JANUARY/FEBRUARY 2022

The Value Examiner®

A PROFESSIONAL DEVELOPMENT JOURNAL *for the* CONSULTING DISCIPLINES

Valuation of Telemedicine: Competition (Part IV of V)

By Todd Zigrang, MBA, MHA, FACHE, CVA, ASA, and Jessica Bailey-Wheaton, Esq.

This fourth installment in a five-part series on the valuation of telemedicine focuses on the competitive environment in which telemedicine providers operate.[1] The first installment[2] introduced telemedicine and its increasing importance to, and popularity among, providers and patients. It also discussed the current and future challenges related to telemedicine. The second installment[3] took a deeper dive into the reimbursement environment in which telemedicine providers operate, both before and during the COVID-19 pandemic, and the third installment[4] examined telemedicine's regulatory environment, with a specific focus on fraud and abuse laws.

The Rise of Telemedicine Supply and Demand

Although telemedicine utilization has been relatively low historically, in recent years practitioners' use of telemedicine has grown considerably as the technology becomes more readily available and affordable.[5] The use of telemedicine has become increasingly popular among both payors and providers, who have been adopting the technology at a rapid pace in an attempt to reduce avoidable hospitalizations and improve in-facility care.[6] In fact, after slower growth in the early part of the decade, telemedicine utilization increased 53 percent between 2016 and 2017, but still only accounted for 0.11 percent of all national medical claim lines in 2017.[7] Urban use of telemedicine grew much faster than rural use during that time, with growth rates of 55 percent and 29 percent, respectively.[8] Further, 76 percent of hospitals had, by 2017, at least partially implemented a telemedicine system to connect with their patients through videoconferences, remote monitoring, online consultation, and other wireless communications.[9] During this time, many health systems found that implementing telemedicine also provided them a competitive advantage. This technology allowed patients to receive ongoing care, particularly from specialists, and allowed those specialists to take on more patients and tap into new markets.[10] One main competitive advantage reported by providers was that telemedicine allowed them to have a stronger presence in underserved markets.[11] This growing utilization of telemedicine among providers and patients in recent years is attributable to several factors. First, as healthcare reimbursement has shifted over the years from volume-based to value-based care, healthcare providers have increasingly looked to telemedicine to expand patient services and better support patients before and after their in-office visits.[12] This care may lead to better patient outcomes and reduce costly and unnecessary

1 For the purposes of this series, the terms "telemedicine" and "telehealth" will be considered to be synonymous, with the former used exclusively for the sake of consistency.
2 Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Introduction (Part I of V)," *The Value Examiner* (July/August 2021): 35–39.
3 Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Reimbursement (Part II of V)," *The Value Examiner* (September/October 2021): 30–35.
4 Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Regulatory (Part III of V)," *The Value Examiner* (November/December 2021): 28–33.
5 Kathleen Klink et al., *Family Physicians and Telehealth: Findings from a National Survey,* Robert Graham Center, October 30, 2015, 3–4, http://www.graham-center.org/content/dam/rgc/documents/publications-reports/reports/RGC%202015%20Telehealth%20Report.pdf.
6 "What Are the Advantages of Telehealth Nursing," *Telemedicine Blog,* AMD Global Telemedicine, October 1, 2019, http://www.amdtelemedicine.com/blog/article/telemedicine-skilled-nursing-facilities-benefits.
7 FAIR Health, *FH Healthcare Indicators and FH Medical Price Index 2019: An Annual View of Place of Service Trends and Medical Pricing* (White Paper), April 2019, 25–26, https://s3.amazonaws.com/media2.fairhealth.org/whitepaper/asset/FH%20Healthcare%20Indicators%20and%20FH%20Medical%20Price%20Index%202019%20-%20A%20FAIR%20Health%20White%20Paper.pdf.
8 Ibid., 25.
9 American Hospital Association, *Fact Sheet: Telehealth,* February 2019, 1, https://www.aha.org/system/files/2019-02/fact-sheet-telehealth-2-4-19.pdf.
10 Eric Wicklund, "In a Competitive Market, Telehealth Can Be a Valuable Commodity," *mHealth Intelligence*, May 18, 2018, https://mhealthintelligence.com/news/in-a-competitive-market-telehealth-can-be-a-valuable-commodity.
11 Ibid.
12 Brian Eastwood, *Telehealth 2018: Vendor Assessment and Market Outlook* (Boston: Chilmark Research, 2018), 15–17, https://go.chilmarkresearch.com/hubfs/Telehealth%202018%20-%20Vendor%20Assessment%20and%20Market%20Outlook.pdf.

