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Marketing in the Health Care Sector: Disrupted Exchanges and New Research Directions

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Health care has been dramatically disrupted on both the demand and supply sides over the last decade. These changes are impacting the creation, provision, and consumption of health care in fundamental ways. Despite these cataclysmic shifts, the role of marketing remains only partially understood and frozen in a very conventional set of business-to-business (e.g., detailing or advertising to doctors) and business-to-consumer (e.g., direct-to-consumer [DTC] advertising) strategies. While important, this view ignores the new actors, roles, and exchanges[1] that characterize our disrupted health care markets. We argue that this limited view means the field is not acting on the full range of opportunities associated with these changes, including understanding their effects on consumer welfare. With this special issue on "Marketing in the Health Care Sector," we highlight more opportunities for marketing to contribute.

At the heart of our view lies a set of disrupted health care–related exchanges. Although there are other significant stakeholders in health care systems, including insurance providers and policy makers, we focus on exchanges among the three sets of actors most relevant to marketing:

- *Health care producers* are actors that develop health-related products, services, and information, but that do not administer health care directly to patients/consumers. Conventional health care producers are pharmaceutical and medical device companies, whereas new producers are technology and diagnostic companies.
- *Health care providers* are actors that deliver information, products, and services to consumers. Providers have traditionally included doctors, nurses, hospitals, and health centers. In contrast, new providers include retail health care providers, complementary and alternative health care providers, and physician influencers who preach their health gospel to the marketplace.
- *Health care consumers* are actors who receive and use information, products, and services created by producers and providers. Traditionally, these actors are exclusively on the receiving end of value. In today's health care systems, however, consumers may also be peer creators of value when they participate in health care communities, provide reviews, and/or become influencers.

Figure 1 separates the conventional and newer forms of each actor. In the conventional view on the left side of Figure 1, consumers have limited health care or medical knowledge and thus, information flows have been primarily top-down and one-way, as illustrated through the solid black arrows. The right side of Figure 1 shows new actors in each category. In some cases, these new actors already have an established presence in the marketplace, but their role has evolved through interconnectivity (physician influencers) or a strategic deepening of services (e.g., retail health providers). In other cases, the actors are new (e.g., internet of things [IoT] device companies, patient influencers). Regardless, our focus is on how these new actors are disrupting health care exchanges, as captured by the gray arrows in Figure 1.

We focus on two types of disrupted exchanges—first, the influence of new actors on their conventional counterparts, and second, the influence of these new actors on one another. As we will show, we are observing a merging of roles across producers, providers, and consumers that is manifesting in a

[1] We use "exchanges" to convey the flows of value, information, influence, resources, and rivalry between actors.

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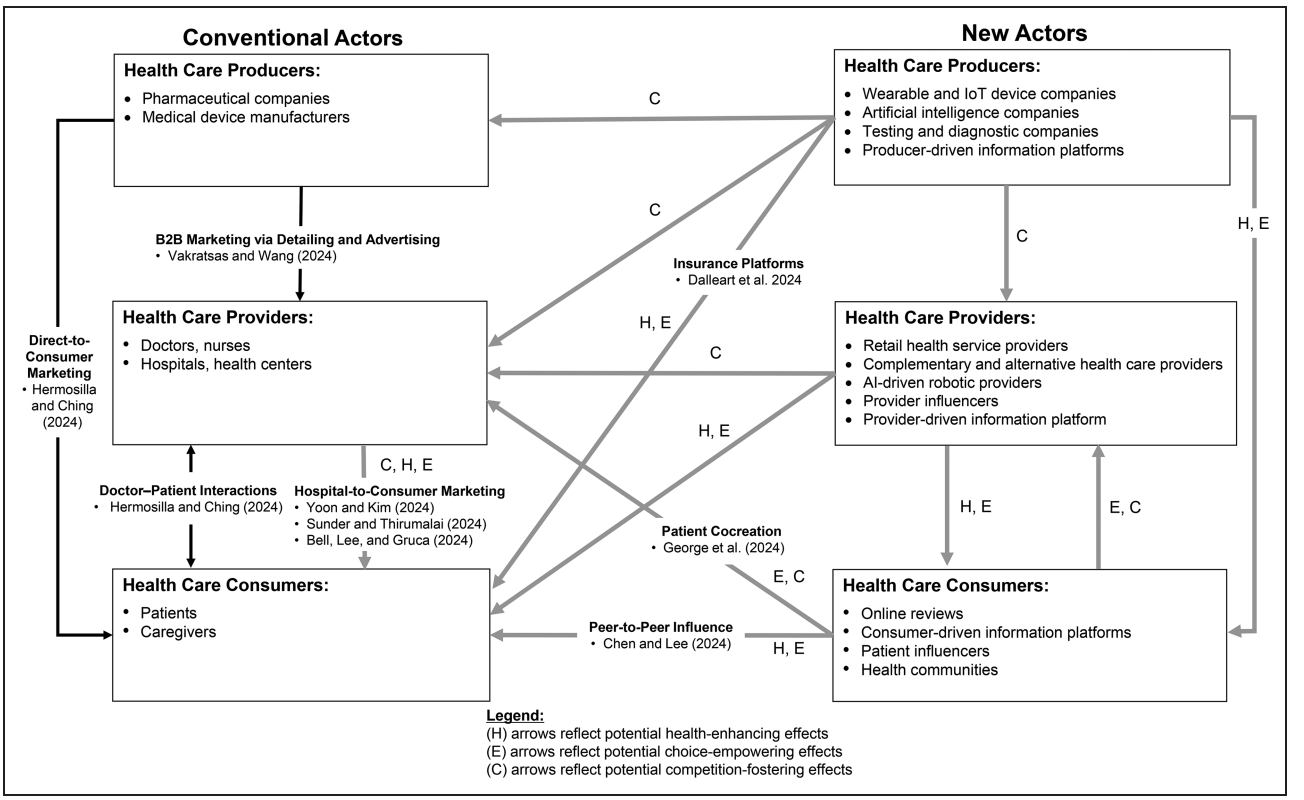

Figure 1. How New Health Care Actors Are Disrupting Health Care Exchanges.

