VALUATION

Four Pillars of Healthcare Valuation: Competition

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Historically, healthcare was considered a special economic market, in which quality of care traditionally trumped general economic notions of the consumer-driven model of supply and demand. Competition law, which considers quality as only one element of a good or service, inherently conflicts with the traditional perspectives of providers who see quality as "an irreducible minimum standard to be determined by physicians without reference to cost."[1]

Traditionally, physicians and hospitals each provided distinct services to patients, with physicians providing physician services and hospitals providing surgical facilities and other related services to patients referred to the hospital in which the physicians enjoyed staff privileges.[2] Under this symbiotic dynamic, there was relatively little to no competition between physicians and hospitals.[3] However, this trend has begun to shift as physicians have become owners and investors in surgical facilities, such as ambulatory surgery centers (ASCs) and specialty hospitals, that compete with the same general hospitals to which the physicians traditionally have referred patients. Additionally, the willingness of physicians to volunteer for responsibilities within a hospital has declined significantly, marking another shift toward a more competitive and adversarial relationship between physicians and hospitals.[4]

This article will detail the current competitive environment in which the healthcare industry operates through the conceptual framework of Porter's Five Forces of Competition. Additionally, this article will note the impact of the competitive environment on the push for recent reform efforts, including the Patient Protection and Affordable Care Act (ACA), and how these efforts are altering (and are likely to continue to alter) the manner in which competition occurs in the healthcare industry.

PORTER'S FIVE FORCES OF COMPETITION

Michael Porter, a Harvard Business School professor, is considered by many to be one of the leading international authorities on competitive strategy and international competitiveness. As depicted in Figure 1, Porter asserts that all businesses must respond to five competitive forces: (1) the threat of new market entrants; (2) the bargaining power of suppliers; (3) threats from substitute products or services; (4) the bargaining power of buyers; and (5) rivalry among existing firms.[5] When attempting to understand competitors and select competitive strategies, a review of these five forces may be useful to understand the underlying fundamentals of competition, particularly in the healthcare delivery system.[6]

1 "Why Competition Law Matters to Health Care Quality" By William M. Sage, David A. Hyman, and Warren Greenberg, Health Affairs, Vol. 22, No. 2, (March/April 2003), p. 39.

2 "Hospital-Physician Relations: Cooperation, Competition, or Separation?" By Robert A. Berenson, Paul B. Ginsburg, and Jessica H. May, (December 5, 2006), p. w31; "The Effect of Physician-Owned Surgicenters On Hospital Outpatient Surgery" By William J. Lynk and Carina S. Longley, Health Affairs, Vol. 21, No. 4 (July/August 2002), p. 215.

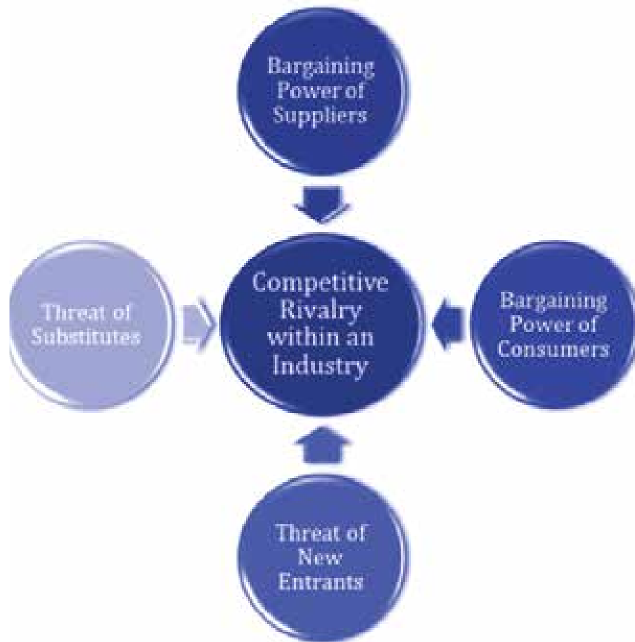
3 "Hospital-Physician Relations: Cooperation, Competition, or Separation?" By Robert A. Berenson, Paul B. Ginsburg, and Jessica H. May, (December 5, 2006), p. w31.

4 *Ibid.*, p. w34.

