Health Care Customer Value Cocreation Practice Styles

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Abstract

This article explores in-depth what health care customers actually do when they cocreate value. Combining previously published research with data collected from depth interviews, field observation, and focus groups, the authors identify distinct styles of health care customer value cocreation practice. Importantly, the authors show how customers can contribute to their own value creation through their own (self) activities in managing their health care. Building on past work in service-dominant (S-D) logic, consumer culture theory and social practice theory, the authors identify "roles," "activities," and "interactions" that underlie customer cocreation of value in health care. The authors uncover five groupings of customer value cocreation practices yielding a typology of practice styles and link these to quality of life. The practice styles are "team management," "insular controlling," "partnering," "pragmatic adapting," and "passive compliance." Two in particular, team management and partnering, should be encouraged by managers as they tend to be associated with higher quality of life. The authors provide a health care Customer Value Cocreation Practice Styles (CVCPS) typology. The usefulness of the typology is demonstrated by showing links to quality of life and its potential application to other health care settings.

Keywords

value cocreation, value, coproduction, practice styles, health care

Health care significantly affects economies worldwide, as well as directly affecting individuals' quality of daily life (Berry and Bendapudi 2007). Consequently, research on health and well-being is encouraged by both service researchers and policy makers alike (Berry and Bendapudi 2007), with the impact of service on well-being being emphasized as a global research priority for the next decade (Ostrom et al. 2010). Traditionally, customers have been viewed as passive recipients being separate and outside the firm, merely a passive recipient of what a firm does (Deshpande 1983; Payne, Storbacka, and Frow 2008). This view has been prevalent in health care (Berry and Bendapudi 2007; Holman and Lorig 2000).

However, paralleling shifts in other fields such as service-dominant (S-D) logic, consumer culture theory (CCT), new service development and brand communities, a different model is emerging (Schau, Muniz, and Arnould 2009)—that is, that customers can cocreate value with a firm and others (McAlexander, Schouten, and Koenig 2002; Prahalad and Ramaswamy 2004; Vargo and Lusch 2004). This new understanding views customers as active, rather than passive. Within health care there is now recognition that the successful management of chronic diseases, such as cancer, is related to the collaborative interactions between the individual and their health provider/providers and the active involvement of the individual (Holman and Lorig 2000). Furthermore, there is growing acknowledgment within health care that treatment plans and related activities can extend beyond interactions with doctors to include

broader aspects of the individual's life such as lifestyle and beliefs (Michie, Miles, and Weinman 2003). However, it is unclear what customers actually do when they cocreate value in health care and whether there is a link between customer value cocreation practice styles (CVCPS) and quality of life. This is where our study contributes.

Building on the emerging model of cocreation of value (Lusch, Vargo, and O'Brien 2007; Schau, Muniz, and Arnould 2009; Vargo and Lusch 2008a), in which value is determined "in use" through activities and interactions of customers "with" the service provider/providers and others, we define customer value cocreation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." That is, a multiparty all-encompassing process with the focal firm and potentially other market-facing and public sources and private sources as well as customer activities. Our new definition breaks free from the previous two party (firm-customer) conceptualization of

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value creation, extending it to the customer's service network. For example, we argue that customers may cocreate value by integrating resources from the service provider (focal firm), and more broadly generated through the integration of resources with others outside the traditional health care setting, such as complementary therapies, and/or with the customer's private sources such as peers, family, and/or friends. Furthermore, customers may cocreate value through self-activities. These activities may be self-generated (such as activities engaged in by the self that ultimately contribute to the cocreation of value, such as cerebral activities—positive thinking, reframing and sense-making, emotional labor, and "psyching oneself up").

Almost all treatments of cocreation of value seem to imply that it is not a homogeneous process but rather one for which there can be multiple approaches. That is, different individuals might choose or have the ability to become involved in the cocreation of value process in different ways. Yet, with some exceptions (Baron and Harris 2008; Epp and Price 2011; Nambisan and Nambisan 2009; Schau, Muniz, and Arnould 2009), these different approaches to cocreation of value have not been investigated.

Thus, the purpose of this study is threefold; first, to investigate health care customer value cocreation empirically, identifying what customers actually do when they cocreate value, teasing apart what these multiple approaches are, identifying activities, interactions and the role of the customer as perceived by the customer, at least in one health care service setting; second, to begin to explore the relationship between health care customer cocreation of value practice styles and desired outcomes (e.g., quality of life); and third, to provide a typology of health care CVCPS. The empirical setting is ongoing cancer treatment, chosen because it provides opportunities to study a full range of customer value cocreation practices (roles, activities, and interactions), as well as links to quality of life.

Centered on a key service science research priority, understanding customer value cocreation for improved well-being (Ostrom et al. 2010), our research addresses the call by Arnould, Price, and Malshe (2006) and Payne, Storbacka, and Frow (2008) to understand what customers actually do when they cocreate value. Our work contributes theoretically and practically in five important ways. First, it represents an in-depth investigation of multiple approaches to health care customer value cocreation associated with different mental models of the customer's role as a resource integrator, identifying a range of activities (behavioral and cognitive) and interactions. Second, it demonstrates different ways in which customers can contribute to their own value creation. Third, it identifies five practice styles of health care customer value cocreation: team management, insular controlling, partnering, pragmatic adapting, and passive compliance. Fourth, it explores the relationship between CVCPS and outcomes (e.g., quality of life). Fifth and finally, it provides a health care CVCPS typology.

The remainder of this article is organized as follows. In the next section, we review cocreation of value, particularly as approached through S-D logic, CCT, social practice theory, and

related literature. Next, we discuss the findings of our empirical study of health care customer value cocreation. Finally, we present our health care CVCPS typology and discuss managerial implications and suggest an agenda for future research.

Conceptual Development

Value Cocreation

Several researchers have identified the notion of the customer as an active rather than passive recipient of service (Baron and Harris 2008; Payne, Storbacka, and Frow 2008; Toffler 1980; Xie, Bagozzi, and Troye 2008). Vargo and Lusch (2008b, p. 35) argue that the customer is "endogenous to both its own value creation and that of the firm." In varying degrees, customers play an active role in the provision of service and in the realization of its benefit (cocreation of value) (Prahalad and Ramaswamy 2000; Tax, Colgate, and Bowen 2006; Vargo andLusch 2004). Some customers might be involved in activities that have traditionally been viewed as "firm" activities such as self-service (Bowen and Benjamin 1985; Mills and Morris 1986), or in providing ideas for improving service (Bettencourt 1997), even in codesigning, and can thus be regarded as "part-time employees" of the organization. It may be argued that all customers are involved to various extents through an array of different activities and in the process of integrating resources with a range of others to realize the benefit (Arnould, Price, and Malshe 2006; Baron and Harris 2008). The concept of customer participation is not particularly new; what is new is the recognition that service providers are only providing partial inputs into the *customer's* value-creating processes, with input coming from other sources (Ng, Maull, and Smith 2010; Vargo and Lusch 2004), including from the customer's own activities.

Value cocreation has been variously defined in the literature. Table 1 provides a summary of key conceptualizations going back to Normann and Ramirez (1994). As shown in Table 1, the different conceptualizations can be divided broadly into those that are primarily firm focused and those that are customer focused. Also as shown in the table, the conceptualizations vary according to their respective theoretical roots. Not surprisingly, those articles that focus on the firm are largely from Strategic Management, Strategy, and Industrial Marketing. These authors view the customer as primarily an input into firm processes, such that "customers are inputs into firm processes aligning them as temporary members of the firms" (Gummesson 1996, p. 35). However, since Prahalad and Ramaswamy's (2003) article, there has been an acknowledgment that value cocreation may extend beyond the boundaries of the firm. This view was emphasized by Vargo and Lusch (2004) and subsequent articles as highlighted in Table 1. A major point of intellectual debate, stemming from these different conceptual roots, is "value-in-use" versus "value-inexchange" (Vargo and Lusch 2011). We take the view, shared by many authors including Lusch and Vargo (2006), Payne, Storbacka, and Frow (2008), Xie, Bagozzi, and Trove (2008), and Ng, Maull, and Smith (2010) that value is not realized until