"race to the provider role" and disrupting many exchanges, changing consumer and firm behavior and the operation of these markets. We touch on three potential impacts, as shown in Figure 1:

- The *health-enhancing impact* (H) of health care exchanges refers to the degree to which mental and physical health outcomes might be improved.
- The *choice-empowering impact* (E) of health care exchanges refers to the degree to which consumers have an actual or perceived improvement in their ability and motivation to understand and make health-related choices. One concern is that more information does not always equate to better choices.
- The *competition-inducing impact* (C) is the degree to which health care exchanges foster competition that improves quality, increases access, and lowers prices. To foreshadow, we find that these competitive effects are determined by whether consumers use new health care exchanges as substitutes or complements. In the case of substitutes, disrupted exchanges may spur competition. If complements, the effects may be minimal or they may produce beneficial partnerships.

In the process of highlighting the nature and effects of these disrupted exchanges, we discuss the eight articles appearing in this special issue. We focus first on the new insights into conventional health care exchanges offered in two of our special issue articles. We then consider how three marketing activities involving hospital-to-consumer marketing are disrupting exchanges with consumers. Finally, we discuss how the actions of new health care producers, providers, and consumers are disrupting exchanges with conventional actors and with each other. We conclude with a broader discussion of research opportunities.

New Insights into Conventional Health Care Exchanges

Two special issue articles offer important new insights into more conventional exchanges. On the B2B and detailing link, Vakratsas and Wang (2024) study the role of scientific evidence and marketing in the diffusion of specialty drugs. These authors find that while scientific evidence (in its three stages: unpublished, published, and cited in clinical guidelines) is a strong driver of the diffusion of specialty drugs, marketing activities are not. Their results lead to intriguing follow-up questions, including why these marketing tools fail in such a high-stakes environment. Is it due to specialty physicians discounting information from commercial sources or due to limited marketing support for specialty drugs? As for competition, should specialty drug manufacturers compete by producing and promoting scientific evidence rather than using traditional forms of marketing? What is the role of empowered consumers demanding these drugs from physicians? Are these consumers directing their specialists toward scientific evidence or away from

marketing? Follow-up research should also study whether the faster diffusion of specialty drugs leads to improved health outcomes.

On the doctor–patient interaction and DTC advertising links, Hermosilla and Ching (2024) show that once consumers have received bad medical news (e.g., poor performance on a cholesterol test) from their doctors, they are more likely to choose brand name versus generic drugs. This finding suggests that consumers attribute more efficacy to brand name drugs than to generic drugs (Faasse et al. 2016) even though experts consider both to be equally effective in terms of health impact (Hermosilla and Ching 2024). Research should investigate whether consumers' exposure to name brands' DTC advertising is the reason consumers prefer these drugs when they have a serious health condition. Alternatively, is the effect driven by consumer word of mouth, influencers, or noncompany online sources? If advertising is predictive, what types of digital and nondigital advertising are most effective in influencing consumers' brand preferences for pharmaceuticals?

Relatedly, a key question in both the marketing and economics literatures is whether advertising fosters market power because it differentiates brands and lowers price elasticity or because it provides information about substitutes that increases price elasticity. Mitra and Lynch (1995) offer a consumer-based explanation by suggesting that both outcomes are possible depending on whether marketing increases consideration set size (which increases price elasticity) or increases the relative strength of preference for a given option (which reduces price elasticity). Research is needed to identify the mechanisms by which DTC advertising affects price sensitivity for brand name drugs versus generic drugs.

Disruptions Due to Hospital-to-Consumer Marketing

Three of our special issue articles focus on hospital-to-consumer marketing—one related to advertising (DTC advertising), one related to place (omnichannel marketing), and one related to product (depth and breadth of service offerings). Although this type of marketing has been around for several decades, its usage is increasing, as is its potential to disrupt health, choice, and competition.

Direct-to-Consumer Hospital Advertising

Expenditures on hospital DTC advertising increased more than fivefold between 1997 and 2016, growing from $542 million to nearly $3 billion (Schwartz and Woloshin 2019). Except for Kim and KC (2020), the marketing literature has largely ignored the demand-side effects of this strategy. Yoon and Kim (2024) address this gap by investigating the role of hospital advertising for robotic surgery in patients' choice of high-tech medical procedures. Their findings demonstrate that advertising has a strong effect on new patient acquisition and that robotic surgery reduces the length of hospital stays, creating more convenience for patients and reducing costs overall. However, the research finds no long-term health advantages associated with the use of robotic surgery compared with conventional laparoscopic and open surgeries.

Yoon and Kim's (2024) research triggers new research questions on the effects of DTC hospital advertising. Specifically, advertising may inform consumers about beneficial options that they had not considered before. Advertising may also foster competition, especially if hospitals start to actively pursue patients in competitor markets. An advertising arms race may result, which raises the question of whether this makes patients better off (if the advertised options objectively improve health outcomes) or worse off (because eventually hospital bills will go up to pay for escalating advertising expenditures). Research is necessary to understand how hospitals' use of DTC advertising affects prices and access for patients.

Multichannel Marketing

Health care providers increasingly use a variety of channels to treat patients. New care delivery methods such as telehealth can minimize the staff needed for office appointments (Schiller and Lin 2022) and save patient travel costs. However, consumer acceptance of these new delivery methods remains relatively weak. Consequently, we need research to understand the barriers to adopting the new care delivery methods and the ways in which technologies can be improved to increase their acceptance. Until there is widespread adoption, it is important to consider how to distribute medical care across geographies. This consideration is especially important given that rural patients tend to have more frequent and serious health problems relative to urban patients (Harrington et al. 2020), but are often unwilling to use telehealth options. To overcome this problem, urban hospitals are increasingly providing clinical outreach in the form of visiting consultant clinics (VCCs) that involve a doctor traveling to meet patients in rural outreach clinics. To understand the drivers of these outreach decisions, Bell, Lee, and Gruca (2024) develop a structural model examining/optimizing time allocation by cardiologists between home hospitals and rural clinic outreach locations. They find that a subsidy program compensating cardiologists for their travel time is one cost-effective way to improve rural access.

