Healthcare Value Proposition

Creating a Culture of Excellence in Patient Experience

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A PRODUCTIVITY PRESS BOOK

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Dr. Omachonu's other books include *Principles of Total Quality* (co-authored with J. Ross [2004]), *Healthcare Performance Improvement* (1999). His most recent book is titled *Access to Health Care and Patient Safety* (co-authored with M. Taveras Ponce [2013]) His book titled *Principles of Total Quality* was translated into the Spanish language (*Principios de Calidad Total*) in 2014. Dr. Omachonu has published several papers in technical and professional journals and has given hundreds of seminars and presentations to professional and management groups all over the United States and South/Central America.

He has supervised the implementation of the quality management process in several service organizations. He has successfully conducted industrial engineering efficiency and customer flow studies. Dr. Omachonu has served as the evaluator for federal and state funded projects (Substance Abuse and Mental Health Services Administration [SAMHSA], Office of

Mental Health [OMH], Department of Health, Ryan White, etc.) He has been featured twice on CNN Business. He has served on the boards of a number of organizations including Interim Healthcare Services, Fort Lauderdale, Florida; Coral Gables Hospital, Coral Gables, Florida; and Palmetto General Hospital, Miami, Florida. His clients include Humana, Louisville, Kentucky; Leon Medical Centers, Miami, Florida; CAC Medical Centers, Miami, Florida; Peoples Health, New Orleans, Louisiana; Methodist Health System, Memphis, Tennessee; Holy Cross Hospital, Fort Lauderdale, Florida; Baptist Health Systems, Miami, Florida; Bascom Palmer Eye Institute, Miami, Florida; Miami Children's Hospital, Miami, Florida; Memorial Hospital System, Hollywood, Florida; Hospital Corporation of America (HCA), Nashville, Tennessee; and Tenet Hospitals, Dallas, Texas. Other clients include Florida Power & Light, Juno Beach, Florida, as well as some Fortune 500 companies. He has conducted educational and training sessions for physicians all over the United States in the areas of Physician–Patient Communication, Improving the Patient Experience, and Improving the Hospital Consumer Assessment of Healthcare Providers and Systems (HCAPH) scores.

Dr. Omachonu has facilitated several strategic planning initiatives and senior management retreats for major organizations. He has worked with several Black Belts in Lean Six Sigma. He has served as the evaluator for all primary care projects funded by the Health Foundation of South Florida. He is a renowned speaker/trainer in the areas of Management, organizational development, process re-engineering, and methods improvement. He has published research papers in *Health Services Research Journal*, *European Journal of Operational Research*, and *Journal of Healthcare Management Science.*

Dr. Omachonu has been the recipient of the University of Miami school-wide teaching awards and multiple awards for teaching excellence in the School of Business (MBA Healthcare Sector) program. He is one of 100 world-wide recipients of the IBM 2012 Faculty Award for his work in the field of healthcare. He was recently named the recipient of the Alexander Orr Teacher of the Year Award for the College of Engineering (2013).

Introduction

After decades of retooling and resets of the healthcare system in the United States, patients are left wondering if they were ever at the center of the decisions and choices driving the evolutionary journey. After half a century of several iterations of good and bad ideas, there are signs that some aspects of the patients' experience are better and some are worse. Some of the policies seem arbitrary and poorly conceived, while others died in the vineyard of execution. And still, many more seem misaligned with the goals they were intended to achieve. Because the healthcare industry has so many stakeholders with different needs, wants, and expectations, it is always a challenge trying to balance the needs of the stakeholders with the constraints of the industry. Rather than give up in the face of the mountains of challenges facing the healthcare industry, I decided to write this book in an attempt to refocus the bright lights on the patient and his/her interpretation of value. Although the healthcare value creation process largely occurs on a person-to-person basis and often within the confines of an organization, a facility, an office, or clinic, it is still subject to a whimsical pattern of laws and public policies. An awareness of the macro-level factors will deepen our understanding of the challenges facing the industry, while the micro-level factors will help us focus on the daily encounters. Any attempts to understand the healthcare value creating process must be informed by the national and even global perspectives.