5 "Competitive Strategy: Techniques for Analyzing Industries and Competitors" By Michael E. Porter, New York, New York: The Free Press, 1980, p. 4.

6 *Ibid*

FIGURE 1: PORTER'S FIVE FORCES[7]



Healthcare is often described as being different from other industries for a number of reasons, including the:

(1) Large role of governmental regulation and reimbursement

(2) Seemingly limitless demand for healthcare

(3) Necessity of having local providers

(4) Absence of normal consumer motivation due to the use of third party payors, and

(5) Difficulties in quantifying health and the quality and costs of care

However, these differences may be found individually in other industries and, increasingly, the barriers to competition in healthcare are under pressure to be removed, diminished, or altered because of rising costs.[8] Therefore, Porter's Five Forces model may well be applicable to healthcare just like any other industry.[9] Porter has further explored the value of his model as a process or framework for use when examining competition in healthcare.[10]

Because Porter's model applies to a company operating within a given industry, it is necessary to define the term "healthcare industry," which contains numerous subsets interacting with each other, including: hospitals, nursing homes, medical practices, home health agencies, sub-acute providers, ASCs, and urgent care centers. The totality of these facilities and providers, along with the administrators, equipment suppliers, pharmaceutical companies, and other support and managerial providers, may be considered for this exercise in definition because they share the common goal of maximizing human health. While this is not an easily quantifiable outcome, it can be viewed as the common denominator among all the factions in the healthcare industry, and advances are being made in the sciences of quality and outcomes research.

THREAT OF NEW MARKET ENTRANTS

Historically, many hospitals and physicians believed that there was a low risk (or even no risk) of new market competitors due to the entry barriers in their segments of the industry. Healthcare has been viewed as a localized industry because providers must personally administer services to their patients. In the current healthcare environment, however, new entrants do not necessarily compete within their local market. Advances in technology and communication, as well as the ability to recruit providers nationally, are changing some aspects of the direct physician–patient relationship, such that this emphasis on localized competitive markets is no longer universal or absolute.

7 *Ibid.*

8 "Hospitals & Health Care Organizations: Management Strategies, Operational Techniques, Tools, Templates, and Case Studies," Edited by Dr. David Edward Marcinko, MBA, CMP, and Professor Hope Rachel Hetico, RN, MHA, CMP, Boca Raton, FL: CRC Press, 2013, p. 44.

9 "Making Competition in Health Care Work" By Elizabeth Olmsted Teisberg et al., Harvard Business Review, July/August, 1994, http://hardvardbusinessonline.hbsp.harvard.edu/hbsp/hbr/articles/article.jsp?artilcleID=9440, (Accessed 09/11/08), p. 140.

10 *Ibid.*

CERTIFICATE OF NEED

One such entry barrier is a Certificate of Need (CON) program, wherein the government determines where, when, and how capital expenditures will be made for public healthcare facilities and major equipment.[11] By their very nature, CON programs are anticompetitive, a principle that serves as, *de minims*, part of the rationale for the inception of state CON programs, in response to concern that market forces were not adequate to prevent providers from overinvesting in equipment and facilities and, as a result, driving up the cost of healthcare.[12] Various shifts in the healthcare industry in the years since CON legislation was introduced have fueled disputes against the implementation of CON programs in order to avoid excess capacity.[13]

The implementation of CON legislation in competitive markets have been perceived as a notable shift from CON's original purpose of supporting competition by preventing overinvestment in healthcare facilities.[14] Most notably, proponents of CON programs argue that CON legislation may prevent healthcare markets from becoming oversaturated with ASCs and other specialty hospitals; this is a position that has helped community hospitals use the regulatory environment in their campaign against physician-owned healthcare facilities.[15] On the other hand, a central argument against CON regulatory policy is that intervention disrupts the natural market forces and is significantly anticompetitive. As a result, CON often serves as a barrier to new market entrants and has been viewed by many healthcare economists as a strong disincentive to the introduction of potentially advantageous innovations and technologies.[16]

CONCIERGE AND BOUTIQUE MEDICINE

Concierge, or boutique, medical practices began in 1996 in Seattle and are now operating in major metropolitan areas across the country, with most practices focused on providing primary care services.[17] Concierge medical practices typically charge patients an annual retainer fee, which provides for guaranteed, around-the-clock access to standard healthcare services, as well as an increased access to personalized physician care.[18] Patients are usually able to see their physician within a day of requesting an appointment, and most patients have twenty-four-hour access to their physician by cell phone. Physicians, tired of working long hours, not having enough time with their patients, and dealing with overbooked caseloads, are turning to concierge medicine as a way of improving their work-life balance while still providing quality care for their patients.[19]

