukwaliteit.nl/pdf/NFU-Position\_Paper\_Waardegedreven\_Zorg.pdf.
- Nijhof, Eline, Marnix Romp, and Joyce Van Schip-Wagter. 2021. "Verzekerden in Beeld 2021." *Zorgthermometer*. Vektis. April 4. https://www.vektis.nl/intelligence/publicaties/zorgthermometer-2022.
- Nilsson, Kerstin, Fredrik Bååthe, Annette Erichsen Andersson, Ewa Wikström, and Mette Sandoff. 2017. "Experiences from Implementing Value-Based Healthcare at a Swedish University Hospital a Longitudinal Interview Study." *BMC Health Services Research* 17 (1). doi:10.1186/s12913-017-2104-8.
- Pache, Anne-Claire, and Filipe Santos. 2010. "When Worlds Collide: The Internal Dynamics of Organizational Responses to Conflicting Institutional Demands." *Academy of Management Review* 35 (3): 455–76. doi:10.5465/amr.35.3.zok455.
- Perrin, James M. 2017. "Innovative Health Care Financing Strategies for Children and Youth with Special Health Care Needs." *Pediatrics* 139 (January): s85–s88. doi:10.1542/peds.2016-2786b.
- Peterson, Jordan B. 1999. *Maps of Meaning: The Architecture of Belief.* London, England: Routledge.
- Peterson, Jordan B., and Joseph L. Flanders. 2002. "Complexity Management Theory: Motivation for Ideological Rigidity and Social Conflict." *Cortex* 38 (3): 429–58. doi:10.1016/s0010-9452(08)70680-4.
- Peppercorn, Jeffrey M., Thomas J. Smith, Paul R. Helft, David J. DeBono, Scott R. Berry, Dana S. Wollins, Daniel M. Hayes, Jamie H. Von Roenn, and Lowell E. Schnipper. 2011. "American Society of Clinical Oncology Statement: Toward Individualized Care for Patients with Advanced Cancer." *Journal of Clinical Oncology* 29 (6): 755–60. doi:10.1200/jco.2010.33.1744.
- Porter, Michael E. 2008. "Value-Based Health Care Delivery." *Annals of Surgery* 248 (4): 503–9. doi:10.1097/sla.0b013e31818a43af.
- —. 2009. "A Strategy for Health Care Reform toward a Value-Based System." New England Journal of Medicine 361 (2): 109–12. doi:10.1056/nejmp0904131.
- —. 2010. "What Is Value in Health Care?" New England Journal of Medicine 363 (26): 2477–81. doi:10.1056/nejmp1011024.

- Porter, Michael E., and Elizabeth Olmsted Teisberg. 2004. "Redefining Competition in Health Care." *Harvard Business Review* 82: 64–76.
- 2006. Redefining Health Care: Creating Value-Based Competition on Results.
   Boston, MA: Harvard Business School Press.
- —. 2007. "How Physicians Can Change the Future of Health Care." *JAMA* 297 (10): 1103. doi:10.1001/jama.297.10.1103.
- Porter, Michael E., and Robert S. Kaplan. 2016. "How to Pay for Health Care." *Harvard Business Review* 94: 88–98.
- Porter, Michael E., and Thomas H. Lee. 2013. "The Strategy That Will Fix Health Care." *Harvard Business Review* 91 (12): 50–70.
- —. 2021. "Integrated Practice Units: A Playbook for Health Care Leaders." NEJM Catalyst 2 (1). doi:10.1056/cat.20.0237.
- Porter, Michael E., Erika A. Pabo, and Thomas H. Lee. 2013. "Redesigning Primary Care: A Strategic Vision to Improve Value by Organizing around Patients' Needs." *Health Affairs* 32 (3): 516–25. doi:10.1377/hlthaff.2012.0961.
- Porter, Michael E., Stefan Larsson, and Thomas H. Lee. 2016. "Standardizing Patient Outcomes Measurement." *New England Journal of Medicine* 374 (6): 504–6. doi:10.1056/nejmp1511701.
- Prager, Elena. 2020. "Healthcare Demand under Simple Prices: Evidence from Tiered Hospital Networks." *American Economic Journal: Applied Economics* 12 (4): 196–223. doi:10.1257/app.20180422.
- Ramsdal, Helge, and Catharina Bjørkquist. 2020. "Value-Based Innovations in a Norwegian Hospital: From Conceptualization to Implementation." *Public Management Review* 22 (11): 1717–38. doi:10.1080/14719037.2019.1648695.
- Reijers, Hajo A,. 2006. "Implementing BPM Systems: The Role of Process Orientation." *Business Process Management Journal* 12 (4): 389–409. doi:10.1108/14637150610678041.
- Riddle, Mark S., and David R. Tribble. 2008. "Reaching a Consensus on Management Practices and Vaccine Development Targets for Mitigation of Infectious Diarrhoea among Deployed US Military Forces." *Journal of Evaluation in Clinical Practice* 14 (2): 266–74. doi:10.1111/j.1365-2753.2007.00848.x.
- Rogers, Lisa, Aoife De Brún, Sarah A. Birken, Carmel Davies, and Eilish McAuliffe. 2020. "The Micropolitics of Implementation; a Qualitative Study Exploring the Impact of Power, Authority, and Influence When Implementing Change in Healthcare Teams." *BMC Health Services Research* 20 (1059). doi:10.1186/s12913-020-05905-z.

