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## **Accounting for value-based management of healthcare services: challenging neoliberal government from within?**

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### **ABSTRACT**

This paper examines the political rationality and governing technology underpinning value-based management (VBM) in the Danish healthcare system. VBM is a neoliberal mode of governing healthcare via competitive pay-for-performance schemes. At the same time, it has somewhat paradoxically cleared a space for criticizing such neoliberal schemes. VBM implies an insatiable demand for knowledge that seeks to map the health outcomes and costs of treatment; a demand challenging the neoliberal governmentality that informs it.

### **IMPACT**

Management scholars have inspired a new series of reforms that, under the heading of ‘value-based management’, seeks to link hospital funding to accounts of actual treatment outcomes and costs. Based on the Danish experience, this paper suggests that the shift from a pay-for-performance system based on narrow conceptions of output, such as the number of patients treated, to one measuring actual health outcomes for patients is promising. However, the requirement for extensive knowledge linking health outcomes to full cycle treatments and their costs significantly challenges the adoption of a fair pay-for-performance system.

**Keywords:** Hospital management; neoliberalism; pay-for-performance schemes; power; value-based management

## Introduction

Health spending now makes up around 10% of GDP in most OECD countries (OECD, 2017) and these costs are expected to continue growing both in absolute terms and relative to GDP (OECD, 2015, p. 167). Accordingly, public health services have been subjected to a variety of managerial ideas and schemes seeking to make the public health sector accountable for its performance and to increase value for money. While cost-accounting systems are by no means a new feature in hospitals (Funnell, Holden, & Oldroyd, 2014), several new pay-for-performance schemes seeking to incentivize hospitals to provide better value healthcare have emerged in the past few decades (Milstein & Schreyoegg, 2016). However, most of these schemes focus on health service processes, such as clinical guidelines, waiting times, and customer satisfaction (Pflueger, 2016), or outputs, such as the number of patients treated per year, rather than actual health outcomes.

In their book, *Redefining Health Care: Creating Value-based Competition on Results*, Porter and Teisberg argue that health service delivery should be designed to maximize value conceived as the health outcomes for the patient per dollar spent; maximizing this ratio is regarded as the core of value-based management (VBM) (Porter & Teisberg, 2006, p. 4). VBM aspires to enhance health outcomes resulting from all the services that constitute the treatment received by an individual patient. So far, Porter and Teisberg's idea of designing health services with a view towards maximizing their value in the sense of achieving maximum health outcomes in proportion to expenditures seems to have gone the furthest in the USA and UK (Milstein & Schreyoegg, 2016, pp. 1126–1127; Economist Intelligence Unit, 2016). More recently, Porter and Teisberg's VBM model has informed attempts to reform the management of healthcare in Australia (Koff, 2016), Germany (Porter & Guth, 2012), Sweden (IVBAR, 2014), and Denmark (illustrated in this paper).

It can be tempting to see VBM as yet another scheme in the seemingly endless row of neoliberal reforms inundating the public sector trying to make it more efficient and customer-friendly (Aberbach & Christensen, 2005; Pflueger, 2016). However, the quest for VBM in healthcare

services has so far received little critical attention, and the few studies that do critically interrogate VBM have focused on its economic and medical efficacy (Tanenbaum, 2009). Therefore this paper asks:

*What kind of power is exercised under the heading of VBM, and what are its potential political implications?*

VBM is addressed here as a particular political rationality and technology. The possible political implications of VBM's attempt to exercise power over or through healthcare (notably hospitals) and, ultimately, patients in the context of the Danish health system are examined. The paper does not look at the practical difficulties involved in the actual implementation of VBM, nor does it assess whether VBM is a desirable way of managing healthcare.

