CONTROVERSIES AND THEIR IMPACT ON MARKET PLASTICITY: THE STORY OF DIGITAL CARE PROVIDERS' EMERGENCE IN SWEDISH HEALTHCARE

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Markets are increasingly becoming contested spheres. Controversies resulting from actors' multiple attempts to shape markets play a crucial role in markets' dynamics and their plasticity, yet little is known about their impact. Adopting an abductive case study approach and drawing on actor-network theory, we follow the controversies surrounding the emergence of digital care providers in the Swedish primary care and pharmacy market and show that these can be observed on three different levels—material manifestations, strategies and goals, and underlying assumptions. Based on our findings, we propose a three-level model of controversies in markets and discuss controversies' varying impact on markets' plasticity—i.e., markets' ability to take new forms or retain old ones—depending on which level they play out. Our research suggests that conflicts about fundamental assumptions have greater impact on market plasticity than those about material issues. We contribute to the growing literature of market studies and controversies and argue that practitioners can benefit from acknowledging controversies' duality—being both destructive and productive.

Keywords: market studies, controversy, market plasticity, actor-network theory, healthcare

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GLOSSARY

1177	Sweden's public central source of information for topics surrounding healthcare organized collectively by all regions. The service is available through the phone number 1177—where nurses advice on health-related questions—and its webpage, offering a broader set of recommendations.
Digital care providers (DCP)	Companies offering access to medical professionals through digital channels such as video calls and chats. In Sweden, they are also known as 'digitala vårdgivare' or 'nätläkare'. Within this work, the term refers to the four major actors, i.e., KRY, Min Doktor, Doktor.se, and Doktor24.
Primary care	Non-institutional care primarily provided by healthcare centers ('Vårdcentral' in Swedish). It serves as the entry point to the healthcare system and is responsible for the rehabilitation, care, and treatment of simpler conditions.
Region	Sweden's federal system is built upon 21 rather independent regions that are responsible for a number of defined policy subjects, most importantly healthcare.
SKR	The Swedish Association of Local Authorities and Regions bundles the interests of Sweden's 21 regions and 290 municipalities, acts as a representative body, issues recommendations, and supports its members on relevant topics.
Triage	The sorting of patients (as in an emergency room) according to the urgency of their need for care, based on the medical history, symptoms, and sometimes vital signs such as blood pressure (Merriam-Webster, n.d.; Vårdfokus, 2009).

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1. INTRODUCTION

"We are changing healthcare."
(Senior Executive, DCP)

"It's basically worthless."
(Doctor)

1.1 Theoretical and Practical Relevance

During the last three years, healthcare has been the most important political question for the Swedish population by a significant margin (Novus, 2020). The country's healthcare system has been subject to critical debate for an extended period. The debate is primarily fueled by the emergence of startups offering access to medical professionals through digital channels such as video calls and chats, thus presenting an alternative to primary care's physical healthcare clinics, and raising the question as to whether Swedish primary care would be the next sector completely upended by a wave of digitalization. But the story of the digital care providers (DCP)—the so-called 'online doctors', a group primarily formed by the companies KRY, Min Doktor, Doktor.se, and Doktor24—over the last couple of years does not resemble a digital landslide, rather it is one of controversies, resistance, and accusations.

While the digital newcomers received growing attention from consumers, increasing the number of digital visits from 20,000 in 2016 to over 1.1 million in 2019 (Cederberg, 2020), doctors fiercely opposed them. No aspect of the development was left uncontested. The discussions ranged from topics such as the reimbursement system, the medical validity of digital healthcare, and appropriate marketing messaging, to the very purpose of the healthcare system, its accessibility, and the role of market mechanisms in a publicly-funded system. But the upheaval was not limited to the primary care sector. The close collaborations that DCPs and pharmacies established, which soon developed into cross-ownership structures, raised concerns over the potential conflicts of interests between the two markets. Long before the Covid-19 pandemic would come to shake up the healthcare sector and society at large, the Swedish healthcare system has been in the spotlight. How did a handful of companies—that in 2018 constituted only 4.6% of the visits and 1% of the costs of primary care (SKR, 2019a)—throw a whole market into disarray, question its borders, and make it a contested space full of controversies and disputes?

The fact that markets have become contested spaces, in which it becomes increasingly difficult to untangle social, political, and economic issues, has been acknowledged by a growing number of researchers (Callon, 2016; Callon, Lascoumes, & Barthe, 2009; Geiger, Harrison, Kjellberg, & Mallard, 2014). In recent decades, academics from various disciplines inspired by advances in actor-network theory and the sociology of translations have sought to dismantle the hegemonic status of the *homo economicus*, promoting a view that understands markets as socio-material phenomena (Araujo, Finch, & Kjellberg, 2010a; Callon, 2007; Callon & Muniesa, 2005; Nenonen et al., 2014). Subsequently, scholars argue that markets are continuously reproduced and subject to multiple shaping efforts by heterogeneous sets of actors trying to change them in their favor (Callon, 2007; Geiger et al., 2014; Kjellberg & Helgesson, 2006). Market actors' mental models—representing their fundamental ideas and views of markets—drive these shaping efforts (Storbacka & Nenonen, 2011a, 2011b).

When markets are no longer static and uniform but always in the making and ever-changing, questions about their dynamics become central. To capture the inherent dialectic forces of fluidity and stability that are at work in markets and form them, scholars introduced the concept of market plasticity (Nenonen et al., 2014), arguing that markets differ in their *capacity* to take new forms or retain old ones. Picturing markets as places where opposing forces—driven by heterogeneous interest groups with varying ideas and ideals—clash, puts those attempts to shape markets and the resulting controversies at the heart of the scholarly investigation. To understand markets and their change dynamics, scholars need to accept their plasticity and follow their controversies.

Yet, despite significant progress regarding our understanding of markets and the expanding influence of markets on almost every area of society (Geiger et al., 2014; Sandel, 2012), much remains to be learned. Although during controversies, "the functioning of markets appears more salient" (Blanchet & Depeyre, 2016: 41), their importance has mostly been overlooked in existing research. Thus, we need to learn more about their implications for markets' plasticity; how they play out, get resolved, and lead to change.

1.2 Research Purpose

In this work, we aim to further marketing's understanding of markets' plastic character and the role of controversies in market change by analyzing how the emergence of DCPs affected the Swedish primary care market and its adjacent pharmacy market. Our purpose is twofold, representing a theoretical and an empirical focus. First, we seek to increase understanding of the role controversies play in market dynamics, establish the applicability of the concept of market plasticity in an empirical setting for the first time, and further develop its theoretical construct. Second, by describing themes and opposing opinions, we aim to contribute to practitioners' understanding of the state of the debate concerning the healthcare sector in Sweden. To fulfill this purpose, we ask the following research questions:

> *How do market controversies affect the plasticity of a market?*
>
> *How did the emergence of digital care providers affect the Swedish primary care market and its adjacent pharmacy market?*

This work is structured as follows. First, we provide the theoretical backdrop by discussing prominent contributions in the literature on market studies, market plasticity and market change, as well as controversies. We conclude this section by addressing relevant gaps in current research. Second, we elaborate on our research approach, explain the case selection, data collection, data analysis process, and reflect on data quality. Third, we introduce our empirical case, followed by a detailed description of the controversies in the Swedish healthcare sector triggered by the emergence of DCPs. Fourth, we analyze these controversies using insights from the literature and present our model, conceptualizing different controversy levels and their implications for market plasticity. We conclude by outlining theoretical contributions, implications for practice, and limitations.

1.3 Delimitations

Naturally, this work is built on several delimitations and key assumptions, given the limited scope and time frame. First, despite its omnipresence, we decided to refrain from including the

impact of the Covid-19 pandemic into our work, not only because most of the data collection had already been finished before the outbreak of the virus disrupted societies and especially healthcare systems, but also to not lose sight of the long-term developments for an immediate focus. Second, we consciously excluded politics but not all political aspects. Barry distinguishes between politics "as a set of technical practices, forms of knowledge and institutions" and the political "as an index of the space of disagreement" (2002: 270). While we showed interest in the political, we largely refrained from including the technicalities of politics. Except for one regional politician, who talked from a regional rather than a politics perspective, we did not include politicians in our inquiry. They seem to have reacted more to changes driven by other actors, rather than being a central part of the discussion itself. These reactive measures regarding decisions on fees and guidelines were easily depicted through secondary material. Third, although there were multiple traces readily available, we did not set out to tell a story of digital innovation or changes driven by a shift towards e-commerce. Without neglecting their presence, we understand them merely as factors setting the scene rather than playing the main part. Fourth, there are numerous medical trends underway in the healthcare sector, such as proximity care. Whereas they play a role in our case and subsequent analysis, they are of secondary purpose since this work does not claim to be a medical essay.

2. THEORY

> *Over the past three decades, markets—and market values—have come to govern our lives as never before. (Sandel, 2012: 5)*

Markets are at the heart of our societies. Despite the wide-reaching and ever-growing influence markets have on our everyday lives, research has long looked at markets as only being places for dyadic exchanges between a buyer and a seller. In recent decades, scholars within the marketing discipline have not only begun to focus on markets themselves more than ever before, but they have also formed a consensus that markets are far more than mere mechanisms of price formation; they are emergent plastic socio-material phenomena, inseparably intertwined with their economic, political, and social fibers (Callon, 2016; Geiger et al., 2014).

In this section, we provide the theoretical background for our work by reviewing influential literature within market studies and economic sociology. First, we present dominant streams within the literature on markets. Second, we focus on the concept of market plasticity and its implications for understanding market change. Third, we discuss why controversies can guide our understanding of markets and their dynamics. We conclude by uncovering the research gaps that this study seeks to address.

2.1 Market Studies

More than 20 years after Callon's seminal work *The Laws of the Markets* (1998a) and scholars' call to focus on the very subject the discipline set out to study[1]—i.e., reconnecting marketing to markets (Araujo et al., 2010a)—, academic understanding of how markets come into existence, function, and cease is significantly richer than the neoclassical understanding of the *homo economicus*, and also more nuanced than Granovetter's (1985) embeddedness approach (Geiger, Kjellberg, & Spencer, 2012). Questioning both ends of the continuum to overcome the deficiencies of both approaches[2], scholars argue that markets are of socio-material nature. This makes it possible to visualize markets in their plural form (Callon & Muniesa, 2005) to capture the inherent plurality of markets and market concepts (Frankel, 2015, 2018). Influenced by advances within the sociology of science and technology and the idea of translation (Latour, 1986, 1999a), markets are argued to be "practical outcomes of organizing efforts" (Araujo, Finch, & Kjellberg, 2010b: 6), rather than carefully designed and implemented entities. They are always in the making, rather than ready-made (Kjellberg & Helgesson, 2007; Latour, 1986).

> *We expect markets to be produced and diffused through the interactions of many actors, to be shaped, negotiated, and contested rather than designed and implemented, providing both surprises and opportunities. (Araujo et al., 2010b: 8)*

[1] Despite Alderson's dictum that a theory of marketing should explain "how markets work" (1965: 23), there has been recurring criticism within the discipline that markets remained "strangely ill-defined and amorphous" (Jackson, 2007: 235).

[2] Geiger et al. (2012) argue that market approaches can be categorized along two dimensions—the degree of socialization and the degree of materialization. While traditional economics is criticized for portraying markets as abstract spaces where encounters of supply and demand occur, ignoring both their social and material character (Callon & Muniesa, 2005), the socio-structural tradition disregards markets' and reality's material nature (Çalışkan & Callon, 2009).

A central starting point to research within this stream is the performative view. Scholars argue that economic theories, models, and ideas contribute to the realities that they describe (Callon, 2007; Law & Urry, 2004); they are performative (Callon, 1998b). Consequently, theoretical concepts and expert knowledge guide and affect economic organizing, thereby having a performative impact. While marketing is home to many different perspectives trying to decode markets from different angles—e.g., markets-as-networks, institutional approaches, or industrial organization theory—, no approach has been as significantly shaped by the performative turn as markets-as-practices (Araujo et al., 2010a; Azimont & Araujo, 2007; Kjellberg & Helgesson, 2007; Muniesa, Millo, & Callon, 2007). Market practices are concerned with "all activities that contribute to constitute markets" (Kjellberg & Helgesson, 2007: 141), even mundane objects like supermarket shelves and baskets (Cochoy, 2010).

Drawing on actor-network theory (Callon, 1986, 1992; Latour, 1986, 1987, 1996; Law, 1986, 1994), scholars argue that ideas are held by heterogeneous, socio-material agencements (Callon, 2007), which consist of human actors and nonhuman devices (Andersson, Aspenberg, & Kjellberg, 2008). These ideas of how markets should look shape reality through a set of interlinked *exchange*, *normalizing*, and *representational practices* (Kjellberg & Helgesson, 2007). Exchange practices refer to the activities related to economic exchanges—e.g., price negotiations or service deliveries—, normalizing practices refer to the norms and guidelines establishing how a market should work—e.g., laws or regulations—, and representational practices refer to the activities aimed at depicting the market—e.g., reports or measurements. All three practices are connected through chains of translation and engage in the continuous production of reality, thereby linking the *world of ideas* and the *world out there* (Kjellberg & Helgesson, 2006).

The literature distinguishes between two different types of performativity[3]: Austinian and generic performativity (MacKenzie, 2004). While Austinian performativity refers to situations where the connection between a distinct theory and its market is direct and easily traceable—cf. MacKenzie's (2003) work on option pricing in light of the Black-Scholes model—, generic performativity captures a wider range of constellations where models, theories, and ideas take part in shaping the reality they describe (MacKenzie, 2004). Furthermore, scholars distinguish between illocutionary and perlocutionary performatives. Whereas the former brings something into being by producing ontological effects—e.g., a court sentencing—, the latter depends on favorable external circumstances to be successful—e.g., a politician's claim that 'a new day has come'— (Butler, 2010).

However, the world of ideas is neither singular nor uniform. Numerous, sometimes opposing models coexist or compete in shaping multiple realities. The concept of multiplicity assumes that there are not only significant differences between actors' definitions and models of markets but also actors themselves might hold multiple definitions (Kjellberg & Helgesson, 2006). Subsequently, in light of the performative assumption, multiplicity should be understood ontologically, resulting in multiple realities rather than multiple perspectives on a single reality (Law & Urry, 2004; Mol, 1999, 2002). Although multiple versions of markets can coexist

[3] MacKenzie (2006) later developed the conceptualization and argued for four types of performativity: generic performativity, effective performative, 'Barnesian' performativity, and counterperformativity. For simplicity, we only distinguish between Austinian and generic performativity.

peacefully, inconsistencies between the different efforts to shape markets can lead to overlaps, clashes, and controversies.

2.2 Market Plasticity and Market Change

Drawing from the insight of markets as emergent socio-material phenomena that are continuously subject to multiple shaping efforts, market dynamics become a crucial component of understanding markets' workings. Nenonen et al. (2014) argue that the continuous reworking, shaping, and reproduction of markets (Kjellberg et al., 2012) seems at odds with deterministic evolutionary process models of market change (Lambkin & Day, 1989; Levitt, 1965; Utterback & Abernathy, 1975). Therefore, the authors introduced a conceptualization of market dynamics as an interplay between fluidity and stability: market plasticity. They define market plasticity "as the capacity to take and retain form"[4] (Nenonen et al., 2014: 272), which all markets possess to varying degrees. The concept aims to capture the inherent dialectics of market change between fluidity—the capacity to take form, allowing markets to be home to multiple market versions—and stability—the capacity to retain form, allowing markets to give form and affect other entities. According to Nenonen et al. (2014), the dialectic forces of taking and retaining form can not only be observed on an aggregated level but also on multiple levels.

Paying tribute to the aforementioned plethora of approaches to markets, Nenonen et al. (2014) classified five different manifestations of market plasticity to deconstruct the concept and consult the respective literature streams on what generates plasticity in markets. The manifestations are exchange objects, market actors, market institutions, market practices, and market structure. We use the following paragraphs to discuss these in more detail.

Exchange objects. Stressing the importance of material offers' products and qualities, scholars invoke the qualification of goods (Callon, Méadel, & Rabeharisoa, 2002) as an ongoing, iterative process contributing to market plasticity. The framing of economic exchanges, which is per definition incomplete, as well as the disentanglement of their objects naturally produces overflows as byproducts (Callon, 1998c). Significant investments are required to cool down the situation and reinstate stability. On the contrary, market actors use reconceptualization or product innovation to heat up market objects (Finch & Geiger, 2011).

Market actors. Scholars highlight the influence of market actors' mental models (Storbacka & Nenonen, 2011b, 2011a), both in directing their shaping efforts and translating theoretical ideas of markets into practice (Callon, 2007; Kjellberg & Helgesson, 2006). Mental models steer strategic shaping efforts (Jaworski, Kohli, & Sahay, 2000) and, thus, exercise forces of taking form. Contrarily, they can also solidify market contexts through industry logics or dominant business recipes (Baldwin & Clark, 2006; Prahalad, 2004; Spender, 1989) by building up mental barriers, which is argued to resemble cognitive myopia (Levinthal & March, 1993). With various actors pursuing their shaping efforts aimed at driving change or inducing stability, a multiplicity of market versions become the rule rather than the exception.

Market institutions. The role of institutions in the market sphere has been discussed for decades. Institutions retain form by providing a set of rules, guidelines, and norms within which to operate

[4] In their paper, the authors provide an extended definition of market plasticity "as a market's ability to take and retain form, while acknowledging that, by retaining form, markets can also give form" (Nenonen et al., 2014: 273).

(North, 1991). Actors are assumed to seek stability out of power and existential considerations (Fligstein, 1996). However, institutions' character as a double-edged sword, both enabling and constraining (Tracey & Phillips, 2011), has a significant influence on market plasticity and mirrors its dual concept. While the effect laws and regulations can have on markets seems obvious (cf. Kjellberg & Olson, 2017), Christophers argues that in the current literature, "little has been said about the role of law" (2015: 126), while Kjellberg (2010) calls into question whether neat concepts such as market institutions suffice to explain market actors' performation struggles.

Market practices. Research on market practices, which are conceptualized as a set of interlinked exchange, normalizing, and representational practices (Kjellberg & Helgesson, 2007), suggests that considerable alignment between the different practices is needed for market actors to engage in working markets, thereby acting as retaining forces. Yet, market actors' engagement in different market practices aimed at shaping markets leads to multiple market versions opposing each other, creating discrepancies across and within practices, subsequently holding great potential for increasing fluidity (Kjellberg & Helgesson, 2006).

Market structure. Researchers from various disciplines highlight markets' structure. Strategy and industry organization scholars investigate change on an industry level, discussing barriers to entry and building defenses against new entrants (Porter, 1980, 1985) as stability-enforcing mechanisms; and strategic actions by challengers to alter market shares to trigger change (Bain, 1959). Network advocates argue for the importance of social contacts in both leveraging opportunities and stabilizing connections (Granovetter, 1985). On a structural level, markets might take form through new players entering the market or emerging opportunities within networks, while barriers to entry and the trust-based nature of networks induce stability and act as retaining forces.

2.3 Controversies

Since markets increasingly seem to be subject to debate and concern, where political, social, technological, and economic issues meet and clash (Callon et al., 2009; Geiger et al., 2014), controversies gain importance. Fueled by actor-network theory, Blanchet and Depeyre (2016) argue that controversies provide critical moments to study markets' functioning; they show markets in the making. Venturini defines controversies as follows:

> *Controversies are situations where actors disagree […]. The notion of disagreement is to be taken in the widest sense: controversies begin when actors discover that they cannot ignore each other and controversies end when actors manage to work out a solid compromise to live together. Anything between these two extremes can be called a controversy. (2010: 261)*

Drawing on this definition, Blanchet and Depeyre (2016) propose that controversies, although manifold in their forms and subjects, share four common features. First, controversies bring about or unearth underlying uncertainties, which reflect the socio-technological developments in recent decades and can oftentimes only be lessened a posteriori (Callon et al., 2009). Second, controversies are conflicts that are fiercely debated and contested, manifesting the clash of incompatible worlds. Third, controversies bring together a heterogeneous set of actors—human and nonhuman likewise—, functioning as *hybrid forums* (Callon et al., 2009) where the debates

are carried out in the open. Fourth, controversies are dynamic, which makes their evolution hardly predictable. As they "display the social in its most dynamic form" (Venturini, 2010: 261), no assemblages of actors can be taken for granted, producing surprising coalitions over time.

Controversies enable scholars to picture ongoing performation struggles in markets (Callon, 2007), displaying the constant dialectics between competing efforts to shape markets in favor of respective socio-technical agencements to align real markets with their ideas and mental models (Kjellberg & Helgesson, 2006). Through the creation of creative frictions between opposing models, controversies are believed to fuel innovations (Stark, 2009). In line with the performative turn in social sciences, Blanchet and Depeyre (2016) point out that controversies are performative by nature, taking part in instituting and challenging markets as they unfold.