Table 1. Definitions of Value Cocreation

		Primarily Firm Perspective		
Author(s)	Conceptualization	Conceptual Domain	Discipline	Perspective
Normann and Ramirez (1994)	Actors come together to coproduce value	Coproduction: delivering value to the customer	Strategic management	Successful companies do not just add value, they reinvent it
Gummesson (1996)	Coproduction is the process of involving customers in joint production and thus joint value creation [with the firm]	Coproduction: joint value creation through dyadic interaction	Nordic School	Customer inputs into firm processes aligning them as temporary members of the firm
Wikström (1996a)	When the customer is conceived as a coproducer, the interaction between the parties should generate more value than a traditional transaction process	Coproduction: creating value with the customer	Industrial markets, management and learning	The consumer is positioned as a resource in the company's value-creating (profit generating) systems
Wikström (1996b)	Companies "design a system of activities within which customers can create their own value, thus the company complements the knowledge and resources already possessed by its customers	Value creation: [Firm activities] with the aim of developing an interactive way of working is thus to make it easier for consumer to achieve more value	Strategic management	In consumer markets the interaction has to be programmed and is thus generally rather static due to the large number involved
Ramirez (1999)	Coproduction is a framework for understanding value-creation processes that exist within interactions between producers and consumers	Coproduction: joint value creation through dyadic interaction	Strategic management	Value coproduced by two or more actors, with and for each other, with and yet for other actors
Prahalad and Ramaswamy (2000)	Cocreate personalized experiences with customers—customers want to shape these experiences themselves, both individually or with experts or other customers	Value cocreation	Strategy	Value cocreated through experience with others outside the service provider dyad—other customers, other experts
Prahalad and Ramaswamy (2003)	There are multiple points of exchange where the consumer and the company can cocreate value	Value cocreation	Strategy	Customers search for value beyond the boundaries of the dyad between the firm and the consumer
Prahalad and Ramaswamy (2004)	The cocreation experience—not the offer- ing—becomes the basis of unique value creation	Value cocreation	Strategy	A firm cannot create anything of unique value without the engagement of individuals
Cova and Salle (2008)	Value cocreation process involving actors from both the supply network and the (business) customer network	Value cocreation in networks	Strategy	B2B networks—value comes from supplier networks and customer networks
Grönroos (2008)	Adopting a service logic makes it possible for firms to get involved with their customers' value-generating processes, and the market offering is expanded to including firm-customer interactions	Value cocreation	Nordic School	Customers are always the value creators. The supplier can only be a cocreator of value with its customers
Payne, Storbacka, and Frow (2008)	The value cocreation process involves the supplier creating superior value propositions, with customers determining value when a good or service is consumed	Value cocreation	Industrial marketing	Providers offer superior value propositions and customers select from these based on judgments of value
Bolton in Ostrom et al. (2010)	Cocreation (of value) is conceptualized as collaboration in the creation of value through shared inventiveness, design, and other discretionary behaviors	Value cocreation	Service marketing	Customers influence value through collaboration and improving firm offerings
Ng, Maull, and Smith (2010)	Value cocreation is "value-in-use," that is, jointly cocreated between the customer and the firm for benefits customers have abilities to cocreate value through customer interactions with resources	Value cocreation	Marketing	Customers influence value through collaboration and improving firm offerings through relationships and/or interactions

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		Primarily Firm Perspective		
Author(s)	Conceptualization	Conceptual Domain	Discipline	Perspective
Tzokas and Saren (1997)	Value can only be reached by means of blending the activities of two strategically positioned yet highly dependent systems of production and consumption	Primarily customer perspective Customer value creation: customer activities which give rise to the pro- duction and consumption of "value"	Strategic marketing	The activities/mechanisms consumers use in order to reach (project, extract, and consume) value, [the role of marketing is] to identify areas (activities) which can be used as "relationship platforms" between the supplier and the customer
Tzokas and Saren (1999)	Value, for both the firm and the customer, is created in the combined, yet unique, effort of systems of production and consumption working synergistically	Joint value creation: the customer's value chain is linked to the value chain of the firm	Relationship marketing	Knowledge produced by means of interaction and dialogue feeds back to the participants thus giving rise to a new cycle of knowledge creation, dissemination and
Grönroos (2000)	Value for customer is created throughout the relationship by the customer, partly in interactions between the customer and the supplier or service provider	Customer value creation: value is created by the customer	Nordic School Relationship marketing	Value is created by the customer
Vargo and Lusch (2004)	Customers are active participants in relational exchanges and coproduction	Customer coproduction	Service-dominant (S-D) logic	The enterprise can only offer value propositions; the consumer must determine value and participate in creating it through the process of coproduction
Arnould, Price, and Malshe (2006)	Consumers deploy their operand resources and use of the firms' operand and operant resources to create value	Cocreation of value	Consumer culture theory (CCT)	Consumers have a stock of their own resources which they deploy to cocreate value with firms
Lusch and Vargo (2006)	The S-D logic notion of value cocreation suggests that there is no value until an offering is used—experience and perception are essential to value determination	Cocreation of value	S-D logic	Value is only assessed when the value offering is used.
Vargo, Lusch, and Morgan (2006)	Value is always uniquely and phenomenologically determined by the beneficiary.	Cocreation of Value	S-D logic	Customers are the sole arbiters of value (value is determined by the beneficiary)
Lusch, Vargo, and O'Brien (2007)	Value can only be determined by the user in the consumption process. Thus it occurs at the intersection of the offerer, the customer—either in direct interaction or mediated by a good—and other value-creation partners.	Cocreation of value	Service science	Value is only realized through consumption by the customer from the customer's point of view
Vargo, Maglio, and Akaka (2008)	Cocreation of value inherently requires participation of more than one service system, and it is through integration and application of resources made available through exchange that value is created	Cocreation of value	Service science	Value is created through resource integration in service systems, networks, and constellations through exchange
Xie, Bagozzi, and Troye (2008)	Prosumption is a process rather than a simple act (e.g., the purchase) and consists of an integration of physical activities, mental effort, and sociopsychological experiences	Prosumption: value creation activities undertaken by the consumer that result in the production of products they eventually consume and that become their consumption	CCT	Resource integration of customer operant resources with firm operand resources

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		Primarily Firm Perspective		
Author(s)	Conceptualization	Conceptual Domain	Discipline	Perspective
Schau, Muniz, and Arnould (2009)	Consumer collectives are the site of much value creation which emerges through emergent participatory actions of multiple members	Customer value creation: occurs in consumer collectives	CCT	Value is determined in use and in context and influenced by social networks and collectives—as consumers construct sense making, prestiee, and identity
Edvardsson, Tronvoll, and Gruber (2011)	Value cocreation is shaped by social forces, is reproduced in social structures, and can be asymmetric for the actors involved	Value cocreation: as a social phenomenon	CCT	Influence of social structures on value cocreation
Heinonen et al. (2010)	Firm provides service cocreation of value opportunities, consumers only engage in value creation as part of how consumption activities become a part of their life goals	Customer value creation	Customer-dominant logic	The sites of interest in a customer dominant logic are not exchange and service as such, but how a company's service is and becomes embedded in the customer's contexts, activities, practices, and experiences, and what implications this has for service companies.
McColl-Kennedy, Vargo, Dagger, Sweeney and van Kasteren	We define customer value cocreation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." That is, a multiparty allencompassing process including the focal firm and potentially other market-facing and public sources and private sources as well as customer activities (personal sources)	Customer value cocreation	Service marketing service science	The customer plays a critical role in integrating resources beyond the firmcustomer dyad, includes customer's selfgenerated activities

service is consumed—that is, value-in-use. In other words, value is not created until the beneficiary (i.e., typically the customer) integrates resources from various sources (Vargo and Akaka 2009).

While it is recognized that some styles of value cocreation are important from an organization's perspective, insofar as they increase "productivity" (Chase 1978), little empirical research has addressed the *customer's* role in value cocreation and its subsequent effect on important customer outcomes, such as quality of life. This is where our key contribution lies, that is, that customers contribute to the cocreation of value through their own (self-generated) activities. Importantly, we show how the customer is the primary resource integrator in the cocreation of their own health care management. To assist in understanding customer value cocreation, we need to be clear about what we mean by value cocreation.