### **Analysing VBM as a mode of governmental power**

The political implications of the flood of value-for-money schemes entering the public services in most OECD countries since the late 1980s have been widely discussed. In the field of critical performance management and measurement studies, for example, scholars have pointed to a number of dysfunctional effects resulting from attempts to quantify and account for the value of public services (Bevan & Hood, 2006; Lindholm, Korhonen, Laine, & Suomala, 2019; Radnor, 2008). Others have examined the administrative and political challenges involved in adopting new management schemes in the hospital sector (Cardinaels & Soderstrom, 2013). These critical studies are pertinent inasmuch as they point to the undesirable implications that value-for-money schemes may have for the allocation of public resources, the behaviour of professionals involved in public service delivery and, ultimately, for the citizens who depend on these services. Moreover, the attempt to account for the value of a phenomenon is not just a technical issue that may be used for various political purposes; it may also contribute to the production of particular forms of knowledge that render public services problematic and susceptible to political intervention in new ways (Hoskin, 1996; Power, 1996).

Inspired by Foucault's notion of government (Foucault, 2007), this paper explains the kind of knowledge-power system embedded in VBM . This ambition of addressing VBM in terms of its placement in a wider knowledge-power system resonates with attempts to analyse diverse

governing techniques under the notion of management control systems as a package (Malmi & Brown, 2008), though the latter seems more attuned to identifying the systemic similarities of control systems and less to exposing power. Foucault used the term ‘governmentality’ to denote the more or less systematic and scholarly forms of reflection on how best to govern a state (Foucault, 2007, pp. 87–133). This term was later expanded to include rationalities involved in governing organizations (McKinlay & Pezet, 2010; McKinlay & Starkey, 1998). Many studies have pointed to the strong influence of neoliberal rationalities in the governing of public services since the 1980s (for example Triantafillou, 2017). However, there is no academic consensus on how to define neoliberalism (Davies, 2014). This paper follows Foucault and others in addressing neoliberalism not in terms of an ideology or a blueprint for political intervention but as a way of problematizing and reasoning about how to govern (Foucault, 1989). Yet, even this take on neoliberalism may lead to widely different interpretations of the defining features of neoliberalism. This ambiguity may partly reflect the fact that neoliberal thinkers often do not agree on what neoliberal politics entails (Peck, 2010). Some articulations of neoliberalism by, for example, von Mises (1990 [1933]), Hayek (1944), and Friedman (1962), suggest that neoliberalism evolves around the generalized problematization of state interventions and the question about how to enable the competitive functioning of markets. Other more recent articulations by, for example, former German chancellor Gerhard Schröder, the British sociologist Anthony Giddens and former UK prime minister Tony Blair propagate a mode of neoliberalism that works not only through markets but, more broadly, by stimulating and regulating the freedom and self-governing capacities of individuals, communities, and organizations alike (Cruikshank, 1999; Hansen & Triantafillou, 2011; Rose, 1999, pp. 137–165). In this analysis of the kind of expert knowledge and the rationalities of government put into play by VBM, I pay attention both to narrow problematizations in terms of market competition and broader ones in terms of (patient) participation and empowerment.

In order to specify the kind of political rationality at work in VBM, this paper addresses the kinds of knowledge and technologies enabling VBM to make hospital services amenable to more or less systematic governing interventions, i.e. to power (Foucault, 1991). The first axis, *knowledge*, is important for the ways in which we can truthfully (or falsely) speak about and account for the value of health services (Pflueger, 2015). What is interesting about knowledge here is not its truthfulness but, rather, its performative dimension. Accordingly, the purpose of this paper is less to clarify what value really is or ought to be (McKevitt & Davis, 2016; Talbot, 2011) but, rather, to explain what

kind of political power is enabled by managerial discourses seeking to explicate what value is and how it can be augmented (Ferlie, Crilly, Jashapara, & Peckham, 2012; Malmrose, 2015).

The second axis of government involves the *technologies of government*, such as management schemes, administrative procedures, and accounting techniques, that are implied in governing (Dean, 1996). Hospitals and other public organizations have been subjected to a number of performance audit systems, customer satisfaction surveys and clinical audit systems trying to hold hospital managers and their medical staff accountable for the efficiency, effectiveness and, increasingly, the value of their activities (Arnaboldi, Lapsley, & Steccolini, 2015; Kelman & Friedman, 2009). The current analysis seeks to contribute to this literature by focusing on how VBM schemes and techniques link to wider political rationalities.