2.4 Research Gap

Although research on markets has made significant advancements in the last two decades, there remains much to learn about markets and market change in particular. Adopting the market definition applied by Nenonen et al., defining markets as "ongoing socio-material enactments that organize economized exchanges" (2014: 271), we argue that little is known about the implications of the ongoing socio-material reproduction of markets on change dynamics. If markets are ever-changing, what guides those changes? Despite the broad coalition behind the seminal paper on market plasticity, the concept still needs to be applied in empirical settings to further understand its dialectic character and develop the concept as such.

Furthermore, while the notion that markets are increasingly contested spheres characterized by debates, controversies, and rival shaping efforts has gained considerable acceptance, we claim that previous literature has come short in understanding how controversies unravel in markets, how they can be conceptualized, and how they play out over time. To advance our understanding of markets, their workings, and their dynamics, we argue for a need to further develop the concept of market plasticity and investigate controversies' influence on the former since the latter provides the perfect frame through which to understand the inherent dialectics of markets: "Controversies […] are the social at its magmatic state. As the rock in magma, the social in controversies is both liquid and solid at the same time" (Venturini, 2010: 264).

3. METHODOLOGY

Controversies enable us to see the social in its most fluid form and follow markets in the making. To understand the debates in the Swedish primary care market and its adjacent pharmacy market, following controversies means following the markets' heartbeat. In this section, we outline the methodological approach to our study. First, we clarify our ontological stance and broader research approach. Second, we detail our case selection and data collection process. Third, we outline our data analysis process. Last, we reflect on data quality and our role as researchers.

3.1 Ontological Stance and Research Approach

Scholars argue that outlining the most critical assumptions that one's research is built upon increases transparency and thereby the quality of scholarly work (Mir & Watson, 2000, 2001). Therefore, we seek to clarify our ontological stance and overall research approach. Following prominent contributions in the stream of market studies—especially Kjellberg and Helgesson (2006)—, we assume a *practical constructivist* position, which combines ontological relativism and epistemological realism. It stresses the emergent character of reality as the ongoing reproduction of socio-material effects. As Law and Urry highlight: "while the 'real' is indeed 'real', it is *also* made" (2004: 395). Arguing for both social and material aspects of reality, practical constructivism refutes claims of social constructivism which understands reality as fully socially constructed (Latour, 1986).[5]

Actor-network theory (see Kjellberg & Sjögren, 2020 for an overview) has been central to the developments within the field of market studies and serves as our methodological backdrop. Oftentimes mistaken as a theory, actor-network theory is a method of inquiry (Latour, 1999b; Law, 1999) concerned with the actions of networks of actants. It is important to note that there is no distinction made between human and nonhuman actants (Andersson et al., 2008). Actor-network theory is built on the principles of agnosticism and generalized symmetry (Callon, 1986). While the former calls on researchers to not hold any scientific claims a priori, the latter requires scholars to present knowledge claims and conflicting viewpoints in the same terms.

Drawing on these principles, we adopted an abductive approach to case study research (Alvesson & Sköldberg, 2009). In line with prior contributions in the relevant literature and our purpose to increase understanding of a rather nascent field (Edmondson & McManus, 2007), we chose our research to be explorative and qualitative to ensure methodological fit (Bryman & Bell, 2015). Throughout the research project, we adopted a non-linear process, switching between empirical work and theoretical spheres iteratively—a typical characteristic of abductive case study research (Dubois & Gadde, 2002). Following an initial interest in the working of markets and particularly the concept of market plasticity, we set out to identify an empirical setting that would be well suited to show markets' controversial and dialectic character. Drawing on actor-network theory, we focused on following controversies[6] unfolding in markets.

[5] As an in-depth discussion of the philosophical debate, its antecedents, and its position in relation to other streams of thought would go beyond the scope of this work, confer Kjellberg & Helgesson (2006) for an extended reflection.
[6] The study of controversies has a long tradition in the discipline of Science and Technology Studies, see Pinch and Leuenberger (2006).

3.2 Case Selection and Data Collection

Blanchet and Depeyre (2016), who adapted Venturini's (2010, 2012) work on the study of controversies for the study of markets, argue that the selection of controversies—i.e., the case in our research endeavor—becomes crucial. The authors call on scholars to study hot topics and to avoid controversies which can be labeled as cold, past, boundless, or underground. By following the news and with these preconditions in mind, we identified DCPs' emergence in Swedish primary care and its adjacent pharmacy market as a suitable case. Particularly, since it was home to fierce debate and involved a set of complex and hybrid issues which covered social, technological, and moral aspects. Healthcare in general is known to be a topic where questions of ethics and morality arise and oftentimes clash (Geiger et al., 2014; Sandel, 2012), which makes it an area worth investigating. We saw the debate surrounding the emergence of DCPs neither as cold, since the arguments were far from being settled or boring, nor past since it was still very much ongoing, nor boundless since it was special to the Swedish healthcare context in particular—although this can rarely be established a priori (Blanchet & Depeyre, 2016)—, nor underground, since it was discussed in public.

Data sources. The nature of controversies presents a methodological challenge as they often rather hold an abundance of data, so rich that it becomes difficult to manipulate (Blanchet & Depeyre, 2016; Venturini, 2010). Nonetheless, actor-network theory requires researchers to pay tribute to the multiplicity of opinions and positions involved and to give all actors a voice. In our attempt to represent the plurality of ongoing controversies and numerous different actors involved (Blanchet & Depeyre, 2016), we did not only seek diverse groups of interviewees but also other data sources, such as press coverage, company documents, government reports, and market studies.[7]

TABLE 1
Summary of Press Coverage per Topic, Including Search Strings and Hits[8]

Topic	Search String	2015	2016	2017	2018	2019	2020	Total
Digital Care Providers	Digital* vårdtjänst*/Digital* vårdgivar*/Nätläkar*	9	94	836	2,398	3,198	1,009	**7,544**
Antibiotics	+antibiotika*	2	1	179	216	269	32	**699**
Costs	+dyr*/stor* kostnad*/hög* kostnad*	0	11	108	231	387	108	**845**
Marketing	+marknadsför*/reklam*	0	0	125	331	363	86	**905**
Accessibility	+tillgänglig*	6	43	239	776	1,040	239	**2,343**
Reimbursement	+ersättning*	2	15	355	380	683	159	**1,594**
Pharmacy	+apotek*	2	10	40	166	325	143	**686**

Next to the complementary secondary data collected through searches via the Database Retriever, which we searched for Swedish press coverage regarding the developments surrounding

[7] Following Latour (2004), Venturini argues that: "Only by accumulating notes, documents, interviews, surveys, archives, experiments, statistics, can researchers strive to preserve the amazing richness of collective life" (2010: 269).
[8] Data as of April 23, 2020.

DCPs (see Table 1 for a summary of searched topics), we interviewed 29 actors (see Appendix A for an overview of interviewees) who represent different coalitions or groups involved in the debate in two phases. To reflect the diversity and to increase second-degree objectivity[9] by multiplying observation points, we interviewed the following actors: four senior executives of DCPs—one of them twice—, six doctors—two of whom represent their profession within an association—, six senior executives and managers of pharmacy chains, three representatives of patient organizations, five region representatives, two industry experts, one senior executive of a pharmacy association, one nurse representative, and one pharmacist representative. On two occasions, we interviewed two respondents of equal seniority jointly to cater the interviews to their schedules. We approached potential interviewees via email, asking about their availability and interest in taking part in our research project, through which we introduced the topic of our study on a high level and in neutral terms to not bias the interviewee. At the end of all conversations, we asked the interviewees to refer us to other potentially interesting actors, triggering a chain reaction that we followed until we experienced saturation regarding controversies and topics that surfaced (Rheinhardt, Kreiner, Gioia, & Corley, 2018).

Semi-structured interviews. The interviews, which were semi-structured in nature to ensure covering pre-defined areas of interest while allowing interviewees to veer off topic or occasionally lead the direction of the conversation (Bryman & Bell, 2015; Edmondson & McManus, 2007), lasted 30 to 80 minutes and were conducted face-to-face, through phone, or Skype[10]. As recommended (Bryman & Bell, 2015), we used an interview guide (see Appendix B), which we updated iteratively over the course of the research, outlining broad areas of interest with open questions and more specific questions as back-up. However, we rarely used these specific questions since interviewees' answers to the open questions often yielded fruitful avenues to follow up on. After an introduction with general questions regarding the interviewee's background, which is argued to help establish rapport and ease the start of the discussion (Alvesson & Ashcraft, 2012), we asked questions related to markets, change processes, and controversies before giving our counterparts the opportunity to raise topics we had not touched upon (Lee & Aslam, 2018).

In all but five interviews, we both participated, with one leading the conversation and immersing himself in topics discussed and the other one assuming a more objective role, taking notes, and asking follow-up questions. Throughout the project, we swapped roles consistently. To increase the quality and depth of the accounts, we conducted interviews both in English and Swedish, depending on the interviewee's comfort with English. All interviews were recorded and transcribed verbatim as soon as possible, with two exceptions where interviewees preferred to not be recorded and therefore, we relied on written notes. We then translated Swedish interviews into English. In light of the controversial and sensitive character of the topics discussed, we guaranteed all interviewees anonymity to enable them to speak freely (Grinyer, 2002).

3.3 Data Analysis

In line with our research approach and purpose, we set out to follow and describe the controversies surfacing in the collected data. When analyzing controversies, scholars are asked to

[9] Venturini (2010, 2012) introduced the term second-degree objectivity, reflecting researchers attempts to reveal "the full range of oppositions around matters of concern" (2012: 798). It marks a contrast to first-degree objectivity, which represents positivistic accounts of matters of fact.

[10] We conducted most of the meetings before the Covid-19 pandemic face-to-face, afterwards we used phone or Skype.

"just describe the state of affairs at hand" (Latour, 2005: 144). Whereas this might seem trivial in theory, the word 'just' represents a gross understatement of the complexity involved in the observation and description of controversies. While we covered the attempt to observe controversies in the section above, their description becomes part of the analysis. As Venturini explains, referring back to the metaphor of the magmatic nature of controversies:

> *When we observe controversies, we focus on the liquid side. When we describe controversies, we contribute to the solidification of some portions of social magma. (2010: 268)*

Following general principles of actor-network theory and despite our initial interest in the concept of market plasticity, we remained as open as possible to the accounts provided and had respect for all viewpoints. Yet, second-degree objectivity requires the researcher to structure the inherent complexity of controversies and the multiple opinions according to their representativeness, influence, and interest (Venturini, 2012). Following Callon, our goal was "to explain conflicting viewpoints and arguments […] in the same terms" (1986: 198).

When analyzing the data, we stayed as close to the accounts—the transcribed interviews enriched by collected documents and press coverage—as possible, while mapping actors' opinions surrounding several controversies, which we grouped around emerging themes, and traced how those played out over time (Blanchet & Depeyre, 2016). Although this work does not resemble a longitudinal study, we relied on actors' historic accounts, which we cross-checked with secondary material, to develop a timeline of events and changes. While we could track changes for many controversies—e.g., how the discussion around the validity of digital visits evolved—, this was not always possible—e.g., changes in actors' views on market or professional logics. Since observation and description are inherently intertwined (Venturini, 2010), we developed and changed themes over time, constantly moving between the raw data and our descriptions. Thus, we traced back chains of translations linking debates, actions, and transformations by following actor-networks (see Appendix C for an overview of the controversies uncovered).

While discussing the different themes iteratively, we quickly realized that the controversies actors brought up were appearing on different levels. Both the nature of the controversies as well as their degree of abstraction and materiality seemed to differ, leading us to conceptualize them on different levels. In a second step, we then grouped the controversies and themes into three different levels, trying to uncover the translations linking the different controversies and levels within and across actor-networks. Eventually, in order to make sense of the case, we revisited theoretical concepts that initially had motivated our research but had become de-emphasized: theoretical insights about the workings of markets, especially market plasticity, and conceptual work on the nature of controversies. We stress that our analysis emanated from the immersion in the empirical data and is by no means the result of trying to make the empirics fit a theoretical concept.

3.4 Data Quality and Reflexivity

Assessing data quality is central to every academic endeavor, equally so for qualitative research (Rheinhardt et al., 2018). Therefore, we devote the following paragraphs to discuss issues of data quality, following Lincoln and Guba's (1985) criteria of credibility and transferability. While the authors also introduced dependability and confirmability as criteria, we addressed them in the

previous section discussing our analysis approach as well as implicitly by outlining our objective to reach second-degree objectivity. Additionally, we engage in a process of reflexivity—reflecting upon our role as researchers in the research.

Credibility. To ensure credibility of our findings, we did not only stay as close to the interviewees' accounts as possible and refrained from making inferences, but also applied concepts of triangulation (Denzin, 2017; Jick, 1979) by cross-checking descriptions of accounts as well as combining multiple data sources next to the interview data. Additionally, we also gave our interviewees the opportunity to read their transcripts again and check quotes before publishing—a process known as member validation (Bryman & Bell, 2015). These practices ensured we represented the actors' viewpoints as authentically and credibly as possible.

Transferability. Often considered as a key component in establishing trustworthiness and rigor, the question of transferability requires the researcher to assess to what degree the thick description allows readers to transfer insights to other contexts beyond what the researchers have provided (Lincoln & Guba, 1985). Despite the particularities and special character of the chosen case, we argue that by using theories not exclusive to the healthcare sector and by providing an extensive description of the developments, our insights which are not distinct to the case—such as the controversies themselves—can inform market dynamics in other contexts as well.

Reflexivity. Generally in qualitative research (Alvesson & Sköldberg, 2009; Corlett & Mavin, 2018) and particularly actor-network theory (Latour, 2005; Venturini, 2010, 2012), the researcher's role as an observant becomes a central part of the investigation. The method includes the observer's subjective viewpoint, for while we took measures to ensure transparency and the actors' unhindered ability to select controversies, we cannot disregard the personal influence we had on our research. Although we began with an emphasis on market plasticity, we quickly discovered that controversies appeared to be connected to market dynamics. We therefore chose to focus on them for our data collection and analysis, which eventually led us to question how this translated into markets' plasticity. Furthermore, we observed that it was rather easy to gravitate towards some interviewees' accounts since they we more outspoken or vivid than others. However, we repeatedly forced ourselves to include all data sources into the analysis, with both authors analyzing the transcripts multiple times. Although most region representatives' accounts were less captivating than the ones by senior executives of DCPs who seemed to be at ease talking about their standpoints, they added important nuances to the overall discussion. Unfortunately, one actor seemed disengaged and unable to provide insight, therefore the resulting account was underemphasized.

Additionally, we noted that our chosen focus on markets combined with our appearance as business students and the perception of the Stockholm School of Economics in Sweden, made certain interviewees uncomfortable in relation to a public-driven system such as healthcare. We felt that the market notion triggered a negative response for some healthcare professionals, doubting the applicability of a market perspective within healthcare, thereby possibly influencing their accounts. Since we had anticipated this from the start, we sought to highlight the genuine interest guiding our inquiry—a mitigation strategy recommended by Lee and Aslam (2018)—and refrained from using business-laden terms.

4. EMPIRICAL FINDINGS

> *The emergence of digital healthcare has without exaggeration led to a minor revolution; and we understand that it creates challenges for the system, but when the reality and the map do not align, it is rarely the reality that is wrong. (KRY, Min Doktor, & Doktor.se, 2020a: 2)*

During the last seven years, the phenomenon of DCPs has emerged and developed rapidly in Sweden, often causing a heated debate. In this section, we start by providing a short introduction to the case itself, which serves as a foundation for the identified controversies that we present in the second part of this section.

4.1 Case Background

Healthcare and pharmacy markets vary in their shape and form globally, and the Swedish versions of those two markets are no exceptions. In this section, we describe the development that made the markets subject to great attention and debate. We briefly introduce the Swedish healthcare system, followed by a description of how DCPs emerged and developed. Their connections with the pharmacy market are outlined in the third section. We conclude the case introduction by summarizing key events ranging from 2015 to 2020.

Sweden's healthcare system. In Sweden, healthcare is part of the publicly-funded welfare system. Although the state and the municipalities have some responsibilities for healthcare, Sweden's 21 regions govern and provide most of if it. Regionalized healthcare comprises two parts: institutional and non-institutional care which is more commonly known as primary care. The former is organized through hospitals with varying degrees of specialization, whereas healthcare centers constitute the main part of non-institutional care. Primary care is available for everyone regardless of age and aimed at the rehabilitation, care, and treatment of simpler conditions, thus serving as the healthcare system's entry point. Primary care is provided via more than 1,000 healthcare centers (Vetenskapsrådet, 2020) and even though these are funded via tax money, 43% of them are private (SKR, 2019b). The Act on System of Choice in the Public Sector 2008 lets citizens choose their healthcare center and also permits private actors to establish themselves and receive public funding from the region. Each region stipulates its own requirements for publicly-funded healthcare centers, leading to varying obligations across regions (SKR, 2019c).

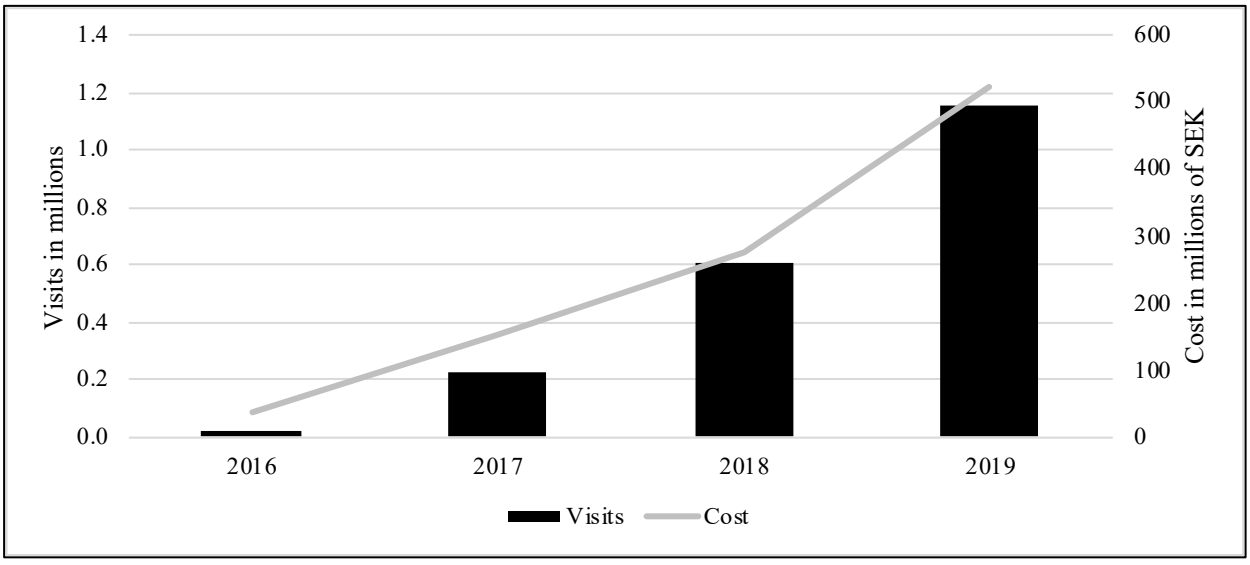
The Swedish healthcare system is funded primarily by regional and municipality taxes (Vetenskapsrådet, 2020). In 2018, Swedish regions spent 88.2% of their budget on healthcare, while 70.2% of their inflows stemmed from regional taxes and only 3.3% from patient fees (SKR, 2020a). Within regions, the reimbursement system to healthcare centers is primarily built on *capitation*, i.e., healthcare centers receive a fixed reimbursement per listed patient, rather than *fee-for-service,* i.e., reimbursement per visit. The share of revenue that healthcare centers receive based on capitation varies among regions but 15 out of the 21 regions have a capitation degree of at least 80%, according to the national investigation 'Digiphysical care' (SOU 2019:42).