- Rotar, Alexandru M., Michael J. Van Den Berg, Willemijn Schäfer, Dionne S. Kringos, and Niek S. Klazinga. 2018. "Shared Decision Making between Patient and GP about Referrals from Primary Care: Does Gatekeeping Make a Difference?" *PLOS ONE* 13 (6). doi:10.1371/journal.pone.0198729.
- Røvik, Kjell Arne. 2016. "Knowledge Transfer as Translation: Review and Elements of an Instrumental Theory." *International Journal of Management Reviews* 18 (3): 290–310. doi:10.1111/ijmr.12097.
- Runnels, Patrick, Heather M. Wobbe, and Peter J. Pronovost. 2021. "Eliminating Defects in Behavioral Health Treatment." *Psychiatric Services* 72 (2): 213–15. doi:10.1176/appi.ps.202000255.
- Sacks, Oliver. 1995. An Anthropologist on Mars: Seven Paradoxical Tales. London, England: Picador.
- Saka, Sule A., Frasia Oosthuizen, and Manimbulu Nlooto. 2020. "Expert Consensus on Clinical Applicability of the American Geriatrics Society-Beers Criteria to Older Persons in Africa: An Exploratory Validation Study." *Journal of Evaluation in Clinical Practice* 26 (5): 1522–29. doi:10.1111/jep.13339.
- Sarkies, Mitchell N, Emilie Francis-Auton, Janet C Long, Andrew Partington, Chiara Pomare, Hoa Mi Nguyen, Wendy Wu, et al. 2020. "Implementing Large-System, Value-Based Healthcare Initiatives: A Realist Study Protocol for Seven Natural Experiments." *BMJ Open* 10 (12). doi:10.1136/bmjopen-2020-044049.
- Santeon. 2021. Waardegedreven zorg. Houten, Netherlands: Bohn Stafleu van Loghum.
- Schippers Edith. 2012. "Kamerbrief over patiëntveiligheid in ziekenhuizen." *Rijksoverheid.nl.* October 26 https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/kamerstukken/2012/11/26/kamerbrief-overpatientveiligheid-in-ziekenhuizen/kamerbrief-over-patientveiligheid-in-ziekenhuizen.pdf.
- —. 2015. "Kamerbrief over Samen Beslissen." Archief. Rijksoverheid. nl. October 29. https://archief28.sitearchief.nl/archives/sitearchief/0/https://www.rijksoverheid.nl/binaries/rijksoverheid/documenten/kamerstukken/2015/10/29/kamerbrief-over-samen-beslissen/kamerbrief-over-samen-beslissen.pdf.
- Schmidt, Vivien A. 2008. "Discursive Institutionalism: The Explanatory Power of Ideas and Discourse." *Annual Review of Political Science* 11 (1): 303–26. doi:10.1146/annurey.polisci.11.060606.135342.
- Schut, Frederik T. 1995. "Health Care Reform in the Netherlands: Balancing Corporatism, Etatism, and Market Mechanisms." *Journal of Health Politics*,

- Policy and Law 20 (3): 615-52. doi:10.1215/03616878-20-3-615.
- Schut, Frederik T., and Marco Varkevisser. 2017. "Competition Policy for Health Care Provision in the Netherlands." *Health Policy* 121 (2): 126–33. doi:10.1016/j.healthpol.2016.11.002.
- Scott, W Richard. 1994. "Institutional Analysis: Variance and Process Theory Approaches." In *Institutional Environments and Organizations: Structural Complexity and Individualism*, edited by W Richard Scott and John W Meyer, 81–112. Thousand Oaks, California: SAGE Publications.
- —. 2004. "Institutional Theory: Contributing to a Theoretical Research Program." ResearchGate. January. https://www.researchgate.net/publication/265348080\_ Institutional\_Theory\_Contributing\_to\_a\_Theoretical\_Research\_Program.
- Scott, W Richard, and John W Meyer. 1994. "Part I: Developments in Institutional Theory." In *Institutional Environments and Organizations: Structural Complexity and Individualism*, edited by W Richard Scott and John W Meyer, 1–8. Thousand Oaks, California: SAGE Publications.
- Smith, Timothy R., Aksharananda Rambachan, David Cote, George Cybulski, and Edward R. Laws. 2015. "Market-Based Health Care in Specialty Surgery." *Neurosurgery* 77 (4): 509–16. doi:10.1227/neu.0000000000000879.
- Smits, Marleen, Annelies Colliers, Tessa Jansen, Roy Remmen, Stephaan Bartholomeeusen, and Robert Verheij. 2019. "Examining Differences in out-of-Hours Primary Care Use in Belgium and the Netherlands: A Cross-Sectional Study." *European Journal of Public Health* 29 (6): 1018–24. doi:10.1093/eurpub/ckz083.
- Song, Zirui, Dana Gelb Safran, Bruce E. Landon, Mary Beth Landrum, Yulei He, Robert E. Mechanic, Matthew P. Day, and Michael E. Chernew. 2012. "The 'Alternative Quality Contract,' Based on a Global Budget, Lowered Medical Spending and Improved Quality." *Health Affairs* 31 (8): 1885–94. doi:10.1377/hlthaff.2012.0327.
- Sismondo, Sergio. 2004. "Actor-Network Theory." In *An introduction to science and technology studies*, 65–74. Oxford, England: Blackwell Publishing.
- Steinmann, Gijs, Diana Delnoij, Hester van de Bovenkamp, Rogier Groote, and Kees Ahaus. 2021. "Expert Consensus on Moving towards a Value-Based Healthcare System in the Netherlands: A Delphi Study." *BMJ Open* 11 (e043367). doi:10.1136/bmjopen-2020-043367.
- Steinmann, Gijs, Hester van de Bovenkamp, Antoinette de Bont, and Diana Delnoij. 2020. "Redefining Value: A Discourse Analysis on Value-Based Health Care." *BMC Health Services Research* 20 (862). doi:10.1186/s12913-020-05614-7.