According to The Commonwealth Fund's most recent study of 11 different countries' healthcare systems, the United States comes in dead last. This study measures overall industry performance and each country is ranked by five factors that contribute to their score: care process (in which the United States placed 5th), access (11th), administrative efficiency (10th), equity (11th), and outcomes (11th) (Schneider et al., 2017). According to Robert Pearl, former chief executive officer (CEO) of The Permanente Medical Group (1999–2017), "When independent researchers crunch the numbers, American health

care ranks nowhere near the top of the list. Among developed countries, the United States has the highest infant mortality rate, the lowest life expectancy and the most preventable deaths per capita." After centuries of experimentation with the healthcare system, it is a perplexing irony that one of the richest countries in the world has not been able to solve the healthcare conundrum. There is a paucity of useful solutions to the problems facing the healthcare industry, and perhaps more importantly, there is little consensus about the causes of the problems. The average American sees "19 different doctors in their lifetime" (Pearl, 2017). This explains some of the challenges posed by paper records—which are still relied on by "about 50 percent of all doctors" according to Pearl (2017). "If you are like most patients, this amounts to 19 different physicians asking you about your allergies, medications and test results. Only one needs to get the information wrong to spell disaster" (Pearl, 2017).

David Rook notes that the best path to fixing the American healthcare system is by broadening access to healthcare through reductions in cost rather than government-mandated access and insurance subsidies, as they do not address the underlying price structure (Rook, 2017). This can only happen when we eliminate the perverse incentives in place at nearly every rung on the healthcare system ladder and empower consumers to shop for value, increase care options, and stimulate competition (Rook, 2017).

"Health-care providers who make prevention a priority are able to lower hypertensive disease, stroke and heart-attack rates anywhere from 10 to 30 percent below national averages" (Pearl, 2017). "If every insured American received care from these higher performers, as many as 200,000 heart attacks and strokes could be prevented each year" (Pearl, 2017).

While the pockets of success stories provide a ray of hope to the industry, they leave us wondering if this is the most we can achieve in an industry that is as complex as any in existence. Is a comprehensive reform of the industry dead or are we closer to the bull's eye than ever before? What lessons have we learned from the mistakes of the past decades?

1. The problems of the healthcare industry cannot be solved by any one discipline; it requires a multi-faceted, interdisciplinary approach involving subject matter experts and stakeholders from different sectors of the economy and society.
2. The industry cannot legislate itself out of the quagmire of inefficiency and poor quality. Policy makers represent one component of the healthcare transformation, but they should not be allowed to drive the debate.

3. Ideas organized around the patients' experience will develop wings, but only if they are balanced against the realistic constraints of the delivery system and the needs of other key stakeholders such as physicians.
4. The patient experience challenge cannot be solved in isolation. The industry has to take a comprehensive view of the patient experience and such a view must take into account the multitude of touch points in the life of a patient and/or his condition.
5. The industry must rethink the concept of "value" and define it in the context of the patients' experience.
6. The ability to focus on population health gives the industry a new level of legitimacy.
7. Digital transformation is indispensable to the current and future state of the healthcare industry.
8. The healthcare industry has been painfully slow at adopting ideas from other industries even when the evidence shows that such ideas would have merit in healthcare. In some cases, it takes decades to adopt proven methodologies and ideas.

In Chapter 1, I highlight some of the key factors and opportunities driving change in the healthcare industry. In Chapter 2, I examine the determinants of value from the patients' perspective. Chapter 3 looks more deeply at the patient experience and how to improve it. Chapter 4 deals with how an organization's attention to detail conveys the perception of value to the patients. In Chapter 5, I emphasize the significance of data, information, and insight and how organizations can use them to drive the patients' experience. In Chapters 6 and 7, I introduce the concepts of Lean Management and Six Sigma respectively. Chapter 8 addresses the implications of digital transformation in the healthcare industry. In Chapter 9, I address the role of telemedicine and how it can profoundly change the healthcare landscape.