Digital care providers. The phenomenon of DCPs—that offer patients nationwide access to healthcare professionals through apps, utilizing various techniques for transmitting information such as chats or video—started to gain momentum in 2015. At that point, two actors, Min Doktor and KRY, had already been established for several years. Min Doktor had since 2013 offered

patients to pay privately for treatments of urinary tract infections and KRY had been a digital platform provider to Region Jönköping's healthcare centers. However, changes to the Swedish Patient Act in January 2015 established a system for DCPs to grow through public funding. The new act enabled citizens to receive help at healthcare centers outside their home region, which was argued to be necessary occasionally, e.g., on vacations. Financially, this was handled through a process where the regions providing care invoiced the patient's home region for each visit—a so-called cross-regional compensation ('Utomlänsersättning' in Swedish). Region Jönköping's decision to compensate all cross-regional visits equally, regardless of whether they were conducted digitally or physically, enabled patients from all over Sweden to call Min Doktor or KRY. These actors operated as contractors to healthcare centers which received funding from Region Jönköping that, in turn, invoiced the patients' home regions for each visit (SOU 2019:42).

As DCPs' popularity and subsequently costs for regions increased (see Figure 1), a debate surrounding the process for and level of reimbursement of those actors emerged. Since digital and physical visits were initially treated similarly from a financing perspective, DCPs received 2,135 SEK per doctor visit—a level that soon decreased significantly. First, Region Jönköping decided to change the reimbursement level to 1,200 SEK at the beginning of 2017 (Cederberg, 2017). Then, the Swedish Association of Local Authorities and Regions (SKR) decided to make two subsequent recommendations to all regions, advocating for a common reimbursement level for digital visits to doctors: first a decrease to 650 SEK per visit in May 2017 and later a further decrease to 500 SEK in 2019 (SKR, 2019d).

FIGURE 1
Yearly Development of Costs and Visits to Digital Care Providers[11]



Since the start, the market has grown rapidly and gone through structural changes with actors emerging and disappearing. Doktor.se and Doktor24 were founded in 2016 (SOU 2019:42) but did not receive publicly-funded visits until January 2018. Meanwhile, KRY and Min Doktor had grown to a level where they received around 20,000 and 10,000 monthly visits respectively (Cederberg,

[11] Data from Region Jönköping and Region Sörmland, cited in Levinson (2019) and Cederberg (2020).

2020). Throughout the years, other niche actors have entered and left the field (cf. Mindler, 2020; Pramsten, 2019) and in 2017, the large private healthcare provider Capio, owner of many healthcare centers, launched its own digital solution Capio Go (SOU 2019:42). However, currently, KRY, Doktor.se, Min Doktor, and Doktor24 are the market's big players, accounting for 97.5% of the visits to DCPs (Cederberg, 2020).

Even though all of the big players have emerged within the same field, they have slightly different offerings, employ different technical solutions, and offer patients access to various professions. For instance, Doktor24 employed a digital, automatic triage system from the start that directed patients to a recommended level of care based on the information that the patient provided—a system that KRY developed in 2019 but did not initially offer when it only provided patients with digital access to medical professionals such as doctors. Another example is Doktor.se that uses nurses as the first point of contact to assess patients' symptoms and need for further help (SOU 2019:42). Official data from authorities also reveal different operating models: in December 2019, Doktor.se accounted for 60% of the digital visits to nurses, but only for 25% of the total number of visits; and 54% of the doctor visits were made through KRY even though the company's total share of visits was 44% (Region Sörmland, 2020).

As of December 2019, all major DCPs are based in Region Sörmland, instead of Region Jönköping where they emerged (Region Sörmland, 2020). Dokor.se initiated this movement in 2018 when it acquired a healthcare center in the region (Lindhe, 2017). Since Sörmland had made a unique decision to remove patient fees for primary care visits, which technically include DCPs, Doktor.se could offer visits for free instead of charging 250 SEK like the actors based in Region Jönköping (TT, 2017a). A couple of months later, in March 2018, SKR recommended all regions to homogenize patient fees for digital visits and charge at least 100 SEK per visit (SKR, 2018)—which Region Sörmland enforced in 2019. However, since this decision only applied to moving digital pictures with audio—i.e., video calls—, other visits via chat or transmission of pictures were still free of charge (Region Sörmland, 2019). All major DCPs later followed Doktor.se's move to acquire or start collaborations with healthcare centers in Sörmland (Caesar, 2019; Cederberg, 2019a; Region Sörmland, 2020).

As the field grew, it became a subject of national interest. Government officials argued that the new area of digital care lacked sufficient regulation and launched an investigation in 2018 (Helander, 2018) that endeavored to "analyze how a long-term, sustainable system for the so-called online doctors could be created with the principle of healthcare governed by need taken into account" (SOU 2019:42: 58). Delivering the final results in 2019, the investigator suggested integrating DCPs in healthcare centers—either by owning healthcare centers themselves or by being contractors to existing ones—, thus removing the opportunity for these actors to access the entire population through one healthcare center (SOU 2019:42).

Sweden's pharmacy market and its connection to digital care providers. In 2009, the Swedish pharmacy market was re-regulated from the monopoly governed by the state-owned chain Apoteket AB. Since then, Apoteket AB has faced competition with the number of big pharmacy chains with physical premises now amounting to five (Tandvårds- och läkemedelsförmånsverket, 2018). Additionally, with e-commerce growing 400% between 2015 and 2019, new online-only pharmacies have emerged (Sveriges Apoteksförening, 2019). However, the changes also affected the healthcare sector. Already in 2005, during the monopoly, the state-owned pharmacy chain

Apoteket AB and the private healthcare company Capio launched a collaboration called 'Vårdoteket'. However, the attempts to quickly help people with simpler symptoms through nurse receptions in pharmacies (Apoteket, 2005) fell short: five months later, the initiative was closed (Vårdfokus, 2006). Yet, this kind of collaboration has re-surfaced with the emergence of DCPs.

Partnerships between pharmacies and DCPs were initiated in 2015 when Lloyds Apotek and KRY launched a collaboration aimed at offering patients a purely digital journey (Dagens Medicin, 2015). The following year, Min Doktor and Apoteket complemented a digital offering with a physical one that enabled patients to check their blood pressure at pharmacies (Carpman, 2016). During the subsequent years, more partnerships emerged (Apoteket, 2018; Apoteksgruppen, 2019; Kronans Apotek, 2017) which later turned into ownerships (Englund, 2018; Market, 2020; Min Doktor, 2018). Consequentially, as of May 2020, three out of the five big pharmacy actors own shares in three out of four major DCPs (see Table 2 for a detailed overview). KRY, who has recently established a partnership with the digital pharmacy Meds (KRY, 2019a), is the only DCP without investment from a pharmacy. As cross-ownership increased, it caused authorities to look deeper into the suitability of this set-up: in 2019, the Swedish Medical Products Agency suggested regulatory changes that would prohibit majority ownership between pharmacy companies and care providers, arguing that not doing so yielded a risk of conflict of interest (Läkemedelsverket, 2020).

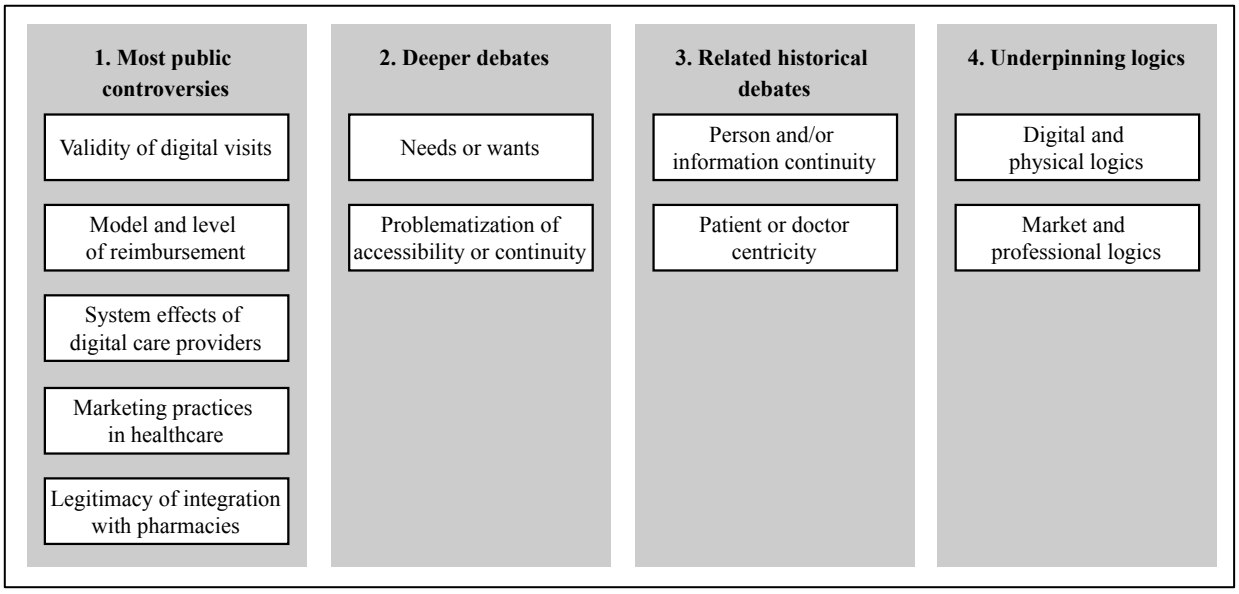
TABLE 2
Summary of Important Events Between 2015 and 2020

Topic	2015	2016	2017	2018	2019	2020
Reimbursement (SEK)	2,135		1,200 & 650		500	
Laws and investigations	New Patient Act enables cross-regional visits			Investigation on DCPs launched	Investigations suggest prohibiting majority cross-ownerships and integrating DCPs in healthcare centers	
Regional regulatory decisions	Jönköping equalizes digital & physical visits				Sörmland makes the patient fee 100 SEK	
Established actors	KRY, Min Doktor	Doktor24, Doktor.se establish				
Overlap to pharmacy market (P=partnership, I=investment)	KRY & Lloyds (P)	Min Doktor & Apoteket (P)	Doktor.se & Kronans (P)	Doktor.se & Kronans (I) Min Doktor & Apotek Hjärtat (I)	Doktor24 & Apoteksgruppen (P) KRY & Meds (P)	Doktor24 & Apoteket (I)
Other				Doktor.se establishes in Sörmland	KRY, Min Doktor, & Doktor24 move to Sörmland	

4.2 Controversies

In this section, we outline and describe the controversies surrounding the emergence of DCPs. We start by describing the most publicly discussed controversies regarding the validity of digital visits, the model and level of reimbursement, DCPs' impact on the healthcare system, and how the actors' marketing practices fueled these controversies, eventually becoming one themselves. Additionally, we present the controversy stemming from the increased overlap to the pharmacy market. These controversies are further tied to diverging views on deeper debates regarding the definition of a need and what problems primary care suffers from today, which we turn to next. Following that, we describe historical, ongoing controversies that have intensified through the emergence of DCPs. Finally, we describe conflicting logics, separated into two controversies that underpinned basically every debate brought up. Although we present the debate in separate themes (see Figure 2), we stress that our mapping aims at providing a rich description of the controversy and its context, not isolating opinions since they span across various controversies and do not resemble self-contained entities.

FIGURE 2
Overview of Controversies



Validity of digital visits. The controversial debate surrounding DCPs was anchored to a public discussion about the very exchange object itself—i.e., is it possible to conduct a healthcare visit digitally? (cf. Ahlzén, Berggren, Metsini, Olsson, & Tegelberg, 2018; Gardell, 2019). Even though the viewpoints on this issue are not dichotomous—rather they seem to occur on a continuum—, they lead to different conclusions that translate into other controversies.

> *If people, from the beginning, would have understood that this is the same kind of care but in a lot more efficient way, a lot of ugly debate would have been avoided. (Senior Executive, DCP)*

No actor has argued for digital visits' ability to fully replace physical ones, nor has anyone mentioned that everything must be handled in physical premises. Rather, the controversy resides

around the question to which extent digital visits can be helpful. DCPs stated that they, in an early stage, could treat simpler cases of illness (Gardell, 2019) and saw that, while they cannot do everything digitally, some visits "being done physically do not have to be done physically" (Senior Executive, DCP). While one doctor admitted that "some cases here and there" can be done digitally, the technical limitations—"you can't examine the person; you can't listen to the lungs, the heart; you can't check the stomach, anything. You just have to rely on what he is telling you"—made doctors question the very benefit of digital visits.

> *A colleague of mine drew two circles next to each other—one illustrating video calls and one physical visits. They overlap this much [showing small overlap] where it could be beneficial with a video call. (Doctor)*

This has led doctors to argue that DCPs generate double visits since they refer patients to physical clinics. One doctor said that he had several patients "where they [DCPs] suspect 'this might be someone who is ill' and [then my response is] 'Well, hello. Yes, of course, that is what we work with'". Further, the controversy seemed to be intensified by DCPs' prescription procedures: "they prescribe way too many antibiotics for something that you are not able to set the diagnosis for", as one doctor argued. KRY initially rejected this argument (Holm, Flodin, & Röstlund, 2017) but later pledged to improve the basis for their diagnoses and to ensure that all doctors adhere to the guidelines (Lennen Merckx, 2018).

However, although the conflict seems to be vivid among some actors, others claim the controversy has cooled down—several DCPs witnessed that opponents got "fewer and fewer" (Senior Executive). While still observing some resistance among his employees, one doctor who is leading a healthcare center acknowledged that DCPs have served as role models: "we have gotten the inspiration, […] I tried to introduce this as fast as possible in my office". This change process is also observable at a public level where the majority of regions now offer digital solutions (Åsgård, 2020)—a movement that has given DCPs "a lot more credibility" (Senior Executive, DCP).

Furthermore, doctors at DCPs have sent referrals to physical healthcare centers, ordering physical examinations or tests. This is a consequence of the limitations of digital visits, as one senior executive explained when speaking about urinary tract infection cases: "we understood that in approximately 10% to 20% of the meetings, the woman needed to have a physical examination". However, a significant amount of these referrals have been dismissed by physical healthcare centers which Min Doktor partly explained as resistance among the profession (Yousef, 2018). One DCP executive stated that this was one of the reasons for opening physical premises at pharmacies.

Model and level of reimbursement. As mentioned in the case background, the reimbursement to DCPs has been subject to changes and also public debate—with 21% of the media articles on DCPs having touched upon reimbursement-related topics (see Table 1). Generally, the controversy comprised two components, however, one came to greater prominence: while the *model* for reimbursement is still undergoing discussion and scrutiny, the debate surrounding the *level* of reimbursement had somewhat ceased. However, the latter component could be observed in retrospect: one actor pointed out that a large part of the debate had revolved around "that they [DCPs] have received a lot of money or high reimbursement levels for their services" (Senior

Executive, Pharmacy Chain). One DCP executive recognized the initial (high) reimbursement as "ridiculous" and regional officers seemed to agree as they called for action.

> *So, it was initiated by the regional financial officers […] that reacted on all the invoices that came from Jönköping for some new sort of digital visits that were very expensive. (Region Representative)*

While the first decrease to 1,200 SEK per visit did not seem to cause any huge uproar—KRY's CEO described it as "reasonable given the kind of care we provide" (Krey, 2017)—further decreases met stronger resistance. As SKR recommended a decrease to 650 SEK, arguing that while they wanted to stimulate the development of DCPs, it had to be proportional to the costs, Min Doktor commented that they feared deceleration of the development (TT, 2017b). The final decrease, to 500 SEK, met even stronger opposition with KRY on the forefront, stating that "the signal is clear. Digitalization is not desired" (Almgren, 2019). Additionally, in hindsight, one DCP executive was critical to SKR's way of coming up with a new reimbursement level: "Pretty much like this: '50 euros' [hand movement suggesting an arbitrary choice]".

Decreasing the level of reimbursement seemed to cool down the conflict as no actor called for further increases or decreases. However, several of them discussed the *model* of reimbursement. One region representative reported that, in the light of DCPs, physical healthcare centers have criticized their own reimbursement model, stating that "online doctors get a completely free game plan to run on and we are stuck in old agreements that do not even reimburse a visit if it is done digitally". Furthermore, several actors argued that fee-for-service, rather than capitation, was not sustainable, because "if the reimbursement model is based on visits, it is best to have short visits that are not needed" (Doctor) and "reimbursement per visit generates over-consumption" (Industry Expert). While some DCPs acknowledged this argument, one senior executive contrastingly argued that capitation incentivized healthcare centers to "have as many listed patients as possible but as few meetings as possible". Even though all DCPs saw that their reimbursement model was under scrutiny, many of them disagreed to what extent the model of fee-for-service was accepted. One senior executive, bearing the historical decreases in mind, admitted that their business model was "under attack"; another one said that fee-for-service "is not as controversial anymore"; and a third said that "the market for fee-for-service will never survive".

To solve the clash of two separate reimbursement systems, a national investigation suggested integrating DCPs as subcontractors to healthcare centers which get reimbursed via capitation (SOU 2019:42). Even though some DCPs acknowledged the current model as "illogical" (Senior Executive), they argued that "it's a digital service. It doesn't recognize any regional borders". Thus, three DCPs rejected the investigation's suggestion and called for a nationalized reimbursement model—leaving out whether it should be based on capitation or fee-for-service (KRY et al., 2020a). Some region representatives argued for a similar solution.

System effects of digital care providers. The discussions on reimbursements and validity of digital visits to DCPs have translated into a more aggregated debate about DCPs' systemic effect on the healthcare system. Do they bring value and offload the primary care system by using more efficient, digital technology; or do they drive more costs by generating double visits and taking care of simpler diseases that otherwise would have been subject to self-care? As this discussion unfolded, researchers tried to answer these questions and came to conflicting conclusions. While

Gabrielsson-Järhult et al. (2019) found support for offloading effects, a different study suggested otherwise (Ellegård & Kjellson, 2019). Actors seem to claim either one of these reports, depending on their views on this debate. KRY, Min Doktor, and Doktor.se cited the former one stating that "research shows the benefit" (2020b: 5) of DCPs; while one doctor referred to the latter study when speaking of double visits:

> *They don't offload, they are not doing much help for us. That has also been shown, they made a study in Skåne and showed that people who turned to these net doctors tend to seek medical advice in other ways, too.*

While many doctors argued that turning to traditional care, instead of using DCPs, would generate "only one visit instead of two", DCPs stressed that they efficiently triage people to healthcare professionals with the "least competence needed" (Senior Executive). This, in turn, resolved an issue: primary care's low accessibility forced patients to seek care at an inappropriate instance, such as emergency rooms (Lennen Merckx, 2018). While this argument met opposition among many doctors saying that "we have that system today, we have 1177 that does that" (Doctor), some DCPs have made triage-mechanisms a central aspect of their service, as mentioned in the case background. One senior executive explained that their "triage system is now 100% digitized, which means that it follows the regulatory protocol 100%". Other actors have followed the same path, introducing "digital triage based on AI" (KRY, 2019b). Another DCP executive described their technical development—in terms of using self-reported data to triage patients—as a way "to make sure that we would not actually do the things that we are being criticized for". This general development was deemed as inefficient according to one doctor, arguing that DCPs generated an "over-triage-effect to the emergency room".

Moreover, several doctors questioned the value of DCPs, arguing that they had "created *more* visits", due to high accessibility. DCPs, on the other hand, stressed the opposite: "despite the emergence of DCPs, the total number of visits to Swedish primary care is decreasing" (KRY et al., 2020a: 1). Additionally, digital visits were argued to be more efficient "since we know for sure that a digital visit costs less than a traditional visit" (Senior Executive, DCP)—while digital visit cost 500 SEK, the production cost of a physical visit was 1,700 SEK on average (Nilsson, 2020). However, one doctor rejected that comparison:

> *It is apple and pears. […] For the 1,700, we have made a lot of calls, answered the nurses' questions, we have done a lot of things.*

The separate reporting of public costs for DCPs—since it is based on visits, not capitation—seemed to intensify the debate: "people working in the other ['ordinary'] system, they see another system [for DCPs] that indirectly steals their resources", as one industry expert observed. This clearly evoked emotions among several parties: One patient representative explained that "it risks taking resources from people with severe chronic diseases", a doctor said that it has "cost us almost two nurses' wages to pay for all these appointments", and regions were "obviously concerned about whether these bills [for DCPs] offload or not" (Region Representative).

Since there seems to be no general conclusion regarding the system's efficiency or effectiveness that actors can agree on, it has led researchers to look further into the question (Widfeldt, 2020). Even though research might produce knowledge about the systemic effects of DCPs, the

conclusions drawn by actors on this matter are tied to a deeper perspective on the accessibility problem within healthcare and a discussion about what qualifies as a treatable case for primary care. We examine these interrelationships later in this section.

Marketing practices in healthcare. The aforementioned controversies seemed to be exacerbated by DCPs' marketing practices which appeared to be central to the overall phenomenon, with 42% of consumers becoming aware of DCPs through their marketing (Myndigheten för vård- och omsorgsanalys, 2020). While the debate primarily mobilized doctors, our interviewees made no attempts to hide their resentment and anger caused by commercials launched by DCPs. Doctors seemed to be upset by the fact that DCPs had used social media influencers to spread the message "that it is cozy and flashy to contact them"—a practice many found provoking, according to a healthcare provider executive, who added that it is "ugly within healthcare to market your services in that way". All doctors especially raised the concern that the marketing content nudged people to seek care for simpler conditions they should not and previously would not have sought care for.