In S-D logic (Vargo and Lusch 2004, 2008a), value cocreation is accomplished through resource integration. What have traditionally been referred to as the "firm" and the "customer" are identified as resource integrators; this suggests that each benefits from the service of the other, and the integration of resources. However, customers may integrate resources to achieve benefits from sources other than the focal firm, such as from other firms or service providers (Arnould, Price, and Malshe 2006; Baron and Harris 2008), from private sources such as peers, friends, family, even other customers (Vargo and Lusch 2011). We argue that there is another potential source, that is, from the customer's self-generated activities (e.g., by accessing their own personal knowledge and skill sets and through their cerebral processes) that contribute to and that ultimately become part of this cocreation.

Additionally, the customer can assist the firm in service-provision processes in various ways, through engaging in customer-provider processes, traditionally viewed as "firm" activities, such as service design (e.g., new service development) and delivery of service (e.g., self-service; Etgar 2008). These activities may be regarded as "coproduction" activities (Vargo and Lusch 2011). They may offer intrinsic reward for the customer, such as enjoyment from the actual experience, and extrinsic rewards, such as being able to customize, time and/or cost reduction and being in control (Bateson 1985; Dabholkar 1996). However, there is likely to be considerable effort and risks, including for instance, possible physical, financial, psychological, performance, social, and time-related risk (Etgar 2008). Consequently, not all customers are likely to engage in these activities.

Definition

Based on these conceptual issues summarized in Table 1, we define customer value cocreation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." That is, a multiparty all-encompassing process including the focal firm, and potentially other market-facing and public sources, private sources, as well as customer activities (personal sources).

Activities are defined as "performing" or "doing" (cognitive and behavioral). Interactions are the ways individuals engage with others in their service network to integrate resources. It is important to note that activities are the active doing of things. Activities may range from simple (low level) activities such as compliance with service provider/providers, and collating information to complex (high level) activities such as colearning, actively searching for information and providing feedback. Regarding interactions, some individuals will choose to, or be able to, interact with many individuals, while others may interact with few.

Our conceptualization of customer value cocreation extends the conceptual work of Payne, Storbacka, and Frow's (2008) and Vargo and Lusch's (2008a) discussion of the customer value-creation process as a series of activities performed by the customer as part of a broad multiplay of activities to achieve a desired outcome. Payne, Storbacka, and Frow (2008) observe that this reflects a trend in consumer behavior research toward an experiential view of consumption underpinned by CCT. CCT belongs to the family of theoretical perspectives that address the dynamic relationships between consumer actions, the marketplace, and cultural meanings (Arnould and Thompson 2005). CCT emphasizes customer action, feelings, and thought such that patterns of behavior and sense-making are predictable (Arnould and Thompson 2005). Payne, Storbacka, and Frow (2008) highlight the roles of customer and supplier showing how together they create value, arguing that customers are feelers, doers, and thinkers who engage in practices involving the firm. Importantly, they highlight that customers may engage in various activities that relate to their lives, objectives, and aspirations.

We extend the scope of the value cocreation beyond the firm and customer dyad to other individuals in the customer's service network demonstrating empirically how customers actually do this. In their conceptualization, Vargo and Lusch (2008a) argue that value is accomplished through resource integration and although traditionally the "firm" and the "customer" are identified as resource integrators, customers may integrate resources from sources other than the firm. Vargo and Lusch (2011) elaborate on the sources of resources as private sources (e.g., friends and family), market-facing sources (e.g., firms, other entities), and public sources (e.g., communal, governmental). We extend their conceptualization by further expanding the type of resources that customers potentially integrate to include self-generated resources and show empirically how customers actually do this cocreating value in practice, through activities and interactions with a range of others in the customer's service network, further explicating the customer's role.

Customer value cocreation does not take place in a vacuum. Giddens (1984, p. 2) argues that social practices are the key to understanding, not merely individual actors or "any form of social totality, but social practices." This suggests that all activities, including customer value cocreation, take place within social systems and that individuals have the potential to learn, adapt, and make choices based on their perceptions

of their socially constructed world. Central to this view is that the only way to understand reality is through asking individuals directly about their "sense-making" activities—that is, what is meaningful to the individuals (Boland 1985). Meaning is associated with social interactions as well as roles and positions within a social system (Edvardsson, Tronvoll, and Gruber 2011). This approach is relevant to marketing and customer value cocreation, particularly, as it helps explain activities and interactions of individuals (Deighton and Grayson 1995).

Schau, Muniz, and Arnould (2009) take a social practice based theory approach and identify a set of value-creating practices in the context of brand community. While the findings concern brand community, rather than customer cocreation of value in a service context, the context of our study, their study illustrates the relevance of value cocreation activities and social practice theory to marketing. Their work highlights the importance of role and the way individuals engage with others, suggesting that not all customers will have the same motivations when engaging in customer value cocreation. Some individuals may see greater value in engaging in certain activities than others and will have preferences for ways of interacting based on their mental model of their world, in particular their view of their role as a resource integrator within the given context. Again in the consumer context, Holt (1995) develops a typology of fan consumption practices in the context of professional baseball. Holt identifies a range of consumption objects, which include the park, the game, the players, and the opposition fans, and explains how these objects can serve as resources to support a given consumption practice. In so doing, he highlights the importance of role and customer activities.

As such, we turn to social practice theory as a compelling theoretical frame to identify the range of value cocreation practices in our context. A central argument in practice theory is that representational practices (seen in the way an individual views the world, for example, their mental model of *role*) affect normalizing practices (i.e., the way an individual interacts through accepting or adjusting norms is reflected in *interactions* with others). Normalizing practices in turn affect exchange or integrating practices (i.e., the way an individual does things (*activities*), which in turn affect representational practices and vice versa (Kjellberg and Helgesson 2006, 2007). This theory thus highlights the importance of the customer's role, activities, and interactions with others.

Health Care

Health care costs billions, significantly affecting economies across the globe as well as directly affecting the quality of daily life (Berry and Bendapudi 2007). Cancer is the second most common cause of death in the United States, exceeded only by heart disease. In the United States, cancer accounts for 1 of every 4 deaths, costing over \$89 billion for direct medical costs (American Cancer Society 2008). With chronic disease treatment, individuals are generally free to engage in activities that can potentially improve their quality of life. But the take-up of these activities and the way individuals integrate these

resources may vary in their quest for the best possible quality of life. For example, the individual may undertake a range of behaviors from noncompliance through minimal compliance to active engagement (Ouschan, Sweeney, and Johnson 2006).

Understanding how individuals cocreate value to better manage their health care is important not only for the individual but for health care service firms such as clinics, health care providers, and government. Customer participation in the form of shared decision making has been shown to lead to improved psychological well-being, improved medical status, and a greater satisfaction with their physician (Ashcroft, Leinster, and Slade 1986; Fallowfield et al. 1990). Basic compliance including complying with the instructions of the health care service provider (Dellande, Gilly, and Graham 2004; Fattal et al. 2005), such as visiting the clinic as directed, following instructions, and keeping a daily journal of their health, has been shown to result in improved self-reports on individuals' health status, perceptions of goal attainment (success), and satisfaction with the health service (Dellande, Gilly, and Graham 2004; Fattal et al. 2005). Given this, we expect that individuals who engage in activities beyond basic compliance will report relatively higher quality of life.

It is widely recognized that the successful management of chronic diseases such as cancer is related to the collaborative relationships with the individual and their health provider/providers and the active behavioral involvement of the individual (Holman and Lorig 2000). The treatment plan and related activities are recognized as extending beyond the interactions between individuals and their doctors to include lifestyle and beliefs (Michie, Miles and Weinman 2003). Furthermore, chronic disease is a "lived, cognitive, emotive, social and even political event that is entered into by thinking, feeling and interpreting beings individually and collectively" (Thorne 1999, p. 398). Hence, a wide range of activities support the individual's goal of good health. This is true for all illnesses but holds particularly in the current study setting.