Pressing research questions in the multichannel health care space include whether adding extra channels (such as rural outreach) enhances usage and improves health outcomes by improving patient access. Does local supply drive up demand, and does usage improve health? Do multichannel health care initiatives foster competition between health care providers on price or service features? In rural areas, more competition (and access) may have the unintended consequence of reducing incentives for physicians to serve these communities if the VCCs do not offer exclusive relationships to the doctors (Bell, Lee, and Gruca 2024). A better understanding of these requirements is important if outreach to rural communities is going to succeed.

Product Portfolio Choice

The range of services health care providers choose to offer is similar to product line design by manufacturers and

merchandise assortments by retailers. Sunder and Thirumalai (2024) investigate the demand-side effects of a hospital's strategic decisions about its portfolio of service offerings. Results show that patient choice is positively influenced by a hospital's decision to "focus" or specialize (e.g., cardiology) and to invest in a "related focus" in areas of expertise associated with this specialization (e.g., endocrinology, respiratory, and digestive systems), finding that patients see these choices as signals of the hospital's expertise.

Sunder and Thirumalai's (2024) findings trigger a follow-up question regarding whether a patient's health is better served by a provider's specialization versus diversification strategy. We suspect that while consumer choice benefits from having a broad (but shallow) array of health services available in a nearby hospital, consumer health is likely better served by deep knowledge that matches a consumer's disease state. Given these trade-offs, research should consider the effect of hospital diversification strategy on new patient acquisition as well as patient mortality, morbidity, and readmission rates. As for competition, research should consider whether portfolio choice spurs competition in ways that increase quality and access or lower prices for consumers. Do hospitals cut back on breadth to ensure they can spend on developing the "depth" signal of expertise? Alternatively, do hospitals compete by positioning away from depth to show they are a well-rounded medical institution?

We next turn to the three sets of new actors and how they are disrupting health care exchanges.

How New Health Care Producers Disrupt Exchanges

Health care producers are those actors that develop health-related products, services, and information. Conventionally, they have been dominated by pharmaceutical firms (e.g., Pfizer, Merck) and medical device manufacturers (e.g., Medtronic, Stryker) that primarily interface with traditional providers (i.e., hospitals and doctors) with limited direct information flows to consumers except for one-way DTC ads and promotions. However, new producers are challenging the health care industry by creating new products and services that have the potential to disrupt exchanges with nearly all actors in Figure 1.

Wearables and IoT Device Companies

The prevalence of individual-level health data has exploded over the past decade with the integration of wearable devices and mobile phones into our daily lives. The global wearable technology market reached $61.3 billion in 2022 and is projected to grow about 15% per year over the next seven years (Grand View Research 2023). These wearable devices use IoT technologies to capture longitudinal data on a multitude of consumer health and fitness variables (e.g., heart rate, ECG, blood oxygen level, weight) and activities (e.g., steps, diet, time sitting). Such detailed and diverse health data have never been available across so many different people for such long periods of time.

There is little doubt that wearables empower consumers with more information. How this will influence their health and medical behaviors is less clear and raises multiple questions. Will consumers use wearable technologies and do so consistently? Some research shows that those who are most at risk for cardiovascular disease are less likely to use their tracking devices (American Heart Association 2022). If worn, what will be the impact? Research by Etkin (2016) shows that the quantification of health data provided by wearables increases monitored activities, such as walking. However, doing so also reduces their enjoyment, which may decrease long-term use as extrinsic motivations replace intrinsic motivations. If so, consumers might be better off not "monitoring their monitors," but instead use emerging AI-driven apps that funnel wearable information directly into electronic health records or to their health care providers. Research has not examined whether this more passive monitoring influences consumer health behaviors in the short or long run or how the use of wearables influences interactions with health providers and compliance with prescribed medicine regimes.

Initial evidence suggests that these products can improve health outcomes. Through its 2019 Heart Study, Apple documented that its tools were able to detect irregular heart rhythms in .52% of the 400,000 participants in the study. This subset of participants was then monitored by doctors, and 34% were found to have atrial fibrillation—a leading cause of stroke (Perez et al. 2019). A recent review of wearable devices shows evidence that their use reduces rehospitalization after home rehabilitation, improves glycemic control, and reduces readmission for heart failure management (Hughes et al. 2023).

These emerging health care producers bring new strengths (e.g., consumer brand loyalty) and capabilities (e.g., communication and data management and technologies) that are potentially a threat to conventional health care producers and providers. Futurist Ron Galloway argues, "If you're a company as large as Apple and you're looking to grow, health care is the only industry with enough scale to move the needle" (Smith 2020). We expect that these new entrants will make health care markets more productive and efficient, which should drive down prices and increase access. However, more research is needed on this important topic.

Artificial Intelligence Companies

Emerging health care producers are transforming the health care landscape through AI-driven technologies (Wood and Schulman 2019). AI is used for diagnosis in the fields of radiology and pathology and to design treatment plans that mine data from previous patient information. Other AI-driven companies offer robots, avatars, and algorithms to interact with consumers.[2] Robotic nurses are expected to be a $2.8 billion

[2] When the AI company provides health or medical care to patients, such as through robotic nurses or an electronic caregiver, this AI should be thought of as a "health care provider." We house both here to simplify our framework.

market by 2031 (Falcone 2023). These robots currently do relatively simple jobs such as lifting and greeting patients rather than advanced jobs such as managing vitals and intake. However, even these tasks are helping to make up for the nursing shortage. There is also a class of remote-monitoring companies, such as Electronic Caregiver, that use avatars to interact with patients and offer reminders, collect information, and call for help when needed. Finally, AI-driven tools like ChatGPT are increasingly used to gather medical and health information.