## **Method**

The analytical lens above implies analysing the kind of power underpinning VBM along two axes: the body of knowledge and political rationalities on the one hand; and the governing technologies involved in accounting for value production on the other. The knowledge axis is examined by mapping the emergence and contours of a new knowledge of organizational value derived from *Redefining Health Care* (Porter & Teisberg, 2006) and two ensuing publications on VBM by Porter and his colleagues (Kaplan & Porter, 2011; Porter, 2010). *Redefining Health Care* was explicitly referenced as the inspiration for the policy debates and proposals introducing VBM to healthcare in Denmark and several other countries.

From this somewhat abstract discursive level, the paper moves on to the unfolding of the political rationalities underpinning VBM in the Danish hospital system. The analysis of the political rationales is based on around 20 Danish policy documents and medical debate articles. The 13 most important ones are listed in Table 1, together with an indication of the analytical focus adopted. Moreover, in order to better grasp the political rationalities and concerns over VBM's pay-for-performance system, a group interview (1) was conducted with two senior managers of the Danish regions that had been engaged in proposing that the Danish hospitals initiate VBM experiments. Finally, an individual interview (2) was conducted with the Danish Medical Association's communication officer in order to examine the position of the most influential medical professional organization in Denmark.

**INSERT Table 1 here**

The second axis, government technologies, was examined by focusing on the schemes and techniques developed—under the heading of VBM—to account for the costs and health outcomes of health services. A thorough search was made for Danish policy and medical documents describing attempts to adopt two technologies constituting the defining features of VBM: patient reported outcome measures ('PROMs') (Porter, 2010, p. 2477) and full cost accounting. The documents collected were about VBM in general, and on the design of seven VBM projects launched in 2015/16 with the support of the Danish regions (Danske Regioner, 2015a). See Table 2.

**INSERT Table 2 here**

While the documents provided abundant information about the governing technologies of VBM, they only covered three of the seven Danish VBM projects. Information on the four remaining projects was gathered via email and two individual interviews (3 and 4) with managerial staff in the relevant hospital departments. The focus was on how PROMs and cost accounting were being used, and the technical and political challenges entailed by their use.

### **Evaluating healthcare services or knowing how to reinvigorate competition**

The 1990s saw the emergence of an understanding in the organizational management literature of 'value' as something created in close interaction between an organization and its customers (Lopdrup-Hjorth, 2013, pp. 106–131). According to this understanding, the production of value depends not only on customers' preferences but also—and increasingly—on the inclusion of these customers and other stakeholders into the production cycle: product design, marketing, and, not least, consumption.

While many management scholars have contributed to this new conception of value, Porter provided a seminal and widely shared understanding of value as a chain of a wide range of actors and processes. In *Competitive Advantage: Creating and Sustaining Superior Performance*, Porter argued that a company seeking to improve its competitive advantage had to start analysing itself by breaking its operations up into the discrete activities that make up a 'value chain' (Porter, 1985, p.

38). Together with several other organizational management scholars, Porter articulated an understanding of value production that included both objective factors of production and subjective preferences of consumption. In order to succeed, a company must analyse and govern its internal production processes and engage in an ongoing dialogue with its suppliers, shareholders and, above all, its customers to mobilize and utilize their ideas and resources in the production of value.

This conceptualization of value creation was taken up by Porter and Teisberg who argued that flawed competition was the root cause of the excessive costs and poor health outcomes of the health system in the USA (Porter & Teisberg, 2006, p. 44). The problem, they said, was neither insufficient nor too much competition but, rather, that competition was not based on patient health outcomes. In line with this neoliberal problematization of the functioning of health services in the USA in terms of inadequate competition, the solution is not some kind of state-provided healthcare, even if life expectancy is higher and national health costs are much lower in other OECD countries with state-provided health services (Porter & Teisberg, 2006, pp. 29–30, 374–376). Instead, reformed health service competition should revolve around the value for the patient, i.e. the physical or mental health outcomes experienced by the patient in proportion to the actual treatment costs. Accordingly, value for the patient can be defined in the deceptively simple ‘health outcomes per dollar spent’ (Porter, 2010, p. 2477).