Recall, customer value cocreation activities are activities that individuals carry out with others integrating resources from the focal firm, other market-facing or public sources, private sources and through self-activities using personal sources. Applied to this empirical setting, personal sources of integrateable resources may include self-generated activities (such as activities engaged in by the self that ultimately contribute to the cocreation of value, such as cerebral activities, including "selftalk," "being philosophical," "reframing and sense-making," and "psyching myself up"), private sources include friends and family; while market-facing sources may include other entities and firms (such as clinics, hospitals, various health professionals such as doctors, nurses, dieticians, physical therapists, alternative medicine practitioners, e.g., acupuncturists, meditation, and yoga teachers); and public sources may include community groups, associations (such as local community self-help groups, American Cancer Foundation), programs, and government departments (such as health departments). As argued, coproduction is participation in relatively direct service provision activities, such as self-service, service design, and new

service development. In this setting, coproduction could include activities such as assisting with administering drugs or other treatments with clinic staff and/or others (i.e., self-service), providing new service ideas to the service provider, such as how to reduce the waiting time at the clinics and assisting in the redesign of treatments, and reconfiguring the composition of the medical team, including "hiring" and "firing" of the doctors.

The setting is highly relevant, since a key goal in chronic illness treatment is to enhance well-being and obtain the best quality of life possible (Cohen et al. 1996; Dunkel-Schetter et al. 1992; Link et al. 2005). Quality of life, defined as "subjective well-being" (Cohen et al. 1996, p. 1421), is used widely in health care and is thought to comprise four domains: psychological, existential, support, and physical. The psychological domain concerns feelings regarding being depressed, nervous or worried, sadness, and fear of the future. The existential domain concerns an individual's belief about their life, including the belief that life is meaningful and worthwhile, and that goals are achievable, how they feel about themselves, and whether they have a sense of control over life. Support is concerned about feeling supported and cared for. The physical domain concerns the individual's most problematic physical symptoms, such as fatigue, pain, and weakness. Thus, ongoing cancer treatment has been selected as the research setting, as cancer is a key health concern in Western countries and is an ongoing illness that offers many opportunities for individuals to cocreate value and thus is an excellent setting for this study.

Therefore, we investigate how customers actually engage in value cocreation practices in an important health care setting. In so doing, we tease apart what these multiple approaches to customer cocreation of value are; identify (1) the customer's perceived *role*, (2) a wide range of customer *activities*, and (3) *interactions*; begin to explore the relationship between CVCPS and quality of life; and provide potential insights into customer value cocreation in other settings.

Method

Data Collection

To address the research aims, we focused on individuals over 18 years of age, who had received or were currently receiving cancer treatment through private outpatient¹ hematology and oncology clinics. Our interpretive analysis draws on various textual forms collected in two phases over 2 years at two oncology day clinics in a major capital city. Both clinics were managed by the same organization. We first interviewed the President and Director of Nursing, four oncologists as well as the two supervisors of the clinic receptionists to gain an indepth understanding of the service provided by the clinic and to assist in understanding where customers can potentially be engaged in customer value cocreation practices. In addition, we undertook field observation studies at the clinics, taking extensive field notes. These data added richness to the findings

of the four focus groups and 20 depth interviews across the range of cancer types and stages of treatment.

Focus Groups

The aim of the focus groups was to help us understand the experiences of the individuals and their subjective well-being (quality of life) and other health outcomes. Four focus group sessions were undertaken. Two of the focus groups were conducted with individuals who were relatively new to the oncology service experience and two sessions were conducted with individuals who were experienced with service provision. Individuals new to the service experience were defined as those who had been attending the clinic for less than 6 months. Individuals experienced in service provision were defined as having attended the clinic for more than 6 months. Each focus group was approximately 2 hours. This enabled the facilitator sufficient time to establish rapport with the participants and fully explore the research issues of interest, while ensuring that participants did not become fatigued (Carson et al. 2001; Morgan 1997). Participants were asked to talk about the health care service they were receiving from the clinics, their quality of life, and health outcomes. Standard procedures of transcribing, coding, and identifying themes were followed using both manual thematic analysis and Nudist (Lincoln and Guba 1985). Key quality of life outcomes identified by the focus group participants included improved health, improved quality of life, feeling more hopeful and encouraged, and achieving the best possible outcome for each individual's situation.

Depth Interviews

The aim of the interviews was to investigate what participants actually do to cocreate value, revealing the customer's perceived role and their value cocreation activities and interactions. Drawing from the same cohort as the focus group respondents, participants were interviewed either at the clinic or in their home, wherever they felt most comfortable. Depth interviews provide an effective means of obtaining rich insights into the phenomenon of interest as they provide detailed contextual information that cannot be obtained from surveys (Gwinner, Gremler, and Bitner 1998). Interviews were conducted until information redundancy was achieved (Lincoln and Guba 1985). Participants were asked to tell their story in their own words. The interviewer first asked the participants to talk about when they were first diagnosed with cancer and how they felt at that time. Following established procedures, deeper questions asked about their experiences at the various stages and typically generated considerable discussion as to their thoughts, their views of their role and specific activities, which in some cases was gently probed (Lincoln and Guba 1985). (For example, participants were asked questions such as "How do you get through those times?" "What sort of things have you changed in your life?" "Can you explain that in more detail?" and "Can you elaborate on that?") Discussions flowed like a conversation. The interviews ranged from

Table 2. Customer Value Cocreation Activities (Examples and Illustrative Quotes)

Activity	Examples
Cooperating	 Accepting information from the service provider (e.g., "They gave you a sheet that explains all the problems that you could possibly have.") Compliance with basics (e.g., "just being, compliant with anything I have to do, with the chemo and things I had to sort of inject myself and I had to take the medication.")
Collating information	 Sorting and assorting information, managing basic every day activities (e.g., "I have been really good in keeping that diary up to date with when my appointments are, everyone I have seen and where I am going")
Combining complementary therapies	 Use of supplementary medicine (e.g., Chinese medicine), exercise, diet, yoga, meditation (e.g., "I include in my diet things that were good for me like drinking lemon juice and having linseed and eating ginger.")
Colearning	Actively seeking and sharing information from other sources (i.e., Internet, other doctors/other health professionals), e.g., " I found books that different people had written, whether they had cancer experiences or not" and sharing information with the service provider, e.g. "I feed them back information"
Changing ways of doing things	 Managing long-term adaptive changes such as changes in financial position (e.g., "the next goal is to work out whether to go back to work, full-time, part-time, not at all, so that means going and seeing the financial people and working out if I can afford not to work, and am I prepared to live on what that would mean.)" Involvement in activities deliberately targeted to take an individual's mind off the situation e.g. holiday/overseas trip, hobbies, " to be occupied here around the house in my spare time learnt to put (cancer) at the back of my mind and not think about it."
Connecting	 Build and maintain relationships (e.g., "a lot of texting, to keep me feeling connected to friendsthat kept me alive. Because I just felt connected")
Coproduction	 Assisting with redesigning treatment programs and reconfiguring composition of medical team (e.g., "I changed my (medical) team I chose my hematologist, I checked around."
Cerebral Activities engaged in by the self that ultimately contribute to the cocreation of value	 Actively hoping, talking to oneself, and having a positive attitude (e.g. "I have to start thinking to myself probably the week before I come in to the clinic you really have to psyche yourself into it" Emotional labor—e.g., "I couldn't be honest with people about my fears or what was really in my head because they wouldn't be able to deal with it so I had better not tell them." Reframing and sense-making—accepting one's actual situation (e.g., "I had a good cry and said well I had better get on with it [life]")

50 minutes to 90 minutes. Interviews were transcribed, resulting in 175 single-spaced pages of text. Appendix A summarizes key characteristics of the depth interview participants.

Findings

Customer Value Cocreation Activities

Our first task was to compile a list of customer value cocreation activities. Four authors read the transcripts independently to develop an overall view of each respondent's story (Reissman 1993) and to identify value cocreation activities. Two researchers listed each separate activity for each respondent and identified themes following Lincoln and Guba's (1985) Constant Comparative Method, in which themes are developed on a match-and-contrast basis. Definitions and inclusion rules were developed. The analysis followed the conventional content analysis procedure (Patton 1995), the iterative process of reading, assessing, and identification of themes. Two judges read

the transcripts several times. Inter-judge reliability was assessed through Perreault and Leigh's (1989) index of reliability. High inter-coder reliability of .87 was achieved, which is well above the .70 recommended for exploratory work. The researchers then revised and negotiated differences in their themes. Eight broad themes of activities were identified reflecting different types of value cocreation activities observed in the data. As shown in Table 2, activities included: (1) cooperating; (2) collating information (sorting and assorting); (3) combining complementary therapies; (4) colearning (actively seeking and sharing information and providing feedback); (5) changing ways of doing things; (6) connecting with family and friends, doctors and other health professionals, and support groups; (7) coproduction (e.g., assisting with administering treatments, redesigning treatments, and reconfiguring the medical team); and (8) cerebral activities, such as positive thinking, psyching up one's self, reframing and sense-making, and emotional labor.