hospitalizations.[13] For patients who face multiple serious conditions, difficulty leaving their home, or other barriers to accessing traditional care, telemedicine can represent a more appealing option,[14] as these services can be delivered either at a closer facility or in the comfort of the patient's home.[15] Second, as mentioned briefly above, advancements in telemedicine technology itself—as well as in technology infrastructure, such as broadband availability—have allowed otherwise unserved or underserved patients to receive healthcare services.[16] In fact, other than barriers to in-person visits, such as paid parking, access to high-speed internet is a main factor for patients in choosing telemedicine over in-person visits.[17] Third, using telemedicine as a healthcare service delivery method has great potential for cost savings, in large part by reducing unnecessary visits to emergency departments.[18] While telemedicine utilization has been on the rise over the past decade for the reasons described above, it was not until the 2020 COVID-19 public health emergency (PHE) that telemedicine became widely adopted and utilized by a variety of patients and providers.

Changes to Telemedicine Supply and Demand during the COVID-19 PHE

Telemedicine has quickly become routine for Medicare beneficiaries since the start of the PHE. Only 14,000 Medicare beneficiaries per week used telemedicine at the start of 2020, but from March to early July 2020, the total number of beneficiaries who received care through telemedicine soared to over 10 million.[19] Similarly, only 0.1 percent of Medicare primary care visits were conducted via telemedicine prior to February 2020, compared to 43.5 percent in April 2020.[20] Both primary and specialty care physicians have experienced increases in the number of telemedicine visits from the start of the PHE.[21] The growth and expansion of telemedicine has been slower in rural areas; however, even the state with the lowest rate of telemedicine use, Nebraska, saw increases in telemedicine primary care visits—up to 22 percent of all primary care visits.[22] Several policy changes from the Centers for Medicare & Medicaid Services (CMS)—including relaxations of previous rules and stipulations, added services, and increased flexibility for providers and patients—launched this rapid expansion following the declaration of the COVID-19 national emergency.[23] Going forward, the continued success of telemedicine may again hinge on CMS and whether wider reimbursement is implemented.[24] Despite the increased utilization of telemedicine during the COVID-19 PHE, there is also evidence that overall primary care visits decreased significantly. Primary care visits in the second quarter of 2020 were more than 20 percent lower than the average of the previous two years' second quarter visit numbers.[25] Researchers also found that the contents of the visits that did occur in the second quarter of 2020 were different than those that occurred in the second quarters of 2018 and 2019. For example, the assessment of important risk factors, such as blood pressure and cholesterol, was significantly less common in 2020.[26] Further, the demand for telemedicine has begun to decrease since the summer of 2020, after the first few months of the pandemic. In July 2020, nationwide telemedicine visits were down to 21 percent of all visits, from 69 percent in April 2020.[27] Telemedicine claims continued to drop in 2021.

13 Ibid., 14–16.
14 Ibid., 16.
15 Nnenaya Q. Agochukwu, Ted A. Skolarus, and Daniela Wittmann, "Telemedicine and prostate cancer survivorship: a narrative review," *Mhealth* 4, no. 45 (October 2018): 1, 7–8.
16 Cynthia LeRouge and Monice J. Garfield, "Crossing the Telemedicine Chasm: Have the U.S. Barriers to Widespread Adoption of Telemedicine Been Significantly Reduced?," *International Journal of Environmental Research and Public Health* 10, no. 12 (December 2013): 6473, 6475–6476.
17 Mary Reed et al., "Patient Characteristics Associated With Choosing a Telemedicine Visit vs Office Visit With the Same Primary Care Clinicians," *JAMA Network Open* 3, no. 6 (June 17, 2020), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2767244.
18 Garrison Nord, et al., "On-demand synchronous audio video telemedicine visits are cost effective," *The American Journal of Emergency Medicine* 37, no. 5 (August 2018): 890; "Telemedicine and prostate cancer survivorship: a narrative review," 1, 7–8 (*see* n. 15).
19 "Trump Administration Proposes to Expand Telehealth Benefits Permanently for Medicare Beneficiaries Beyond the COVID-19 Public Health Emergency and Advances Access to Care in Rural Areas," Centers for Medicare & Medicaid Services, August 3, 2020, https://www.cms.gov/newsroom/press-releases/trump-administration-proposes-expand-telehealth-benefits-permanently-medicare-beneficiaries-beyond.
20 "HHS Issues New Report Highlighting Dramatic Trends in Medicare Beneficiary Telehealth Utilization amid COVID-19," Department of Health & Human Services, July 28, 2020, https://www.hhs.gov/about/news/2020/07/28/hhs-issues-new-report-highlighting-dramatic-trends-in-medicare-beneficiary-telehealth-utilization-amid-covid-19.html.
21 Ibid.
22 Ibid.
23 For more detail on these policies, *see* Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Introduction (Part I of V)," *The Value Examiner* (July/August 2021): 35–39.
24 For more detail on reimbursement, *see* Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Reimbursement (Part II of V)," *The Value Examiner* (September/October 2021): 30–35.
25 G. Caleb Alexander, et al., "Use and Content of Primary Care Office-Based vs Telemedicine Care Visits During the COVID-19 Pandemic in the US," *JAMA Network Open* 3, no. 10 (October 2, 2020), https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2771191.
26 Ibid.
27 Casey Ross, "Telehealth grew wildly popular amid Covid-19. Now visits are plunging, forcing providers to recalibrate," *STAT News,* September 1, 2020, https://www.statnews.com/2020/09/01/telehealth-visits-decline-covid19-hospitals/.