URGENT CARE WALK-IN CLINICS

Urgent care centers have become increasingly more popular in the U.S., with over 7,000 facilities already in existence that serve approximately 160 million people each year.[20] Acute care patients, tired of the progressively longer waits for appointments with primary care physicians or for emergency room services, are attracted to the convenience of urgent care centers (e.g., the extended hours and the availability of walk-in appointments).[21] With the supply of primary care physicians dwindling, combined with many family physicians declining to accept new Medicare fee-for-service (FFS) patients, and fewer emergency departments nationally, urgent care utilization will likely continue to rise.[22] In fact, a survey of urgent care centers in 2014 found that eighty-nine percent of these facilities saw an increase in the number of patient visits and eighty-seven percent acquired or built a new location.[23]

11 "Certificate of Need: State Health Laws and Programs" National Conference of State Legislature, April 30, 2009, http://www.ncsl.org/IssuesResearch/Health/CONCertificateofNeedStateLaws/tabid/14373/Default.aspx (Accessed 1/13/10).

12 "Monopoly is Not the Answer" By Clark C. Havighurst, Health Affairs, Web Exclusive (August 9, 2005), http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.373/DC1 (Accessed 05/21/10), p. W5-373-374.

13 "Improving Health Care: A Dose of Competition" Federal Trade Commission and the Department of Justice, July 2004, Chapter 8, p. 2,5, 6.

14 "Monopoly is Not the Answer" By Clark C. Havighurst, Health Affairs, Web Exclusive (August 9, 2005), http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.373/DC1 (Accessed 05/21/10), p. W5-373.

15 "Specialty Versus Community Hospitals: What Role for the Law?" By Sujit Choudhry, et al., Health Affairs, Web Exclusive (August 9, 2005), http://content.healthaffairs.org/cgi/content/full/hlthaff.w5.361/DC1 (Accessed 5/21/10), p. w5-367.

16 "The U.S. Healthcare Certificate of Need Sourcebook" By Robert James Cimasi, ASA, CBA, AVA, FCBI, CM&A, CMP, Washington, DC: Beard Books, 2005, p. 2.

17 "Physician Services: Concierge Care Characteristics and Considerations for Medicare (GAO-05-929)" By the U.S. Government Accountability Office, For Congressional Committees, August 2005, p. 3.

18 "Impact of Concierge Care on Healthcare and Clinical Practice" By Anthony J. Linz, DO et al., Journal of the American Osteopathic Association, Vol. 105, No. 11 (November 2005), p. 515.

19 *Ibid*.

20 "Industry FAQs" Urgent Care Association of America, http://www.ucaoa.org/?page=IndustryFAQs (Accessed 11/29/16); "The Urgent Care Association of America Unveils New Accreditation Program" PR Newswire, March 20, 2014, http://www.prnewswire.com/news-releases/the-urgent-care-association-of-america-unveils-new-accreditation-program-251207411.html (Accessed 11/29/16).

21 "The Case for Urgent Care" Urgent Care Association of America, September 1, 2011, http://c.ymcdn.com/sites/www.ucaoa.org/resource/resmgr/Files/WhitePaperTheCaseforUrgentCa.pdf (Accessed 3/26/15), p. 1.

22 "Urgent Care Centers in the U.S.: Findings from a National Survey" By Robin M. Weinick, et al., BMC Health Services Research, Vol. 79 (2009), p. 6.

23 "Benchmarking Survey Headlines Summary 2015" Urgent Care Association of America, http://c.ymcdn.com/sites/www.ucaoa.org/resource/resmgr/Infographics/2015_BM_Survey_Headlines_Sum.pdf (Accessed 11/29/16).