How these AI tools affect consumer welfare across the competition, health, and choice fronts is fertile ground for more research (Puntoni et al. 2021). Regarding competition, AI-driven health care tools are replacing—and will continue to replace—health care providers. This may increase access and drive down prices if AI can be deployed at scale. However, the health benefits of this scale will depend on how consumers respond. Medical research is beginning to document the conditions under which AI is as efficacious as physicians. Research in marketing has observed that algorithmic aversion (Longoni, Bonezzi, and Morewedge 2019) can be a barrier to the acceptance of AI advice. However, it has also found that this aversion can be overcome by showing that the AI can learn (as humans do) (Reich, Kaju, and Maglio 2023). We need more research on how AI influences the doctor–patient relationship. Will consumers disclose more or less negative information and ask more questions to machines compared with human providers? We do know that computers that disclose information tend to generate more disclosures from people (Moon 2000). We also know that portraying humans as machines in promoting healthy eating is helpful (backfires) for consumers with high (low) eating self-efficacy (Weihrauch and Huang 2021). Finally, given research showing that consumers engage in compensatory consumption responses, such as ordering and eating more food, when they interact with humanoid service robots (with faces, arms, and legs; Mende et al. 2019), we need to look for paths to mitigate these tendencies in either expectations about the robots or in their design.

Testing and Diagnostic Companies

We include three types of companies in this set: lab testing companies, diagnostic scanning companies, and genetic testing companies. While the former two types have been around for decades, consumers have only recently been able to directly access them without the involvement of a doctor. Given that these companies focus on the provision of information—not medical services per se—we classify these companies as "health care producers" and not providers.

Lab testing companies offer medical tests for screening vitamin levels, food allergies, and colon cancer, among other things. Some of these providers, such as Labcorp, offer brick-and-mortar offices where patients can have blood drawn or pick up an in-home colonoscopy kit—on their own and outside of medical directives. Others operate online and use mail-order services to distribute testing materials to patients and providers. *Diagnostic scanning companies* use MRI technologies that are marketed as early detection tools. The press has been awash with stories of their success in finding brain tumors and pancreatic cancer as well as of their use by high-profile celebrities. Direct-to-customer *genetic testing companies* have made individual genetic and ancestry data accessible to consumers. Companies offer reports that document the presence of risks for a range of physical (e.g., chronic kidney disease) and mental (e.g., panic attacks) illnesses.

All three types of companies focus on the provision of information so that consumers can make proactive, informed decisions about their health within or outside the conventional health care system. This is clearly choice-empowering. However, whether this choice equates with health benefits depends on consumers' behavior. On the scanning front, high-profile cases of early detection have certainly captured the public imagination, but medical research has not yet demonstrated the value of full-body scans. Experts point to the high cost—which insurance does not reimburse—and the high level of false positive results that worry consumers unnecessarily and require a great deal of further testing. To this latter point, research in marketing has found that such worry can be costly because consumers receiving false-positive results for life-threatening conditions are more likely to delay future screenings (Kahn and Luce 2003). Critics also worry that consumers may see these full-body scans as a substitute for regular cancer screenings such as colonoscopies and mammograms, leaving some early-stage cancers to go undetected. Similarly, consumers using lab services to self-diagnose may substitute testing for other preventive measures. How consumers think about and use these types of health tools needs significantly more investigation.

Finally, on the genetic testing front, the benefits of early detection of risk factors (e.g., mutations on the BRCA gene) seem clear (e.g., Miller and Tucker 2018). However, our literature lacks insight into how consumers process genetic data (see Daviet, Nave, and Wind [2022] for an initial discussion). Does genetic profiling feed a sense of fatalism about health or, alternatively, motivate preventive actions? We do not yet have answers to these questions. The study of epigenetics, which focuses on the expression of genes, may fuel the latter given that many preventive health behaviors, such as stress reduction and diet, affect gene expression. On the supply side, how can we ensure that genetic data are not used to discriminate in the marketplace?

Supply will grow as companies enter markets and develop innovations that leverage AI and/or genetic data to create value for consumers. These emerging producers will often partner with conventional producers; for example, Mayo Clinic researchers are using AI to detect a weak heart pump based on ECG data from the Apple watch (Malloy 2022). Research will need to determine if consumers view these new services as complements or substitutes for more conventional health care services to understand how they will influence competition. If viewed as substitutes, conventional providers will lose revenues. We suspect most consumers with the wherewithal to afford these

testing services will use them as complements, which should limit their effect on health care markets.

Producer-Driven Information Platforms

Information platforms are operating across the three actors (see Figure 1). We classify one group as "producer-driven" because they create value by collecting, organizing, and disseminating health-related information (without provider or consumer input). For example, Yoon (2020) studied the publication of report cards (of risk-adjusted mortality rates) by the New Jersey Department of Health for hospitals performing coronary artery bypass graft surgery. Results indicate that the report cards led to suboptimal matching because the highest-quality providers became congested and could not serve the highest-risk patients. Health care exchanges that provide information about health insurance options qualify as a producer-driven information platform. In this special issue, Dellaert et al. (2024) study the use of choice architecture in these exchanges and argue that information provision can be improved to help consumers make better insurance decisions by prioritizing (best options first) and partitioning (grouping) insurance options according to decision criteria important to individual consumers.

How New Health Care Providers Disrupt Exchanges

The number and range of providers delivering health care information, products, and services to consumers has grown dramatically over the last decade. The result has been a massive change in the types of products and services consumers can access, the nature of health information available to consumers, and competition in this space. Four new types of providers are discussed: retail health clinics, complementary and alternative health care providers, physician influencers, and provider-driven information platforms.

Retail Health Clinics

Retail health clinics are expected to grow to $6.7 billion in 2030 (Fortune Business Insights 2022). Located in convenient settings, these new providers offer accessible health care services for many common ailments at lower prices. Retail health advocates argue that retailers can help underserved communities (who often use the emergency room for medical services) access more affordable health services (Alexander, Currie, and Schnell 2019). However, Rand Corporation (2016) finds that only 12.5% of these clinics are located in underserved areas. While some research suggests that the quality of care at retail health clinics is comparable to conventional providers (Godman 2016), other scholars point to the need for more research (Hoff and Prout 2019), and still others worry that care is compromised (American Heart Association 2022). On the positive side, these clinics are cheaper ($38 less than urgent care, $471 less than physician offices, and $746 less than hospitals; Lagasse 2023) and often priced with more transparency.