With regard to health outcomes, Porter and Teisberg are adamant that VBM is not (only) about gauging patient satisfaction with healthcare services as we find in so many other neoliberal inspired performance measurement schemes. While patient assessments are regarded as crucial to gauging value, these assessments should be directed toward actual post-treatment health status. More precisely, accounting for the outcomes of the health treatment should, according to Porter and Teisberg, assess the health status of the patient and establish whether this status is causally linked to the treatment provided. However, Porter and Teisberg collapse these two steps into one using PROMs (Porter & Teisberg, 2006, pp. 126–134). PROMs are a self-assessment technology where the patient reports on their own health by way of a standardized questionnaire designed by a relevant medical expert. This assessment is clearly not a strictly clinical assessment. Yet, it is based on questions and criteria formulated by the medical personnel treating the patient and therefore imply a quite strict structuring of the scope of patient responses.

The second part of the value equation, cost accounting, should be based on the actual costs involved in the full treatment cycle, because it is this full treatment, not discrete interventions, that creates value for the patient (Porter & Teisberg, 2006, p. 98). Porter stresses that: ‘To measure true costs, shared resource costs must be attributed to individual patients on the basis of actual resource use for their care, not averages’ (Porter, 2010, p. 2481). Porter later explained, in some detail, the many steps involved in making full treatment cycle cost accounting (Kaplan & Porter, 2011). The pilot study example they provided testifies to the complexity and technical difficulty of making full treatment cost accounting. Kaplan and Porter acknowledge that currently, full cost accounting cannot be fully scaled up and therefore cannot replace existing cost systems. Yet, they said they were confident that technology ‘will soon greatly improve providers’ ability to track the type and amount of resources used by individual patients’ (Kaplan & Porter, 2011, p. 51). The ensuing analysis of VBM reform in Denmark, which runs one of the world’s most consistent and centralized patient health record systems, suggests that there is reason to question this confidence.

In sum, VBM implies a need for increasingly detailed knowledge about the complex, causal linkages between public health interventions and health outcomes. Medical authorities must have detailed knowledge about the health status, and the social environment impinging on this status, of every patient. This need for extensive expert knowledge appears to resonate poorly with the kind of restrictive neoliberalism that sees any attempt to govern society on the basis of state-sanctioned expertise as technically impossible and politically dangerous (Hayek, 1944; Popper, 1966, chapter 9). Yet, VBM is clearly in line with the neoliberal dictum that only the individual, not the state (or medical authorities for that matter), can truly get to know the needs and wellbeing of individual citizens. Moreover, VBM is explicitly articulated as a technology for reinvigorating market competition in the health sector.

### **VBM and the problematization of hospital management in Denmark**

Clinical quality and the efficiency of the Danish health services have been debated and stimulated several reforms of the public health services since the 1990s (Triantafillou, 2014). This includes the introduction, in the late 1990s, of a value-for-money system rewarding hospitals for increasing output (treatment activities) per Danish kroner (DKK) spent. However, if value-for-money schemes have been an integrated part of the Danish healthcare system for the past two decades, they tended

to revolve around user choice and satisfaction with the services provided, not health outcomes (Vrangbæk & Østergren, 2006).

The idea of governing health services based on individual health outcomes only emerged in Denmark during the mid 2010s when the Ministry of Health, the Danish regions, and the Danske Patienter (the Danish patients' association) started discussing the need for patient-centred quality measures (Danske Patienter, 2013; Regeringen, Kommunernes Landsforening, & Danske Regioner, 2013). Activity-based financial management in general, and the government's 2% annual productivity increase requirement in particular, came under heavy criticism from the regions, the medical staff at hospitals, and by the Danske Patienter (Danske Patienter, 2016; NN, 2017). The thrust of this criticism was that the activity-based element encouraged quantity and productivity at the expense of the quality of clinical services and, ultimately, could lead to poorer outcomes for patients (Interview 1).