Using a similar process to that used for the identification of value cocreative activity themes, the two judges classified each

respondent's quality of life as high, moderate, or low on the four domains (existential, psychological, support, and physical) from the interview transcripts. Recall, the existential domain concerns an individual's belief about their life, including the belief that life is meaningful, life is worthwhile, that they can achieve life goals, feel good about himself or herself, and have a sense of control over life. For example, participants who talked about "having a good life" or a "highly meaningful life" were classified as high positive on existential. The "psychological" domain concerns feelings regarding being depressed, nervous or worried, sadness, and fear of the future. To simplify, individuals who talked about feeling very depressed or fearful of the future, or sad or worried were classified as high negative on "psychological" domain (and high positive if they spoke about very low levels of feeling depressed, fearful, sad, or worried). A high positive rating on the "support" dimension was given when the participants spoke about high levels of feeling supported and cared for. Participants evidencing high levels of problematic physical symptoms, such as high levels of fatigue, pain, and weakness were classified as high negative on the fourth domain "physical." High inter-coder reliability of .90 was achieved, again well above the .70 recommended for exploratory work (Perreault and Leigh 1989).

CVCPS

Our second task was to identify groupings, or constellations, of activities and interactions around perceptions of the customer's role to represent different value cocreation practice styles. Two authors independently read the transcripts at least 3 times. In a similar manner to the development of activities themes, two authors then developed value cocreation practice styles from individuals' activities and interactions, again following Lincoln and Guba's (1985) Constant Comparative Method, on a match-and-contrast basis. When there was disagreement, discussion took place until agreement was reached. Consistent with a social practice-based approach and in line with our definition of customer value cocreation, "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network," five practice styles of customer value cocreation were identified. They are team management, insular controlling, partnering, pragmatic adapting, and passive compliance. Each style is summarized in Table 3 with the associated role, activities, interactions, and quality of life and is described below.

Team management. Team management is characterized by high level of activities and high number of interactions with different individuals from the focal firm, other firms/service providers (market-facing and public sources), private sources (peers, family, and other customers), and self-generated activities. This style is typified by Lucy, Matt, and Russ. Activities include cooperating, collating information, colearning (such as actively seeking, sharing, and providing feedback), combining complementary therapies (such as diet, exercise, herbal medicines), connecting with family, friends, doctors, nurses, and

other health professionals, and engaging in cerebral activities such as positive thinking, reframing and sense-making, psyching themselves up, and emotional labor. Irrespective of type of cancer and being in different phases of treatment, all manage their respective "team" that includes friends and family (private sources), medical experts (market-facing sources), and support groups (public sources). For example, Lucy believes in a team approach which *she* coordinates. She believes her *role is to assemble and manage the team*. She says "you do it, you don't leave it up to fate, God or the doctors." She with her extensive team will make it happen. In addition to the doctors and other medical professionals, she has a circle of support people and is very open in her communication with her team. For example:

...I have a support team...my husband and my sister are really the center of my support then it goes out in concentric circles, then there is my children,...then the Bahai community and of course my parents...I discuss everything with everyone. (Lucy, 52 years)

Similarly, Matt has a high number of interactions with different collaborators and demonstrates strong team management. In addition to the medical staff, Matt has his ex partner, his son, and daughter, neighbors, friends, cleaner, and gardener, Individuals evidencing this team management style demonstrated a high level of being in control, high levels of inclusion of others and open communication with "their team." This practice style is associated with coproduction activities, such as assisting with administering their treatments, redesigning their treatment program, and reconfiguring the composition of their medical team, including hiring and firing their doctors. This style appears to be associated with relatively high overall quality of life, being high positive on the support domain, moderately to high positive on the existential domain, and high positive on the psychological domain (i.e., low levels of negative emotions of feeling depressed, nervous or worried, sad, and fear of the future) as shown in Table 3. Their relatively high quality of life is demonstrated through the following comments:

It hurts to make my bed and pull the sheets . . . but we're getting there, and every day seems to be a day better. (Matt, 51 years)

I'm off again on Wednesday for a week of swimming and snorkelling so I'll be doing what I need to keep as healthy as I can. I've decided to treat myself after every three rounds of treatment. (Lucy, 52 years)

Passive compliance. In contrast to team management is passive compliance. Passive compliance practice style is characterized by low level of activities and low number of interactions with different individuals from the focal firm, other market-facing and public sources, and private sources. Interactions are primarily only with one source, that is, the medical profession, following orders of the doctors. This practice style is characterized by acceptance. The individuals do not

Table 3. Summary of Customer Value Cocreation Practice Styles and Quality of Life

Style	Role	Activities	Interactions	Quality of Life ³
Team management	To assemble and manage team	 Cooperating (being compliant with basic requirements, e.g., attending sessions) Collating information Colearning Connecting (e.g., with family, friends, doctors, nurses, personal trainer) Combining complementary therapies (e.g., diet, exercise, vitamins) Cerebral activities positive thinking psyching myself up reframing and sense-making Coproduction activities—(assisting with): administering treatments redesigning their treatment programs reconfiguring composition of medical team, including "hiring "and "firing" of doctors 	Relatively high number of interactions (deep level) with high number of individuals	Psychological ⁴ —high positive Existential—moderately to high positive Support—high positive Physical—low to moderately negative
Insular controlling	To control from distance	Cooperating (being compliant) Collating information Colearning Combining complementary therapies (e.g., diet, exercise, vitamins) Cerebral activities emotional labor Coproduction activities—(assisting with): administering treatments redesigning their treatment programs reconfiguring composition of medical team, including "hiring "and "firing" of doctors	Relatively low number of interactions with different individuals (at a superficial level—keeps a distance)	Psychological—moderately negative Existential—low positive Support—low positive Physical—low to moderately negative
Partnering	To partner (primarily with doctors)	 Cooperating (being compliant) Collating information Combining therapies primarily with doctors Cerebral activities positive thinking Coproduction activities—(assisting with): administering treatments redesigning their treatment programs reconfiguring composition of medical team, including "hiring "and "firing" of 	Medium level of activities and medium number of inter- actions with different individuals	Psychological—moderately to high positive Existential—moderately to high positive Support—high positive Physical—low to moderately negative
Pragmatic adapting	To adapt	doctors Cooperating (being compliant) Collating information (e.g., organizing practicalities of life) Connecting (primarily with family, friends, support groups) Changing ways of doing things (e.g., managing long-term adaptive changes) Cerebral positive thinking	High number of interactions with different individuals	Psychological—moderately positive Existential—moderately positive Support—moderately to high positive Physical—low to moderately negative
Passive compliance	To comply	 reframing and sense-making Cooperating (being compliant) Collating information (e.g., organizing practicalities of life) 	Low level of interactions with few individuals (primarily the doctors and other medical staff)	Psychological—low positive Existential—low positive Support—low to moderately positive Physical—low to moderately negative

tend to question the doctors. These individuals believe their *role is to comply* with what the service provider (doctor) wants, exhibiting a strong external locus of control. They focus on cooperating and engage in collating information. They tend not

to take initiatives, such as searching the Internet for more information, going to a gym, or changing their diet. Furthermore, they do *not* engage in the more effortful, less compulsory activities of coproduction or in self-generated activities. In the

present setting, Marilyn, Maria, Terri-lee, Elle, Renee, Karen, Jasmine, Josh, and Julie all display this style. For instance, as Marilyn puts it:

I am fairly accepting . . . and I am reasonably compliant so I just said (to the doctor) you know best . . . You have to be accepting. (Marilyn, 60 years)

Maria is also very accepting. As she says:

I just was happy to go with the surgeon's advice. (Maria, 58 years)

Similarly, Terri-lee talks about not being in control and not having a lot of say. Rather, she says:

You just go with the flow...the doctor teed up the other two specialists for me and I felt good about the amount they (doctors) knew and shared...didn't have any questions...you can't control, well I chose not to control what treatment I underwent. (Terri-lee, female, 45 years)

Again, this style seems to be independent of the type of cancer and whether the individual is "in" treatment or in "post" treatment phase. These individuals evidenced relatively low quality of life, particularly in terms of psychological, existential, and physical dimensions (Table 3).