> *And they do ads on big, fucking billboards when you drive into the city. [They say] you should seek care for something that is not in need of a doctor's visit. (Doctor)*

Healthcare professionals even raised concerns over the very existence of marketing in healthcare in general. Promoting medical services through ads and commercials was "not aligned with the fact that healthcare should be driven by needs", a nurse representative argued. Confronted with the accusations and negative reactions that made headlines (Svensson & Almgren, 2018; Wisterberg, 2018), some DCPs argued that marketing was the only possibility for private companies to raise awareness: "When you are a private company, how do you inform someone that you exist and that there are new ways of doing things? It's marketing". This senior executive added that it was difficult for newcomers to judge "what is controversial to say and not" within healthcare. Despite the attempts to explain why they launched the early marketing messages, DCPs seemed to react to the criticism and adapt their messaging (Niemi & Vig, 2019).

> *In the beginning, all of us did blunders where it maybe sounds like you should try to get healthcare even though it is not needed. […] Together with our competitors we have all become much better at it now. (Senior Executive, DCP)*

This change was acknowledged by a doctor representative, arguing that DCPs had adapted their marketing to be more guided by medical needs. However, the profession's members did not seem to be appeased, calling the concessions "lip service" (Doctor) and arguing that the changes were not sufficient. "It definitely crossed the line before, and now it is on the border to crossing the line", another doctor told us.

The controversy left its mark on the market. The related negative press coverage led Doktor24 to urge all DCPs to adopt responsible marketing practices within healthcare to gain trust in digital services (Perdahl & Siljeholm, 2018)—company representatives also called for not "applying a broad brush" to DCPs (Thomson et al., 2019). Nonetheless, a senior executive said the "aggressive marketing" was, although making many enemies, increasing the acceptance level for digital care. In April of 2019, Region Sörmland—home to all major DCPs—updated its guidelines for marketing within healthcare (Cederberg, 2019b). SKR later recommended a coherent set of rules

for all regions, including a statement that "marketing should only encourage care that is medically motivated" (SKR, 2019e).

Legitimacy of integration with pharmacies. As the overlap between DCPs and pharmacies increased, a controversy around its legitimacy surfaced. Doctors and industry experts strongly argued against cross-ownerships and called for regulations prohibiting it, arguing that financial incentives risked offsetting the patient's medical needs as the governing mechanism: "perhaps you [as a doctor] prescribe a little bit more, do a bit more promotion for the pharmacy, so that both your office and the pharmacy profit" (Doctor). On the contrary, pharmacies and DCPs argued against the risks, stating that there were no problems identified today: "No. There are no such signals, no investigations, no reports, no filed complaints. We need to be clear on that, we do not have any problems today" (Senior Executive, Pharmacy Association).

Furthermore, since "it is not the healthcare provider that prescribes drugs, it's the doctor" (Senior Executive, DCP) and "the doctor's profession is a licensed profession with strong integrity" (Senior Executive, Pharmacy Chain), those principles would serve as a shield against potential risks. Contrastingly, industry experts argued against the effectiveness of having ethical codes as a protection against financial incentives, stating that, as a doctor, "you get affected because it affects your own financial situation". One doctor, who initially could see the benefit of the cross-ownership, did not rule out the potential conflict of interest when asked specifically about it:

> *That implies that doctors have abandoned all reason. But of course, that is not impossible. If one thinks it is reasonable to sit at the Riviera and recommend nose spray to children in Sweden, one might consider that [prescribing too much or wrong drugs] reasonable as well.*

As DCPs and pharmacies increased their degree of integration—aimed at improving the customer and patient journey, which we detail out later—, it caused pharmacies to consider their positions. Some actors felt forced to follow—"If they [other pharmacies] deliver a simple and good solution, maybe we should do that too?" (Senior Executive, Pharmacy Chain)—, while others had to scrutinize the degree of integration: one executive described KRY's and Meds' fully integrated and digital journey (KRY, 2019a) as "questionable" and said that her pharmacy would probably not do anything similar.

Another aspect of the dispute relates to the different interpretations of the status quo. One doctor stated that the increased overlap was "insane" and "that's why the law says that you are not allowed to own a pharmacy as a doctor". However, conversely, a representative for pharmacies called it "a misinterpretation. […] Anyone is allowed to own pharmacies, as long as you are not prescribing simultaneously". While refraining from commenting on legal interpretations, we observed that some doctors and industry experts seemed to portray the cross-ownership as actors exploiting a loophole since there had been a long tradition of "separating the two businesses from each other" (Industry Expert); while several pharmacies and DCPs argued that the potential for conflict of interest had already been subject to investigation at the time of the pharmacy market's re-regulation, and that the risk was considered to be quite low.

In 2019, the Swedish Medical Products Agency suggested regulatory changes that would prohibit majority ownership between pharmacy companies and care providers, arguing that not

doing so yielded a risk of conflict of interest (Läkemedelsverket, 2020). Up until now, the Swedish government has acknowledged the identified risks while working on a solution (Wisterberg, 2020). The regulatory uncertainty caused one pharmacy chain manager to call for predictability since they are "used to develop a business within regulations".

Problematization of accessibility or continuity. One aspect complicating the landscape of controversies around DCPs is that parties seem to disagree on the fundamental problem with primary care, and thus emphasize different improvement areas. Several parties chose to either emphasize problems with accessibility or continuity. This debate is not dichotomous, but contains a technical paradox, pushing actors closer to one of the two extremes. In a system within limited resources, one cannot have perfect continuity and accessibility simultaneously. If two patients with the same healthcare contact seek care at exactly the same time, one has to either compromise on continuity or accessibility.

Since their emergence, all prominent DCPs have publicly pointed at the Swedish primary care's problem with low accessibility (Kangro, 2018; KRY et al., 2020a; Perdahl & Kernell, 2019; Schildt, 2018). One senior executive said that "the whole Swedish healthcare system has been built upon not being accessible", resulting in a level of availability "as bad as in Albania" (Senior Executive, DCP). Other, somewhat diverse, parties also recognized the poor accessibility. Patient organizations described it as "a significant problem"; a nurse representative depicted the accessibility as "not perfect"; and several pharmacy representatives did a similar analysis. Many of these actors argued that DCPs have highlighted the problem of scarce accessibility, and one industry expert agreed, but simultaneously stressed something he perceived as "one of the most important factors for efficient healthcare", continuity:

> *They pointed to a weakness. We were aware of that [...], the bad accessibility. [...] They also indirectly pointed at the lack of continuity as well."*

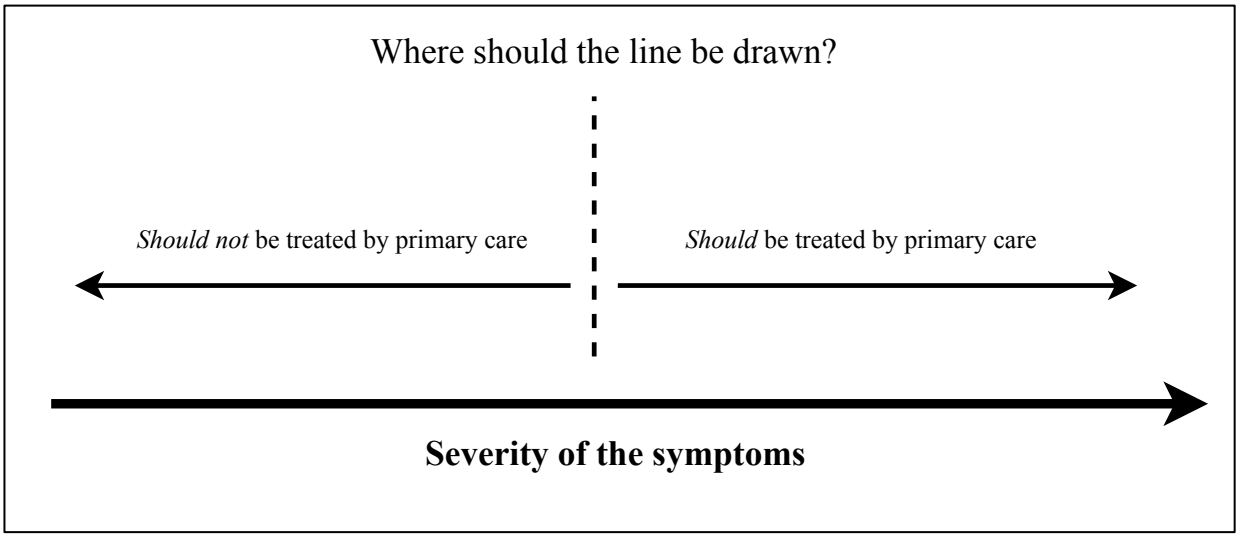
One doctor representative argued that regions focused a lot on "accessibility rather than continuity" and that the current system could provide good accessibility but not continuity. The urge for continuity was a common theme among all doctors and several of them also emphasized the lack of resources within primary care as a fundamental problem, causing troubles with continuity rather than accessibility. The resource gap increased the need for doctors working for different healthcare centers simultaneously on a contract basis ('Staffetläkare' in Swedish) which was "not optimal for primary healthcare because the continuity […] is the key to giving person-centered care" according to one doctor. The doctors who pointed to the lack of resources did not associate that with causing an accessibility problem. Only one of them admitted that accessibility was a problem and that it enabled a market "for the online doctors to establish themselves", but he also stressed that continuity is "extremely important".

The discussion seems to be ongoing, even though we observed some changes. One region representative stressed that in the light of DCPs, if regional healthcare is "much less or less available, then we will not be able to maintain the credibility from the taxpayers". Several DCPs "are working more and more […] to provide continuity when needed" (KRY et al., 2020b: 4)—by enabling the possibility for scheduling re-visits, which one senior executive emphasized was necessary as "the complexity of the problems" treated increased. Additionally, the national investigation from 2019 had the title "Digiphysical care – accessible primary care based on needs

and continuity" (SOU 2019:42), highlighting the need for both continuity and accessibility. Several DCPs responded negatively to the investigation, calling for an extended version that takes the required level of accessibility as a starting point (KRY et al., 2020a). Finally, as of April 2020, the government has espoused objectives for primary care, targeted at improving both accessibility *and* continuity (Socialdepartementet, 2020).

Needs or wants. What is a need? This question has been subject to hefty debate surrounding the emergence of DCPs, translating into other discussions, such as the validity of digital visits and the system effects. The controversy comprises two facets: (a) what symptoms should be treated within primary care (see Figure 3); (b) and should patients' medical needs be the only governing mechanism or are there other important factors? While, again, we refrain from describing the actors' views as dichotomous, we chose to clarify the standpoints by dividing the aforementioned facets into the concepts of *needs* and *wants*. Whereas focus on the former implies that *simpler cases should not be subject to primary care treatment and that medical needs serve as a governing mechanism*; focus on the latter concept means that also *simpler cases should be treated within primary care and that patients' medical needs is not the only important factor*. While some parts of this controversy were delimited to healthcare, it also touched upon the increased overlap to the pharmacy market.

FIGURE 3
An Indicative Model of What Needs to Treat Within Primary Care



Given the aforementioned technical limitations to digital visits, doctors argued that DCPs take on easier cases that should not be subject to a primary care visit. One of them said:

> *They only take care of very trivial conditions, which are mostly self-containing, the patients get well anyhow without any interruption by healthcare. So, DCPs profit from something which is not really needed in healthcare.*

As outlined, DCPs stressed poor accessibility as a significant problem of the Swedish healthcare system. However, several doctors argued that DCPs had created a need for instantly getting help for simpler conditions: "The need was not there ten years ago—that you should be able to call

someone instantly and show your skin problems or talk about your throat issues" and concluded that DCPs were "completely unnecessary". Contrastingly, one DCP executive stated that, while increased accessibility drives more visits, the "need [for accessibility] has been there for a long time".

Moreover, several parties, such as DCPs, region representatives, some pharmacies, and one patient organization argued that the call for increased accessibility partly stems from a larger societal development where citizens require services to be delivered conveniently and quickly, thus implying that healthcare needs to adopt to non-medical trends. One DCP executive commented that, as citizens, we expect "that everything happens wherever and whenever we want it to happen". Even a doctor, who met patients through digital visits at a large healthcare provider, talked about the patients' needs being prioritized in light of digital accessibility:

> *The patients' needs are steering much more through the digital availability. […] The patients soon won't accept to be put in this box and be waiting.*

Another actor highlighted that DCPs—as self-appointed creators of a new step between "meeting [a healthcare professional] physically and just staying at home" (Senior Executive)—were changing the structure of primary care, a desire where DCPs and pharmacies joint forces. All of them argued for closing the loop between the markets and enabling a seamless customer journey. One pharmacy chain manager said they can "take the easier cases and the primary care the follow-ups and the [cases that need more structure and continuity]". Another executive explained how their partnership—as part of their strategic objective to "take a broader role in the patient and customer journey"—could yield a solution that offers "better availability, more convenient services and more frictionless experiences for the customer".

Consequently, pharmacies and DCPs could resolve the issue of the "one million patients that don't have prescriptions that are accurate or up to date when they come into the pharmacies" (Senior Executive, Pharmacy Chain). Facilitating prescription renewals in this manner was questioned by a doctor: "there is not really the need for accessibility that these [actors] try to insinuate" since already today, patients could get prescription renewals quite quickly from him. Rather, he called for more responsibility among citizens: "they should not come when they have taken their last pill, they could come two days before".

Person and/or information continuity. As discussed, actors emphasized the need for continuity to various extents. We noticed that this translated into an ongoing debate about how to technically ensure the claimed necessity of continuity. More specifically, actors debated whether patients should be tied to fixed healthcare contacts and whether doctors need to be assigned to each patient. Although the discussion is by no means new in Sweden (cf. Regeringen, 1993) and the Swedish Healthcare Act 2017 already entitles patients to choose a fixed doctor contact within primary care, the emergence of DCPs has established another arena to discuss this issue.

All doctors called for assigning patients to a specific doctor—i.e., a named person. A doctor representative emphasized its importance while calling for primary care reforms: "[…] one of the biggest changes needed is the proposal of a fixed doctor". To enable this, doctors argued for limiting the number of listed patients to "1,500 [patients] per General Physician". This will require significant resource investment in terms of personnel—one doctor explained that at his healthcare

center "six more doctors are needed to reach the goal of 1,500"—which constitutes one of the counterarguments brought up by DCPs, who stated that "with the current and expected supply of personnel it will not be possible for all citizens to have a named doctor" (KRY et al., 2020a). Although KRY showcased doctor continuity through a TV-commercial from 2020, in which a doctor asks a patient calling in with throat issues, "before moving on, can I ask you about the wound you had?" (KRY, 2020); DCPs have questioned "whether the continuity in all cases needs to be connected to a physical place or a specific doctor, or if the most important aspect with regards to continuity is the information continuity" (KRY et al., 2020a) obtained through journals. One doctor had observed this objection, and provided a hands-on counterargument:

> *A colleague told me about a patient that had visited the emergency room a lot of times and the journal said in capital, bold letters 'Do not conduct an x-ray on this patient'. But even so, they had conducted 30 x-rays the past two years.*

Other parties brought up the need for patients to be assigned to a fixed *healthcare* contact rather than a *doctor* contact. Patient and nurse representatives shared this opinion; one of them offered a patient perspective and elaborated on its benefits: "I do not need to call the physiotherapist, the doctor, the nurse to tell the same thing. I have one fixed contact. That is different from 'one doctor contact'. This could be anyone".

While this controversy is not new, in 2019, a national investigation stressed its importance by suggesting that patients should be connected "to a named doctor and preferably a named care team" (SOU 2019:42: 41) and in 2020, the government stated that it is considering whether regions should be obligated to inform patients about the possibility to choose a fixed doctor contact (Socialdepartementet, 2020). Furthermore, we observed that the discussion indirectly surfaced in the light of DCPs through doctors stating that money spent on DCPs could have been spent on hiring more doctors in primary care to enable fixed doctor contacts (cf. Isacsson, 2019; Mellgren, 2020).

Patient or doctor centricity. As the calls for information continuity and fixed healthcare contacts were based on a more *patient-centric* perspective*,* the suggestion about fixed doctor contacts represented a more *doctor-centric* approach*.* These two views constitute an ongoing debate about an increasingly patient-centric care (SKR, 2020b) which surfaced with the emergence of DCPs. This debate primarily involves patient representatives and healthcare professionals, with the former stressing the importance of moving towards more patient-centric care. As one of them explained:

> *It is a way of acting in healthcare. […] Firstly, partnership. That the patient and the caregiver have a relationship like a partnership […]. (Patient Representative)*

This actor also mentioned the need for a personalized healthcare plan—i.e., a journal that follows the patient—that serves as a technical vehicle for the concept of patient-centric care. Moreover, another patient representative explained that "the healthcare system has been very hierarchical. If you go way back it was like 'Yes, Mr. Doctor. Thanks, Mr. Doctor' […]", adding that this hierarchy, contradicting patient-centric care, "still exists". Several doctors contested this view and explicitly or implicitly stated that "it is even less hierarchical. Especially at primary care clinics, it is not a strong hierarchy. Sometimes a little bit too little". One doctor explained the historical development:

> *It has been a development from the hierarchy with the doctor, nurse, and patient [illustrating a distinct hierarchy among these three actors]; […] Now, we are talking about patient-centric care with the patient as a part of the circle.*

However, not all seemed to agree that this change has been realized. One nurse representative talked about systematic changes needed to "find a new way of collaborating where the competencies are connected in a new way. [...] We have to start from the patient's perspective […] Partly, by having the patient as a part of the team". This argument seems to align with the Swedish government's perspective on this matter, which in April 2020 stated that one of its goals for primary care in Sweden is "a person-centric care with more patient involvement" (Socialdepartementet, 2020: 21).

According to DCPs, "by putting the patient's needs in the center and using digital tools" (KRY et al., 2020b: 2) they are fundamentally changing healthcare. While these actors did not explicitly talk about patient-centricity, they spoke vividly about the patient or user journeys. One DCP executive explained: "We are looking at the whole ecosystem for a patient. It includes contact with the healthcare provider, the pharmacies, and also the transportation to the site of care. All our collaborations are created around the patient journey".

Digital and physical logics. The controversy about patient or doctor centricity is related to a larger conflict between digital and physical logics: "[today], the sick need to go to the healthy [healthcare professionals] all the time. […] But through technology, the healthy go to the sick ones", as a patient representative described. But this controversy went beyond patient and doctor centricity, rather it had fundamental ties to other conflicts, such as to what extent accessibility is a problem, and whether digital visits are valid. In essence, it illustrates a clash between the nature of digital solutions—deemed as "too smart, too practical, and too good" to stop (Senior Executive, Pharmacy Association)—and the contemporary, physical healthcare system divided by regional borders. Many actors—including DCPs, pharmacy, and region representatives—argued that digital care "doesn't recognize any regional borders" (Senior Executive, DCP) and thus constitutes a conflict with Sweden's regionalized healthcare system, which another DCP executive described as running "20+ countries when it comes to healthcare".

> *By definition, a digital service is not bound by geographical boundaries. (Region Representative)*

The conflict seems to have triggered a new way of working for institutions, as SKR issued national recommendations in areas—e.g., on reimbursement levels—that "normally should be treated on a regional level" (SKR, 2019d: 8). Although not explicitly opposing DCPs, one industry expert argued that they represent "a way of working; not a healthcare system" and several doctors stressed that "they should be integrated into the doctor's job". Thus, rather than highlighting the clashes of two systems, these actors seemed to start from the current system when analyzing the feasibility of DCPs. Moreover, while doctors have called for more personnel and more "resources to get a well-functioning primary care", digital solutions did not adhere to the linear cost-assumption held in a physical world since automated, digital visits "can have zero marginal cost" (Senior Executive, DCP). This called for a shift in mindset:

Almost all political reforms are focused on more money and more people in the healthcare system. But we observe that this is not how one thinks if one has understood the potential stemming from new technology. (Region Representative)

Elaborating further, the actor suggested that DCPs were a stepping-stone towards an entirely new reality where technology will "enable us to constantly monitor our health", thus highlighting that technology could yield better preventive care. However, the organizational challenges to this were prominent, as one healthcare provider executive rhetorically asked: "Is it still the task of primary healthcare to take care of this prevention; or is it maybe time for another level of healthcare?".