The emergence of retail health providers may improve health if consumers who would otherwise not visit doctors' offices are willing to visit retail clinics given their accessibility and lower prices. Ashwood et al. (2016) estimate that 58% of retail clinic visits reflect medical care that would have otherwise not occurred. However, one unintended consequence is that patients may visit retail clinics instead of their primary care doctors, challenging the continuity of care and making it more difficult for chronic health conditions to be caught and treated. Indeed, research finds that about 39% of clinic visits replace physician visits (Ashwood et al. 2016) and that retail health clinic patients tend to be younger adults without a regular provider (Rand Corporation 2016). A related concern is that retail health clinics will only be used for curative, not preventive, health care (Moorman and Matulich 1993).

Despite the potential welfare loss due to the use of retail clinics as substitutes, this pattern should foster competition between retail clinics and more conventional providers. If so, a broader swath of consumers may benefit from innovations such as Amazon's One Medical clinics' same-day services, appointments that start on time, and "covered when you travel" health services.

Complementary and Alternative Health Care Providers

The marketplace for health care services has exploded with a range of complementary and alternative (C&A) health providers, reaching $31.8 billion in the United States (IBIS World 2023). Approximately half of all Americans report the use of some form of C&A medicine (Pew Research Center 2017). While many C&A health care providers have been around for centuries (e.g., Ayurvedic medicine, acupuncture), other forms have become prevalent over the last few decades (e.g., functional medicine).

C&A health care providers clearly increase the level of information available to consumers because they are trained to focus on complementary aspects of the body, mind, and lifestyle (Thompson and Troester 2002) and related solutions. This may also occur, in part, because C&A providers tend to spend significantly more time with patients (Finnegan 2017). These effects are choice-empowering.

The effects on health and competition depend largely on how consumers use C&A providers. Research offers clear evidence of the advantages of C&A therapies for some conditions. This tends to occur when C&A providers achieve better outcomes at lower costs and with fewer pharmacologic side effects—a benefit that cannot be understated given the opioid crisis. For these reasons, Medicare covers acupuncture for lower back pain, and the Veteran's Administration covers acupuncture for use in PTSD (Tang et al. 2023). In such cases, C&A may be a viable substitute, which should improve health outcomes and spark competition on these therapies. Evidence that the latter is already happening is found in cases where C&A providers are operating within more traditional health care systems

(e.g., Duke University Integrative Medicine) or in medical research (Phutrakool and Pongpirul 2022). In other cases, consumers use C&A services as a substitute for conventional therapies even when the latter are superior. When this occurs, health is compromised. Health can also be negatively affected when the use of C&A therapies is not shared with physicians, which research shows occurs about 29% of the time (UT Southwestern Medical Center 2019). The latter is one reason to bring C&A therapies in-house—so their use can be codetermined and communicated across all members of a patient's provider team.

Provider Influencers

A special class of health care providers delivers value as influencers. There have always been social roles for physicians who give advice, write books, and even sell related products. For example, Dr. Benjamin Spock was a popular child-raising expert in the 1950s, whose book *The Common Sense of Baby and Child Care* is one of the best-selling books of the twentieth century (Spock 1946). What is distinctive about the new breed of "provider influencers" is their ability to use digital tools to reach consumers all over the world. Consumers are now one click away from videos from online medical professionals who have the knowledge, personality, and focus on topics that consumers find appealing, such as mental health or diet. Supporters of consumer use of influencer providers might argue that it is beneficial for consumers to have access to more health information and that influencers educate consumers about important topics that many physicians do not address. This may be particularly important for consumers who lack physical or financial access to health care.

Critics worry that these physician influencers have too much sway with consumers and urge consumers to "stop trusting celebrity medical influencers and start trusting doctors who know you" (Mainous 2023). This focus on the doctor–patient relationship, which hosts more interactions and exchange of information, allows for the modification of health strategies to meet individual consumer needs. Further, many consumers may overlook that these provider influencers are not regulated by the American Medical Association. Online platforms have standards regarding the removal of medical misinformation, but their enforcement is far from perfect (Konstantinovsky 2022). Finally, many influencers receive support from companies, which can lead to conflicts of interest. More followers mean more advertising dollars or crowdfunding support (Gorski 2023), which critics worry increases the incentive to focus on more negative, more sensationalized information (Swire-Thompson and Lazer 2020). This tendency becomes even more problematic when consumers stop visiting their conventional or C&A providers and exclusively rely on influencer guidance. For all these reasons, critics believe influencer providers are a net negative on health.

Will the surge in influencer providers spur competition with more conventional providers? We suspect not, because conventional doctors are likely to eschew the type of video advice millions of people seek from online medical influencers. Hence, we do not expect other breeds of doctors to change their behaviors in response to this new provider type. However, conventional and new health care providers could leverage physician influencers who advocate health strategies that are consistent with their prescriptions to patients as a way to offer more support and to reduce their own explanatory burden in these relationships.

Provider-Driven Information Platforms

A second class of information platforms is driven by health providers. These platforms house a large amount of health and medical information on the nature of diseases, causes, and management of health and medical problems. Some sites are hosted by high-profile medical institutions, such as the Mayo Clinic, Cleveland Clinic, the World Health Organization, the Centers for Disease Control and Prevention, the National Institutes of Health, and MedlinePlus. Other platforms are fully commercial, such as Healthline, which averages about 250 million visitors per month (Scripted 2020), and WebMD, which houses a popular "symptom checker" into which consumers can enter symptoms for self-diagnosis.

On the health front, health care providers are driving the content on these sites, which should increase their accuracy. Further, these platforms have an incentive to remain truthful and up-to-date in order to drive traffic to their sites and to generate positive word of mouth. These incentives should increase competition among these platforms on this important feature. However, critics warn that these sites are not regulated for safety or accuracy, suggesting that research should investigate whether market forces are working to keep the accuracy quotient high.