Insular controlling. Insular controlling is characterized by high level of activities and low number of interactions with different individuals from private, market-facing and public sources. Interactions seem to be superficial. Individuals tend to be self-focused. They exhibit strong emotional labor, preferring to be alone and not to share their feelings and problems with others. They restrict the amount of details they tell others about the illness, symptoms, and problems they are experiencing and manage their emotions. They engage in a wide range of activities including cooperating, collating information, colearning, combining complementary therapies, such as taking vitamins, doing exercise, and diet and cerebral activities, particularly emotional labor. They tend to see their *role as controlling from a distance*. This style is displayed by Claire, who is in treatment and Danielle, who is in the posttreatment phase. Claire points out:

I make their job easier to make sure that I am as healthy as can be ... [Regarding her mother, Claire said], I had to be very careful what I said to her ... I have kept them at a distance.

In a similar vein, speaking of her husband, Claire says:

I haven't told him...I am very careful about what I say to people...I don't feel the need to be surrounded by people that had cancer (support groups)...I am a by-myself-person, a loner. (Claire, 49 years)

Danielle avoids social contact. She does not even walk in her own neighborhood.

I felt if I went to the park I wasn't walking around my home area...I wanted to keep it private. (Danielle, 46 years)

Moreover, she believes her recovery is up to her "I'm just trying to focus on my own health and my own situation." She has developed her own recovery program with experts she has selected including an oncologist, surgeon, dietician, psychologist, personal trainer, and gym instructor. She engages in coproduction, assisting with administering her own treatment program. She has a strong internal locus of control believing that the power is within. As Danielle puts it:

You've got to start your own health program and your own exercise program so I've now got on board my own team...but all that's come from me...I feel as though that's my own kind of recovery program that I've put in place. (Danielle, 46 years)

This practice style exhibits some similarities to that of team management as it involves a team, but the collaboration and communication, unlike that of team management is not open. In contrast, it is very limited and controlled. This practice style is characterized by inward looking, self-focus and interestingly, relatively low quality of life overall (Table 3), being low positive on support and existential domains and moderately negative on the psychological domain (expressing medium levels of depression, worry, sadness, and fear).

Partnering. Partnering is displayed by Cathy, Polly, and Amy. This practice style is characterized as demonstrating medium level of activities and medium number of interactions with different individuals from the focal firm, other market-facing and public sources, private sources, and self-generated activities. The collaboration is typically primarily with doctors and a limited number of professionals. Take for example, Cathy. She speaks about "working with" her doctor, being engaged in the process, "because it's a partnership," "I'm working with her (doctor)" and "pulling my share of the weight." As she states in the interview:

I said to my doctor I want you (the doctor) to listen...because it's a partnership, because I now feel I am of more benefit to her...the relationship to me is more equal...I am capable of working with her and pulling my share of the weight. (Cathy, 56 years)

Speaking of her doctor Cathy talks about working with her. She says:

I expect if you (doctor) hear of anything I expect you to tell me...I'm working with her (my doctor) and my dietician... we are going to work out a diet plan together. (Cathy, 56 years)

Polly also sees her role of that of a partner. She says:

I can do it with him (the doctor) \dots I share everything with Dr $X \dots I$ do my part, I try to drink (water), make sure I am

hydrated because I think it helps your veins and things...I do things that I can do...then the other part can be dealt with by the doctors. (Polly, 59 years)

These individuals see their *role as a partner*, primarily with the key service providers. They engage in cooperating, collating information, combining therapies primarily with doctors and engaging in cerebral activities, especially positive thinking. They also engage in coproduction, for example, assisting with reconfiguring the composition of their medical team, including hiring and firing. These individuals tend to have good support networks. Accordingly, they demonstrate relatively high levels of quality of life, exhibiting high positive on the support domain, moderately to high positive on the existential and psychological domains. Comments that reflect these individuals' quality of life include:

I can't get back to aqua aerobics, but that's OK, I am just going walking again, and then I can go to the aqua aerobics... when I'm ready to come back I can just join in a little bit. (Polly, 59 years)

It's good, I can do just about anything I want to ... I go shopping, I do everything, I just get very tired, I sort of do a chore and then lie down, but other than that I am still doing everything I used to do. (Amy, 57 years)

Pragmatic adapting. This practice style is characterized by relatively low level of activities (largely cooperating, collating information and connecting, and engaging in cerebral activities especially positive thinking and reframing and sense-making) and have a high number of interactions with different individuals from the focal firm, other market-facing and public sources, private sources, and self-generated activities. Exemplified by Sharon, Tim, and William, individuals exhibiting this practice style see their role primarily as adapting to their changed circumstances. An important activity is changing and being adaptive. Sharon changed jobs to accommodate her health situation. She draws support from a cancer support group, and she gave back to their cancer support group by raising money afterward. She never felt the need to hide herself from others and did not feel ashamed of who she had become. She just adapted and got on with her life. Sharon says:

... when I was diagnosed with cancer I was a single mom... I had to do all of these things so that I could be around, to see him (her young son) grow up. I lost my hair the day after the second lot of chemo... That didn't bother me. That's just one of those things that happens with chemo... I only put a hat on, I didn't wear a wig. (Sharon, 52 years)

Tim is also adaptive. His main priority is his sporting interests which are the center of his life, his tennis and his golf, which he never gave up, even though he considered that it may have been related to his condition. With loss of bladder control which might be seen as a good reason to stay at home, he has continued his golf, goes to the toilet many times in an evening,

considers wearing long pants instead of shorts as he has no bladder control but not once does he consider giving up his tennis or his golf. Tim was very open about the whole process among his wide social network. He did not let it interfere with his life and was able to manage to continue doing much as he had before without too much interruption even though this might jeopardize his treatment.

... so now I can do a lot of things that I did... I could still play golf because there were plenty of trees, but never on a mixed day, never played mixed golf again. You have to adapt. (Tim, 70 years)

This CVCPS appears to be associated with moderate quality of life as evidenced by moderately positive to high positive levels on the support and moderately positive on the existential and psychological domains (Table 3).

CVCPS Typology

In a similar approach taken by Holt (1995) to develop his typology of consumption, we propose a CVCPS typology that is consistent with social practice theory and our definition of customer cocreation of value, and which we believe is transferable to other health care service settings. Recall that we define customer value cocreation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." That is, a multiparty allencompassing process including the focal firm and potentially other market-facing and public sources, private sources as well as customer activities (personal sources). Central to our definition are activities and interactions. Crossing these two dimensions of activities and interactions yields a 2 × 2 matrix, supporting five CVCPSs. As shown in Figure 1, our typology is based on different perceptions of the customer's role in relation to (1) level of activities (low to high) and (2) number of interactions with different individuals from the focal firm, other market-facing and public sources, private sources, and self-generated activities in the service network (low to high).

As shown in Figure 1, high level of activities and high number of interactions with different individuals, centering on the role of assembling and managing their team is labeled team management customer value cocreation practice. Low level activities with low number of interactions with different individuals, with the key role of complying, is labeled passive compliance. High level of activities with low number of interactions with individuals, centering on the role of controlling from a distance, is termed insular controlling, while relatively low level of activities and high number of interactions with individuals, with the key role of adapting is labeled pragmatic adapting. Finally, medium level of activities and medium number of interactions with individuals with the key role of partnering is labeled partnering practice.

We argue that the CVCPS typology is potentially transferable to other health care service settings. The framework could best be applied to other chronic disease settings, such as heart

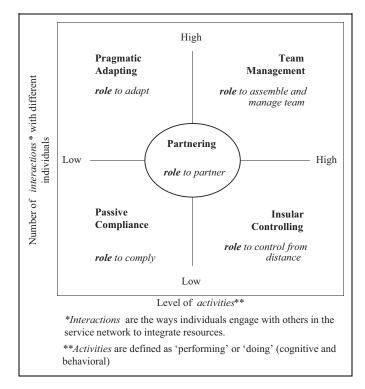


Figure 1. Customer value co-creation practice styles (CVCPS) framework. **Interactions are the ways individuals engage with others in their service network to integrate resources. **Activities are defined as "performing" or "doing" (cognitive and behavioral).

disease and diabetes where there is ongoing medical treatment. However, we expect that the value cocreation practice styles are also applicable to ongoing illnesses such as hypertension, arthritis, celiac disease, eczema, back pain, stress management, and childbirth health service, with limited application to minor ailments such as colds, upper respiratory infections, urinary infections, and minor one-off skin irritations. Possible extension to other contexts is discussed in the following section as well as in the future research section.