- Steinmann, Gijs, K. Daniels, Fabio Mieris, Diana Delnoij, Hester van de Bovenkamp, and Paul van der Nat. 2022. "Redesigning Value-Based Hospital Structures: A Qualitative Study on Value-Based Health Care in the Netherlands." BMC Health Services Research 22 (1193). doi:10.1186/s12913-022-08564-4.
- Steinmo, Sven. 2008. "Historical Institutionalism." In *Approaches and Methodologies in the Social Sciences*, edited by Donatella Della Porta and Michael Keating, 118–38. Cambridge, UK: Cambridge University Press.
- Stevens, Marthe, Rik Wehrens, and Antoinette de Bont. 2018. "Conceptualizations of Big Data and Their Epistemological Claims in Healthcare: A Discourse Analysis." *Big Data & Society* 5 (2): 205395171881672, doi:10.1177/2053951718816727.
- Stolper, Karel C.F., Lieke H.H.M. Boonen, Frederik T. Schut, and Marco Varkevisser. 2019. "Managed Competition in the Netherlands: Do Insurers Have Incentives to Steer on Quality?" *Health Policy* 123 (3): 293–99. doi:10.1016/j.healthpol.2018.08.018.
- Suddaby, Roy. 2010. "Challenges for Institutional Theory." *Journal of Management Inquiry* 19 (1): 14–20. doi:10.1177/1056492609347564.
- Suddaby, Roy, William Milton Foster, and Albert James Mills. 2013. "Historical Institutionalism." In *Organizations in Time: History, Theory, Methods*, edited by Marcelo Bucheli and Daniel Wadhwani, 100–123. Oxford, UK: University Press.
- Svallfors, Stefan, Erica Falkenström, Corrie Hammar, and Anna T. Höglund. 2022. "Networked Reports: Commissioning and Production of Expert Reports on Swedish Health Care Governance." *Politics & Policy* 50 (3): 580–97. doi:10.1111/polp.12462.
- Thelen, Kathleen. 1999. "Historical Institutionalism in Comparative Politics." *Annual Review of Political Science* 2 (1): 369–404. doi:10.1146/annurev. polisci.2.1.369.
- Torres, David L. 1988. "Professionalism, Variation, and Organizational Survival." American Sociological Review 53 (3): 380. doi:10.2307/2095646.
- Triantafillou, Peter. 2020. "Accounting for Value-Based Management of Healthcare Services: Challenging Neoliberal Government from within?" *Public Money & Management* 42 (3): 199–208. doi:10.1080/09540962.2020.1748878.
- Trommel, Willem. 2009. Gulzig Bestuur. Den Haag: LEMMA.
- Tulp, Edith. 2023. "Paul Van Der Nat: 'Waardegedreven Zorg Is Een Trein Die Niet Te Stoppen Is' Qruxx: Kennisplatform Voor Passende Zorg." *Qruxx*.

- February 22. https://www.qruxx.com/paul-van-der-nat-waardegedreven-zorg-is-een-trein-die-niet-te-stoppen-is/.
- Van de Bovenkamp, Hester M., Marleen De Mul, Julia G.U. Quartz, Anne Marie Weggelaar-Jansen, and Roland Bal. 2014. "Institutional Layering in Governing Healthcare Quality." *Public Administration* 92 (1): 208–23. doi:10.1111/padm.12052.
- Van de Bovenkamp, Hester M., Annemiek Stoopendaal, Marianne van Bochove, and Roland Bal. 2020. "Tackling the Problem of Regulatory Pressure in Dutch Elderly Care: The Need for Recoupling to Establish Functional Rules." *Health Policy* 124 (3): 275–81. doi:10.1016/j.healthpol.2019.12.017.
- Van de Ven, Wynand. 2015. "Het Beste Zorgstelsel? EUR." *Het Beste Zorgstelsel?* Erasmus University Rotterdam. October 2. https://www.eur.nl/sites/corporate/files/Afscheidscollege\_Ven\_150904\_0.pdf.
- Van Deen, Welmoed K., Dominic Nguyen, Natalie E. Duran, Ellen Kane, Martijn G. van Oijen, and Daniel W. Hommes. 2016. "Value Redefined for Inflammatory Bowel Disease Patients: A Choice-Based Conjoint Analysis of Patients' Preferences." *Quality of Life Research* 26 (2): 455–65. doi:10.1007/ s11136-016-1398-z.
- Van der Nat, Paul B. 2021. "The New Strategic Agenda for Value Transformation." *Health Services Management Research* 35 (3): 189–93. doi:10.1177/09514848211011739.
- Van der Nat, Paul B, Lineke Derks, and Dennis van Veghel. 2021. "Health Outcomes Management Evaluation—a National Analysis of Dutch Heart Care." *European Heart Journal Quality of Care and Clinical Outcomes* 8 (6): 670–80. doi:10.1093/ehjqcco/qcab060.
- Van Egdom, L.S.E., J.A. Hazelzet, and L.B. Koppert. 2019. "Reply to: Moving Forward with Value-Based Healthcare: The Need for a Scientific Approach." European Journal of Surgical Oncology 45 (7): 1300. doi:10.1016/j. ejso.2019.04.022.
- Van Egdom, L.S.E., M. Lagendijk, M.H. van der Kemp, J.H. van Dam, M.A.M. Mureau, J.A. Hazelzet, and L.B. Koppert. 2019. "Implementation of Value Based Breast Cancer Care." *European Journal of Surgical Oncology* 45 (7): 1163–70. doi:10.1016/j.ejso.2019.01.007.

- Van Elk, Sam, Susan Trenholm, Robert H. Lee, and Ewan Ferlie. 2021. "Adopting Management Philosophies: Management Gurus, Public Organizations, and the Economies of Worth." *Public Management Review*, December, 1–24. doi:10.108 0/14719037.2021.2014165.
- Van Engen, Veerle, Igna Bonfrer, Kees Ahaus, and Martina Buljac-Samardzic. 2022. "Value-Based Healthcare from the Perspective of the Healthcare Professional: A Systematic Literature Review." *Frontiers in Public Health* 9. doi:10.3389/fpubh.2021.800702.
- Van Staalduinen, Dorine J., Petra van den Bekerom, Sandra Groeneveld, Martha Kidanemariam, Anne M. Stiggelbout, and M. Elske van den Akker-van Marle. 2022. "The Implementation of Value-Based Healthcare: A Scoping Review." *BMC Health Services Research* 22 (1). doi:10.1186/s12913-022-07489-2.
- Varkevisser, Marco. 2019. "Hand in Hand: Op Zoek Naar De Juiste Balans Tussen Marktwerking En Overheidsingrijpen in De Gezondheidszorg." *Oratieboekje*. Erasmus University Rotterdam. January 19. https://repub.eur.nl/pub/127476/30468\_Oratieboekje\_Marco\_Varkevisser\_160x240\_5-def.pdf.
- Vera, Antonio, and Ludwig Kuntz. 2007. "Process-Based Organization Design and Hospital Efficiency." *Health Care Management Review* 32 (1): 55–65. doi:10.1097/00004010-200701000-00008.
- Vijverberg, Joanna R, Kirsten Daniels, Gijs Steinmann, Mirjam M Garvelink, Marc B Rouppe van der Voort, Douwe Biesma, Willem Jan Bos, Frits van Merode, and Paul van der Nat. 2022. "Mapping the Extent, Range and Nature of Research Activity on Value-Based Healthcare in the 15 Years Following Its Introduction (2006–2021): A Scoping Review." *BMJ Open* 12 (8). doi:10.1136/bmjopen-2022-064983.
- Waring, Justin. 2007. "Adaptive Regulation or Governmentality: Patient Safety and the Changing Regulation of Medicine." *Sociology of Health & Illness* 29 (2): 163–79. doi:10.1111/j.1467-9566.2007.00527.x.
- Watson, Tony J. 1994. In Search of Management: Culture, Chaos and Control in Managerial Work. London, England: Routledge.
- Westerink, Jet, Gijs Steinmann, and Paul van der Nat. n.d.. Ms. Value-Based Health care Implementation within Multidisciplinary Value Improvement Teams of Dutch Hospitals.