References

Pearl, R., 2017. *Mistreated: Why We Think We're Getting Good Health Care and Why We're Usually Wrong*. New York: PublicAffairs.

Rook, D., 2017. "Why America's Healthcare System Is Broken." JP Griffin Group. https://www.griffinbenefits.com/employeebenefitsblog/why-americas-healthcare-system-is-broken

Schneider, E.C., Sarnak, D.O., Squires, D., Shah, A., and Doty, M.M., 2017. "Mirror, Mirror 2017: International Comparison Reflects Flaws and Opportunities for Better U.S. Health Care." The Commonwealth Fund. https://interactives.commonwealthfund.org/2017/july/mirror-mirror/assets/Schneider_mirror_mirror_2017.pdf

Chapter 1

The Healthcare Industry: Challenges and Opportunities

National health expenditure growth is expected to average 5.6 percent annually from 2016 to 2025, according to a report published by *Health Affairs* and authored by the Centers for Medicare & Medicaid Services' (CMS) Office of the Actuary (OACT). These projections do not assume potential legislative changes over the projection period. What continues to be shocking to most healthcare observers is the fact that, despite the growth rate, there is no evidence that the overall patient experience has improved. The report also projects the healthcare share of gross domestic product (GDP) to rise from 17.8 percent in 2015 to 19.9 percent by 2025. According to the report, for 2016, total health spending was projected to have reached nearly $3.4 trillion, a 4.8 percent increase from 2015. The report also found that, by 2025, federal, state, and local governments are projected to finance 47 percent of national health spending, a slight increase from 46 percent in 2015. The challenges and opportunities facing the healthcare industry include the following:

Healthcare Cost and Sustainability

The calls for reform grow increasingly louder as the global healthcare sector continues to be besieged by unprecedented change. Providers, payers, governments, and other stakeholders experiment with various business and operating models in efforts to deliver effective, efficient, and equitable care. These responses are fueled by many factors, including aging and growing

populations; the proliferation of chronic diseases; an increasing focus on patient experience, quality of care, and value; informed and empowered consumers; and innovative treatments and technologies—all of which are leading to rising costs and an increase in spending for care delivery. In addition, the trend toward universal healthcare is likely to accelerate growth in numerous markets. However, the pressure to reduce costs, increase efficiency and effectiveness, and demonstrate value will continue to mount.

On average, other wealthy countries spend about half as much per person on health than the United States spends. As would be expected, wealthy countries like the United States tend to spend more per person on healthcare and related expenses than lower-income countries. However, even as a high-income country, the United States spends more per person on health than comparable countries. Health spending per person in the United States was $9,451 in 2015—2022 percent higher than Switzerland, the next highest per capita spender (Sawyer and Cox, 2017). While the United States has much higher total spending as a share of its economy, its public expenditures alone are in line with other countries. In 2015, the United States spent about 8.4 percent of its GDP on health out of public funds—essentially equivalent to the average of other comparable countries. However, private spending in the United States is much higher than any comparable country: 8.6 percent of the U.S.'s GDP, compared to 2.4 percent on average for other nations (Figure 1.1). According to the Centers for Medicare & Medicaid Services, U.S. healthcare spending grew 4.3 percent in 2016, reaching $3.3 trillion or $10,348 per person. As a share of the nation's GDP, health spending accounted for 17.9 percent.