This critique of the existing pay-for-performance regulation was partly inspired by Porter and his colleagues' ideas about VBM in the debate over the Danish hospital services. In April 2015, the Danish regions introduced the idea of a value-based approach to govern the Danish hospitals (Danske Regioner, 2015b). With direct reference to the Swedish SVEUS-project, a project explicitly inspired by Porter and Teisberg (IVBAR, 2014, p. 4), the Danish regions articulated the need to focus on patients' experiences and benefits resulting from their treatment. Further impetus to the introduction of VBM was given with the publication of a consultancy report: *Value-Based Steering and Support systems for Danish Health Care* (IVBAR, 2015). This report, which was commissioned by the Danish regions, explained that, even though the Danish health system was relatively successful compared to other OECD countries, it suffered from several problems, notably an excessive focus on activity and productivity and, conversely, inadequate attention to treatment flows and value for the patient (*ibid.*, pp. 5–8). The general solution proposed to these problems was to adopt a VBM approach addressing all treatment costs and the outcomes for patients. With this in mind, a Danish regions taskforce in 2015/16 decided to launch the National VBM project, which consisted of seven specific projects within distinct medical specialities that had all for some time been experimenting with systematic health outcome assessment (Danske Regioner, 2015a). In outlining these projects, the task force explicitly referred to Porter's model of value-based

healthcare as a guideline for their further development and future assessment (Danske Regioner, 2015a, appendix 6).

The Danish regions' attempt to focus on the production of value for the patient was rapidly endorsed by the Danske Patienter. The association had for some time stressed the importance of clinical quality, user satisfaction, and adequate financial resources for the public health system (Danske Patienter, 2013). The advent of VBM allowed them to articulate the need for public health reforms in terms of concrete health outcomes for the individual patient. In 2016, the association established a joint experimental project on patient involvement in cancer treatment with the Danish regions and several hospitals. The rationale for this project was:

Patients are experts on their own life and health. How severe is my pain today? What worries do I have? Am I able to undertake my daily chores? These are questions that only the individual patient can answer. In other words, patients have unique knowledge, which the health sector may use to improve itself. But it requires that we move towards a culture where we are even better at listening to the *individual patient and where we see them as an active partner* when important decisions about treatment and follow-up are made (Danske Patienter, 2016, my emphasis).

The Danske Patienter was clearly stressing that the VBM projects meant that the medical staff needed to listen to their patients in order to provide better treatment by utilizing the knowledge and the resources that a patient may be able to mobilize throughout the treatment process. If this is an expression of a neoliberal rationality, it is certainly not that of the narrow market competition focused one, but a wider one seeking to promote the health of individuals and populations by governing through the freedom and self-steering capacities of patients. By doing so, VBM links up with the wider political trend of health promotion that emerged in Denmark during the mid 2000s (Vucina, 2014).

Of course, it may not be surprising that the Danske Patienter argued in favour of increased patient participation and empowerment. It is perhaps more surprising that some of the major Danish medical associations endorsed this, for example 'Regionerne vil belønne helbredelse og patienttilfredshed [the regions will reward **effective treatment** and patient satisfaction]' (see

Ugeskrift, 2016). After all, patient participation and empowerment could be regarded by medical professionals as a challenge to their authority. The head of the Danish association of chief physicians explained:

Everybody agrees that the hospitals should provide treatments that benefit the patients. However, we are subjected to productivity requirements that do not focus on the quality for the patients, but only on activity and the number of treatments. Hence, the project proposed by the Danish regions is a milestone because it has designed a new systematic model for using a patient's assessment in the management of the hospital's activities (cited in Bundgaard, 2017).

If may not be entirely clear from the above quotation, but what is being referred to here is a patient's subjective assessment not of the quality of the health services but of their own health status following treatment. It is this active patient subjectivity that leading parts of the Danish medical community started to endorse as a principle for governing hospitals.

In brief, the advent of the managerial knowledge of VBM in the political debate over the Danish hospital sector entailed a partial recasting of existing neoliberal political rationalities and intensified the problematization of the prevailing pay-for-performance systems that essentially rewarded hospitals for the number of patients they treated. While VBM may be regarded as a neoliberal steering mechanism favouring a competitive pay-for-performance-oriented mode of governing hospitals, it cleared a space in Denmark for criticizing these kinds of neoliberal schemes and for providing the promise for more local influence—by hospital managers, doctors and patients—to design and reward treatment systems attuned to health outcomes.