## Summary

This thesis revolves around a set of ideas on the external governance and internal management of health care delivery called value-based health care (VBHC). More specifically, it concentrates on the interpretation and application of this set of ideas within the Netherlands—one of many countries across the globe in which VBHC has quickly become both popular and influential among a variety of stakeholders within the health care sector. But, although VBHC has rapidly acquired attention and recognition among both scholars and health care practitioners, the exact meaning of the concept remains shrouded in ambiguity. Moreover, efforts to put it into practice have been characterized by a high degree of local variability. This makes it rather challenging to grasp the essence and evaluate the effects of this popular concept within health care systems. A Scramble for Value addresses that challenge.

Chapter 1 introduces VBHC as a coherent set of ideas originally developed by Michael Porter and colleagues. At its core, this set of ideas promotes the realignment of (1) organizational structures, (2) regulations, and (3) payment structures with the goal of improving patient value—defined as the ratio between the health outcomes that matter to patients and the costs that are necessary to reach those outcomes. The chapter then outlines how for most modern health care systems, the widespread implementation of Porter's ideas would entail radical transformations on multiple levels. Yet, VBHC means different things to different people, and the following chapters explore how this popular concept is interpreted and applied in the Netherlands, and why this takes place the way it does.

The empirical chapters of this thesis (2-6) can roughly be subdivided into two parts. The first part (Chapter 2, 3 and a subpart of Chapter 4) consists of studies on how VBHC is interpreted in the Netherlands. The second part (Chapter 4, 5, and 6) consists of studies on the application of key VBHC principles (within a primary care organization, within hospitals, and within the purchasing behavior of insurers, respectively). Since the goal is to unravel and grasp the essence of a phenomenon (i.e. the interpretation and application of VBHC in the Netherlands),

this thesis relies heavily on qualitative research methods. And each of these chapters utilizes (sociological) theories and concepts primarily as sensitizing tools, which do not determine but guide the collection and analysis of data through various analytical lenses.

Chapter 2 builds on the Delphi technique to generate consensus among an expert panel regarding the most important aspects of VBHC in the context of the Dutch system. In this study, the one and only distinct idea that panel members unanimously considered to be "very important" was shared decision-making (SDM). And the pivotal importance of SDM reemerged in of Chapter 3. Strikingly, SDM is by no means part of Porter's original set of ideas, yet it has become a critical component of VBHC in the Netherlands.

In hindsight, the Delphi study of Chapter 2 forecasted much of the contours of a consensual Dutch version of VBHC. In addition to the importance of SDM, there also seems to be considerable agreement on the importance of several aspects of the original set of ideas, including the idea that providers should measure health-related outcomes that matter to patients, and that care cycles for medical conditions are the proper level of analysis when it comes to the creation and evaluation of patient value. But this consensual Dutch version also deviates considerably from Porter's original. In addition to the inclusion of SDM, VBHC in the Netherlands is characterized by a relative overemphasis on outcome measurement compared to cost measurement. And Dutch stakeholders appear to disagree on the idea of benchmarking provider performance, and there is also no consensus on the idea of incentivizing outcome improvement.

Chapter 3 delves deeper into the disagreement and ambiguity surrounding VBHC, and directly examines how the concept is interpreted by actors and organizations that represent various national stakeholders. The chapter builds on a discourse analysis based on a series of semi-structured interviews (n=23) and a document analysis of publicly accessible publications (n=22). The study reveals four discourses on VBHC, each anchored in its own particular assumptions. In the patient empowerment discourse, VBHC is a strategy for strengthening the position of patients.

In the governance discourse, it is a toolkit to incentivize providers. In the professionalism discourse, it a methodology for health care delivery. In the critique discourse, it is a dogma of manufacturability. Moreover, the chapter also uncovers the underlying assumptions that lay at the root of these different viewpoints. A critical contribution of Chapter 3 is the insight it provides into the ambiguity surrounding VBHC by revealing different and opposing interpretations. Additionally, the chapter also highlights that some aspects of the original set of ideas remain highly contested in the Netherlands. This particularly concerns the idea of outcome information being disclosed publicly.

Chapter 4 constitutes a case study of a project in which a primary care organization was working towards a new care center for elderly patients, with service delivery based on the principles of VBHC applied to primary care. With an analysis based on participant observation in the project (50 hours), semi-structured interviews with project team members (n=20), and a complementary document analysis (n=16), this chapter sheds new light on the way in which VBHC transitions from the original set of ideas to a local application. The concept of translation as developed within actor-network theory (ANT) serves as the main analytical lens. The case study demonstrates VBHC's ability to "enroll allies" by converging their interest towards a common goal—to improve value for patients—and this ability probably plays a big part in its global popularity. Moreover, VBHC has affected behavior within this primary care organization in that it stimulated interaction across disciplines. It brought together a multidisciplinary group of primary care professionals, had them discuss potential ways to improve value for patients, which has led to several project deliverables that focused on increased communication and coordination across primary care disciplines.

The observation that VBHC affects behavior in the form of increased multidisciplinary interaction and coordination is a crucial one, and not only applies to the primary care organization of Chapter 4, but is mirrored in our study of the organizational structures of hospitals in Chapter 5. VBHC appears to be successful in catalyzing cross-disciplinary interaction aimed at improving value for patients.