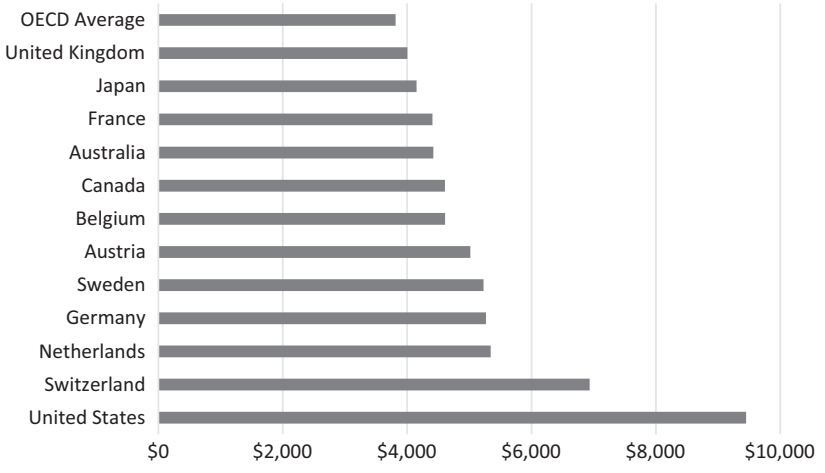

Figure 1.1 Total health expenditures per capita, U.S. dollars, PPP adjusted, 2015.

The expenditure for Australia was estimated.*

Because health spending is closely associated with a country's wealth, Figure 1.1 compares the United States to similar OECD countries—those that have above-median national incomes (as measured by GDP) and above-median income per person. The average amount spent on health per person in comparable countries ($4,908) is just over half that of the United States ($9,451). The average per capita health expense in the OECD overall (including smaller and lower-income countries) is significantly lower at $3,814 per person, or 40 percent of that spent in the United States.

The Aging Population in the United States

The two main variables shaping the healthcare landscape in the next few decades are the age structure of the overall population and the composition of the older population (age, gender, race, and ethnicity). The change in these characteristics over the next three to four decades will dramatically shape the healthcare landscape. Between 2010 and 2050, the United States is projected to experience rapid growth in its older population. In 2050, the number of Americans aged 65 and older is projected to be 88.5 million, more than double its projected population of 40.2 million in 2010. The Baby Boomers are largely responsible for this increase in the older population, as they began crossing into this category in 2011 (Vincent and Velko, 2010).

As the U.S. population ages, the older demographic's racial and ethnic makeup is also expected to change. Many experts expect an increase in the proportion of the older population that is Hispanic and an increase in the proportion that is a race other than White. As 2050 approaches, it is believed that the oldest age categories will grow concerning numbers and proportions. This changing age structure will significantly affect families, patient-provider encounters, patient experiences, and society as a whole. Here are some of the ways the patient experience might be affected:

- Younger physicians (providers) would have to rethink how best to interact with an older population. The amount of time allowed per patient may also need to be reexamined. The norm of 15 minutes per

* Source: Kaiser Family Foundation analysis of data from the Organisation for Economic Co-operation and Development (OECD) (OECD, 2017), "OECD Health Data, Health Expenditure and Financing: Health Expenditure Indicators," OECD Health Statistics.

follow-up patient and 30–45 minutes per new patient may no longer work. Today, it might take as much as three to five minutes for an elderly patient to make his/her way into a doctor's office and get settled. A seemingly simple request from a provider like, "Can I see all the medications you're currently taking?" may take six to seven minutes to address with an elderly patient. Providers usually count on a comfortable mix of younger and older patients to achieve their average visit duration. However, when most of one's patients are 65 and older, that becomes unrealistic.

- With the current projections indicating a growing Hispanic population in the United States, healthcare providers would have to be more bilingual, more culturally sensitive, and reflect a more diversified staff. How provider offices communicate with patients could become a vital part of their business strategy. Other far-reaching implications include an examination of the number of Hispanic or Spanish-speaking providers produced.
- Often, significant growth in the aging population implies an increase in chronic conditions and the need to address end-of-life issues.