### **VBM and the insatiable demand for causal knowledge**

This section of the paper examines the technological dimension of VBM by looking at the schemes and techniques employed to account for the outcomes and costs of the seven VBM projects endorsed by the Danish regions. The attempt to move from a narrow focus on the quantity of patients treated to health outcomes was seen as very positive by the managers of the seven VBM projects (Bjerregaard & Christensen, 2018; Edvardsen, 2018; Region Midtjylland, 2018; Skovlund & Ejskjær, 2018; Sørensen, 2018; Interviews 3 and 4). Several of the project managers saw VBM as

an opportunity for developing a ‘bottom-up’ style healthcare that allows, for example, medical staff and patients to jointly formulate outcome goals (for example Bjerregaard & Christensen, 2018, p. 323), and provides an opportunity that can enable patients to design individually tailored healthcare provision (Skovlund & Ejskjær, 2018).

In order to account for health outcomes, the seven projects draw on two general sources: clinical registers and patient questionnaires. Only very few countries in the world have a population whose dealings with the public sector is so intensely and systematically monitored and registered as in Denmark. The Danish registers include clinical data on patients receiving medical care but this data is not readily usable for VBM. Only a few of these clinical registers hold systematic information about a patient’s health a month or more following treatment. Moreover, as VBM is predicated on an understanding of value that revolves around a patient’s subjective needs and preferences, current clinical registers can, at best, only serve as supplementary to the account for health intervention outcomes. Hence, the need for a second data source—PROMs—which focus on the patient’s assessment of their health following treatment. The seven VBM projects suggest that it is possible to use the PROMs to increase the attention paid to long-term health outcomes, although there is still a need for thorough clinical studies about these projects’ health effects. Although there are currently only some 20 medical specialties that systematically use questionnaires asking patients to assess their post-treatment health status (Regionernes kliniske kvalitetsudviklingsprogram, 2015; Reiermann, 2015), there is strong support from both the Danish regions and the medical community for expanding the use of PROMs to improve health outcomes (Danske Regioner, 2017; Ugeskrift, 2016).

However, attempts to account for full treatment costs are problematic. As explained by Kaplan and Porter, cost accounting under VBM implies, among other things, developing process maps of each activity in patient care delivery; identifying the resources and supplies used for each activity in the process; making time estimates for each process step; calculating the costs of these steps; estimating the practical capacity of each resource provider; and calculating the capacity cost rate (Kaplan & Porter, 2011, pp. 8–9). Danish hospitals have accounted for the costs of their services since the mid 1990s by way of a DRG-based system. However, this mode of cost accounting clearly does not meet the VBM cost accounting ideal as it based on predefined standard costs, rather than actual

costs. Moreover, the Danish system only includes hospital costs induced by the hospital and not the costs of treatment provided by the GP or the municipality.

In 2018, the VBM project at the department of cardiology at the Rigshospitalet began to calculate the actual costs of health services (Interview 4). However, this only included the Rigshospitalet's own costs, because it was not impossible to identify and calculate all of the service costs that are part of cardiology treatment, i.e. the services provided by other hospitals, a patient's GP, and the municipality. Expanding the current mode of costing is problematic due to the current ICT systems' technical requirements, but also because of the costs being split between hospitals, GPs, and municipalities. These three health sectors have different economic interests and it is very difficult to require them to adopt standardized cost accounting systems.

In order to maximize the value produced by health services, Porter and Teisberg argued that it is necessary to alter the management of healthcare. This includes tailoring payment for performance systems attuned to value production. The Danish Ministry of Health has adopted this approach stating that PROMs may contribute to improving health outcomes in proportion to the public money spent on healthcare (Sundheds- og Ældreministeriet, 2017, pp. 4–5). However, developing a pay-for-performance system around the maximization of health outcomes per actual costs is fraught with difficulties. Apart from serious legal challenges revolving around the concern for disseminating sensitive personal data, the use of PROMs to govern healthcare services faces causality attribution problems. Porter and Teisberg said that treatment should be understood as the full cycle of interventions contributing to the patient's recuperation (or lack thereof). Accordingly, payment for the expenditures generated from these interventions should directly reflect their causal contribution to the patient's post-treatment health status. As explained earlier, the VBM project at Rigshospitalet's department of cardiology includes both health outcome assessment and more comprehensive cost accounting, but they have so far rejected the idea of a pay-for-performance system based on outcomes, because a patient's status after one year is influenced by a wide range of factors outside the department's control (Interview 4). Only one out of the current seven Danish VBM projects utilizes a pay-for-performance system linked to patient outcomes. Even in this one case—the orthopaedic department at Aalborg University Hospital—the new payment system only constitutes a minor supplement to the existing activity-oriented budget system (Bjerregaard &

Christensen, 2018). Moreover, this pay-for-performance system is based on health outcomes only, not on full cost accounting.