Chapter 5 examines the ways in which Dutch hospitals are applying value-based redesign: structural coordination of care cycles at the level of medical conditions. Data for this chapter were collected though semistructured interviews and a focus group, the analysis of which was guided by organizational theory, and particularly sensitized by Henry Mintzberg's conceptualization of design parameters and coordinating mechanisms. This deductive analysis reveals that health care organizations have a wide range of options when it comes to the application of VBHC. Reorganizing into units at the level of medical conditions (i.e. IPUs) concerns just one potential design parameter (namely "unit grouping"). And while the pioneering literature by Porter and colleagues depicts value-based redesign as a fundamental change, characterized by radical transformations, Chapter 5 portrays a different picture: one of incremental redesign, with Dutch hospitals applying a variety of design parameters to various degrees. Common among all is that they serve to modify the mechanisms by which the multiple tasks of care cycles for patients with a certain medical condition are coordinated. For example, hospitals utilize planning and control systems, particularly in the form of outcome measurements, to upgrade coordination aimed at improving value. And rather than regrouping into IPUs, these organizations aim to spur coordination through various liaison devices, such as intermediary managers and regular multidisciplinary team meetings. None of the hospitals we spoke to, however, systematically measures or estimates the actual costs of their care cycles.

Chapter 4 and 5 lead to the overlapping conclusion that, when it comes to provider organizations, the application of VBHC in the Netherlands is characterized by the goal to improve value for patients, mainly by focusing on and measuring outcomes that matter to patients, the improvement of which is pursued (internally) in the form of multidisciplinary collaboration and coordination at the level of medical conditions or otherwise similar groups of patients.

Whereas as Chapter 4 and 5 focus on providers, **Chapter 6** studies the application of VBHC principles within a different type of organization: health insurers. More specifically, this study examines the perspective of Dutch insurers on their application and the overall applicability of

value-based purchasing concerning hospital care. The findings are based on semi-structured interviews (n=18) with representatives of several insurer companies (including directors, purchasing managers, medical advisors, strategy officers, and buyers). This final empirical chapter uses insights from institutional theory as an analytical lens, and reveals how the purchasing behavior of private health insurers is constrained by a historically rooted tangle of socio-political norms and expectations. This includes, for instance, the dominance of self-regulation by medical professionals, and society's deep-seated belief in the quality of all Dutch hospital services. And although there are examples of bundled payment contracts at the level of medical conditions, these payment models are the exception within a system where budgeting remains the rule. Chapter 6 concludes that, as of yet, Dutch health insurers are practically unable and perhaps also unwilling to critically and widely apply the ideas popularized by Porter and colleagues.

Overall, it is clear that VBHC has been affecting behavior within the Dutch health care system. Provider organizations, in particular, have not only started to perceive it as a relevant and useful set of ideas, but they have been actively putting some of these ideas to practice (Chapter 4 and 5). Next to a focus on outcomes that matter to patients, it has stimulated professional interaction at the level of medical conditions or otherwise similar patient groups, and generally increased coordination across medical disciplines (Chapter 4 and 5). Additionally, it has also ushered some insurers to develop and implement bundled payment contracts, albeit rarely (Chapter 6). Thus far, however, the influence of VBHC has not generated fundamental changes to either organizational structures (Chapter 4 and 5) or payment structures (Chapter 6).

Chapter 7 provides a general discussion of the main findings of the preceding chapters, and distills an overlapping pattern regarding the way in which VBHC is interpreted in the Netherlands, as well as how it is applied. In brief, the meaning VBHC has acquired in the Netherlands can be considered a moderate version of the original set of ideas. Compared to the ideas put forth by Porter and colleagues, this thesis indicates that in the Netherlands, its (consensual) meaning has not been adapted arbitrarily, but moderated such that it is rid of its radicalism. Closely related to this,

the chapter outlines a pattern of application which can be summarized as the conservative application of what was originally a rather radical set of ideas. Within the Dutch health care system, improving value, or trying to do so, generally concerns the measurement of outcomes that matter to patients followed by efforts to improve those outcomes by way of intensified multidisciplinary collaboration, and through SDM. But the application of VBHC will not entail the kind of profound restructuring advocated by Porter and colleagues.

An important conclusion of this thesis is that, within the Netherlands, the original set of ideas is applied selectively in ways that conserve traditional structures, including organizational designs, payment practices, and a self-regulating professional bureaucracy. VBHC's popularity notwithstanding, there are no pathbreaking IPUs in Dutch hospitals, there are path dependent multidisciplinary liaisons; bundled payments are the idealized exception, budgeting is the institutionalized norm; and self-regulating professionals by and large determine how they will be held accountable for the outcomes of their work.

To conclude, VBHC has not generated radical changes—specialty-based organizational structures are, by and large, left intact, and the same applies to the dominance of professional self-regulation regarding accountability structures, as well as the prevalence of budgets in terms of payment structures. Yet, within these historically rooted structures, VBHC has generated a renewed focus on outcomes that matter to patients. Plus, it has boosted multidisciplinary collaboration and coordination aimed at improving those outcomes. In and of itself, this may be regarded quite an accomplishment: not bad at all for a foreign bunch of (neoliberal) management ideas that are covered with a cloak of ambiguity.

## Samenvatting

Dit proefschrift gaat over een set ideeën aangaande beleid en management in de gezondheidszorg genaamd waardegedreven zorg (VBHC). Meer specifiek ligt de focus op de wijze waarop deze ideeën worden geïnterpreteerd en toegepast in Nederland—één van de vele landen waarin VBHC opvallend snel zowel populair als invloedrijk is geworden onder verschillende stakeholders binnen de zorgsector. Maar alhoewel VBHC inderdaad een snelle groei in aandacht en erkenning heeft doorgemaakt, binnen zowel de wetenschap als de zorgpraktijk, de exacte betekenis van het concept blijft verhuld in een wolk van ambiguïteit. Bovendien worden pogingen om het concept in praktijk te brengen gekarakteriseerd door een hoge mate van lokale variabiliteit. Dit maakt het behoorlijk uitdagend om de essentie van dit populaire concept te bevatten, laat staan om de effecten ervan te evalueren binnen zorgsystemen. *Een gedrang om waarde* gaat die uitdaging aan.

Hoofdstuk 1 introduceert het concept VBHC als een coherente set aan ideeën die oorspronkelijk is ontwikkeld door Michael Porter en enkele van zijn collega's. In essentie pleiten deze ideeën voor hervorming van (1) organisatiestructuren, (2) regulering, en (3) vergoedingsstructuren, dusdanig dat deze zijn afgestemd met het overkoepelende doel om waarde voor de patiënt te verbeteren—waarbij waarde wordt gedefinieerd als de ratio tussen gezondheidsuitkomsten die er voor patiënten toe doen en de kosten die nodig zijn om die uitkomsten te behalen. Vervolgens wordt toegelicht dat voor de meeste moderne zorgsystemen het daadwerkelijk implementeren van Porters gedachtengoed vergaande, radicale transformaties zal vergen. Desondanks is het wel zo dat de betekenis van VBHC veelal afhangt van het subjectieve referentiekader waarmee eenieder het concept interpreteert. In de aansluitende hoofdstukken wordt nagegaan hoe dit populaire concept wordt geïnterpreteerd en toegepast in Nederland, alsook waarom dit op dusdanige wijze gebeurt.