MEDICAL TOURISM

Another competitive force in the healthcare industry is the growing incidence of medical tourism, which is the practice of patients traveling to countries, such as India, Thailand, or any number of other countries, to receive medical procedures at a fraction of what they may cost in the U.S.[24] By avoiding the structural, regulatory, and legal barriers present in the U.S., foreign hospitals may be more free to innovate in ways that potentially decrease the cost of many procedures.[25] Generally, these procedures are performed by skilled physicians who may have been trained in the U.S. and who may employ the latest technology with a risk of infection and mortality no higher than in the U.S.[26] According to the Centers for Disease Control (CDC), 750,000 U.S. residents utilize foreign medical tourism each year, often because of the lower costs associated with treatment.[27] This trend demonstrates the reach of globalization on the healthcare industry and, as with globalization in other sectors, it could mean that new competition for domestic suppliers is worldwide.

BARGAINING POWER OF CONSUMERS

Most healthcare services are paid for by insurance, whether private or governmental. Most private health insurance is purchased through employers that, to a great degree, make most of the buying decisions. Employer coalitions have emerged, but most command leverage on price rather than quality or value. This often leaves healthcare providers as the only advocates for consumers (i.e., patients). Corporate buyers have asserted substantial, if disproportionate, influence over healthcare companies, but not always in the best interests of the consumers or the community at large.

Recently, payors have begun to shift toward value-based reimbursement and pay for performance (P4P) plans, which tie the quality and efficiency of services to the payment for those services. P4P plans, the predecessor value-based reimbursement initiatives, have been shown to potentially improve quality of care,[28] and, by offering financial incentives to providers, value-based reimbursement and P4P plans also will allow consumers to recognize the quality of care when making choices for provision of services.[29]

The traditional means of procuring insurance changed dramatically in 2014 with the advent of state health insurance exchanges and the small business health options program (SHOP) exchanges, both of which are mandated under the ACA.[30] The ACA provision requiring the provision of minimal essential health benefits and restricting the payor's ability to reject coverage based on preexisting conditions has further decreased the bargaining power of buyers and has placed more decision power with patients. To ease the burden on small businesses with fewer than twenty-five full-time employees, the ACA implemented a federal tax credit, which, depending on need, will offset up to half of insurance premiums.[31] To qualify for the credits, a small employer must pay at least half of each employee's premium.[32] In 2014, approximately 181,000 employers took advantage of this tax credit of the 1.4 to four million companies thought to be eligible.[33]

The bargaining power of buyers, particularly insurance companies, is also subject to increasing scrutiny under the ACA, specifically regarding limitations on the medical loss ratio (MLR). On December 2, 2011, HHS issued a final rule regarding the MLR, creating a significant change in industry oversight by considering insurance broker and agent fees as administrative costs for purposes of a MLR calculation[34]

24 "Could U.S. Hospitals Go The Way Of U.S. Airlines?" By Stuart H. Altman, David Shactman, and Efrat Eilat, Health Affairs, Vol. 25, No. 1 (January/February 2006), p. 18; "2014 Yellow Book: Chapter 2 The Pre-Travel Consultation: Medical Tourism" By C. Virginia Lee and Victor Balaban, Centers for Disease Control and Prevention, August 1, 2013, http://wwwnc.cdc.gov/travel/yellowbook/2014/chapter-2-the-pre-travel-consultation/medical-tourism (Accessed 3/26/15).

25 "Innovation Abroad" Health Affairs, Vol. 27, No. 5, (September/October 2008), p. 1259.

26 "Lessons From India In Organizational Innovation: A Tale of Two Heart Hospitals" By Barak D. Richman et al., Health Affairs, Vol. 27, No. 5 (September/October 2008), p. 1261.

27 "Medical Tourism" Centers for Disease Control and Prevention, last updated June 15, 2016, http://www.cdc.gov/features/medicaltourism/ (Accessed 7/19/2016).

28 "Hospital Quality Improving, Cost, Mortality Rate Trends Declining for Participants in Medicare Pay-For-Performance Project" Premier Inc., Press Release (January 31, 2008), http://premierinc.com/about/news/08-jan/performance-pays-2.jsp (Accessed 04/25/08).; "Patient outcomes and evidence-based medicine in a preferred provider organization setting: a six-year evaluation of a physician pay-for-performance program" By Amanda S. Gilmore, et al., Health Services Research, (December 2007), http://findarticles.com/p/articles/mi_m4149/is_6_42/ai_n21157693/print (Accessed 4/21/08).

29 "Improving Health Care: A Dose of Competition" Federal Trade Commission and The Department of Justice, July 2004, Chapter 1, p. 8.