More generally, the Danish Medical Association, which has endorsed the use of PROMs for ensuring clinical quality, does not support the idea of a new outcome-oriented budgeting system (Interview 2). The chair of the Danish Medical Association explained that payment for performance in terms of outcome would only create ‘new attempts at cherry-picking and neglecting hard-to-cure patients’ (Ugeskrift, 2016). Even the Danish regions, which have been a leading political advocate of VBM, are sceptical about wholly replacing the activity-oriented DRG system with a system allocating resources to the hospitals according to patient outcomes. The Danish regions fear that such a new pay-for-performance model could favour the hospitals located in areas with wealthy and capable citizens, as well as university hospitals, which tend to have the most qualified staff and often have better equipment than non-university hospitals (Interview 1).

## **Conclusion**

Porter and Teisberg inspired a new series of reforms that, under the heading of VBM, seek to link funding of hospitals to accounts of actual treatment outcomes and costs. Based on the Danish experience, this paper suggests that the shift from a pay-for-performance system based on narrow conceptions of output, such as the number of patients treated, to one measuring actual health outcomes for patients is promising. However, the requirement for extensive knowledge linking health outcomes to full cycle treatments and their costs significantly challenges the adoption of a fair pay-for-performance system.

In more conceptual terms, VBM’s attempt to enhance health outcomes for patients per dollar spent is underpinned by a decidedly neoliberal problematization of (flawed) competition. This political rationality clears a space for governing healthcare providers by making them compete and by rewarding them for their contribution to health outcomes rather than, for instance, the number of patients treated or customer satisfaction. Moreover, since value is produced in tandem with the customer, or the patient, accounting for the value of the treatment must include extra-clinical data. The production of this extra-clinical data means that patients should actively participate in their treatment. Thus, through the use of PROMs, VBM seems to latch on to a broader neoliberal subjectivity by which power is exercised through the regulated empowerment and freedom of

citizens (Cruikshank, 1999; Rose, 1999). However, the use of VBM in Denmark has problematized the kind of narrow neoliberal rationalities that focus on market competition, patient choice and, not least, value conceptions that look at outputs (activities). Interestingly, in the Danish context, VBM has served more as a critique of the inadequacies of the existing pay-for-performance system than an endorsement of a novel value-based pay system.

The particular mode of neoliberal rationality underpinning VBM comes with a number of political implications. These implications, of course, are just potential limitations because VBM has not been fully implemented in Denmark or anywhere else. On the one hand, VBM's explicit quest for including medical concerns in accounting for and rewarding health services were widely regarded by the interviewees in this study as a sign of real political progress and as a platform for contesting the existing and highly problematic pay-for-performance system. Moreover, VBM's invitation to make patients participate more actively in their treatment is considered both by patient organizations and by medical associations as likely to provide better health outcomes for patients.

On the other hand, VBM may work to legitimize budget costs in the public healthcare sector and an insatiable desire for knowledge about patients and the social environments impinging on their health—something that may encroach on the privacy of citizens. Moreover, VBM could result in unfairly rewarding urban and/or university hospitals at the expense of other, less well resourced hospitals. Finally, VBM may reinforce existing neoliberal public health reforms that—under the headings of health promotion and lifestyle change—seek to charge patients with the responsibility not only for their treatment but, increasingly also, for the cause of their disease (Triantafillou & Vucina, 2018). It is too early to assess how these emancipatory potentials and limitations will actually unfold.