De empirische hoofdstukken van dit proefschrift (2-6) kunnen grofweg worden onderverdeeld in twee delen. Het eerste deel (Hoofdstuk 2, 3, en een gedeelte van Hoofdstuk 4) bestaat uit studies over de interpretatie van VBHC in Nederland. Het tweede gedeelte (Hoofdstuk 4, 5, en 6) bestaat

uit studies gericht op de toepassing van het concept (respectievelijk in een eerstelijnszorgorganisatie, binnen ziekenhuizen, en binnen de inkooppraktijken van zorgverzekeraars. Aangezien het doel is om de essentie van een bepaald fenomeen (i.e. de interpretatie en toepassing van VBHC in Nederland) te bevatten en doorgronden, zijn de analyses van dit proefschrift grotendeels gebaseerd op kwalitatieve onderzoeksmethoden. En elk van de empirische hoofdstukken maakt voornamelijk gebruikt van (sociologische) theorieën en concepten in de vorm van sensibiliserende hulpmiddelen (sensitizing tools), welke niet bepalend zijn, maar richting geven aan de dataverzameling en -analyse door middel van verschillende analytische lenzen.

Hoofdstuk 2 maakt gebruik van de Delphi-techniek om consensus te genereren onder een expertpanel over de belangrijkste aspecten van VBHC in de context van het Nederlandse zorgstelsel. Binnen deze studie kwam enkel het idee van Samen Beslissen (SDM) unaniem naar voren als zijnde "zeer belangrijk" volgens de panelleden. En het cruciale belang van SDM kwam later opnieuw naar voren in Hoofdstuk 3. Opvallend genoeg is SDM in principe geen onderdeel van het originele gedachtengoed van Porter—laat staan een kernelement—maar het is weldegelijk een cruciaal aspect van VBHC in Nederland.

Achteraf gezien heeft de Delphi-studie van Hoofdstuk 2 behoorlijk wat contouren voorspeld van een consensuele Nederlandse versie van VBHC. Naast het belang van SDM is er ook de nodige overeenstemming over meerdere aspecten van de originele set ideeën. Dit geldt onder andere voor het idee dat aanbieders gezondheidsuitkomsten dienen te meten die er voor patiënten toe doen, en voor het idee dat zorgcycli voor medische aandoeningen gezien moet worden als het niveau waarop waarde wordt gecreëerd en kan worden geëvalueerd. Maar deze consensuele Nederlandse versie kent ook verschillende afwijkingen van Porters originele gedachtengoed. Naast de toevoeging van SDM is er in Nederland ook een relatief grote nadruk op het meten uitkomsten in vergelijking met het meten van kosten. En Nederlandse stakeholders zijn het veelal niet eens over het idee om de prestaties van aanbieders te gaan benchmarken, en er is ook geen consensus rond het idee om prikkels te genereren voor het verbeteren van uitkomsten.

Hoofdstuk 3 gaat dieper in op de onenigheid en de ambiguïteit die er heerst rond VBHC, met een expliciete focus op de wijze waarop het concept geïnterpreteerd wordt door personen en organisaties die verschillende nationale stakeholders vertegenwoordigen. Het hoofdstuk maakt gebruik van een discoursanalyse op basis van een reeks semigestructureerde interviews (n=23) en een documentanalyse van publiekelijk toegankelijke publicaties (n=22). De studie onthuld vier discoursen rond VBHC in Nederland. In het patient empowerment discours is VBHC een strategie voor het verbeteren van de positie van patiënten. In het governance discours is het een instrument om verbeteringen bij zorgaanbieders te stimuleren. In het professionalism discours is het een methodologie voor het leveren van zorg. En in het critique discourse is VBHC een maakbaarheidsutopie. Het hoofdstuk legt vervolgens ook de diepgewortelde aannames bloot die ten grondslag liggen aan deze verschillende zienswijzen. Een belangrijke bijdrage van deze discoursanalyse betreft het verrijkende inzicht in de wolk van ambiguïteit rond VBHC door verschillende en tegenstrijdige interpretaties te onthullen. Daarbij wordt ook benadrukt dat bepaalde elementen van de originele ideeën behoorlijk omstreden zijn in Nederland. Dit gaat dan bij uitstek over het idee dat uitkomstinformatie publiekelijk inzichtelijk moet worden gemaakt.

Hoofdstuk 4 beschrijft een casestudy van een project waarin een eerstelijnszorgorganisatie toewerkte naar een nieuw zorgcentrum voor ouderen en nieuwe vormen van dienstverlening gebaseerd op de principes van VBHC. De casestudy is gebaseerd op participerende observatie (50 uur), semigestructureerde interviews met projectleden (n=20), plus een documentanalyse (n=16). Met het concept "translatie" zoals deze is vormgegeven binnen actor-netwerk theorie (ANT) als analytische lens biedt het hoofdstuk nieuwe inzichten in de wijze waarop VBHC overgaat van de originele set aan ideeën naar een lokale toepassing. Deze analyse laat het vermogen van VBHC zien om "bondgenoten te werven" door hun belangen te convergeren in lijn met een gezamenlijk doel—het verbeteren van waarde voor patiënten. Dit vermogen speelt waarschijnlijk een grote rol in de wereldwijde populariteit van het concept. De casestudy laat ook zien hoe VBHC het gedrag van werknemers van deze zorgorganisatie heeft beïnvloed: door het aanwakkeren van

interdisciplinaire interactie. Het concept heeft een multidisciplinaire groep eerstelijnszorgprofessionals samengebracht, om hen vervolgens in gesprek te brengen over potentiële mogelijkheden voor het verbeteren van waarde. En dit heeft geleid tot meerdere projectresultaten die expliciet gericht zijn op het versterken van communicatie en coördinatie tussen verschillende eerstelijnszorgdisciplines.