The Growing Trend of Retail Healthcare

Between 2000 and 2006, when the first retail clinics emerged and quickly proliferated, traditional healthcare providers raised concerns about quality and protecting their market share. Meanwhile, the ability to get affordable and convenient treatment for minor illnesses such as coughs and sore throats became a welcome change with patients. The majority (91 percent) of patients who recently used a retail clinic reported that they were "satisfied" or "very satisfied" with their visit, according to an April 17, 2017, retail clinic survey from healthcare market researcher Kalorama Information.

Given the growing popularity and convenience of these retail healthcare delivery systems, many healthcare organizations have embraced that concept through partnerships with or the creation of storefront clinics, standalone walk-in and urgent care clinics, and supplemental telemedicine services. Retail giants like CVS and Walgreens are pushing further into care delivery, continuing to pressure traditional providers to increase access to care. The real question is: how will shifting the spectrum of care from hospitals to lower-cost sites affect the patient experience?

While the scope of services and delivery methods continue to evolve, what these on-demand healthcare services consistently have in common are convenience, affordability, and access. All three are vital to the patient experience. Doctors will be required to step up their efforts to optimize the patient experience, beyond measuring patient satisfaction.

Although some organizations were reluctant to embrace the retail movement, this disposition is changing. Since 2009, Springfield, Missouri-based CoxHealth has maintained a presence at numerous Walmart Supercenters. To date, CoxHealth runs five Walmart walk-in clinics and one clinic at a Hy-Vee grocery store. While Medicare and Medicaid also reimburse services provided at retail clinics, self-pay patients are expected to pay at the time of service. All prices are provided up front.

For the medium ground between assessing bug bites and performing surgery, urgent care centers provide relief without the wait or expense of going to the emergency department (ED). As they have become more widespread, so has their popularity. According to a study by Accenture, visits to urgent care centers rose 19 percent from 2010 to 2015. There are nearly 7,400 urgent care centers and counting in the United States, according to the Urgent Care Association of America.

One of the chief concerns of the opponents of retail healthcare is the quality of services offered. In the early retail clinic days, physicians' organizations, including the American Medical Association (AMA) and American College of Physicians (ACP), were especially vocal about the trend's potential downsides, including patient safety risks, damage to the physician-patient relationship, and the business threat to physician practices. In June 2017, the AMA House of Delegates adopted a policy that states that any individual, company, or other entity that establishes or operates retail health clinics should follow certain guidelines.

Among other things, delegates said that retail clinics should help patients without primary care providers (PCPs) obtain one; use electronic health records (EHRs) to transfer records to PCPs, with patient consent; and use local physicians as medical directors or supervisors of retail clinics. AMA delegates also stated that retail clinics should not "expand their scope of services beyond minor acute illnesses" such as a sore throat, common cold, flu symptoms, cough, or sinus infection. Similarly, the ACP released a position paper in 2015 that reflected an evolved marketplace in which the largely nurse practitioner (NP)-staffed clinics and primary care offices could coexist and even collaborate. The thrust of the new recommendations urged that retail clinics serve only as a backup alternative to primary care.

Nonetheless, many retail clinics that originally handled a short list of minor illnesses and injuries now play a role in chronic care management and more. CVS Health, for example, announced new MinuteClinic services for women's health, skin care, and travel health assessments. Walgreens, in the meantime, has begun tackling mental health through an online screening questionnaire.

Retailers and grocery chains alike are expanding their operations to capture the value that the changing healthcare industry is creating. Adapting to the needs and wants of their customers, more pharmacy operations are demonstrating an increased focus within the health and wellness space. These companies' evolution is assisting them in gaining a competitive advantage over their customers.