At a general level, my research resonates with studies examining the modes of political power linked to managerial discourses on value (Ferlie et al., 2012; Malmrose, 2015). My study goes further by illuminating the particular neoliberal kinds of political power and rationalities implied by the current attempts to introduce VBM in healthcare. Thus, at an analytical level, this paper contributes to the attempts to incorporate technical issues into governmentality studies, which have to a large extent been theoretical to date (Biebricher, 2008). More specifically, it adds to the few accounting studies (Brivot & Gendron, 2011; Martinez, 2011) that examine forms of power that

work less by disciplinary mechanisms and legal requirements or prohibitions and more by a neoliberal form of steering that works through the subjectivity of medical personnel and patients alike.

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**Table 1. Key publications used to analyse the knowledge and rationalities underpinning VBM.**

Publication	Paper author's analytical focus
Porter, M. E., & Teisberg, E. O. (2006). <i>Redefining health care: creating value-based competition on results</i>	How VBM is conceptualized, how it problematizes existing pay-for-performance systems in healthcare, and what kind of governing knowledge and rationalities it rests upon
Porter, M. E. (2010). <i>What is value in health care?</i>	How value in healthcare is defined
Kaplan, R. C., & Porter, M. E. (2011). <i>How to solve the cost crisis in health care</i>	How full treatment cycle cost-accounting should (ideally) be conducted under VBM
Regeringen et al. (2013). <i>Digitalisation with effect—national strategy for digitalisation of the health sector 2013 to 2017</i>	How the Danish health authorities initially articulated the need for a new way of pursuing value, and problematized the existing mode of managing quality
Danske Regioner. (2015a). <i>Debriefing. Managing by value for the patient.</i>	The launch and description of the seven VBM projects at certain Danish hospital departments
Danske Regioner. (2015b). Focus on patient results can provide better hospital quality	How the Danish Region initially articulates the need for VBM —inspired by Porter and Swedish experiments
IVBAR. (2015). <i>Value based steering and support systems for Danish health care.</i>	How the Danish regions consider VBM could be implemented in Denmark based on the Swedish experiments
Danske Patienter. (2013). <i>Patient centred quality measures</i>	How the largest Danish patient interest organization has articulated the need for patient-centred quality measures
Danske Patienter. (2016). <i>Together on better patient inclusion</i>	How the largest Danish patient interest organization has articulated the need for more patient participation in healthcare treatment
Sundheds- og Ældreministeriet. (2017). <i>National targets for the healthcare sector</i>	The Danish government's position on the use of PROMs and VBM in healthcare management

Bundgaard, B. (2017, April 5). <i>How to measure quality in the future</i>	The Danish medical community's position on how to account for quality and value in healthcare
<i>Ugeskrift</i> (2016, August 23). <i>The regions will reward effective treatment and patient satisfaction</i>	The Danish medical community's position on how to account for quality and value in healthcare
Willert et al. (2016). <i>Development and validation of patient reported questionnaires</i>	The medical community's position on the use of PROMs in healthcare

**Table 2. Key publications used to analyse the governing technologies underpinning VBM .**

<i>Publication</i>	<i>Paper author's analytical focus</i>
Danske Regioner. (2015a). <i>Debriefing. Managing by value for the patient</i>	The launch and description of the seven VBM projects in Danish hospitals
Regionernes kliniske kvalitetsudviklingsprogram. (2015). <i>Guidelines for implementation and utilisation of patient reported outcome data in clinical databases</i>	How PROMs will be used in Danish healthcare in technical terms
Danske Regioner. (2017). <i>Value-based health</i>	How Danish regions specify PROMs and their role in VBM
Reiermann, J. (2015, August 10). <i>Most doctors do not know how the patients experience their treatment</i>	The actual use of PROMs in Danish healthcare and the problems linked to increasing the use
Bjerregaard, H. H., & Christensen, P. H. (2018). <i>Value-based management of orthopaedic surgery in Region Northern Jutland</i>	How the VBM project on orthopaedic surgery was designed
Region Midtjylland. (2018). <i>Agenda for meeting in the Health board 16th August, 2018 in the Region House, Viborg</i>	How the VBM project on apoplexy was designed
Skovlund, S., & Ejskjær, N. (2018). <i>Great prospects in value-based diabetes treatment</i>	How the VBM project on diabetes was designed