Consumers may be able to help detect emerging disease conditions earlier if they can informally check their symptoms by using these sites. A large-scale survey by the National Institutes of Health found that more than one-third of Americans self-diagnose when facing a health problem (Kuehn 2013), while other evidence suggests the number may be closer to 16% (Hochberg, Allon, and Yom-Tov 2020). However, if these sites are used as a substitute for visiting a doctor, this may cause harm to consumers. These dynamics should be studied more completely, as should the question of whether traditional health care providers offering customers these types of information platforms will help minimize the use of more weakly vetted sources.

How New Health Care Consumers Disrupt Exchanges

A dynamic set of actors in the emerging health care system are consumers themselves. Outside the reach of producers and providers, consumers are generating their own sources of information, including reviews of doctors, practices, and hospitals as well as influencer communications, and participation in online and offline communities. This information has the potential to

drive competition among health care providers on valued attributes, to empower consumers with more information, and to drive health outcomes. We discuss each of these peer-to-peer sources next.

Consumer-Driven Online Reviews and Platforms

With the rise of consumer-driven online review platforms such as Yelp and Healthgrades, consumers are increasingly able to tap into consumer-generated physician and hospital ratings to inform their health care decisions. A recent survey finds that 90% of patients use online reviews to select and evaluate physicians (Hedges and Couey 2020), which reduces information asymmetry. In this special issue, Chen and Lee (2024) show that consumers' online ratings drive a physician's patient flow and are positively associated with measures of physician quality, including credentials, adherence to clinical guidelines, and patient health outcomes.

Another example are platforms hosted by the government that house patient ratings of their hospital experiences. The Consumer Assessment of Healthcare Providers and Systems (HCAHPS) offered by the Centers for Medicare & Medicaid Services (CMS) seeks (1) to provide comparable data on the patient's perspective of care that allows objective comparisons between hospitals, (2) to create incentives for hospitals to improve their quality of care, and (3) to enhance public accountability in health care by increasing transparency (CMS 2023). Scores on these ratings also influence a hospital's reimbursements. Although causal evidence is not available, research shows that performance on HCAHPS is associated with improved health outcomes (Boulding et al. 2011), and there is little doubt that it empowers consumers with information that might be used in hospital choice.

Although online reviews have received a great deal of attention in the marketing literature, their role specifically in the health care sector remains underresearched and challenging to determine. Different from reviews in other domains, patient reviews in the health care sector are complicated by the need to protect the privacy and anonymity of patients. This makes it hard for a health care provider to respond to complaints or compliments on the online platform. The required anonymity also creates the opportunity for fake reviews that may be influential, but also hard to spot. All these considerations offer fertile ground for follow-up research, including how this information is driving competition among health care providers.

Patient Influencers

A more personal form of peer-to-peer influence is that of patient influencers. These consumers are typically individuals who are actively managing a chronic condition and sharing their experiences with online followers. Because these influencers share their own personal stories and experiences, they are often viewed as authentic and trustworthy sources of information (Chan 2023). Health care marketers, particularly pharmaceutical firms, are turning to these consumers to promote their products because patient influencers can help firms overcome the low levels of trust (i.e., only 58%; Edelman 2019) consumers have in pharmaceutical firms (Willis and Delbaere 2022). Further, messaging from social media health influencers has proven to be more persuasive than messaging originating from brand-owned channels (Enberg 2020; Willis and Delbaere 2022). A challenge of using patient influencers is that they may enable firms to skirt important regulations. While the U.S. Federal Trade Commission updated its guidelines for social media marketing, the rules remain "vague and up to interpretation if no pharmaceutical brand name is mentioned" (Willis and Delbaere 2022).

Given the potential effectiveness of patient influencers to drive demand, their use is likely to continue to grow. This raises several important research questions. When do consumers adopt patient influencer input without further research or checking with their doctor? Misinformation is a significant concern, such as when patient influencers backed the off-label use of Ozempic for weight loss, which created both severe side effects in patients and shortages for consumers who needed the drug for its on-label benefits. From a policy perspective, what are the most effective types of regulation that the U.S. Food and Drug Administration and/or the Federal Trade Commission can put into place to minimize patient influencer harm? And, managerially, how does the use of patient influencers affect the brand equity of pharmaceutical firms and their signature drugs?

Health Communities

Traditional online health care communities (OHCs) also serve as an important source of peer-to-peer information and support. Unlike those created and developed by influencers, these online communities often grow organically and are often moderated by the patients themselves (Hodgkin, Horsley, and Metz 2018). The participatory and longitudinal nature of these forums enables patients to offer and receive more customized advice and social support from community members who share a common interest or experience with a specific disease or condition (see, e.g., IBDRelief.com for inflammatory bowel disease). Many of the successful OHCs rely exclusively on gift economies, where participants are motivated to share their insights and experiences freely to benefit community members. It follows that when outside entities attempt to monetize such communities, community members tend to quit engaging (Hodgkin, Horsley, and Metz 2018).

Patient empowerment is one of the key benefits of OHCs, which increases users' self-esteem, self-efficacy, and management of their conditions (see Atanasova and Petric [2019] for an overview). Differences in age cohorts have also been observed, with Gen Z consumers benefiting the most in terms of alleviation of depressive symptoms and involvement in online support groups (Bizzotto et al. 2023).

While individual empowerment is well-documented in OHCs, little attention has been paid to the potential for collective empowerment (Atanasova and Petric 2019). This oversight is important given that community participants have the

potential to "increase their social power as an interest group, with the aim of influencing the institutionalized arrangements and political decisions that affect their quality of life" (Atanasova and Petric 2019). One example occurred in New Zealand, where a community of breast cancer patients used its collective engagement to force a change in a national health insurance plan's coverage of an effective new treatment (Radin 2006).