Deze constatering—dat VBHC gedrag beïnvloed in de vorm van een verhoogde mate van multidisciplinaire interactie en coördinatie—is een cruciale, en is niet alleen van toepassing op de eerstelijnszorgorganisatie van Hoofdstuk 4, maar wordt ook weerspiegeld in de studie rond de organisatiestructuren van ziekenhuizen in Hoofdstuk 5.

Hoofdstuk 5 betreft een deelstudie naar de wijze waarop Nederlandse ziekenhuizen het idee van "waarde gebaseerd herontwerp" (value-based redesign) toepassen, waarbij er structurele coördinatie van zorgcycli plaatsvindt op het niveau van aandoeningen. De data voor dit hoofdstuk komen voort uit semigestructureerde interviews en een focusgroep, en voor de analytische lens is vooral gebruik gemaakt van de concepten "ontwerpparameters" en "coördinatie mechanismen" zoals deze zijn ontwikkeld binnen de organisatietheorie van Henry Mintzberg. De deductieve data-analyse laat zien dat zorgorganisaties een breed scala aan opties hebben met betrekking tot het toepassen van VBHC. Het hergroeperen van organisatie-eenheden (van specialisme gebaseerde eenheden naar eenheden op het niveau van aandoeningen) geldt slechts als één potentiële ontwerpparameter. De resultaten schetsen verder een beeld waarin-alhoewel Porter en collega's value-based redesign zien als een fundamentele verandering met radicale transformaties-Nederlandse ziekenhuizen hun organisatiestructuren incrementeel herontwerpen, en in verschillende gradaties aan verschillende knoppen van ontwerpparameters draaien. Ziekenhuizen maken bijvoorbeeld gebruik van planning- en controlesystemen, bij uitstek in de vorm van uitkomstmetingen, om coördinatie te versterken gericht op het verbeteren van waarde. En in plaats van het hergroeperen in organisatie-eenheden op het niveau van aandoeningen proberen deze organisaties coördinatie tussen traditionele, op specialisme gebaseerde eenheden aan te drijven met behulp van zogenaamde "verbindingsmiddelen" (liaison devices), onder andere in de vorm van intermediaire managers en periodieke multidisciplinaire contactmomenten. Geen van de ziekenhuizen die onderdeel waren van dit onderzoek maakte echter gebruik van het systematische meten van de kosten van hun zorgcycli.

Hoofdstuk 4 en 5 leiden tot de overkoepelende conclusie dat op het gebied van zorgaanbieders de toepassing van VBHC in Nederland wordt aangedreven door het doel om waarde voor patiënten te verbeteren, en in de praktijk vertaalt dit zich dan met name in een focus op uitkomsten, het meten ervan, en in inspanningen om uitkomsten proberen te verbeteren door middel van multidisciplinaire samenwerking en coördinatie op het niveau van medische aandoeningen (of anderszins vergelijkbare patiëntgroepen).

Hoofdstuk 6 richt zich op de toepassing van VBHC binnen een ander type organisatie: zorgverzekeraars. Deze deelstudie gaat specifiek in op het perspectief van Nederlandse zorgverzekeraars, zowel op de algemene toepasbaarheid van waardegedreven zorginkoop (value-based purchasing), alsook op de wijze waarop zij dit zelf toepassen in het kader van ziekenhuiszorg. De resultaten komen voort uit semigestructureerde interviews (n=18)vertegenwoordigers met van verschillende zorgverzekeraars (waaronder bestuurders, managers zorginkoop, medisch adviseurs, strategisch adviseurs, en inkopers). Dit laatste empirische hoofdstuk maakt gebruik van institutionele theorie als analytische lens, en onthult hoe het inkoopgedrag van private zorgverzekeraars wordt beteugeld door een complex maaswerk van sociaalpolitieke instituties. Het gaat dan onder andere om de dominantie van zelfregulering door medische professionals, en een diepgeworteld maatschappelijk geloof in de alomtegenwoordige kwaliteit van zorg in Nederland. En alhoewel er voorbeelden zijn van het type bundelcontracten dat Porter en collega's voor ogen hebben, zijn deze vergoedingsstructuren de uitzondering in een systeem waar budgetteren nog altijd de regel is. Het hoofdstuk concludeert dat Nederlandse zorgverzekeraars (vooralsnog) praktisch niet in staat zijn, en misschien ook wel niet bereid zijn, om het gedachtengoed van Porter en collega's kritisch en wijdverspreid toe te passen.

Al met al is het duidelijk dat VBHC gedrag heeft beïnvloed binnen het Nederlandse zorgstelsel. Onder zorgaanbieders wordt het niet alleen gezien als een relevante en bruikbare set aan ideeën, veel van deze organisaties hebben delen ervan ook actief toegepast in de praktijk (Hoofdstuk 4 en 5). Naast een focus op uitkomsten die er voor patiënten toe doen, heeft het ook bijgedragen aan interprofessionele interactie op het niveau van aandoeningen (of anderszins vergelijkbare patiëntengroepen), en het heeft gezorgd voor meer coördinatie tussen medische disciplines (Hoofdstuk 4 en 5). Daarnaast heeft het ook bijgedragen aan het ontwikkelen en toepassen van bundelcontracten door zorgverzekeraars—al zij het relatief zeldzaam (Hoofdstuk 6). Tot dusver heeft de invloed van VBHC echter geen fundamentele veranderingen gegenereerd, noch op het gebied van organisatiestructuren (Hoofdstuk 4 en 5), noch op het gebied van vergoedingsstructuren (Hoofdstuk 6).

Hoofdstuk 7 betreft een algemene discussie van de belangrijkste bevindingen van de voorgaande hoofdstukken, en distilleert een overlappend patroon met betrekking tot de wijze waarop VBHC in Nederland wordt geïnterpreteerd en toegepast. Samengevat kan de betekenis die VBHC in Nederland heeft verkregen worden beschouwd als een gematigde versie van de originele set ideeën. In vergelijking met het gedachtengoed van Porter duidt dit proefschrift aan dat de (consensuele) betekenis van VBHC in Nederland niet zomaar is veranderd, maar zodanig is gemodereerd dat at het is ontdaan van zijn radicalisme. Direct in het verlengde daarvan schets het vervolg van dit hoofdstuk een patroon van toepassing dat kan worden samengevat als de conservatieve toepassing van wat van origine een vrij radicale set ideeën was. Binnen het Nederlandse zorgsysteem komt het (proberen te) verbeteren van waarde er in principe op neer dat er uitkomsten worden gemeten die er voor patiënten toe doen, gevolgd door inspanningen om die uitkomsten te verbeteren door middel van multidisciplinaire samenwerking, aangevuld met samen beslissen in de spreekkamer. Maar de toepassing van VBHC brengt niet het soort diepgaande herstructurering met zich mee dat door Porter en collega's wordt bepleit.