30 "Patient Protection and Affordable Care Act" Pub. L. 111-148, § 1311(b), 124 Stat. 119, 173 (March 23, 2010).

31 "Patient Protection and Affordable Care Act" Pub. L. 111-148 (March 23, 2010), p. 102.

32 "Small Business Health Care Tax Credit for Small Employers" Internal Revenue Service, January, 15, 2015, http://www.irs.gov/uac/Small-Business-Health-Care-Tax-Credit-for-Small-Employers (Accessed 3/27/15).

33 "Small Employer Health Tax Credit: Limited Use Continues Due to Multiple Reasons" Statement of James R. McTigue, Jr., Director, Strategic Issues, Testimony Before the Subcommittee on Economic Growth, Tax and Capital Access, Committee on Small Business, House of Representatives, United States Government Accountability Office, March 22, 21016, http://www.gao.gov/assets/680/675969.pdf (Accessed 12/1/16).

34 "Medical Loss Ratio Requirements under the Patient Protection and Affordable Care Act" Federal Register, Vol. 76 No. 235, (December 2, 2011), p. 76574-76594.

(i.e., that portion of insurance premium revenues spent on items other than clinical services, quality improvement, and other non-administrative activities[35]). The MLR final rule requires insurance companies to spend eighty percent of insurance premiums on medical care and healthcare quality improvement in the individual and small group markets, and eighty-five percent of premiums on these components in the large group markets, exclusive of administrative costs.[36] Beginning in 2011, insurance companies were required to annually report their MLR data to HHS in an effort to allow consumers to evaluate available health plans based on the value they provide. Beginning in 2012, private payors who failed to meet MLR requirements are required to provide their customers with rebates.[37] The final rule allows the Secretary of HHS, through the Center for Consumer Information and Insurance Oversight (CCIIO), to adjust the MLR standard in states where it is determined that meeting the eighty percent MLR standard might destabilize the individual market.[38] To date, eighteen states have applied for an adjustment to the MLR standard, but only Maine has received a constant adjustment (maintained at sixty-five percent).[39] However, the CCIIO has allowed various models of leniency regarding the MLR standard for those approved, including gradual and temporary adjustments.[40]

Insurance companies are the main opponents of the MLR rebate, perhaps in part because they were required to issue over $396 million in rebates to 4.8 million consumers based on their 2015 performance.[41] Concern specifically surrounds the inclusion of insurance broker and agent fees in administrative costs, with the insurance industry asserting that these activities are necessary services for consumers that will be hindered by the regulations. While the insurance industry claims that the MLR rule will create a “desperate economic situation,” consumer groups support including insurance broker and agent fees in administrative costs, touting the rule as “a great victory for consumers… maintain[ing] the integrity of incredibly important consumer protections that hold the insurance industry accountable.”[42]

POWER OF THE INSURANCE LOBBY

The rise of antitrust law in the healthcare marketplace has indirectly led to the courts supporting the preferences of insurance companies. As agents for the consumers protected under the laws (i.e., patients), insurance companies have emerged as the dominant force in articulating competitive preferences for price and quality. Courts have deemed insurance providers to be the best voice for the needs of consumer patients and, therefore, have overlooked the traditional competitive transgressions of insurance companies (i.e., selective contracts with health professionals or onerous contractual requirements on network providers).[43]

The health insurance marketplace is currently trending toward consolidation, with the mergers of Aetna-Humana and Anthem-Cigna currently being challenged by the U.S. Department of Justice (DOJ).[44] These mergers have the potential to significantly change the competitive environment by impacting premium costs, patient access, and other factors important to both providers and patients within the U.S. healthcare delivery system, on both national and regional/local levels. One of the most pressing concerns regarding these mergers arises from the reduction in the number of health insurers offering policies for large-group employers; and for the individual health insurance market through the exchanges established by the ACA, in that these mergers

35 “Medical Loss Ratio” Center for Consumer Information and Insurance Oversight, http://cciio.cms.gov/programs/marketreforms/mlr/index.html (Accessed 1/4/12).

36 “Medical Loss Ratio: Getting Your Money’s Worth on Health Insurance” Center for Consumer Information and Insurance Oversight, http://cciio.cms.gov/resources/factsheets/mlrfinalrule.html (Accessed 12/13/11).