Offline communities can offer similar benefits to their members and have a long history in marketing scholarship (Muniz and O'Guinn 2001). In this special issue, George et al. (2024) study First Nations people living in the Northern Territory in Australia. A pressing issue for this population was its reliance on a health care system developed by Western colonizers that did not fit First Nation customs and preferences. These authors study how community efforts deployed marketing across the decolonization process in "Birthing on Country"—a program that allows mothers to have their babies on tribal lands using tribal customs and providers. This research shows that marketing can play a role in empowering patients, which is especially important for patients who feel alienated and powerless in the health care system.

Because both online and offline health care communities are based on altruism in the context of a gift economy, one might expect misinformation on the platform to be significantly lower (or more quickly corrected) than on platforms driven by an entrepreneurial/economic model. Such a proposition could be tested in future research.

Disrupted Exchanges in Changing Health Care Ecosystems: What Do We Need to Know?

We have suggested that the actors and activities in today's changing health care ecosystem are or will disrupt the exchanges between health care producers, providers, and consumers. What we do not know is how the marketplace will be transformed by these disruptions or how marketing might contribute in positive or negative ways. Will health be improved, choice enabled, and competition fostered on quality care, access, and lower prices? Or will health be managed differently, but with no effects on morbidity and mortality, with more confusion than empowerment, and with more competition but no welfare gains? Despite considerable progress and coverage in recent special issues (Ailawadi et al. 2020; Sarkees, Fitzgerald, and Lamberton 2022; Zhu, Chakravarti, and Ni 2022), we do not yet have good answers to these questions. In this section, we look across the disruptive exchanges we have discussed to identify important implications and areas where we need more research.

Questions About Health Care Consumers

Understanding the use of health information. Empowerment is a clear theme across this editorial. To sort out whether empowerment helps or hurts health outcomes and markets, we need deeper and more extensive research insights regarding how consumers search for, evaluate, and use health care information coming from new producers, providers, and other consumers. In particular, it would be helpful to have stronger descriptive insights into what consumers are actually doing at each stage of the journey. How do they learn about health problems, causes, and solutions? Alternatively, how do consumers gather information to decide what health care products and services are necessary? How should they do so? Consumer research is relatively silent on this fairly fundamental issue, although Liu et al. (2022) offer a promising framework describing the patient journey across the preclinic, in-clinic, and postclinic stages. We need more empirical work to understand what is happening, why, and to what effect. This work could document online and offline information patterns as well as stopping and inflection points in the health care journey from both an information processing and cultural perspective.

Assessing equity in health care exchanges. Health care has long been a market with strong disparities among patients. It is important to consider whether disruptions in health care exchanges will address these inequities. Many barriers associated with the digital divide have been overcome. While seemingly positive, this digital access means large amounts of unfiltered information are now reaching underprivileged consumers who often lack the knowledge to assess its credibility. Research needs to shed light on whether greater access to health information empowers, deceives, or overwhelms disadvantaged consumers. To leverage the sociologist David Caplovitz's classic question, "Do the poor pay more?," we could ask, "Do the poor lose more" in these new digital health markets? The Australian Birthing on Country initiative among First Nations people in George et al. (2024) suggests that support is needed, but that it must be accompanied by deep engagement and involvement with the affected consumers.

Determining real health outcomes. The marketing literature has typically stopped short of actual health outcomes when studying health exchanges or studied outcomes at the aggregate level (e.g., Kim and KC 2020; Yoon and Kim 2024). In particular, we lack research that links data about individuals' health care product, service, and information usage to their health outcomes. Technology companies in the role of health care producers will likely change this if and when daily health data are connected to an individual's broader digital profile. Together with additional diary/photo data about consumer behaviors, including diet, there are important opportunities in this area. Marketing scholars can bring their understanding of the full range of consumer search, purchase, consumption, and disposition behaviors to bear on questions on health outcomes. Researchers will, of course, need to be mindful of selection issues that arise when studying consumers who choose to use devices and share their data.

Finding a 360-degree view of health care exchanges. Huang and Lee (2023) offer a tour de force of the health and decision-making literature in their curation for the *Journal of Consumer Research*. Their framework makes clear that we need to look across the individual, peers, and the larger

situational and societal factors that codetermine health. We are fast to put a lot of emphasis on the individual and "responsibilize" this role (Giesler and Veresiu 2014). However, how health is defined and how it is achieved are, in fact, heavily influenced by the era, country, state, neighborhood, and family we find ourselves in as consumers. Marketing research needs to attend to those differences in understanding health drivers and in designing health interventions—from creating the ritual of healthy family dinners, to prioritizing sidewalks in residential developments and reducing the stigma of using mental health services.

Questions About Health Care Markets and Marketing

Disintermediating health care markets. The CMO Survey (2023) reports that 36% of health care companies added a DTC channel in the last three years. Our analysis points to this same conclusion—that there is a "race to the provider role" as producers seek to connect with the customer directly by integrating forward in the value chain. The entry of technology firms into health care is a significant competitive threat to traditional health care providers due to these firms' customer knowledge, relationships, and brand equity. In response, conventional providers are working to build consumer loyalty—for example, some are expanding their urgent care branches, even at a financial loss, as a customer acquisition strategy. Whether this strategy can create a moat that protects providers from tech entrants or whether technology companies' already-high brand equity will allow them to dominate these markets is a question research should investigate.

Merging of organizational roles across the value chain. One implication of disintermediation is that organizational roles are merging across the value chain. Historically, there has been a separation of the creation, delivery, and consumption of value in health care. Pharmaceutical and medical device companies provided products, but they did not provide medical care. Consumers used health care, but they did not spread information to other consumers, at least not at a scale that is now possible online. Our analysis shows that emerging health care actors sometimes perform multiple roles in the race to the provider role. For example, IoT and wearable companies are moving from providing simple tools to offering information that approaches what we might call "health care delivery." For example, Withings, a French company, has launched a suite of products to measure blood pressure, 6-lead ECG, body weight composition, and sleep stages that link to a health app on consumers' mobile phones and can be shared with health care providers. From a strategic perspective, this role merging likely increases efficiencies where producer entities would otherwise incur transaction costs to exchange with providers, potentially driving down prices. At the same time, this role merging could increase market power, which could limit access and variety as well as raise prices.