In general, this controversy seems to have sparked development. As mentioned in the controversy about digital visits' validity, several actors highlighted that resistance among doctors "has changed because now many doctors have tried working with this and they see that you can actually help" (Senior Executive, DCP), implying a shift of mindset. As aforementioned, the national investigation titled "Digiphysical care", which could be understood as a merger of views within this controversy, suggested that DCPs should be integrated as subcontractors to healthcare centers (SOU 2019:42). Even though three DCPs described the investigation as lacking "comprehension of the digital industry's logic" (KRY et al., 2020a: 1), they all agreed on the idea of digiphysical care: "that's what we have been planning to do in the last two to three years […]. We will have physical primary healthcare centers across the whole of Sweden" (Senior Executive). This movement will, according to several DCPs, "change how physical healthcare is done" (Senior Executive).

Furthermore, as regions are developing their own digital solutions—currently, 15 out of 21 regions offer digital visits (Åsgård, 2020a)—and pushing towards digiphysical care, regional departments face significant challenges: "Nothing is built for this—they have to rebuild the whole logic for a digiphysical care" (Region Representative). And while the Swedish government stated that "the work with digitalization needs to be an *integral* part of the ongoing development within primary care" (Socialdepartementet, 2020: 63), in 2019, the government and SKR announced a *separate* investment in 1177, aiming at developing digital tools and enabling a first instance of national care (Cederberg, 2019c), thus basically establishing a national DCP.

Market and professional logics. Many controversies, such as the one debating needs and wants as well as views on DCPs' marketing practices, seemed to be underpinned by a deeper conflict about two different mechanisms governing the actors' line of reasoning: the *market logic* and the *professional logic*. While it was difficult to delineate espoused and opposing views on the matter at hand, this conceptualized conflict seemed to revolve around to what extent actors depicted primary care as a market and showcased business-infused or healthcare-related practices. It also translated into conflicts about where knowledge stems from: in a market logic, the customer is always right, whereas in a professional logic, doctors have the most appropriate knowledge for healthcare-related issues.

While many DCPs stated that they have "a single customer, which is the region paying for all their visits" (Senior Executive), thus implying that primary care does not mirror a typical market, we observed that both DCPs and pharmacies used market-infused words more frequently than others: one DCP executive sized the market and concluded that "from an economical point of view,

it's a quite huge market"; another one explained that the need for accessibility was "a matter of supply and demand"; and a third argued that "in all businesses, start-up companies are driving innovation" (Senior Manager, Pharmacy Chain), implying that DCPs have brought change to the 'market'. While several doctors called the area in which DCPs operate a market, they questioned whether primary care as such constituted a market: "we do not have sellers and buyers—it is a publicly-financed system". An industry expert depicted this as a Swedish phenomenon:

> *Sweden is naive […]. When it comes to that, all breaks are let off. That the market mechanisms should solve the problems. In other countries […], when they construct those systems, they steer and regulate from the very beginning.*

On this topic, region representatives, which generally depicted private actors as a positive force, called for policy suggestions, stating that "healthcare is not a market—but some kind of market conditions that enables us to welcome innovations faster but in a sustainable manner [are needed]". The need for speed should be seen in the light of a slow public system that does "not see the forest because of all the trees" (Senior Manager, Pharmacy Chain), which almost all actors agreed upon. Thus, as regional representatives and pharmacies concluded, DCPs "have been the battering ram for this whole development" (Region Representative).

A fundamental part of markets is the concept of competition, which seems to govern both DCPs' and pharmacies' behavior. Many of them stated that the growth of e-commerce put pressure on pharmacies. "Suddenly people buy their medicine over the internet instead" (Senior Executive, DCP), which made the big pharmacy chains consider "where they should end up in terms of online sales" (Senior Executive, Online Pharmacy). Thus, as one industry expert concluded, pharmacies have "realized that their possibility to expand is to enter the healthcare system"—a move perfectly natural for companies, according to another expert: "Businesses try to integrate either horizontally or vertically. That's what they try to do". Moreover, as regions are developing their own digital solutions (Åsgård, 2020; Cederberg, 2019c), DCPs have responded with criticism, arguing that it constituted an "unhealthy competition against private actors" (KRY et al., 2020a: 4). One actor called this movement "inefficient" and "expensive", hinting towards a business mindset of economies of scale.

> *[…] Every region will put a lot of money and projects and development into building their own solutions on a regional level when we actually have strong, central, quite efficient solutions that could actually handle this. (Senior Executive, Pharmacy Chain)*

Several doctors and one industry expert also criticized the regions' initiatives. One doctor stated that their solutions had "the same disadvantages that KRY has", while the industry expert outlined that continuity got lost in these solutions, regardless of whether the ownership was private or public: "I fear that the regions miss this point when they develop these systems. 1177, for instance, it is not a good system, the thing with centralized consultation […]". Besides worsened continuity, a doctor representative feared that, even though DCPs might become an integral part of the capitation-based system, they might still cherry-pick patients: "The risk I see is that KRY and company launch clinics for healthy ones", implying that healthy patients were economically beneficial. In general, these arguments outlined by doctors seemed to stem from a professional

logic which entails a strong focus on patients' medical needs, particularly that the ones with the greatest needs should be prioritized.

> *[…] The dividing line here is that we often talk about the right care to the right patient and the most resources to the one needing it most—and the ones that need us the most are the sickest with the most complicated disease history and maybe the elderly. They are the ones that cannot get helped via digital care. (Doctor)*

The professional logic also seemed to circle the doctor as a central part of medical practices—a claim that several actors agreed on. One DCP executive argued that doctors "see continuity as a product of the built-in knowledge within every clinician. They have really, really hard times saying that the computer can provide you with this knowledge". While doctors did not explicitly state their claim on the truth, they did so implicitly by reverting back to the validity of digital visits. In video calls, one doctor said, "you cannot examine the person […] you just have to rely on what he is telling you", implying that *without* an investigation by a doctor, knowledge about diseases cannot emerge.

While DCPs and patient and nurse representatives did not seem to share an underlying market logic, they jointly argued against the prominent professional logic among doctors. DCPs argued that digital solutions resemble a well-needed "liberating revolution" (KRY, 2018) since, as a patient, you could not "decide yourself if you are sick or not. You need a healthcare professional […] to tell you that 'yes, you are actually sick'" (Senior Executive, DCP). Patient and nurse representatives called for patient empowerment since "we have different competencies. The healthcare system has the medical [knowledge], but I am an expert in being myself and might have lived with this chronic disease over 20 years" (Patient Representative).

Table 3 provides an overview of all the opinions held by different actors within each controversy. Notably, DCPs and pharmacies seemed to converge more in their opinions, while somewhat opposing views were held by doctors and experts. Additionally, patient and nurse representatives' opinions appeared to overlap.

TABLE 3
Summary of Controversies and Opinions Held by Different Actors[12]

Controversy	Opinions	Actors that agree (X = all; / = some)						
		Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Validity of digital visits	Technical limitations make digital visits unnecessary				X			
	Digital visits could handle some important cases	X	/					
Model and level of reimbursement	Fee-for-service visit leads to negative incentives				X	X		
	Reimbursement model should be nationalized	/		/				
System effects of DCPs	DCPs create double visits and do not offload				X			
	DCPs offload by triaging patients and treating easier cases more efficiently	X	/					
	DCPs drain resources through double and/or unnecessary visits				X		/	
Marketing practices in healthcare	DCPs' marketing messages have been appalling				X			
	Marketing does not belong in healthcare				X			X
	Marketing is necessary to create awareness	/						
Legitimacy of integration with pharmacies	Cross-ownerships should be prohibited since it implies risks that cannot be hindered by ethical codes				X	X		/
	Cross-ownerships are legal since there are no problems today and ethical codes shield against risks	X	X					
Problematiza-tion of accessibility or continuity	Accessibility is a problem, but continuity is a more severe problem				X	/		
	Accessibility is a significant problem	X	/				X	X
Needs or wants	DCPs have created a demand for healthcare for cases that should not be subject to healthcare				X			
	DCPs meet a latent demand for accessible care	X	X	/			/	

[12] See Appendix C for an extended table, including quotes.

TABLE 3 (Continued)

Controversy	Opinions	Actors that agree (X = all; / = some)						
		Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Needs or wants (continued)	Digitalization brings new requirements for accessibility	X	/	/				
	Integration with pharmacies improves the customer journey and offloads	X	X					
	Integration with pharmacies might affect prescription procedures negatively				X	X		
Person and/or doctor continuity	Fixed doctor contacts should be enforced				X			
	Fixed healthcare contacts should be enforced						X	X
	Person-continuity could partly be replaced with journals	X						
Patient or doctor centricity	Doctors' power has decreased				/			
	Doctor-centric hierarchy still exists, patients should be empowered						X	X
	Patients should be the central point in the patient journey	X					X	
Digital and physical logics	Digital solutions ignore borders	X	/	X				
	Digital solution has zero marginal costs which calls for a new mindset	/		/				
	DCPs should be integrated as a tool				X	/	/	
Market and professional logics	Competitive pressures led markets to converge	X	X			/		
	Regions' own digital initiatives lessen efficiency gains of digital solutions	X	X					
	Healthcare has market aspects	X	X	/				
	Healthcare should not be seen as a market				/	/		
	Patients should be in charge of their healthcare	X			/		X	
	Doctors reject digital tools because it questions their competence	X	/	/				

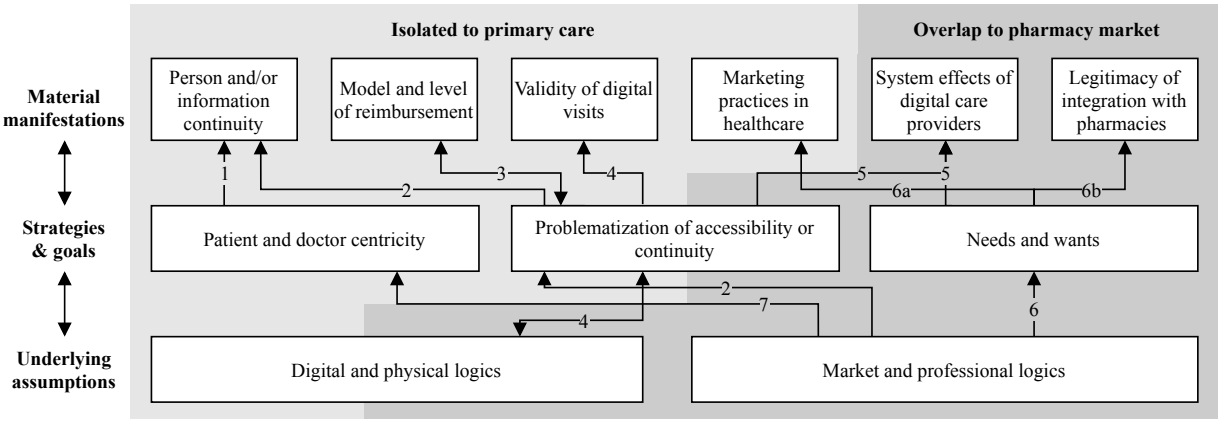
5. DISCUSSION

Our analysis revealed a set of interlinked controversies unfolding in the Swedish primary care and pharmacy market that are connected to the emergence of DCPs. Additionally, our data suggest a heretofore-unconceptualized order of controversies in markets on different levels, linked by chains of translation. In this section, we propose a three-level model of controversies in markets and discuss their impact on markets' dynamics, in particular on markets' plasticity.

5.1 Three Controversy Levels in the Swedish Primary Care and Pharmacy Market

When following the actors in our case and mapping out the different views and opinions that resulted in emergent controversies, we realized that the issues brought up seemed to be all interwoven and interlinked. While actors' initial positions were clearly separable and straight forward—"they are good, they are bad"—, they followed up with objections, calls for development, or elaborated reasonings, representing the controversies' complexity. The discussion about whether a digital visit is a valid tool to diagnose patients appeared to be inseparably connected with a bigger question about what the healthcare sector's goals and purpose should be—e.g., being accessible—and what underlying logic should be steering it—e.g., market or professional logics. Yet, the controversies differed in their degree of abstraction and materiality, ranging from rather contained discussions with a material manifestation at the heart of the controversy—e.g., DCPs' marketing messages—to fundamental disagreements about a system's or market's nature and purpose—e.g., the debate around the extent to which primary care should be seen as a market. The controversies were not only linked across but also within levels making the separation of themes inherently complex and not exclusive, something Venturini acknowledges: "if the cartography of controversies is complex, it is because collective life itself is complex" (2010: 263).

FIGURE 4
Controversy Levels Interlinked via Chains of Translations



Chains of translations

1. Different goals on patient and doctor centricity seemed to lead to different conclusions on whether *doctor* contacts or *healthcare* contacts should be fixed
2. The professional logic seemed to inform actors to argue for continuity and, in turn, fixed doctor contacts
3. Reimbursement models seemed to reinforce actors' objectives with regards to accessibility and continuity, and vice versa
4. A digital logic seemed to make actors call for accessibility issues within primary care and, in turn, view digital visits as valid. Additionally, actors arguing for the validity of digital visits stressed the goal of accessibility and seemed more at ease with a digital logic
5. Actors' choice to focus on either accessibility or continuity, as well as their definition on needs and wants seemed to determine their views on system effects
6. The clash between market and professional logics seemed to divide actors into different stances on needs and wants and, in turn, legitimizing/delegitimizing (a) marketing practices within healthcare and (b) integration with the pharmacy market
7. Actors referring to professional logics seemed to hold a more doctor-centric view, while actors guided by market logics called for more patient-centric views

Derived from these findings, we conceptualized three different controversy levels, as shown in Figure 4. Markets are emergent social phenomena and, hence, share similarities with cultural aspects. Thus, Schein's (1985, 2016) work[13], advocating that cultures in organizations can be analyzed on three levels—referring to the degree an observer can recognize a cultural phenomenon—, inspired us. Consequentially, we conceptualized the controversy levels as (1) material manifestations, (2) strategies and goals, and (3) underlying assumptions. The levels are connected through chains of translations, which are described in Figure 4. In the following, we present the levels based on the controversies outlined in our case.

Material manifestations. Some of the controversies we identified were more vivid than others. The ones conceptualized at the surface level, i.e., material manifestations, were the ones that seemed to be discussed most vividly, drawing public attention and making headlines. The actors on all sides of the debates were quick to point out their opponents' flaws, criticizing them in rather harsh words. DCPs' marketing messages made doctors furious, while the question of whether the new actors added value to the primary care made DCPs accuse their counterparts of not having a holistic view. The public visibility of these topics in the press coverage enabled almost anyone to

[13] Schein (1985, 2016) argues that cultures in organizations can be analyzed on three levels: artifacts, espoused beliefs and values, and basic underlying assumptions. While artifacts represent the tangible manifestations of culture, underlying assumptions unconsciously form the culture's DNA.

enter the discussion. Consequently, our findings show that all actors brought up at least one—more often numerous—of the controversies at the surface level.

The controversies seemed to be circling a material manifestation of the overall debated phenomenon. Whether it was the digital application of DCPs that triggered the fierce debate regarding the medical validity of digital visits, or the connected discussion about an appropriate amount of reimbursement for those visits, the center of the issues was closely connected to something material. This made the controversies more concrete and contained than others.

Our data suggest that actors were quicker in reaching compromises on the surface level than on the other levels. Actors acknowledged that the debates about marketing practices and the reimbursement level had previously been more controversial but abated in recent times, primarily because opponents—especially DCPs—have changed and adjusted their offering or position significantly. While the issues have been or were close to being resolved, the early controversies seem to be sticky. Actors kept bringing up old disputes they had strong feelings about—such as doctors complaining about commercials that ran one year ago.

Strategies and goals. The aforementioned debates surrounding material manifestations seemed to be connected to more abstract questions about the goals and strategies within healthcare. We found significant differences in how actors approached the system's goals and how to reach them. Actors did not agree whether patients' medical needs should be steering the system or the wants of customers who should be followed along their journey. Yet, debates seemed less heated than the ones at the surface level. Despite their disagreements, DCPs and doctors had more temperate discussions about accessibility and continuity than about marketing practices.

The viewpoints actors held on the intermediate level seemed to inform many of their positions regarding material manifestations. While actors that argued for continuity in healthcare consequently called for the establishment of fixed doctor contacts, others that stressed the importance of accessibility saw digital visits as an important tool to make healthcare more accessible. Although the ongoing translations between the two levels were rarely completely linear, actors' stances on material manifestations and strategies and goals were always connected in some shape or form.

While none of the controversies about strategies and goals seemed to have been fully resolved, actors were able to reach compromises over time. However, as exemplified by the government's decision to state accessibility *and* continuity both as goals of primary care, agreements did not seem to include major concessions by any actor group, but rather acknowledging both sides of the discussion. We also found that the discussions on the intermediate level were not entirely new to healthcare and some—such as the ongoing shift to more patient-centric care—were part of long-term developments, yet they seemed to have been fueled by DCPs' emergence. These positions on strategies and goals seemed to act as lenses through which actors interpreted new material manifestations, consequently influencing their views on those controversies.

Underlying assumptions. The differences in strategies and goals actors pursued seemed to stem from disagreements on a fundamental level. We understood that actors did not only have opposing views on technical details but also very different visions of the world. DCPs and pharmacies naturally seemed to converge through a shared belief in the market logic. Contrastingly, most

doctors perceived the developments as incompatible with their world view, governed by a professional logic and their self-image as doctors. However, it should be noted that the profession is no homogeneous group, rather it seemed to be home to multiple identities since some doctors also work at DCPs.

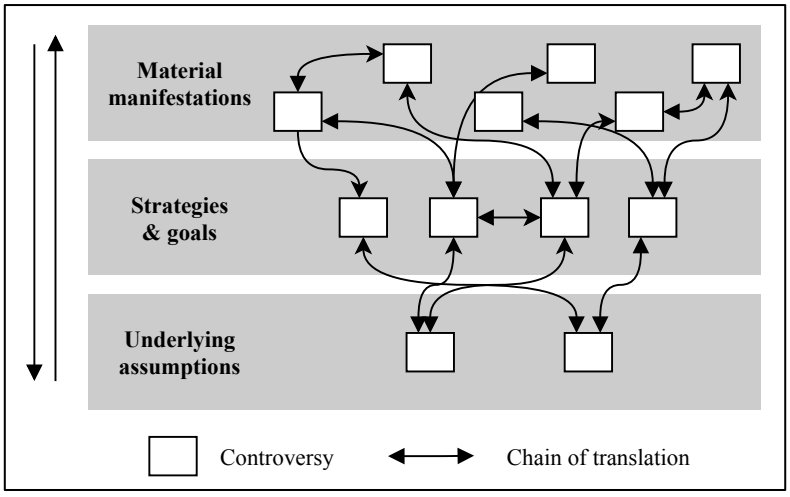
Although those underlying assumptions were seldomly articulated, they seemed to hold information about the very purpose of the market and healthcare system, its boundaries, and guiding principles. They seem to act as a glue, tying actor-networks together and bridging market boundaries, as seen with the collaborations of DCPs and pharmacies. Additionally, we found that the very DNA of a digital logic questioned physical spaces in general, which became clear when actors had different starting points when assessing systems. While DCPs looked at the development through a digital lens and thus called for a systemic change, doctors understood digital tools as mere add-ons to the existing landscape.

Our data suggest that those controversies on the fundamental level represent long-term disagreements. While they seem to remain latent most of the time, they translate into the disputes on the intermediate and surface level. The discussion around the legitimacy of market-infused logics in healthcare has a long tradition in Sweden and around the globe, yet the developments described in our case seemed to lead to a resurgence. Since the worldviews seem to be almost incompatible, changes seem to happen only over a long-time horizon—rather generations than years—and in small steps. While actors often seemed to agree to disagree, they quickly abandoned understanding for the opponents' views when controversies flared up.

5.2 Three Controversy Levels in Markets

Based on our findings, we argue that the three controversy levels we have conceptualized can be observed in markets in general. Recent research has acknowledged that controversies in markets are rather the rule than the exception (Callon, 2016; Callon et al., 2009; Geiger et al., 2014). Despite the healthcare sector's particularities, we suggest that controversies in markets play out on the aforementioned three levels, connected through chains of translations. Figure 5 shows our model of market controversies, which we present and discuss below.