37 *Ibid*.

38 “Patient Protection and Affordable Care Act” Pub. L. 111-148, § 2718, 124 Stat. 119, 886 (March 23, 2010).

39 “State Requests for MLR Adjustment” The Center for Consumer Information & Insurance Oversight, Centers for Medicare & Medicaid Services, https://www.cms.gov/CCIIO/programs-and-initiatives/Health-Insurance-Market-Reforms/state_mlr_adj_requests.html (Accessed 11/29/16); “Medical Loss Ratio: Maine Request for an Adjustment of the Medical Loss Ratio Standard” The Center for Consumer Information & Insurance Oversight, Centers for Medicare & Medicaid Services, https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/mlr_adj_maine.html (Accessed 11/29/16).

40 “Re: State of New Hampshire’s Request for Adjustment to Medical Loss Ratio Standard” By Steven B. Larsen, Letter to Roger A. Sevigny, State of New Hampshire Insurance Department, May 13, 2011, http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/Downloads/nh_mlr_adj_decletter.pdf (Accessed 3/31/15), p. 2; For other examples, see generally “State Requests for MLR Adjustment” Center for Consumer Information & Insurance Oversight, http://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Market-Reforms/state_mlr_adj_requests.html (Accessed 3/31/15).

41 “2015 MLR Rebates by State: Based on MLR reports filed through October 19, 2016” Centers for Medicare and Medicaid Services, https://www.cms.gov/CCIIO/Resources/Data-Resources/Downloads/2014_MLR_Refunds_by_State.pdf (Accessed 12/1/16).

42 “MLR Final Rule Keeps Broker Fees as Administrative Costs” By Margaret Dick Tockness, HealthLeaders Media, December 5, 2011, http://www.healthleadersmedia.com/print/HEP-273901/MLR-Final-Rule-Keeps-Broker-Fees-as-Administrative-Costs (Accessed 1/4/2012).

43 “Why Competition Law Matters to Health Care Quality” By William M. Sage, David A. Hyman, and Warren Greenberg, Health Affairs, Vol. 22, No. 2, (March/April 2003), p. 38.

44 “U.S. et al., v. Anthem, Inc., and Cigna Corp.” Case No. 1:16-cv-01493 (U.S. District Court, District of Columbia, July 21, 2016), Complaint; “U.S. et al., v. Aetna, Inc., and Humana, Inc.” Case No. 1:16-cv-01494 (U.S. District Court, District of Columbia, July 21, 2016), Complaint.

would impact plan choice, which by extension would affect provider choice, within local markets.

Further adding to the power of the consolidating industry, insurance companies as an industry sector have enjoyed an exemption from federal antitrust laws since 1945. The McCarran-Ferguson Act limits federal scrutiny of insurers and places states in primary control of antitrust enforcement.[45] State legislation is preserved in the bill, but whether states are powerful enough to prevent insurance companies from engaging in price fixing, bid rigging, market allocations, deterring competition, and impairing consumers has been questioned.[46]

POWER OF PUBLIC PAYORS

Through programs like Medicare, Medicaid, and TRICARE, the federal government exerts one of the most influential competitive forces in the health insurance industry. As the largest national purchaser of health services,[47] the government exerts influence over not only the public delivery of health services, but also over the private sector.[48] Many private insurers negotiate their own arrangements with providers, but some private third-party payors base their arrangements on the Medicare payment systems, or use those systems as a starting point for negotiations with providers.[49]

Medicare's influence on competition in certain sectors is limited, however. Under the Medicare Prescription Drug, Improvement, and Modernization Act (MMA), the secretary of HHS is prohibited from negotiating drug prices with pharmaceutical manufacturers under Medicare Part D, a prohibition which also inhibits free market competition in

45 "McCarran-Ferguson Act" 15 U.S.C 1011, March 9, 1945.
46 "House Panel Approves Bill Curbing Insurers' Antitrust Exemption" By David M. Herszenhorn, New York Times, October 21, 2009. *As of March 27, 2015, the MacCarren-Ferguson Act has not been repealed, but attempts have been made. "McCarran-Ferguson Act's Antitrust Exemption Dodges Another Attempt at Repeal" By James Burns and Williams Mullen, TAGLaw, 2015, http://www.taglaw.com/index.php?option=com_content&id=1656:mccarran-ferguson-acts-antitrust-exemption-dodges-another-attempt-at-repeal&Itemid=100074 (Accessed 3/27/15).