Een belangrijke conclusie van dit proefschrift is dat de originele ideeën in Nederland selectief worden toegepast op een manier die

traditionele structuren conserveert—dit geldt onder andere voor het traditionele ontwerp van zorgorganisaties, vergoedingspraktijken, en de zelfregulerende professionele bureaucratie. Ondanks de populariteit van VBHC zijn er in Nederlandse ziekenhuizen geen baanbrekende eenheden op het niveau van aandoeningen, maar pad afhankelijke multidisciplinaire liaisons. Bundelcontracten zijn de geïdealiseerde uitzondering, budgetten zijn de geïnstitutionaliseerde norm. En zelfregulerende professionals zijn doorslaggevend in de wijze waarop zij wel of niet verantwoordelijk worden gehouden de uitkomsten van hun werk.

Ter conclusie, VBHC heeft (tot dusver) geen radicale verandering gegenereerd—op specialismen gebaseerde organisatiestructuren worden over het algemeen in stand gehouden, en hetzelfde geldt voor de dominantie van zelfregulering met betrekking tot verantwoordingsstructuren, evenals de prevalentie van budgetten in termen van vergoedingsstructuren. Maar desalniettemin heeft VBHC binnen deze historisch verankerde structuren een hernieuwde focus en toenemende aandacht gegenereerd voor uitkomsten die er voor patiënten toe doen. Bovendien heeft het een boost gegeven aan multidisciplinaire samenwerking en coördinatie gericht op het verbeteren van die uitkomsten. En dit is op zichzelf al best een prestatie te noemen: niet slecht voor een stel Amerikaanse (neoliberale) managementideeën die door een wolk van ambiguïteit worden omhuld.

## **PHD PORTFOLIO**

	Publications	Article type
2020	Steinmann, Gijs, Hester van de Bovenkamp, Antoinette de Bont, and Diana Delnoij. 2020. "Redefining Value: A Discourse Analysis on Value-Based Health Care." <i>BMC Health Services Research</i> 20 (862). doi:10.1186/s12913-020-05614-7.	Original research
2021	Kruse, Florien Patrick Jeurissen, Tineke Abma, Elena Bendien, Iris Wallenburg, Hester van de Bovenkamp, Hugo Peeters, Hannah Stalenhoef, Gijs Steinmann, and Oemar van der Woerd. 2021. "Houdbare ouderenzorg–Ervaringen en lessen uit andere landen." <i>WRR Working Paper.</i> https://www.wrr.nl/publicaties/working-papers/2021/02/08/houdbare-ouderenzorg-%E2%80%93-ervaringen-en-lessen-uit-andere-landen	Working paper (WRR)
2021	Steinmann, Gijs, Diana Delnoij, Hester van de Bovenkamp, Rogier Groote, and Kees Ahaus. 2021. "Expert Consensus on Moving towards a Value- Based Healthcare System in the Netherlands: A Delphi Study." <i>BMJ Open</i> 11 (e043367). doi:10.1136/ bmjopen-2020-043367.	Original research
2021	Delnoij, Diana M, and Gijs Steinmann. 2021. "Value-Based Care: Requiring Conceptual Checks and International Balances." <i>European Journal of Public Health</i> 31 (4): 677–78. https://doi.org/10.1093/eurpub/ckab052.	Viewpoint
2021	Vijverberg, Joanna R, Kirsten Daniels, Gijs Steinmann, Mirjam M Garvelink, Marc B Rouppe van der Voort, Douwe Biesma, Willem Jan Bos, Frits van Merode, and Paul van der Nat. 2022. "Mapping the Extent, Range and Nature of Research Activity on Value-Based Healthcare in the 15 Years Following Its Introduction (2006–2021): A Scoping Review." <i>BMJ Open</i> 12 (8). doi:10.1136/bmjopen-2022-064983.	Original research
2022	Steinmann, Gijs, K. Daniels, Fabio Mieris, Diana Delnoij, Hester van de Bovenkamp, and Paul van der Nat. 2022. "Redesigning Value-Based Hospital Structures: A Qualitative Study on Value-Based Health Care in the Netherlands." <i>BMC Health Services Research</i> 22 (1193). doi:10.1186/s12913-022-08564-4.	Original research

	Courses	Organization
2019	How to Finish Your PhD in Time	EGSH
2020	Academic Writing in English	EGSH
2021	Classics in Public Administration and Political Science	NIG
2021	Collaborative governance for public value, innovation	NIG
	and the role of leadership	
2021	Getting it published	NIG
2022	Summer School: Epistemic Corruption	WTMC
2022	University Teaching Qualification (BKO)	Risbo

	Teaching	Program
2019	Critical Studies of Management and Innovation	Bachelor Health Sciences
2019	Value-based healthcare	Bachelor Health Sciences
2020	Afstudeerproject	Bachelor Health Sciences
2020	Kwalitatief leeronderzoek	Premaster Health Care Management
2020	Value-based healthcare	Bachelor Health Sciences
2021	Afstudeerproject	Bachelor Health Sciences
2021	Value-based healthcare	Bachelor Health Sciences
2021	Thesis Supervision	Master Health Care Management

	Presentations	Organization
2019	Een zoektocht naar waarde voor de patiënt (Oratie & Symposium Diana Delnoij)	ESHPM
2019	From Competition to Conversation: VBHC in the Netherlands (ESHPM day)	ESHPM
2019	The Implementation of VBHC in the Netherlands	SCBH
2020	Redefining Value: A discourse analysis on VBHC	EHMA
		Conference
2020	Redefining Value: A discourse analysis on VBHC	LUMC
2020	Redefining Value: Een zoektocht naar waarde voor de patiënt	Reinier de Graaf
2022	The (Dutch) debate on VBHC: Where are the costs? (Making Healthcare Sustainable)	ESHPM