Determining substitutes or complements in health care markets. An issue that arises across our analysis is whether consumers view emerging health care producers, providers, and consumers as substitutes for or complements to conventional sources or one another. If used as substitutes, concerns about consumers skipping regular medical appointments, forgoing regular scans, or using non-evidence-based health care advice are heightened. At the same time, these patterns of substitution should spur competition on more C&A therapies as well as the positive features of retail clinics, such as on-time appointments and traveling insurance. Research needs to study these patterns.

Assessing the impact on partnerships in health care. The race to the provider role and the emerging pattern of substitutes and complements among health care options will likely set the stage for new partnerships and alliances. Firms that have mastered the capture and analysis of individual-level data streams (e.g., retailers, mobile device manufacturers) could partner with firms that have health care–specific knowledge to generate new offerings that neither could provide alone. Firms with strong consumer brands may be able to stretch their brands into health care without partnering, but for most firms the transition from consumer markets into health care markets may be too difficult without a knowledgeable health care partner. Research is needed to identify the key market-based assets and capabilities that are most valuable and transferable to the health care setting. In addition, we need to consider how these partnerships can pave the way for new technologies to improve the effectiveness of health care services and the quality of the customer experience, to protect consumers' privacy, and to empower consumers to become more engaged with their health.

Investigating marketing payoffs in health care. Given skyrocketing health care costs, which are presently $3.6 trillion and 19% of U.S. GDP, marketing can contribute to containing these costs in several ways. First, this can occur when marketing has a positive return on investment by increasing demand more than its cost. To that end, scholars can help practitioners apply stronger segmentation, targeting, and positioning strategies to drive up demand. Second, marketing can be used to improve the strength of brand and customer relationships, which can lower costs, increase revenues, and lower the volatility of cash flows (Srivastava, Shervani, and Fahey 1998). Third, by determining when health care marketing seems to help and why, we can also guide expenditures. For example, Yoon and Kim (2024) observe that using marketing to promote robotic surgeries seems to create demand. However, Vakratsas and Wang (2024) find that marketing does not increase the adoption of specialty drugs.

Determining the effect on firm financial performance. Many health care producers and providers pursue profits and/or shareholder value. While we have discussed how disrupted health care exchanges may impact consumer empowerment, health outcomes, and competition, another key outcome variable is firm financial performance. It is unlikely that these four outcome variables will always align. For example, trends

fueling empowered consumers, improved health outcomes, and disruptive competitors may be costly to a firm's bottom line. However, if achieved, profits will be also a source of attraction for new entrants seeking a share of this enormous industry and for new investments in AI and other tech by health care producers. These investments could benefit consumers and markets. Whether or not this occurs will likely depend on how for-profit companies invest and manage quality on the front line to achieve health outcomes. A longstanding debate in the health and economics literature reveals mixed evidence regarding how well hospitals do this. We need more research regarding why market mechanisms may not work to improve quality in health care markets and how marketing can play a role in eliminating sources of inefficiency.

Learning from international differences in health care markets. While many of the themes in this editorial are illustrated using U.S. examples, most apply across countries. At the same time, there are stunning international differences in health care funding, coverage, and outcomes. A recent report by Gunja, Gumas, and Williams (2023) documents that the United States is the only high-income country that does not offer universal health coverage, while health care spending (both per person and as a share of GDP) continues to be three to four times higher in the United States relative to other high-income countries.[3] Despite its high expenditures, the United States has the lowest life expectancy at birth, the highest death rates for avoidable or treatable conditions, the highest maternal and infant mortality, and among the highest suicide rates. Moreover, the United States has the highest rate of people with multiple chronic conditions and an obesity rate nearly twice the average, according to the Organisation for Economic Co-operation and Development. Americans see physicians less often than people in most other countries and have among the lowest rate of practicing physicians and hospital beds per 1,000 people.

These stark differences raise important follow-up questions that would benefit from a marketing perspective. For example, are the poor health outcomes in the United States causally related to the lack of universal health care, and if so, what consumer and provider actions are the responsible mechanisms? Do marketing expenditures contribute to more expensive health care?

Finding a "better world" role for marketing in health care. In the popular press, marketing often tends to be viewed negatively in health care. We think this is because marketing is often portrayed as focused on persuading doctors and patients or underlying the rise of physician and patient influencers. Likewise, in health care organizations, marketing is often relegated to a selling role. However, amid the sea of changes we have documented, we seek a broader role for marketing that fully accounts for its potential to create and deliver value for consumer welfare. One role that we think is underdeveloped is for marketing to help identify unmet needs that might drive both conventional and new producers and providers to offer more value. Such a role means marketing will have a more fundamental seat at the table in these companies—a seat that involves more customer discovery work to uncover opportunities. This may require marketers who are dually trained in health or medical research as well as the development of more R&D capabilities that begin with consumers—not in the lab.

Getting to a broader and more positive impact may also require the field to assess whether different marketing frameworks are necessary when it comes to health care. This perspective asks, for example, should we sell soap and mammograms in the same way? Or do we need new guidelines? This shift may require deeper training in health and medical care even for marketers who are not supporting R&D work. We should also study how to build health care organizations—in terms of culture, structure, and capabilities—to ensure that marketing is a force for good in the world. Work by Manary et al. (2015) and Marinova, Ye, and Singh (2008) offers a good start, but more research is needed on this important topic.

Conclusion

We see an enormous opportunity for the marketing discipline to help understand and address the complexities arising from the unprecedented pace and level of change in health care exchanges. Asking questions that consider how the new actors and new roles are participating in these exchanges and to what end in terms of health, choice, and competition outcomes is a valuable role we can play. We invite you to contribute to creating a stronger role for marketing in this important domain.

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Dedication

For all those who struggle to achieve health and those who are committed to its attainment.

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[3] High-income countries are defined in the report as Australia, Canada, France, Germany, Japan, the Netherlands, New Zealand, Norway, South Korea, Sweden, Switzerland, the United Kingdom and the United States.

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