47 "How the Government as a Payer Shapes the Health Care Marketplace" By Tevi D. Troy, American Health Policy Institute, 2015, http://www.americanhealthpolicy.org/Content/documents/resources/Government_as_Payer_12012015.pdf (Accessed 12/1/16), p. 1.
48 "The Next Antitrust Agenda: The American Antitrust Institute's Transition Report on Competition Policy to the 44th President of the United States" By Albert A. Foer, Ed., Vandeplas Publishing (2008), p. 344.
49 "How Medicare Shapes the US Health Sector" By Jeffrey Clemens, Economics in Action, Issue 10 (May 14, 2014) http://economics.ucsd.edu/economicsinaction/issue-10/headline.php (Accessed 3/27/15).

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healthcare.[50] Instead, negotiations are undertaken by private insurers and Pharmacy Benefit Managers (PBMs) that then offer prices they obtain through those negotiations to Medicare beneficiaries.[51] Under this system, the Medicare program is unable to use its power as what would be the largest purchaser of prescription drugs to bring the cost of such drugs down.[52] Proponents of the noninterference provision argue, however, that it prevents the federal government, which is motivated by taxpayers, voters, and Medicare beneficiaries alike, monopsony power to affect the price of prescription drugs, consequently stifling the ability of pharmaceutical companies to earn the profits that allow them to develop new drugs.[53]

BARGAINING POWER OF SUPPLIERS

Suppliers within the healthcare industry include an expansive range of individuals and companies providing a wide variety of services and products.[54] These suppliers include: physicians, healthcare systems, medical supply and pharmaceutical companies, billing and insurance companies. While suppliers can gain competitive leverage from their size, this leverage may be affected by new technologies, care standards, and regulatory initiatives.

New technologies can affect the bargaining power of suppliers by changing the standard and efficiency of care provided. For example, technologies such as the da Vinci robot, a robotic system created in 1998, may improve procedure outcomes and productivity, and may make earlier treatment services obsolete or increase physician productivity.[55] Physicians resisting new technologies may lose a competitive edge in the marketplace due to potential lost productivity, as a study examining an entity's use of the da Vinci robot to perform fifty mitral repairs found that the procedure time decreased by 0.4 hours from 1.9 to 1.5 hours during the course of the study.[56]

THREAT OF SUBSTITUTES

Traditional healthcare providers are increasingly competing with nontraditional healthcare providers and services, such as chiropractors and telemedicine. Traditional providers may also experience additional competition from other conventional healthcare suppliers, such as pharmaceuticals and specialists that are increasingly used as alternatives to surgery and other medical procedures. For example, midlevel providers may increasingly become a greater competitive threat to physicians as midlevel providers' scope of practice broadens in order to address the provider shortage; especially considering that the growth of physician assistants and nurse practitioners has outpaced physician supply, and is projected to continue outpacing physician supply.[57]

Additionally, telemedicine services, such as: (1) physician consultations; (2) remote patient monitoring; and (3) media-based tools (e.g., wireless applications) to publish medical information for use by consumers,[58] may increase competition for traditional providers as telemedicine offers many advantages and is utilized in over half of all hospitals in the U.S.[59] Further implementation of telemedicine may be influenced by the advantages of this technology, including: (1) patient convenience; (2) increased engagement between patients and providers; and (3) improving providers' efficiency by eliminating unnecessary in-person visits.[60]

50 "The Medicare Prescription Drug Benefit Fact Sheet" The Henry J. Kaiser Family Foundation, September 19, 2014, http://kff.org/medicare/fact-sheet/the-medicare-prescription-drug-benefit-fact-sheet/ (Accessed 3/27/15) p. 9.

51 "The Human Cost of Federal Price Negotiations: The Medicare Prescription Drug Benefit and Pharmaceutical Innovation" By Benjamin Zycher, Center for Medical Progress at the Manhattan Institute, November 2006, http://www.heartland.org/custom/semod_policybot/pdf/20365.pdf (Accessed 11/10/09), p. 1.

52 *Ibid.*, p. 2.

53 *Ibid.*, p. 3.