Telemedicine and Virtual Healthcare

Telemedicine and virtual healthcare are very quickly becoming a mainstay in the healthcare field. When it comes to short-term, self-limited needs, telemedicine and virtual medicine offer viable options for meeting consumers' demands. They help consumers avoid having to call a medical office to make an acute care appointment; they obviate the need to drive to the office, sit in a crowded waiting room, and eventually be seen. This convenience can be especially appealing to a generation accustomed to doing everything with mobile devices, from texting to booking and checking in for flights. Patients needn't take time off work or school to visit the clinic for consultations, follow-up appointments, lab results, or post-operative guidance. Physicians have more time in their schedules for new patients and those who must be seen in person.

Telemedicine can meet many different needs for both patients and physicians. Technology compliant with the Health Insurance Portability and Accountability Act (HIPAA) has evolved to where it is helping providers offer continuity of care and a seamless experience for patients while enabling practices to generate more revenue. Telemedicine also enables physicians and other providers to take care of urgent patient calls. Time savings and convenience are the benefits of telemedicine most often cited by physicians. In addition, sometimes patients are too frail or sick to visit the office. Some systems enable the provider to make diagnoses, do follow-ups, and discuss lab results on these calls. Providers also feel the system helps them get a good visualization of problems and informs them which insurances are billable.

The idea of a doctor seeing patients via a computer screen may no longer be new, but the doctors' adoption of telemedicine services with their own patients is still a struggle. The Information Technology and Innovation Foundation shares a vision of how telemedicine can reduce patient backlogs:

> Imagine a world where patients in rural areas far from a nearby doctor can easily find a healthcare provider to consult with online from the comfort of their own homes; where doctors living in Pennsylvania can help reduce the backlog of patients waiting to see doctors in Mississippi; and where patients can connect to a doctor over the Internet for routine medical purposes with a few clicks of the mouse—like they do when ordering a book on Amazon.

Balancing in-person visits and telemedicine will require doctors to adjust their approach to care. Learning to diagnose remotely also requires new skills and detailed reporting.

Population Health Management

Population health refers to the most important determinants of populations' health. Population health has been defined as "the health outcomes of a group of individuals, including the distribution of such outcomes within the group." This approach aims to improve the health of an entire human population. The healthcare landscape has shifted, moving toward consumer-centric care and overall population health management. Adapting to the needs and wants of the consumer (i.e., convenience, timeliness, quality) has created opportunities for the improved coordination of care, which has increased quality and decreased healthcare delivery costs. According to the Population Health Forum, the following indicators measure population health:

- Life expectancy
- Infant mortality
- Death rates
- Disability
- Quality of life
- Self-assessed health
- Happiness and well-being

Population Health Management is the aggregation of patient data across multiple health information technology resources, the analysis of that data into a single, actionable patient record, and the actions through which care providers can improve both clinical and financial outcomes. The Centers for Disease Control and Prevention (CDC) identified the 10 most important public health problems and concerns as follows:

- Alcohol-related harm and food safety
- Healthcare-associated infections
- Heart disease and stroke
- HIV- and AIDS-related illnesses
- Motor vehicle injury
- Nutrition, physical activity, and obesity
- Prescription drug overdose
- Teen pregnancy
- Tobacco use

For primary and preventive care, value should be measured for defined patient groups with similar needs. Patient populations requiring different bundles of primary and preventive care services might include, for example, healthy children and adults, patients with a single chronic disease, frail elderly people, and patients with multiple chronic conditions. Care for a medical condition (or a patient population) usually involves multiple specialties and numerous interventions. Value for the patient is created by providers' combined efforts over the full cycle of care. The benefits of any one intervention for ultimate outcomes will depend on the effectiveness of other interventions throughout the care cycle.

Accountability for value should be shared among the providers involved. Thus, rather than "focused factories" concentrating on narrow groups of interventions, integrated practice units that are accountable for the total care of a medical condition and its complications are needed.

Price Transparency in Healthcare

One tactic for reducing spending is to increase price transparency in healthcare—to publish the prices that providers charge or those that a patient would pay for medical care—with the aim of lowering prices overall (Sinaiko and Rosenthal, 2011). State progress on healthcare pricing transparency has