FIGURE 5
Three-Level Model of Controversies in Markets



Controversies at the surface level are disagreements about material manifestations of markets such as exchange objects or devices. In line with the market practices approach, material objects are central to markets' functioning and even the most mundane material aspects may play a vital role (cf. Callon & Muniesa, 2005; Cochoy, 2010; Muniesa et al., 2007). Borrowing the words of Kjellberg & Helgesson (2006), the surface level deals with *the world out there*. These controversies play out in the open, are easy to follow, and make headlines. Resembling *hybrid forums* (Callon et al., 2009), they thus enable a multitude of actors—including laypeople—to join the discussion and contribute. Consequently, material manifestations are fiercely debated. We argue that those controversies resemble ping-pong matches, displaying a high frequency of exchanged arguments or attacks. Yet, although they are somewhat easily settled through small compromises or adaptions—i.e., 'cooled down' (Callon, 1998c)—, early controversies seem to be sticky. Resembling the first cracks in a solid substance, they expose fault lines and set the tone for subsequent debates.

Controversies at the intermediate level concern disputes about strategies and goals in markets. More abstract and normative than material manifestations, strategies and goals refer to actors' ideas about what they should strive for in markets and how it should be accomplished. Thus, they translate underlying, unspoken assumptions into strategic statements, which then inform viewpoints on surface controversies. Compared to disagreements about material manifestations, actors debate less fiercely and over longer time horizons. However, they tend to acknowledge the opponents' opinions, which makes compromises including both views possible. Thus, the intermediate level serves as a platform to negotiate and mediate incompatibilities between different market versions (Mol, 2002; Sjögren & Helgesson, 2007).

Controversies at the fundamental level relate to clashes of underlying assumptions. Those rarely articulated assumptions form actors' mental models (Storbacka & Nenonen, 2011a, 2011b) and represent ideas about the markets' very purpose, guiding principles, and fundamental logics. These ideologies "are not meant to be descriptions of the world as it is, but visions of the world as it should be" (Venturini, 2010: 267), representing an idealized state with a strong normative, almost utopian character. Thus, the controversies seem almost impossible to settle since the opposing

world views act as "major communication obstacles in the resolution" (Venturini, 2012: 808), especially when actors suffer from cognitive myopia (Storbacka & Nenonen, 2011a). Following Callon, controversies about actors' fundamental assumptions are struggles "between worlds that are trying to prevail […]. Each statement, each model, battles to exist" (2007: 332).

The three levels are connected by chains of translations (Latour, 1986, 1999a). Following Kjellberg & Helgesson (2006), these translations are bidirectional; they translate actors' few fundamental assumptions into numerous material manifestations, but they also translate material controversies into underlying assumptions through abstraction. Thus, the model is V-shaped with few underlying assumptions, each translating into multiple strategies and goals, which again translate into multiple material manifestations. As outlined, the app of a DCP is more than a technical device—it embodies the goal of accessible healthcare driven by a fundamental digital logic. These translations rarely occur in an orderly, linear vertical fashion, instead they zigzag, leading to different, changing, and heterogeneous coalitions of socio-technical agencements along the three levels. Those socio-technical agencements (Callon, 2007) include market actors—e.g., DCPs—but also technical devices—e.g., digital care app—and incentive systems—e.g., fee-for-service system. Furthermore, these agencements appear to be bridging traditional market structures, making the markets' borders subject to debate. Sharing similar assumptions, DCPs' and pharmacies' collaborations questioned the long-kept separation of the two markets.

5.3 Controversies and Their Implications for Markets' Plasticity

Until now, we have shown how controversies played out on three separate levels in our empirical case and argued that they are likely to do so in other markets as well. In the following section, we suggest that these levels have different implications for markets' plasticity and the dialectical forces governing it by picking up the argument made by Nenonen et al. (2014) that market plasticity—markets' *ability* to take new forms or retain old ones—could be observed on different levels of aggregation: on the level of an aggregated market as well as on a disaggregated level through manifestations of plasticity—e.g., exchange objects. Further, we discuss the differing time dimension of market plasticity on the three levels.

Material manifestations. Controversies at the level of material manifestation are more visible and get public attention. However, changes to markets' plasticity are more difficult to observe. As DCPs introduced a new exchange object, i.e., enabling digital visits, the market's ability to take on new forms seemed to slightly increase (Finch & Geiger, 2011) since launching new products, reconfiguring, and bundling old ones is easier in a digital environment. Contrastingly, when doctors mobilized the resistance and delegitimized the newcomers based on evaluation criteria tied to traditional, physical consultations, it highlighted the market's strong existing forces of retaining established forms. Despite the regions' developments of own digital services, it remains unclear whether DCPs long-lastingly increased primary care's ability to take new forms based on the controversies surrounding material manifestations.

Furthermore, the high visibility enables a more frequent back-and-forth, illustrating the interplay of taking and retaining forces. As actors engage in the aforementioned metaphorical ping-pong game, they can quickly react to each other's actions. DCPs' marketing practices, stemming from an inherent market perspective on how to inform customers about their existence, evoked strong emotions among doctors. This critique, in turn, made the actors learn more about tonality in

marketing messages, a lesson that doctors described as "lip service". The practice itself led to an institutional agreement on how to market healthcare services, working as a double-edged sword (Tracey & Phillips, 2011), enabling actors to market their services but constraining the way the practice is conducted. This again highlights the market's somewhat stable ability to maintain form, only allowing incremental material changes.

Strategies and goals. More abstract than the ping-pong matches concerning material manifestations, controversies around strategies and goals resemble actors' game plan espousing the way to victory—tailored to opponent and situation. The controversies seem to undertake a longer time perspective, generating interlinked strategic shaping efforts (Jaworski et al., 2000) manifested in the material world—e.g., the strategy of focusing on accessibility, governed commercial messages among DCPs. This level seemed to generate both taking and retaining forces, carrying greater possibility to impact plasticity. The collaborations between DCPs and pharmacies marked a strategic shift, which later on created an industry-standard or business recipe (Baldwin & Clark, 2006; Prahalad, 2004; Spender, 1989), thus serving as a retaining force across the two markets.

Actors seemed better able to reach agreements on the intermediate level. Since espoused strategies and goals are more abstract than material manifestations, yet also articulated and more visible than underlying assumptions, opponents seemed to negotiate and debate disagreements. Thus, various actors could agree on the strategy of digiphysical care as a desirable goal. Consequently, this level seemed to have a cooling-effect (Callon, 1998c) on markets by enabling actors to negotiate, mediate, and resolve incompatibilities between the strategies (Mol, 2002; Sjögren & Helgesson, 2007). This appeared to impact markets' ability to take form by acknowledging new strategies, but also the ability to stabilize forms by including existing goals into the consensus. However, conflicting strategies still exist in markets—as portrayed in the conflict between needs and wants—, inducing greater possibility for markets to take form and also allowing for the coexistence of multiple versions of the market.

Underlying assumptions. The dialectical forces played out at the level of underlying assumptions represent different philosophies of how to play ping-pong. While these dialectics seem to have a stronger ability to induce stability or generate fluidity than the levels above, they need ties to espoused goals and material manifestations in order to impact the market. The clash between digital and physical logics is neither new nor isolated to healthcare—but it did not affect the market directly. Material components of the respective socio-material agencements, such as the app and the call for greater accessibility, played an essential role. However, underlying assumptions, as such, are not insignificant for market plasticity—rather the opposite. As visions of how the world should be (Venturini, 2010), these underlying assumptions work as axioms for what is right and wrong. Hence, depending on the degree of dissemination and actors' adhesion, these assumptions could constitute a strong retaining force in markets—e.g., the professional logic's idea of doctors' precedence to medical truth seems to have been shared for a long time within healthcare. Contrastingly, when multiple, coexisting assumptions clash, they seem to significantly increase markets' ability to take form—e.g., the market logic challenging the aforementioned claims of truth by emphasizing customers' perceptions. In the latter case, the "struggle between worlds that try to prevail" (Callon, 2007: 332) is evident.

Incorporated in the underlying assumptions are ideas about the market itself and its borders. Integration seems to be a natural component in the market logic in contrast to the professional logic's clear idea about separating the two markets at hand. This seemed to have a historic aspect, implying that underlying assumptions accumulate struggles over time and incorporate them into the market (Callon, 2007). When being challenged, underlying assumptions appear to surface into fierce public debates, as in the case of the legitimacy of cross-ownerships. Extending Venturini's (2010) magma metaphor, the lower, more viscous layers of magma start to set the upper, more liquid layers in motion, leading the whole volcano to occasionally erupt smaller or bigger pieces of magma.

Arguably, underlying assumptions mainly reside in market actors' mental models, comprising the world of ideas (Kjellberg & Helgesson, 2006). However, the clash between digital and physical logics also constituted a force that pressured institutions to take on an entirely new form. Due to digital services' spatial boundlessness, institutions were portrayed as incapable of hindering or steering the development. The elusive character of digital solutions thus highlights and amplifies the inevitable difficulties laws and regulations have with drawing boundaries since "the rigid and linear market boundaries envisioned by the law simply do not have parallels in the real world; border zones are invariably wide, and blurry" (Christophers, 2015: 129).

6. CONCLUSION

Markets are omnipresent in our societies. In recent years, they have increasingly become contested spheres. Thus, controversies play an important role in markets' dynamics. We have shown that following actors and their controversies can contribute to our understanding of markets' change processes and their plasticity. In this section, we conclude our work by summarizing theoretical and empirical contributions, pointing out implications for future research and practitioners, and discussing possible limitations of our research.

6.1 The Role of Controversies in Markets

The purpose of this work was to increase understanding of the role controversies play in market dynamics and how they relate to markets' plasticity. We chose the Swedish primary care and pharmacy market as a suitable empirical setting to discover how the emergence of DCPs triggered such controversies and affected the respective markets. Therefore, we posed the two following questions at the outset:

> *How do market controversies affect the plasticity of a market?*
>
> *How did the emergence of digital care providers affect the Swedish primary care market and its adjacent pharmacy market?*

Our research shows that controversies play an important role in the working and shaping of markets. Describing and understanding the disputes that arise when various actor-networks with different worldviews clash, enabled us to conceptualize a three-level model of controversies in markets. Our contributions to existing research are three-fold. First, we contribute to the growing body of market studies within the marketing discipline by making markets and their workings the central focus of our work (cf. Araujo et al., 2010a; Geiger et al., 2014). Especially, we contribute to the rather nascent research stream on controversies' impact on markets (Blanchet & Depeyre, 2016; Callon et al., 2009; Kjellberg & Helgesson, 2006) by explicitly using them as a lens to structure our case and developing a three-level model to conceptualize how controversies play out in markets. Second, we demonstrate the applicability of the concept of market plasticity in empirical settings. Third, we argue that controversies have differing impacts on markets' plasticity, depending on the level they play out—the deeper the conflict, the greater the impact on market plasticity.

As an empirical objective, we tried to gain insights into the developments within the Swedish healthcare sector related to DCPs. Our findings show that the emergence of DCPs has pushed an overall development towards digiphysical healthcare combined with a stronger focus on accessibility. Additionally, they seem to have established a business recipe for pharmacies for how to improve customer journeys and cope with the threat of e-commerce. These collaborations surfaced questions about the legitimacy of the integration of the primary care and pharmacy market. Finally, DCPs seem to challenge fundamental assumptions within healthcare, promoting market logics in a sphere driven by professional logics.

Overall, similar to market plasticity, controversies seem to have a dual character. They are not merely destructive, rather they are also productive. While they solidify and stabilize opponents' positions, they also drive fruitful debates and lead markets on different trajectories. Controversies

play out differently over time and impact markets' plasticity over short or long periods—depending on the nature and level of the controversy. When actors' attempts to change a market meet opposition by established actor-networks who try to maintain stability, disputes about material manifestations, strategies and goals, and underlying assumptions arise. Thus, controversies allow us to follow markets in the making.

6.2 Implications for Practitioners and Future Research

By studying the controversies in the Swedish primary care and pharmacy market, we have shed light on their impact on markets. This has implications for practitioners being confronted with contested market spaces. First, our research suggests that controversies have deeper roots. Managers could gain from having awareness and understanding of these underlying assumptions, enabling strategic decision-making, avoiding destructive controversies, and making it easier to comprehend opponents' views on surface-level questions. Second, we claim that businesses can use controversies to their advantage to trigger change, get attention, and shake up inert markets. Yet, practitioners should always bear the potentially detrimental effects of their controversial practices in mind.

Further, this work also has implications for future research at the intersection between controversies and markets. We call on scholars to scrutinize our proposed model conceptually and try it out in various empirical contexts to attest its transferability to markets in general and further develop the three-level conceptualization of controversies. Having demonstrated that controversies play a vital role in markets' dynamics, we encourage academics to leverage them as methodological lenses when investigating market change. Finally, as we have successfully established the applicability of market plasticity in an empirical setting, future research should further investigate our suggestion that manifestations of market plasticity have stronger ties to some controversy levels than others.

6.3 Limitations

It should be noted that our research is not without limitations. First, since we conducted interviews both in English and Swedish, we had to translate Swedish accounts into English. While researchers from the positivist paradigm would argue that this could lead to words and meanings getting 'lost in translation', social constructionists call for acknowledging the translator's role in the process (Berman & Tyyskä, 2011). Holding a 'double role' as researchers and translators is, however, considered to help bridge cross-cultural contexts. Second, due to the limited scope of this thesis, we were not able to collect longitudinal data, which made it more difficult to assess long-term changes regarding underlying assumptions. As discussed, we tried to offset this structural limitation by drawing on secondary data as well as interviewees' historic accounts. Nonetheless, we call for longitudinal designs in future research to be able to track changes over an extended time period.

REFERENCES

Ahlzén, R., Berggren, L., Metsini, A., Olsson, L., & Tegelberg, Å. 2020. Vetenskapligt stöd saknas för digitala diagnoser. ***Dagens Nyheter***. April 18. Accessed online at https://www.dn.se/debatt/vetenskapligt-stod-saknas-for-digitala-diagnoser/. Viewed March 12, 2020.

Alderson, W. 1965. ***Dynamic marketing behavior: A functionalist theory of marketing*** (2nd ed.). Homewood: Richard D. Irwin Inc.

Almgren, J. 2019. Kry rasar mot sänkta ersättningar för nätläkare. ***SvD Näringsliv***. June 14. Accessed online at https://www.svd.se/kry-rasar-mot-sankta-ersattningar-for-natlakare. Viewed March 20, 2020.

Alvesson, M., & Ashcraft, K. L. 2012. Interviews. In G. Symon & C. Cassell (Eds.), ***Qualitative Organizational Research: Core Methods and Current Challenges***: 239–257. London: SAGE Publications.

Alvesson, M., & Sköldberg, K. 2009. ***Reflexive Methodology: New Vistas for Qualitative Research*** (2nd ed.). London: SAGE Publications.

Andersson, P., Aspenberg, K., & Kjellberg, H. 2008. The configuration of actors in market practice. ***Marketing Theory***, 8(1): 67–90.

Apoteket. 2005. ***Apoteket och Capio öppnar Vårdotek i Göteborg - ny vårdform för snabb vård på rätt nivå***. Accessed online at https://news.cision.com/se/apoteket/r/apoteket-och-capio-oppnar-vardotek-i-goteborg---ny-vardform-for-snabb-vard-pa-ratt-niva,c175667. Viewed April 4, 2020.

Apoteket. 2018. ***Apoteket utökar samarbetet med Doktor24.*** Accessed online at http://www.mynewsdesk.com/se/apoteket_ab/pressreleases/apoteket-utoekar-samarbetet-med-doktor24-2812004. Viewed April 4, 2020.

Apoteksgruppen. 2019. ***Apoteksgruppen inleder samarbete med Doktor24***. Accessed online at http://www.mynewsdesk.com/se/apoteksgruppen/pressreleases/apoteksgruppen-inleder-samarbete-med-doktor24-2846112. Viewed April 4, 2020.

Araujo, L., Finch, J., & Kjellberg, H. 2010a. ***Reconnecting Marketing to Markets***. Oxford: Oxford University Press.

Araujo, L., Finch, J., & Kjellberg, H. 2010b. ***Reconnecting marketing to markets: An introduction***. Reconnecting Marketing to Markets. Oxford: Oxford University Press.

Åsgård, S. 2020. Bäst och sämst på digital vård – DS rankar regionerna. ***Dagens Samhälle***. April 9. Accessed online at https://www.dagenssamhalle.se/nyhet/bast-och-samst-pa-digital-vard-ds-rankar-regionerna-32218. Viewed April 29, 2020.

Azimont, F., & Araujo, L. 2007. Category reviews as market-shaping events. ***Industrial Marketing Management***, 36(7): 849–860.

Bain, J. S. 1959. ***Industrial Organization***. New York: Wiley.

Baldwin, C. Y., & Clark, K. B. 2006. Between "knowledge" and the "economy": Notes on the scientific study of designs. In B. Kahin & D. Foray (Eds.), ***Advancing knowledge and the knowledge economy***. Cambridge: MIT Press.

Barry, A. 2002. The anti-political economy. ***Economy and Society***, 31(2): 268–284.

Berman, R. C., & Tyyskä, V. 2011. A critical reflection on the use of translators/interpreters in a qualitative cross-language research project. ***International Journal of Qualitative Methods***, 10(2): 178–190.

Blanchet, V., & Depeyre, C. 2016. Exploring the Shaping of Markets through Controversies: Methodological Propositions for Macromarketing Studies. ***Journal of Macromarketing***, 36(1): 41–53.

Bryman, A., & Bell, E. 2015. ***Business research methods*** (4. ed.). Oxford: Oxford University Press.

Butler, J. 2010. Performative Agency. ***Journal of Cultural Economy: Performativity, Economics and Politics***, 3(2): 147–161.

Caesar, J. 2019. Nätläkaren slopar patientavgiften: "Ser inget annat alternativ". ***Di Digital***. August 6. Accessed online at https://digital.di.se/artikel/min-doktor-slopar-patientavgiften-flyttar-till-sormland. Viewed March 20, 2020.

Çalışkan, K., & Callon, M. 2009. Economization, part 1: shifting attention from the economy towards processes of economization***. Economy and Society***, 38(3): 369–398.

Çalışkan, K., & Callon, M. 2010. Economization, part 2: a research programme for the study of markets. ***Economy and Society***, 39(1): 1–32.

Callon, M. 1986. Some elements of a sociology of translation: Domestication of the scallops and the fishermen of St-Brieuc Bay. In J. Law (Ed.), ***Power, action and belief: A new sociology of knowledge***. London: Routledge & Kegan Paul.

Callon, M. 1992. The dynamics of techno-economic networks. In R. Coombs, P. Saviotti, & V. Walsh (Eds.), ***Technical change and company strategies.*** London: Academic Press.

Callon, M. 1998a. ***The laws of the markets***. Oxford: Blackwell.

Callon, M. 1998b. Introduction: The Embeddedness of Economic Markets in Economics. In M. Callon (Ed.), ***The Laws of the Markets***: 1–57. Oxford: Blackwell.

Callon, M. 1998c. An essay on framing and overflowing: economic externalities revisited by sociology. ***Sociological Review***, 46(1): 244–269.

Callon, M. 2007. What does it mean to say that economics is performative? ***Do Economists Make Markets? On the Performativity of Economics***, 311–357.

Callon, M. 2016. Revisiting marketization: from interface-markets to market-agencements. ***Consumption Markets & Culture: Agencing Markets***, 19(1): 17–37.

Callon, M., Lascoumes, P., & Barthe, Y. 2009. ***Acting in an Uncertain World: An Essay on Technical Democracy***. Cambridge: MIT Press.

Callon, M., Méadel, C., & Rabeharisoa, V. 2002. The economy of qualities. ***Economy and Society***, 31(2): 194–217.

Callon, M., & Muniesa, F. 2005. Economic Markets as Calculative Collective Devices. ***Organization Studies***, 26(8): 1229–1250.

Carpman, A. 2016. Apoteket AB i samarbete med Min doktor. ***Dagens Medicin***. March 2. Accessed online at https://www.dagensmedicin.se/artiklar/2016/03/02/apoteket-ab-i-samarbete-med-min-doktor/. Viewed April 10, 2020.

Cederberg, J. 2017. Kostnaden för digitala vårdcentraler kan fördubblas. ***Läkartidningen***. February 10. Accessed online at https://lakartidningen.se/Aktuellt/Nyheter/2017/02/Kostnaden-for-digitala-vardcentraler-kan-fordubblas/. Viewed April 2, 2020.

Cederberg, J. 2019a. Kry till Sörmland – blir dyrare för regionerna. ***Läkartidningen***. February 12. Accessed online at https://lakartidningen.se/aktuellt/nyheter/2019/02/kry-till-sormland-kan-bli-dyrare-for-regionerna/. Viewed April 2, 2020.

Cederberg, J. 2019b. Sörmland skärper reklamregler för nätläkare. ***Läkartidningen***. April 16. Accessed online at https://lakartidningen.se/aktuellt/nyheter/2019/04/sormland-skarper-reklamregler-for-natlakare/. Viewed April 2, 2020.