54 "Redefining Health Care: Creating Value-Based Competition on Results" By Michael E. Porter and Elizabeth Olmsted Teisberg, Boston, MA: Harvard Business School Press (2006), p. 283.

55 "History—The da Vinci System," Intuitive Surgical Inc., http://www.intuitivesurgical.com/company/history/system.html (Accessed August 24, 2012); "Critical Outcomes in Nonrobotic vs. Robotic-Assisted Cardiac Surgery" By Franz Yanagawa, M.D., et al., JAMA Surgery, Vol. 150, No. 8 (August 2015) p. 775; "Value of Robotically Assisted Surgery for Mitral Valve Disease" By Tomislav Mihaljevic, M.D., et al., JAMA Surgery, Vol. 149, No. 7 (July 2014) p. 684.

56 "Robotic Mitral Valve Surgery: A Technological and Economic Revolution for Heart Centers" By W. Randolph Chitwood, et al., Journal of the American Heart Hospital, Vol. 1 (2003), p. 37.

57 "The Complexities of Physician Supply and Demand: Projections through 2025" By Michael J. Dill and Edward S. Salsberg, Center for Workforce Studies, Association of American Medical Colleges, November 2008, p. 65; "Projecting the Supply and Demand for Primary Care Practitioners Through 2020" Health Resources and Services Administration, November 2013, http://bhpr.hrsa.gov/healthworkforce/supplydemand/usworkforce/primarycare/projectingprimarycare.pdf (Accessed 7/26/2016), p. 2.

58 "What is Telemedicine?" American Telemedicine Association, 2012, http://www.americantelemed.org/about-telemedicine/what-is-telemedicine#.VmsNENIrJhE (Accessed 12/11/2015).

59 "The Promise of Telehealth for Hospitals, Health Systems and Their Communities" American Hospital Association, January 2015, http://www.aha.org/research/reports/tw/15jan-tw-telehealth.pdf (Accessed 6/13/2016), p. 1.

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RIVALRY AMONG EXISTING FIRMS

Integrated physician organizations and other types of emerging healthcare organizations (EHOs) may be viewed as new market entrants or simply as a reorganization of existing providers in order to better compete. Provider organization and EHO volumes have grown significantly through integration, consolidation, and mergers; however, in many ways, their effectiveness as competitors is still uncertain. The collapse of physician practice management companies (PPMCs), the poor performance of hospital managed physician practices (including physician-hospital organizations [PHOs]), the failure of capitated groups and independent physician associations (IPAs) in California, and the previous trend toward divestiture of acquired practices would seem to indicate that some EHOs may not have been effective competitors. However, as a result of HHS Secretary Sylvia Burwell's January 2015 announcement that by 2016, HHS anticipated transitioning the at least thirty percent of Medicare reimbursement from volume-based to value-based payments (this goal was realized almost one year ahead of schedule)[61], EHOs such as accountable care organizations (ACOs) and clinically integrated networks (CINs) may change the competitive dynamics in the healthcare industry.[62] Nonetheless, a strong argument could be made that the competitive forces that led to the formation of these integrated organizations still exist and that these initial failures have more to do with mismanagement and poor planning than the concept of physician integration itself.

Integration, affiliation, and collaboration among providers may, in some cases, be viewed as a means of circumventing competition unless the clinical benefits to patients can be demonstrated.[63] Because the overarching mission of the healthcare delivery system is inherently human value-based, it is often deemed to be in conflict with the economic and financial goals of healthcare organizations, especially in the for-profit arena, as well as incompatible with the competitive forces that have been successful in other industries. These differences in basic values and the manifestation of these values between businesses in other industries, as well as the various existing organizations in healthcare, are deeply rooted and important to understand in assessing the impact of rivalry on the potential for competition to succeed in stimulating quality and efficiency.

CONCLUSION

The healthcare delivery system, while still a business, has been buffered from the full onslaught of commercialism, including the ever-present attraction of competition. Whether to control quality or cost, outside forces have regulated competitive forces within the healthcare industry. Supported by the provider shortage and increased population demands (i.e., the baby boomer generation), regulations regarding the scope of midlevel providers have been lessening and physicians have begun expanding the services they offer. This is creating an overlap of services, which will likely continue to fuel the emergence of new competitors in the healthcare market. As the impact of competitive forces grows in response to a changing system, government regulations will also need to adapt to the new healthcare environment. VE

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