Ongoing Health Care Service Settings

First, regarding other chronic diseases, childbirth and ongoing minor diseases, individuals displaying a team management CVCPS could be expected to have a high level of activities and high number of interactions with different individuals from the focal firm, other market-facing and public sources, private sources, and self-generated activities. Individuals displaying this practice style could be expected to display high level of colearning, including actively seeking and sharing information from a range of sources such as the Internet, friends, family and work colleagues, support groups, health professionals, and allied health professionals as well as government sources. Individuals displaying what we term team management could be expected to engage in some coproduction such as assisting with reconfiguring the composition of their medical team by "hiring" and "firing" doctors and other professionals and

redesigning their treatment programs, combining complementary therapies, such as diet, yoga, meditation, Chinese medicine, and exercise. High levels of positive thinking are also expected as well as high levels of connecting with individuals in the customer's service network.

In contrast, passive compliance practice style is associated with low level activities and a low number of interactions with different individuals from the focal firm, other market-facing and public sources, and private sources. Consistent with this customer value cocreation practice is cooperating, primarily accepting without question information provided by the doctors, complying with basic requirements, such as attending appointments and collating information. Accordingly, this practice style is expected to be associated with a low number of interactions with different individuals, in other words interactions would typically be limited to the doctor/doctors.

In other ongoing chronic disease, childbirth and ongoing minor illness settings, insular controlling is expected to be associated with high level of activities such as collating information, colearning and combining complementary health activities, and low number of interactions with others. Individuals displaying this style could be expected to engage in some coproduction such as assisting with reconfiguring the composition of their medical advisory team, "firing" and "hiring" a new doctor and redesigning their treatment.

Pragmatic adapting in other ongoing chronic disease, child-birth, and ongoing minor illness settings could be expected to demonstrate low-level activities such as collating information, primarily accepting without question information provided by the doctors, complying with basic requirements, such as taking the medications, and a low level of additional complementary activities (such as diet, exercise, alternative/natural medicine) leaving decisions with the doctor/doctors but having a high number of interactions with different individuals from the focal firm, other market-facing and public sources, private sources, and self-generated activities, including for instance to manage practicalities of life and obtain support from family members, friends, and group support.

Finally, a partnering practice style in other ongoing chronic disease, childbirth, and ongoing minor illness settings is expected to be associated with medium-level activities and interactions, primarily with the doctor. The individual is expected to see their role primarily as a partner, sharing information, and being involved in joint decision-making regarding treatment programs.

Minor Ailments

It is expected that at least three of the five practice styles, passive compliance, team management, and partnering will be evident for minor ailments. For example, we expect some individuals to exhibit passive compliance practice characterized by accepting without question and complying with the basic treatment directed by the primary physician, while others will exhibit a team management practice style by engaging in high levels of collating information, colearning (e.g., on-line

treatments and medicines), and combining complementary therapies, such as using Chinese/natural medicines, connecting with friends, family, and professionals and coproduction (e.g., assisting with redesigning treatments). Partnering is also likely to apply in this health care setting with the focus on working with the doctor primarily to cocreate value.

Discussion

Our research is centered on a key service science research priority, understanding customer value cocreation for improved well-being (Ostrom et al. 2010) and addresses the call by Payne, Storbacka, and Frow (2008) and Schau, Muniz, and Arnould (2009) to understand what customers actually do when they cocreate value. Our findings extend Vargo and Lusch's (2004) work on the centrality of customer cocreation of value by identifying a list of customer value cocreation activities and interactions in an important real world setting—health care. Furthermore, we conceptualize customer value cocreation as "benefit realized from integration of resources through activities and interactions with collaborators in the customer's service network." That is, a multiparty all-encompassing process including the focal firm, and potentially other market-facing and public sources, private sources as well as customer activities (personal sources). Thus we extend Payne, Storbacka, and Frow's (2008) conceptualization of the customer value-creation process as a series of activities performed by the customer as part of a broad multiplay of activities to achieve a desired outcome. Specifically, we extend the scope of the value cocreation beyond the firm and customer dvad to other individuals in the customer's service network demonstrating empirically how customers actually do this. Furthermore, we elaborate Vargo and Lusch's (2004, 2008) conceptualization by further expanding the type of resources that customers potentially integrate to self-generated resources and show empirically how customers actually do this cocreating value in practice, through activities and interactions with a range of others in their service network, thus more fully explicating the customer's role.

Eight broad themes of activities were identified, comprising behavioral (doing) and cerebral (thinking) activities namely: (1) cooperating; (2) collating information (sorting and assorting); (3) combining complementary therapies; (4) colearning (actively seeking and sharing information and providing feedback); (5) connecting with family and friends, doctors and other health professionals, and support groups; (6) changing ways of doing things; (7) coproduction (e.g., assisting with administering treatments, redesigning treatments, and reconfiguring the medical team); and (8) cerebral activities, such as positive thinking, psyching up one's self, reframing and sense-making, emotional labor, and being philosophical. These themes provide a basis for a customer value cocreation activities measurement scale in the health care context. As such, our study extends beyond Nambisan and Nambisan's (2009) conceptual framework for considering value cocreation in online customer health care communities.

We teased apart customer value cocreation providing a typology and exploring links to quality of life. For example, we found evidence that suggests that relatively high quality of life tends to be associated with individuals who display partnering or team management practice styles. In contrast, the lowest quality of life appears to be associated with those that we classify as passive compliance and insular controlling cocreation of value practice styles. Three of the five practice styles of customer value cocreation (team management, insular controlling, and partnering), exhibited some coproduction, specifically, assisting with administration of treatments, redesigning their treatment programs, and hiring and firing their medical team.

Finally, we proposed a social practice—based CVCPS typology from the empirical setting which is potentially transferable to other health care service settings, addressing in part Ng, Maull, and Smith's (2010) call for generating abstracted theory of service. Such transferability is critical to producing new knowledge in service research and ultimately to advance service science.

Managerial Implications

Our study suggests that customers cocreate value differently, demonstrating different types and levels of activities' and integrate resources in different ways through interactions with collaborators. Such collaborators include individuals from the focal firm, other market-facing (e.g., doctors, nurses, dieticians, therapists, personal trainers) and public sources (e.g., support groups, community groups, and government), private (e.g., family members, friends, colleagues), and personal sources (e.g., customer's self-generated activities). This differential is an important lesson for service providers to understand. Even though customers may be provided with similar value propositions, they may choose to undertake different types of activities and integrate resources in different ways. Indeed, we saw that some individuals engaged in a wide range of value cocreation activities and collaborated with a diverse range of other individuals, while others engaged in very few activities and restricted their collaboration to one or two individuals.

Some practice styles, such as team management and pragmatic adapting, exhibited a high number of interactions with different collaborators. Collaboration in team management tended to be broadly based (from the focal firm, such as doctors and other health professionals), other market-facing and public sources and private sources (such as friends, family, peers) and self-generated activities, while other styles (e.g., partnering) exhibited more narrowly focused collaborations with service providers, primarily doctors.

Importantly, service providers should recognize not only that CVCPSs differ but that the styles seem to reflect different views of the customer's role and that these appear to be related to different outcomes for the individuals. In the empirical context investigated, we found that two practice styles in particular were associated with better outcomes for the customer, with two styles associated with the least beneficial outcomes.