Cederberg, J. 2019c. 1177 injiceras med 33 miljoner för utveckling. ***Läkartidningen***. October 24. Accessed online at https://lakartidningen.se/Aktuellt/Nyheter/2019/10/Regeringen-satsar-pa-digital-vard/. Viewed April 2, 2020.

Cederberg, J. 2020. Rekordmånga besök hos nätläkarna. ***Läkartidningen***. February 18. Accessed online at https://lakartidningen.se/aktuellt/nyheter/2020/02/natlakarbesoken-passerade-en-miljon-i-fjol/. Viewed April 2, 2020.

Christophers, B. 2015. The Law's Markets: Envisioning and effecting the boundaries of competition. ***Journal of Cultural Economy***, 8(2): 125–143.

Cochoy, F. 2010. Reconnecting marketing to 'market-things': How grocery equipment drove

modern consumption (Progressive Grocer, 1929–1959). In L. Araujo, J. Finch, & H. Kjellberg (Eds.), ***Reconnecting Marketing to Markets***. Oxford: Oxford University Press.

Corlett, S., & Mavin, S. 2018. Reflexivity and researcher positionality. In C. Cassell, A. Cunliffe, & G. Grandy (Eds.), ***The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions***: 377–398. London: SAGE Publications Ltd.

Dagens Medicin. 2015. Lloyds Apotek startar samarbete med Kry.se på nätet. ***Dagens Medicin.*** June 16. Accessed online at https://www.dagensmedicin.se/artiklar/2015/06/16/lloyds-apotek-startar-samarbete-med-kry.se-pa-natet/. Viewed March 10, 2020.

Denzin, N. K. 2017. ***Sociological Methods: A Sourcebook***. London: Taylor & Francis.

Dubois, A., & Gadde, L.-E. 2002. Systematic combining: an abductive approach to case research. ***Journal of Business Research***, 55(7): 553–560.

Edmondson, A. C., & McManus, S. E. 2007. Methodological Fit in Management Field Research. ***The Academy of Managemen***t Review, 32(4): 1155–1179.

Ellegård, L. M., & Kjellson, G. 2019. Nätvårdsanvändare i Skåne kontaktade oftare vårdcentral. ***Läkartidningen***. Octorber 18. Accessed online at https://lakartidningen.se/klinik-och-vetenskap-1/artiklar-1/originalstudie/2019/10/natvardsanvandare-i-skane-kontaktade-oftare-vardcentral/. Viewed April 10, 2020.

Englund, C. 2018. Doktor.se fyller på kassan med över 100 miljoner. ***Breakit***. May 5. Accessed online at https://www.breakit.se/artikel/13210/doktor-se-fyller-pa-kassan-med-over-100-miljoner. Viewed April 18, 2020.

Finch, J., & Geiger, S. 2011. Constructing and contesting markets through the market object. ***Industrial Marketing Management***, 40(6): 899–906.

Fligstein, N. 1996. Markets as Politics: A Political-Cultural Approach to Market Institutions. ***American Sociological Review***, 61(4): 656–673.

Frankel, C. 2015. The multiple-markets problem. ***Journal of Cultural Economy***, 8(4): 538–546.

Frankel, C. 2018. The "s" in markets: mundane market concepts and how to know a (strawberry) market. ***Journal of Cultural Economy: Special Issue: Mundane Market Matters***, 11(5): 458–475.

Gabrielsson-Järhult, F., Areskoug-Josefsson, K., & Kammerlind, P. 2019. ***Digitala vårdmöten med läkare.*** Jönköping: Jönköping Academy of Improvement of Health and Welfare.

Gardell, R. 2019,. Nätläkare: "Vi är lika bra – om inte bättre". ***Dagens Samhälle***. March 15. Accessed online at https://www.dagenssamhalle.se/debatt/natlakare-vi-ar-lika-bra-om-inte-battre-26632. Viewed April 10, 2020.

Geiger, S., Harrison, D., Kjellberg, H., & Mallard, A. 2014. ***Concerned markets: economic ordering for multiple values***. Cheltenham: Edward Elgar Publishing Limited.

Geiger, S., Kjellberg, H., & Spencer, R. 2012. Shaping exchanges, building markets. ***Consumption Markets & Culture***, 15(2): 133–147.

Granovetter, M. 1985. Economic Action and Social Structure: The Problem of Embeddedness. ***American Journal of Sociology***, 91(3): 481–510.

Grinyer, A. 2002. The Anonymity of Research Participants: Assumptions, Ehtics and Practicalities. ***Social Research Update***, (36).

Helander, I. 2018. Nu ska marknaden för nätläkare utredas. ***Läkemedelsvärlden***. March 1. Accessed online at https://www.lakemedelsvarlden.se/nu-ska-marknaden-for-natlakare-utredas/. Viewed April 10, 2020.

Healthcare Act of 2017. SFS 2017:30. Accessed online at https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/halso--och-sjukvardslag_sfs-2017-30. Viewed April 20, 2020.

Holm, L., Flodin, J., & Röstlund, J. 2017. Kry: ”Vi skriver ut mindre antibiotika”. ***Dagens Samhälle***. November 29. Accessed online at https://www.dagenssamhalle.se/debatt/kry-vi-skriver-ut-mindre-antibiotika-19714. Viewed April 23, 2020.

Isacsson, M. 2019. Nätläkarna slukar resurser på fel sätt. ***Svenska Dagbladet***. March 12. Accessed online at https://www.svd.se/natlakarna-slukar-resurser-pa-fel-satt. Viewed April 10, 2020.

Jackson, W. A. 2007. On the social structure of markets. ***Cambridge Journal of Economics***, 31(2): 235–253.

Jaworski, B., Kohli, A., & Sahay, A. 2000. Market-driven versus driving markets***. Journal of the Academy of Marketing Science***, 28(1): 45–54.

Jick, T. D. 1979. Mixing Qualitative and Quantitative Methods: Triangulation in Action. ***Administrative Science Quarterly***, 24(4): 602–611.

Kangro, H. 2018. Min Doktor: Primärvården förtjänar bättre verktyg. ***Dagens Samhälle.*** June 21. Accessed online at https://www.dagenssamhalle.se/debatt/min-doktor-primarvarden-fortjanar-battre-verktyg-22671. Viewed March 30, 2020.

Kjellberg, H. 2010. Marketing on trial: The SAS EuroBonus case. In L. Araujo, J. Finch, & H. Kjellberg (Eds.), ***Reconnecting Marketing to Markets***. Oxford: Oxford University Press.

Kjellberg, H., & Helgesson, C.-F. 2006. Multiple versions of markets: Multiplicity and performativity in market practice. ***Industrial Marketing Management***, 35(7): 839–855.

Kjellberg, H., & Helgesson, C.-F. 2007. On the nature of markets and their practices. ***Marketing Theory***, 7(2): 137–162.

Kjellberg, H., & Olson, D. 2017. Joint markets: How adjacent markets influence the formation of regulated markets. ***Marketing Theory***, 17(1): 95–123.

Kjellberg, H., & Sjögren, E. 2020. Actor-network theory – delight in the details. In U. Eriksson-Zetterquist, M. Hansson, & F. Nilsson (Eds.), ***Theories and Perspectives in Business Administration***: 245–268. Lund: Studentlitteratur.

Kjellberg, H., Storbacka, K., Akaka, M., Chandler, J., Finch, J., et al. 2012. Market futures/future markets: Research directions in the study of markets. ***Marketing Theory***, 12(2): 219–223.

Krey, J. 2017. Nätläkarbolag bemöter kritiken. ***Dagens Medicin***. March 3. Accessed online at https://www.dagensmedicin.se/artiklar/2017/03/03/natlakarbolag-bemoter-kritiken/. Viewed, April 10, 2020.

Kronans Apotek. 2017***. Doktor.se och Kronans Apotek i samarbete.*** Accessed online at http://www.mynewsdesk.com/se/kronans-droghandel/pressreleases/doktor-punkt-se-och-kronans-apotek-i-samarbete-2314961. Viewed April 3, 2020.

KRY. 2018. "Traditionell primärvård kan ha spelat ut sin roll." ***Dagens Nyheter***. April 5. Accessed online at https://www.dn.se/debatt/repliker/traditionell-primarvard-kan-ha-spelat-ut-sin-roll/. Viewed March 25, 2020.

KRY. 2019a. ***KRY och MEDS samarbetar för smidigare och snabbare vård***. Accessed online at https://www.kry.se/press/nyheter/KRY-och-MEDS-samarbetar-för-smidigare-och-snabbare-vård/. Viewed March 28, 2020.

KRY. 2019b. ***KRY introducerar sjuksköterskor, ingår samarbete i Sörmland och utvecklar nytt AI-triage.*** Accessed online at https://www.kry.se/press/nyheter/introducerar-ai-sormland-sjukskoterskor/. Viewed April 10, 2020.

KRY. 2020. ***KRY - Vi hjälper dig, hos dig (16x9 / 15).*** Youtube. Accessed online at https://www.youtube.com/watch?v=izrn5v6VHhI. Viewed April 15, 2020.

KRY, Min Doktor, & Doktor.se. 2020a. ***Remissvar till Socialdepartementet: Digifysiskt vårdval - Tillgänglig primärvård baserad på behov och kontinuitet***. Accessed online at https://assets.ctfassets.net/h8qzhh7m9m8u/6visrGXBNwWEOTk7osYDfX/b43a70fef24c6df7b2e873ab4d99375c/Remissvar_SOU_2019_42_KRY_Min_Doktor_Doktorse_FINAL.pdf. Viewed March 10, 2020.

KRY, Min Doktor, & Doktor.se. 2020b. ***Skuggutredning med anledning av Digifysiskt vårval - Tillgänglig primärvård baserad på behov & kontinuitet (SOU 2019:42)***. Accessed online at https://assets.ctfassets.net/h8qzhh7m9m8u/75lcYTfgLktspfdOvos3lb/89bec8519dbe86ce0690ca48312aa377/kry_mindoktor_doktorse_skuggutredning_digital.pdf. Viewed March 10,

2020.

Läkemedelsverket. 2020. ***Översyn av begränsningar för att få tillstånd att bedriva öppenvårdsapotek***. D.no.: 4.3.1-2019-019711. Accessed online at https://www.läkemedelsverket.se/globalassets/dokument/regeringsuppdrag/rapport-oversyn-av-agarbegransningar-oppenvardsapotek.pdf. Viewed February 20, 2020.

Lambkin, M., & Day, G. S. 1989. Evolutionary Processes in Competitive Markets: Beyond the Product Life Cycle. ***Journal of Marketing***, 53(3): 4–20.

Latour, B. 1986. The powers of association. In J. Law (Ed.), ***Power, action and belief: A new sociology of knowledge***. London: Routledge & Kegan Paul.

Latour, B. 1987. ***Science in action: How to follow scientists and engineers through society***. Cambridge: Harvard University Press.

Latour, B. 1996. ***Aramis, or the love of technology***. Cambridge: Harvard University Press.

Latour, B. 1999a. ***Pandora's hope, essays on the reality of science studies***. Cambridge: Harvard University Press.

Latour, B. 1999b. On Recalling ANT. In J. Law & J. Hassard (Eds.), ***Actor network theory and after***: 15–25. Oxford: Blackwell.

Latour, B. 2004. ***Politics of Nature***. Cambridge: Harvard University Press.

Latour, B. 2005. ***Reassembling the social: an introduction to actor-network-theory***. Oxford: Oxford University Press.

Law, J. 1986. ***Power, action and belief: A new sociology of knowledge***. London: Routledge & Kegan Paul.

Law, J. 1994. ***Organizing modernity***. Oxford: Blackwell.

Law, J. 1999. After ANT: Complexity, naming and topology. In J. Law & J. Hassard (Eds.), ***Actor network theory and after***: 1–14. Oxford: Blackwell.

Law, J., & Urry, J. 2004. Enacting the social. ***Economy and Society***, 33(3): 390–410.

Lee, B., & Aslam, U. 2018. Towards the Wholesome Interview: Technical, Social and Political Dimensions. In C. Cassell, A. Cunliffe, & G. Grandy (Eds.), ***The SAGE Handbook of Qualitative Business and Management Research Methods: Methods and Challenges***: 102–116. London: SAGE Publications Ltd.

Lennen Merckx, J. 2018. Kritik mot digitala vårdgivare: "Nätläkarna dränerar vården på resurser". ***SVT Nyheter***. March 25. Accessed online at https://www.svt.se/nyheter/inrikes/kritik-mot-

digitala-vardgivare-natlakarna-dranerar-varden-pa-resurser. Viewed April 3, 2020.

Levinson, P. 2019. Kostnader för nätläkare skenar. ***Sveriges Radio***. January 21. Accessed online at https://sverigesradio.se/sida/artikel.aspx?programid=83&artikel=7137083. Viewed April 3, 2020.

Levinthal, D., & March, J. 1993. The myopia of learning. ***Strategic Management Journal***, 14: 95–112.

Levitt, T. 1965. Exploit the Product Life Cycle. ***Harvard Business Review***, 43(6): 81–94.

Lincoln, Y. S., & Guba, E. G. 1985. ***Naturalistic inquiry***. Beverly Hills, CA: Sage.

Lindhe, A. 2017. Vårdcentralen såld till doktor.se. ***SN***. December 15. Accessed online at https://www.sn.se/nyheter/vardcentralen-sald-till-doktor-se-sm4532380.aspx. Viewed April 10, 2020.

MacKenzie, D. A. 2003. An Equation and its Worlds: Bricolage, Exemplars, Disunity and Performativity in Financial Economics. ***Social Studies of Science***, 33(6): 831–868.

MacKenzie, D. A. 2004. The big, bad wolf and the rational market: portfolio insurance, the 1987 crash and the performativity of economics. ***Economy and Society***, 33(3): 303–334.

MacKenzie, D. A. 2006. ***An engine, not a camera: how financial models shape markets***. Cambridge, Mass.: MIT.

Market. 2020. Apoteket investerar i digital rådgivare: ”Vi vill öka stödet till våra kunder”. ***Market***. January 16. Accessed online at https://www.market.se/nyhet/apoteket-investerar-i-digital-radgivare-vi-vill-oka-stodet-till-vara-kunder. Viewed February 20, 2020.

Mellgren, F. 2020. Ohederligt att lova egen läkare redan 2021. ***Svenska Dagbladet.*** January 26. Accessed online at https://www.svd.se/ohederligt-att-lova-egen-lakare-redan-2021. Viewed February 20, 2020.

Merriam-Webster. n.d. Triage. ***Merriam-Webster***. Accessed online at https://www.merriam-webster.com/dictionary/triage. Viewed February 25, 2020.

Min Doktor. 2018. ***ICA Gruppen och Apotek Hjärtat satsar på tillgänglig vård med Min Doktor***. Accessed online at https://www.mindoktor.se/press-releases/ica-gruppen-och-apotek-hjartat-satsar-pa-tillganglig-vard-med-min-doktor/. Viewed February 25, 2020.

Mindler. 2020. ***Om Mindler***. Accessed online at https://mindler.se/om-mindler/. Viewed March 25, 2020.

Mir, R., & Watson, A. 2000. Strategic Management and the Philosophy of Science: The Case for a Constructivist Methodology***. Strategic Management Journal***, 21(9): 941–953.

Mir, R., & Watson, A. 2001. Critical Realism and Constructivism in Strategy Research: Toward a Synthesis. ***Strategic Management Journal***, 22(12): 1169–1173.

Mol, A. 1999. Ontological politics: A word and some questions. In J. Law & J. Hassard (Eds.), ***Actor network theory and after***: 74–89. Oxford: Blackwell.

Mol, A. 2002. ***The body multiple: Ontology in medical practice***. Durham: Duke University Press.

Muniesa, F., Millo, Y., & Callon, M. 2007. An introduction to market devices. ***Sociological Review***, 55(2): 1–12.

Myndigheten för vård- och omsorgsanalys. 2020. ***Tre perspektiv på digitala vårdbesök – befolkningens, patienternas och vårdpersonalens uppfattningar***. Report no.: 2020:1. Accessed online at https://www.vardanalys.se/rapporter/tre-perspektiv-pa-digitala-vardbesok/. Viewed March 15, 2020.

Nenonen, S., Kjellberg, H., Pels, J., Cheung, L., Lindeman, S., et al. 2014. A new perspective on market dynamics: Market plasticity and the stability–fluidity dialectics. ***Marketing Theory***, 14(3): 269–289.

Niemi, T., & Vig, J. 2019. Med hjälp av nätläkare kan regionerna spara miljarder. ***Dagens Samhälle***. May 23. Accessed online at https://www.dagenssamhalle.se/debatt/med-hjalp-av-natlakare-kan-regionerna-spara-miljarder-27690. Viewed March 25, 2020.

Nilsson, H. 2020. Läkarbesök i mobilen – här är tjänsterna och så funkar det. ***PC För Alla***. April 8. Accessed online at https://pcforalla.idg.se/2.1054/1.721189/natdoktorer-lakare-online. Viewed April 15, 2020.

North, D. C. 1991. Institutions. ***Journal of Economic Perspectives***, 5(1): 97–112.

Novus. 2020. ***Rapport: Viktigaste politiska frågan.*** Accessed online at https://novus.se/wp-content/uploads/2020/03/novusviktigastefrgafeb2020v1.pdf. Viewed April 20, 2020.

Patient Act of 2014. SFS no.: 2014:821. Accessed online at https://www.riksdagen.se/sv/dokument-lagar/dokument/svensk-forfattningssamling/patientlag-2014821_sfs-2014-821. Viewed April 20, 2020.

Perdahl, T., & Kernell, D. 2019. Hårt slag mot tillgängligheten om digitala vården stryps. ***Dagens Samhälle***. October 2. Accessed online at https://www.dagenssamhalle.se/debatt/hart-slag-mot-tillgangligheten-om-digitala-varden-stryps-29480. Viewed April 10, 2020.

Perdahl, T., & Siljeholm, S. 2018. Ta kritiken mot nätläkare på allvar. ***Göteborgs-Posten***. October 29. Accessed online at https://www.gp.se/debatt/ta-kritiken-mot-nätläkare-på-allvar-1.10234907. Viewed April 10, 2020.

Pinch, T., & Leuenberger, C. 2006. Studying Scientific Controversies: The S&TS Perspective.

Proceedings of EASTS Conference "Science Controversy and Democracy," National Taiwan University, Taiwan.

Porter, M. E. 1980. ***Competitive strategy : techniques for analyzing industries and competitors***. New York: Free Press.

Porter, M. E. 1985. ***Competitive advantage : creating and sustaining superior performance.*** New York: Free Press.

Prahalad, C. K. 2004. ***The Blinders of Dominant Logic***. Long Range Planning, 37(2): 171–179.

Pramsten, S. 2019. Nätläkarbolaget Medicoo i konkurs. ***Läkartidningen***. April 16. Accessed online at https://lakartidningen.se/aktuellt/nyheter/2019/04/natlakarbolag-i-konkurs/. Viewed at April 3, 2020.

Regeringen. 1993. ***Regeringens proposition 1992/93: 160 om husläkare m.m.*** 1992/93: 160. Accessed online at https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/huslakare-mm_GG03160. Viewed April 10, 2020.

Region Sörmland. 2019. ***Frågor och svar om digitala vårdbesök i Sörmland.*** Accessed online at https://regionsormland.se/nyheter/nyhetslista-2019/fragor-och-svar-om-digitala-vardbesok-i-sormland/. Viewed April 10, 2020.

Region Sörmland. 2020. ***Data for visits to digital care providers 2019***. Accessed through personal communication.

Rheinhardt, A., Kreiner, G. E., Gioia, D. A., & Corley, K. G. 2018. Conducting and Publishing Rigorous Qualitative Research. ***The SAGE Handbook of Qualitative Business and Management Research Methods: History and Traditions***: 515–531. London: SAGE Publications Ltd.

Sandel, M. J. 2012. ***What money can't buy: the moral limits of markets***. New York: Farrar, Straus and Giroux.

Schein, E. H. 1985. ***Organizational culture and leadership: a dynamic view*** (1. ed). San Franciso: Jossey-Bass.

Schein, E. H. 2016. ***Organizational Culture and Leadership*** (5th ed.). New York: John Wiley & Sons, Inc.

Schildt, J. 2018, April 5. Traditionell primärvård kan ha spelat ut sin roll. ***Dagens Nyheter.*** April 5. Accessed online at https://www.dn.se/debatt/repliker/traditionell-primarvard-kan-ha-spelat-ut-sin-roll/. Viewed April 21, 2020.