Specifically, we found that team management and partnering (where there are relatively high levels of interactions with different individuals and high to medium levels of activities) exhibit relatively higher quality of life (as shown in Table 3). In contrast, passive compliance and insular controlling practice styles exhibiting relatively low number of interactions with different individuals exhibit relatively low quality of life. Two styles in particular, team management and partnering, should be encouraged by managers as they tend to be associated with higher quality of life. Ideally, customers should be encouraged to adopt a partnering or team management role, going beyond the more passive activities such as cooperating (being compliant with basic requirements, such as attending sessions), and collating information, to engaging in colearning, connecting, combining complementary activities, and cerebral activities (e.g., positive thinking and emotional labor). At the very least, individuals could be encouraged to consider engaging in a range of cocreation of value activities and interacting with a range of different individuals in their respective service networks. Importantly, health care service providers and managers should understand that individuals are likely to have differing views of their role, partially in response to their abilities and interests in these roles. These views are likely to influence the take-up of different types of activities and interactions with others. Accordingly, customers could be challenged about what they believe their role is or could be given the likely links to quality of life. Equally, the findings challenge the way service providers do and should view their customers and ultimately service providers may need to consider new business models.

Future Research

In this final section, we outline an agenda for future research. The study provides a solid base for future research on the practices of customer value cocreation. In particular, we identify five potentially fruitful avenues of research: (1) application beyond health care; (2) situational and personal factors; (3) customer value cocreation scale development and validation; (4) longitudinal changes in customer value cocreation; and (5) impact on organizations.

Application beyond health care. Our focus was on an ongoing customer service that facilitated a range of practice styles of customer value cocreation. Furthermore, the clinic service required the customer to be present for the service but also allowed the customer to make choices about activities that could take place outside the clinic. This offered significant opportunity for customers to create value in a number of ways through interactions and activities as our five practice styles suggest. Future research should test the applicability of our typology of customer value-creation practice styles to service applications beyond health care. We believe that the practice styles are potentially transferable, especially to settings where customers see value in integrating resources to reach important goals such as financial planning, legal advice, and education. The first two of these especially may not involve value

cocreating activities central to the individual's lifestyle and social world (Michie, Miles, and Weinman 2003) as our health care context did. Nonetheless, a variety of value cocreation styles may emerge from analysis of these and other highly participatory service settings. Other services requiring minimum input from the customer, perhaps more standardized service offerings (e.g., budget airlines, fast food), or service requiring customer input such as information or materials may also generate some of the same as well as other value cocreation practice styles. Passive compliance and insular controlling styles are likely to exist in these service settings. Given the wide range of customer behavior and customer education (and thus knowledge as to how to support rather than negate effective value cocreation; Kelley, Donnelly, and Skinner 1990), other value cocreation styles may be evident.

Situational and personal factors. Other considerations such as sharing the service environment with other customers may also affect the value cocreation style. For example, the desirability of emotional contagion may affect the extent and type of value cocreation and the need for organizations to manage it. Future studies could further investigate the drivers of these practice styles of customer value cocreation, such as needs including for instance, need for control, need for cognition, need for trust, and need for self-efficacy and optimism. Moreover, practice styles may vary according to Hofstede's (1983) cultural scale, with individualistic cultures more likely to engage in certain styles of customer value cocreation such as team management and insular controlling, while collectivist cultures may be more likely to demonstrate a passive compliance style suggesting a useful area for future research.

Scale development and validation. Future research may include the development and validation of a scale of customer value cocreation based on the behavioral and cognitive activities identified. This may be in the current or related health settings, such as other ongoing health care treatment, for example, heart disease and diabetes, as well as other service settings, such as financial planning, legal services, and education, as these settings are also likely to enable a wide range of customer value cocreation activities. Such a scale would further enhance our understanding of customer value cocreation, as well as the nomological fit of the construct with customer outcomes, such as quality of life and customer satisfaction, as well as organizational outcomes, such as behavioral intentions and relationship continuance.

Longitudinal changes. It is possible that the practice style of customer value cocreation may vary over time, with more novice individuals relying more on the advice of the medical experts, before moving to a stronger partnership arrangement as they become more experienced (Dagger and Sweeney 2007). Identification of if and how value cocreation activities and interactions vary over the ongoing treatment would allow service providers to encourage individuals to focus on certain constellations of activities with the view to enhancing beneficial outcomes at different time periods. Thus, exploring the

change in customer value cocreation over time would appear to be a fruitful avenue of research.

Impact on organizations. Last but far from least, the impact of customer value cocreation on organizations offers significant research opportunities. For example, the concept of customer value cocreation is so different to the traditional view of customers as passive recipients of what an organization does, that this new approach will require changes in the organizational culture (Vargo and Lusch 2004). Organizations adopting this approach may find it necessary to be more open and reduce the level of control that they have traditionally exercised over customers. This new customer-directed approach is likely to be resisted by traditional managers. However, enabling the customer to cocreate value successfully from both their perspective and that of the organization requires the customer learning from the organization as well as the reverse (Payne, Storbacka, and Frow 2008). Much remains to be done in this area, particularly given the multiple CVCPS and blurring of the boundaries between the customer and organization associated with value cocreation.

Research into the design and implementation of new business models is especially encouraged to facilitate different CVCPS.

Conclusion

Using a two-study research design, this article uncovers what customers actually do when they cocreate value in health care. Customer roles, activities, and interactions are highlighted in the five practice styles of health care customer value cocreation. The article concludes with a research agenda designed to stimulate future research into this important area. At a managerial level, the article challenges the way firms do business. Importantly, this research questions the relevance of the widely used business model where the customer is still viewed as being relatively passive. At a minimum, firms should reevaluate the appropriateness of their business models, paying particular attention to the criticality of understanding their customers' practice styles, specifically their perceived roles, activities, and interactions. This is a crucial first step to enable firms to operate more effectively in today's increasingly networked and collaborative market.

Appendix A
Summary of Depth Interview Respondents²

ID	Diagnosis	Sex	Age	Employment	Stage Months	Phase	Customer Cocreation of Value Style
William	Non Hodgkin's lymphoma	М	55	Professor	3	In treatment	Pragmatic adapting
Renee	Breast cancer	F	55	Administration Manager	3	In treatment	Passive compliance
Josh	Bowel cancer	M	65	Retired	12	Posttreatment	Passive compliance
Russ	Non Hodgkin's lymphoma	M	61	Retired	6	In treatment	Team management
Maria	Breast cancer	F	58	Homemaker	6	In treatment	Passive compliance
Elle	Ovarian cancer	F	65	Homemaker	12+	Posttreatment	Passive compliance
Danielle	Ovarian cancer	F	46	Part Time Lecturer	12	Posttreatment	Insular controlling
Terri-lee	Breast cancer	F	45	Agricultural Administrator	12	Posttreatment	Passive compliance
Cathy	Breast/lung cancer	F	49	Manager (Public Service)	6	In treatment	Partnering
Claire	Breast cancer/secondary brain tumors	F	49	Business Manager	12+	In treatment	Insular controlling
Lucy	Mantel cell lymphoma	F	52	Nurse	6	In treatment	Team management
Jasmine	Breast cancer	F	49	Receptionist	6	In treatment	Passive compliance
Matt	Multiple myeloma	M	51	Landscape Manager	6	Posttreatment	Team management
Sharon	Breast cancer	F	52	Respite Coordinator	12	Posttreatment	Pragmatic adapting
Tim	Cancer of the bladder	Μ	70	Retired	12+	Posttreatment	Pragmatic adapting
Karen	Breast cancer	F	57	School Pastoral Worker	12	Posttreatment	Passive compliance
Amy	Breast/bone cancer	F	57	Homemaker	12	In treatment	Partnering .
Marilyn	Non Hodgkin's lymphoma	F	62	Public Service	6	In treatment	Passive compliance
Polly	Ovarian cancer	F	63	Payroll Clerk	12	In treatment	Partnering '
Julie	Breast cancer	F	46	Psychologist	12+	Posttreatment	Passive compliance

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Notes

- 1. Outpatient service even for oncology treatment captures a patient base that is not so medically incapacitated that preclude them from participating in the research.
- 2. Pseudonyms are used to protect the identity of respondents.
- 3. "Psychological" domain concerns feelings regarding being depressed, nervous or worried, sadness, and fear of the future. "Existential" domain concerns an individual's belief that life is meaningful, life is worthwhile, can achieve life goals, feel good about self, and have a sense of control over life. "Support" domain is concerned about feelings of support and being cared for. "Physical" domain concerns the individual's most problematic physical symptoms, such as fatigue, pain, and weakness.
- "High positive psychological" means that the individual exhibits a low level of being depressed, nervous or worried, sadness, or fear of the future.

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