Sjögren, E., & Helgesson, C.-F. 2007. The Q(u)ALYfying Hand: Health Economics and Medicine in the Shaping of Swedish Markets for Subsidized Pharmaceuticals. ***The Sociological Review***,

55(2): 215–240.

SKR. 2018. ***Rekommenderad patientavgift för digital vård.*** Accessed online at https://skr.se/tjanster/press/nyheter/nyhetsarkiv/rekommenderadpatientavgiftfordigitalvard.15326.html. Viewed April 3, 2020.

SKR. 2019a. ***Digitala vårdtjänster i primärvården.*** Accessed online at https://skr.se/halsasjukvard/ehalsa/digitalavardtjansteriprimarvarden.28301.html. Viewed April 3, 2020.

SKR. 2019b. ***Statistik om hälso- och sjukvård samt regional utveckling 2018.*** Accessed online at https://skr.se/download/18.9989e6716e92b2208868b2b/1574697351840/Statistik om hälso- och sjukvård samt regional utveckling 2018-tabeller 191115.pdf. Viewed April 3, 2020.

SKR. 2019c. ***Valfrihetssystem inom hälso- och sjukvård.*** Accessed online at https://skr.se/demokratiledningstyrning/driftformervalfrihet/valfrihetssystemochersattningsmodeller/halsoochsjukvard.1759.html. Viewed April 3, 2020.

SKR. 2019d. ***Meddelande från styrelsen - Utvecklingen av digitala vårdtjänster.*** Accessed online at https://skr.se/download/18.71dfc29d16bc118c79d62f5/1562328895540/Digitala-vardtjanster.pdf. Viewed April 10, 2020.

SKR. 2019e. ***Så får vård marknadsföras.*** Skr.se. Accessed online at https://skr.se/tjanster/press/nyheter/nyhetsarkiv/safarvardmarknadsforas.31185.html. Viewed April 10, 2020.

SKR. 2020a. ***Diagram för regionerna***. Accessed at online https://skr.se/ekonomijuridikstatistik/ekonomi/sektornisiffror/diagramforregionerna.1883.html. Viewed April 10, 2020.

SKR. 2020b. ***Omställning till en nära vård.*** Accessed online at https://skr.se/halsasjukvard/kunskapsstodvardochbehandling/primarvardnaravard.6250.html. Viewed April 10, 2020.

Socialdepartementet. 2020. ***Lagrådsremiss. Inriktningen för en nära och tillgänglig vård – en primärvårdsreform.*** Accessed online at https://www.regeringen.se/497da4/contentassets/ceebc29edc2342729860d245a499cd2f/inriktningen-for-en-nara-och-tillganglig-vard--en-primarvardsreform.pdf. Viewed April 29, 2020.

SOU 2019:42. ***Digifysiskt vårdval: Tillgänglig primärvård baserad på behov och kontinuitet (SOU 2019:42)***. Accessed online at https://www.regeringen.se/rattsliga-dokument/statens-offentliga-utredningar/2019/10/sou-201942/. Viewed January 28, 2020.

Spender, J. C. 1989. ***Industry Recipes: An Enquiry Into the Nature and Sources of Managerial Judgement***. Oxford: Blackwell.

Stark, D. 2009. ***The Sense of Dissonance: Accounts of Worth in Economic Life***. Princeton: Princeton University Press.

Storbacka, K., & Nenonen, S. 2011a. Markets as configurations. ***European Journal of Marketing***, 45(1): 241–258.

Storbacka, K., & Nenonen, S. 2011b. Scripting markets: From value propositions to market propositions. ***Industrial Marketing Management***, 40(2): 255–266.

Svensson, F., & Almgren, J. 2018. Reklam upprör: ”De vill få oss att ringa för minsta lilla”. ***SvD Näringsliv***. July 26. Accessed online at https://www.svd.se/reklam-uppror-de-vill-fa-oss-att-ringa-for-minsta-lilla. Viewed April 20, 2020.

Sveriges Apoteksförening. 2019. ***Branschrapport 2019***. Accessed online at http://www.sverigesapoteksforening.se/branschrapport-2019/. Viewed April 4, 2020.

Tandvårds- och läkemedelsförmånsverket. 2018. ***2018 års uppföljning av apoteksmarknadens utveckling***. D.no.: 2816/2018. Accessed online at https://www.tlv.se/om-oss/om-tlv/rapporter/arkiv/2018-11-19-2018-ars-uppfoljning-av-apoteksmarknadens-utveckling.html. Viewed April 20, 2020.

Thomson, Y., Peterson, U., Haraldsson, L., Salo, R., Ström, H., et al. 2019, April 26. Man bör inte dra alla digitala verksamheter över en kam. ***Läkartidningen***. April 26. Accessed online at https://lakartidningen.se/Opinion/Debatt/2019/04/Man-bor-inte-dra-alla-digitala-verksamheter-over-en-kam/. Viewed May 5, 2020.

Tracey, P., & Phillips, N. 2011. Entrepreneurship in Emerging Markets: Strategies for New Venture Creation in Uncertain Institutional Contexts. ***Management International Review***, 51(1): 23–39.

TT. 2017a. Digitala vårdbesök gratis för alla. ***Aftonbladet***. December 30. Accessed online at https://www.aftonbladet.se/senastenytt/ttnyheter/inrikes/a/kay18L/digitala-vardbesok-gratis-for-alla. Viewed April 20, 2020.

TT. 2017b. Kraftig prissänkning för digitala läkarbesök. ***Västerviks-Tidningen.*** May 12. Accessed online at https://www.vt.se/nyheter/kraftig-prissankning-for-digitala-lakarbesok-om4646273.aspx. Viewed April 15, 2020.

Utterback, J. M., & Abernathy, W. J. 1975. A dynamic model of process and product innovation. ***Omega***, 3(6): 639–656.

Vårdfokus. 2006. Vårdotek läggs ner. ***Vårdfokus***. May 5. Accessed online at https://www.vardfokus.se/tidningen/2006/nr-5-2006-5/vardotek-laggs-ner/. Viewed April 3, 2020.

Vårdfokus. 2009. ***Det här är triage***. Accessed online at

https://www.vardfokus.se/tidningen/2009/nr-6-2009-6/det-har-ar-triage/. Viewed April 3, 2020.

Venturini, T. 2010. Diving in magma: how to explore controversies with actor-network theory. ***Public Understanding of Science***, 19(3): 258–273.

Venturini, T. 2012. Building on faults: How to represent controversies with digital methods. ***Public Understanding of Science***, 21(7): 796–812.

Vetenskapsrådet. 2020. ***Det svenska sjukvårdssystemet***. Accessed online at https://www.kliniskastudier.se/forskningslandet-sverige/det-svenska-sjukvardssystemet.html#. Viewed April 3, 2020.

Widfeldt, E. 2020. ***Forskning ska visa om nätläkare leder till färre vårdbesök.*** Accessed online at https://www.gu.se/omuniversitetet/aktuellt/nyheter/detalj//forskning-ska-visa-om-natlakare-leder-till-farre-vardbesok.cid1672835. Viewed March 29, 2020.

Wisterberg, E. 2018. Kry spenderar miljoner på att locka förkylda till läkaren – sågas. ***Breakit***. October 11. Accessed online at https://www.breakit.se/artikel/15994/kry-spenderar-miljoner-pa-att-locka-forkylda-till-lakaren-sagas. Viewed April 3, 2020.

Wisterberg, E. 2020. Apoteksaffären kan medföra lagändring***. SvD Näringsliv***. January 24. Accessed online at https://www.svd.se/efter-apoteksaffaren--utesluter-inte-lagandring. Viewed April 13, 2020.

Yousef, T. 2018. Nätläkare kritiska till vårdcentraler som nobbar deras remisser. ***Sveriges Radio***. June 15. Accessed online at https://sverigesradio.se/sida/artikel.aspx?programid=160&artikel=6977479. Viewed April 12, 2020.

APPENDICES

APPENDIX A
List of Interviewees

#	Interviewee	Date	Length	Medium	Language
1	Senior Manager, Pharmacy Chain	21.01.2020	64 min	In person	English
2	Nurse Representative	23.01.2020	73 min	In person	Swedish
3	Senior Executive, Digital Care Provider	24.01.2020	65 min	In person	English
4	Region Representative	27.01.2020	59 min[a]	In person	Swedish
5	Region Representative	27.01.2020	59 min[a]	In person	Swedish
6	Senior Executive, Digital Care Provider	28.01.2020 26.03.2020	80 min 30 min	In person Skype	English English
7	Senior Manager, Pharmacy Chain	28.01.2020	54 min	In person	English
8	Industry Expert	10.02.2020	60 min	In person	English
9	Senior Executive, Digital Care Provider	14.02.2020	69 min	In person	English
10	Senior Executive, Pharmacy Chain	17.02.2020	58 min	In person	Swedish
11	Patient Representative	18.02.2020	67 min[b]	In person	Swedish
12	Patient Representative	18.02.2020	67 min[b]	In person	Swedish
13	Senior Executive, Care Provider	18.02.2020	63 min	In person	English
14	Doctor and Doctor Representative	21.02.2020	60 min	In person	Swedish
15	Senior Executive, Pharmacy Chain	27.02.2020	55 min	In person	English
16	Region Representative	27.02.2020	47 min	Phone	Swedish
17	Pharmacist Representative	27.02.2020	54 min	Phone	English
18	Senior Executive, Pharmacy Chain	28.02.2020	45 min	Phone	Swedish
19	Doctor	02.03.2020	60 min	Phone	Swedish
20	Doctor	04.03.2020	52 min	In person	English
21	Region Representative	04.03.2020	60 min	Phone	Swedish
22	Senior Executive, Pharmacy Association	06.03.2020	63 min	Phone	Swedish
23	Region Representative	06.03.2020	47 min	In person	Swedish
24	Industry Expert	10.03.2020	66 min	In person	Swedish
25	Senior Executive, Online Pharmacy	13.03.2020	40 min	Phone	English
26	Doctor and Doctor Representative	17.03.2020	47 min	Phone	Swedish
27	Doctor	18.03.2020	47 min	Phone	English
28	Patient Representative	23.03.2020	62 min	Phone	Swedish
29	Senior Executive, Digital Care Provider	21.04.2020	47 min	Skype	English

[a] Participants were jointly interviewed in one interview.
[b] Participants were jointly interviewed in one interview.

APPENDIX B
Interview Guide[c]

Categories	Overarching Question(s)
Thesis & interview introduction	Our research is part of the master program Business and Management at Handelshögskolan. There is a big debate surrounding the healthcare market in Sweden—and the existence of online doctors in particular—at the moment and we are interested in the ongoing changes from a market perspective. We are trying to understand how the emergence of online doctors has affected the primary healthcare market in Sweden and the adjacent pharmacy market. Therefore, we are conducting a series of interviews with experts, representing different perspectives on the subject to capture their perceptions.
	All interviews will be used for the purpose of this research only, anonymously, and will be destroyed after publication. This interview will be recorded for transcription purposes. If we have not received any objections, we assume your consent. Our research project is not supported nor funded by any institution, commercial organization, or interest group but SSE.
Background	What is your educational and professional background?
Current position	What is your current role?
	What are you doing on a daily basis and what are your responsibilities?
Perception of the market	Describe the main characteristics that define the Swedish primary care market/pharmacy market.
Perception of the company's position in the market	Describe your company, its daily operations, and its position in the market.
	How has your company and its position changed over time?
Perception of pharmacies	Partnerships between online doctors and pharmacies have become quite common, can you tell us something about your partnership with X? (emergence & future outlook)
	What is your general perception of the pharmacy market?
Changes within the market	Describe the main change processes underway at the market today.
	What changes did you see in the last years?
	What do you think will drive change in the market in the future?
Controversies in the market	What issues are at the center of the debate surrounding the market?
	Is there anything about the market right now that you say, 'I do not agree with that'?
Wrap-up	Do you want to mention anything that we have not touched upon?
	Do you have any recommendations about which people we should interview as well?

[c] This represents the fifth version of our interview guide, which we slightly adjusted depending on the interviewee's role and background.

APPENDIX C
Extended Summary of Controversies

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Validity of digital visits	Technical limitations make digital visits unnecessary	"You can't examine the person; you can't listen to the lungs, the heart; you can't check the stomach, anything. You just have to rely on what he is telling you." (Doctor)				X			
	Digital visits could handle some important cases	"When someone has that [infectious diseases], you don't want them to go to a physical healthcare center because it's so contagious. Then it's better if they get digital healthcare." (Senior Executive, DCP)	X	/					
Model and level of reimbursement	Fee-for-service visit leads to negative incentives	"If the reimbursement model is based on visits, it is best to have short visits that are not needed." (Doctor)				X	X		
	Reimbursement model should be nationalized	"We should re-evaluate the entire model and have some national […] model." (Senior Executive, DCP)	/		/				
System effects of DCPs	DCPs create double visits and do not offload	"They don't offload, they are not doing much help for us." (Doctor)				X			
	DCPs offload by triaging patients and treating easier cases more efficiently	"You should meet the one with the least competence needed but still in an efficient way. This means, for example, if you just need little help, you should meet a nurse. If you get questions about your pregnancy, you should meet a midwife. You should only talk to doctors when you need to talk to doctors. We are working with that […] what's called a triage." (Senior Executive, DCP)	X	/					
	DCPs drain resources through double and/or unnecessary visits	"[…] It risks taking resources from people with severe chronic diseases." (Patient Representative)				X		/	

APPENDIX C (Continued)

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Marketing practices in healthcare	DCPs' marketing messages have been appalling	"And they do ads on big, fucking billboards when you drive into the city. [They say] you should seek care for something that is not in need of a doctor's visit, but that is how they make money." (Doctor)				X			
	Marketing does not belong in healthcare	"There have been commercials and ads [promoting their service]. This is not aligned with the fact that the healthcare should be driven by needs." (Nurse Representative)				X			X
	Marketing is necessary to create awareness	"We are new companies and we have to learn what you are allowed to say and what not. In the beginning, all of us have done blunders where it maybe sounds like you should try to get healthcare even though it is not needed. […] Together with our competitors, we have all become much better at it now. It's happening less and less." (Senior Executive, DCP)	/						
Legitimacy of integration with pharmacies	Cross-ownerships should be prohibited since it implies risks that cannot be hindered by ethical codes	"You get affected because it affects your own financial situation." (Industry Expert)				X	X		/
	Cross-ownerships are legal since there are no problems today and ethical codes shield against risks	"We need to be clear on that, we do not have any problems today." (Senior Executive, Pharmacy Association)	X	X					
		"The doctor's profession is a licensed profession with strong integrity." (Senior Executive, Pharmacy Chain)							
Problematization of accessibility or continuity	Accessibility is a problem, but continuity is a more severe problem	"A lot of focus is on accessibility, rather than continuity in the regions. […] It is absolutely good to provide good access to the patient, but one must also keep in mind the continuity." (Doctor and Doctor Representative)				X	/		

APPENDIX C (Continued)

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Problematization of accessibility or continuity (continued)	Accessibility is a significant problem	"[…] But availability is quite bad in Sweden when it comes to primary care. We have top-notch quality of the actual medical diagnosis, but the availability is as bad as in Albania." (Senior Executive, DCP)	X	/				X	X
Needs or wants	DCPs have created a demand for healthcare for cases that should not be subject to healthcare	"They only take care of very trivial conditions, which are mostly self-containing, the patients get well anyhow without any interruption by healthcare. So, they profit from something which is not really needed in healthcare. They are concentrating on very simple diseases." (Doctor)				X			
	DCPs meet a latent demand for accessible care	"The need [of accessibility] has been there for a long time." (Senior Executive, DCP)	X	X	/			/	
	Digitalization brings new requirements for accessibility	"But then there is also this societal development that we expect to get everything, that everything happens wherever and whenever I want it to happen. I want healthcare now." (Senior Executive, DCP)	X	/	/				
	Integration with pharmacies improves the customer journey and offloads	"[…] We, as a pharmacy, together with caregivers—even if it's digital ones or physical ones—that we together can offer better availability, more convenient services and more frictionless experiences for the customer and for the whole customer journey […]." (Senior Executive, Pharmacy Chain)	X	X					
	Integration with pharmacies might affect prescription procedures negatively	"Perhaps you [as a doctor] prescribe a little bit more, do a bit more promotion for the pharmacy, so that both your office and the pharmacy profit." (Doctor)				X	X		
Person and/or doctor continuity	Fixed doctor contacts should be enforced	"[…] One of the biggest changes needed is the proposal of a fixed doctor." (Doctor and Doctor Representative)				X			

APPENDIX C (Continued)

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Person and/or doctor continuity (continued)	Fixed healthcare contacts should be enforced	"If I need to contact the healthcare, I know who to turn to. I do not need to call the physiotherapist, the doctor, the nurse to tell the same thing. I have one fixed contact. That is different to 'one doctor contact'. This could be anyone. That could be the nurse." (Patient Representative)						X	X
	Person-continuity could partly be replaced with journals	"There is what we call information continuity; that in some cases the certain need of having a specific doctor for having every kind of problem you have, it's not that highly rated from the patient." (Senior Executive, DCP)	X						
Patient or doctor centricity	Doctors' power has decreased	"It has been a development from the hierarchy with the doctor, nurse, and patient [illustrating a distinct hierarchy among these three actors]; then the second phase was the patient in the middle and all the professions and its caretakers and hospitals and specialists working around the patient. Now, we are talking about patient-centric care with the patient as a part of the circle." (Doctor)				/			
	Doctor-centric hierarchy still exists, patients should be empowered	"The healthcare system has been very hierarchical. If go way back it was like 'Yes, Mr. Doctor. Thanks, Mr. Doctor'. […] that is exactly what still exists. These hierarchies. The patient is someone who should be treated. Not what is important for me as an individual and that you [the doctors] exist for me. That is a shift of perspective and cultural change that needs to happen." (Patient Representative)						X	X
	Patients should be the central point in the patient journey	"We are looking at the whole ecosystem for a patient. It includes the contact with the healthcare provider, the pharmacies, and also the transportation to the site of care. All our collaborations are created around the patient journey." (Senior Executive, DCP)	X					X	

APPENDIX C (Continued)

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Digital and physical logics	Digital solutions ignore borders	"Web-based solutions are per definition national—or actually global—since you can sit in Thailand on your vacation and get advice in a doctor's visit […]." (Senior Executive, Pharmacy Association)	X	/	X				
	Digital solution has zero marginal costs which calls for a new mindset	"Almost all political reforms are focused on more money and more people in the healthcare system. But we observe that this is not how one thinks if one has understood the potential stemming from new technology." (Region Representative)	/		/				
	DCPs should be integrated as a tool	"They should be integrated into the doctor's job." (Doctor and Doctor Representative)				X	/	/	
Market and professional logics	Competitive pressures led markets to converge	"The big pharmacies are struggling with what their future is. They have super low margins; they are experiencing huge changes when it comes to other macro factors with digitization—suddenly people buy their drugs over the internet instead […]. They see that they have to be a part of the future. And then they see those digital healthcare providers and they see that 'Ok, maybe this could make us relevant for the patient again' because they are constantly looking for ways to be relevant for the patients." (Senior Executive, DCP)	X	X			/		
	Regions' own digital initiatives lessen efficiency gains of digital solutions	"[…] Every region is going to put a lot of money and projects and development into building their own solutions on a regional level when we actually have strong, central, quite efficient solutions that could actually handle this. So, for me, that's a little bit strange. In my opinion, it's maybe a bit inefficient, expensive, and time-consuming." (Senior Executive, Pharmacy Chain)	X	X					
	Healthcare has market aspects	"From an economical point of view, it's a quite huge market." (Senior Executive, DCP)	X	X	/				

APPENDIX C (Continued)

Controversy	Opinion	Quote	Actor (X = all; / = some)						
			Digital care providers	Pharmacies	Region representatives	Doctors	Industry experts	Patient representatives	Nurse representative
Market and professional logics (continued)	Healthcare should not be seen as a market	"Sweden is naive […]. When it comes to that, all breaks are let off. That the market mechanisms should solve the problems. In other countries—that are not ideologically different from Sweden, so it is not political, rather cultural—when they construct those systems, they steer and regulate from the very beginning." (Industry Expert)				/	/		
	Patients should be in charge of their healthcare	"If I would have had the perfect service, I would just got online, answer a couple of questions, got my allergy medication. But from a GP, they say that you need to need to meet your same doctor. But I am not in need of meeting my doctor, I know my problems, I know the treatment. Just fix it for me." (Senior Executive, DCP)	X			/		X	
	Doctors reject digital tools because it questions their competence	"[…] Many of them, they see continuity as a product of the built-in knowledge within every clinician. They have really, really hard times saying that the computer can provide you with this knowledge." (Senior Executive, DCP)	X	/	/				