Despite uncertainties, many experts continue to project growth over the next several years in the area of telemedicine.

From February to March 2021, national claims dropped 5.1 percent (as a percentage of all medical claim lines), compared to a 15.7 percent decrease from January to February 2021.[28] These dramatic changes in demand from pre-COVID-19 to later in the pandemic have reportedly left hospitals and other providers having to provide training in virtual care to their staffs, only to switch many of these staffs back to in-person visits.[29] After the financial tolls of the pandemic, many providers are looking to balance the most cost-effective combination of these two visit types, which now seems to mean scaling back their telemedicine operations from those levels early in the COVID-19 PHE.[30]

How Will Telemedicine Continue to Transform Competition?

Despite uncertainties, many experts continue to project growth over the next several years in the area of telemedicine. One market analysis projected that the global telemedicine market will be valued at nearly $397 billion by 2027, an increase of $317 billion from 2020,[31] a compound annual growth rate (CAGR) of 25.8 percent.[32] Further, while telemedicine has undoubtedly already had an effect on competition and likely has been a useful tool for competing in the healthcare market for many years, some predict that it could have an even more profound effect in the future. One analysis likened telemedicine in healthcare to the rise of online shopping for other industries or online education in the higher education system.[33] Similarly, by releasing some constraints typically put on patient choice, telemedicine may also lead to lower prices and greater availability of services.[34] As discussed above, providers have found themselves able to serve more patients with telemedicine. Since the start of the COVID-19 PHE, they are also able to serve new patients (in contrast to only established patients), as well as patients in different states. A continued relaxation of these restrictions may, at least partially, serve to ameliorate geographic and availability limitations through the use of telemedicine. Where limited specialists and hospital consolidations have led to increased prices of care, telemedicine may be a powerful tool to foster competition and decrease those prices.[35]

In addition to ameliorating limitations on access, telemedicine also has the potential to lessen the effects of growing primary care physician shortages. The Association of American Medical Colleges (AAMC) has predicted that there will be a shortfall of 21,000 to over 55,000 primary care physicians by 2033.[36] Physicians retiring, the aging population in the U.S. (and particularly the baby boomer cohort), and improved access to healthcare services are likely to all be strong contributors to this shortage.[37] Because telemedicine makes visits more efficient,[38] the potential effects from this shortage may be lessened

28 "Telehealth Utilization Continues to Fall Nationally from February to March 2021," FAIR Health, March 2021. *See* https://www.prnewswire.com/news-releases/telehealth-utilization-continues-to-fall-nationally-from-february-to-march-2021-301308011.html.

29 Casey Ross, "Telehealth grew wildly popular amid Covid-19."

30 Ibid.

31 "Telemedicine Market Size, Share & COVID-19 Impact Analysis, by Type (Products and Services), By Modality (Store-forward (Asynchronous), Real-time (Synchronous), and Others), By Application (Teleradiology, Telepathology, Teledermatology, Telecardiology, Telepsychiatry, and Others), By End user (Healthcare Facilities and Homecare), and Regional Forecast, 2020-2027," *Fortune Business Insights,* January 2021, https://www.fortunebusinessinsights.com/industry-reports/telemedicine-market-101067.

32 Ibid.

33 Adam E. Block and Michael S. Adelberg, "Will telemedicine create perfect competition?," *Medical Economics,* September 22, 2020, https://www.medicaleconomics.com/view/will-telemedicine-create-perfect-competition.

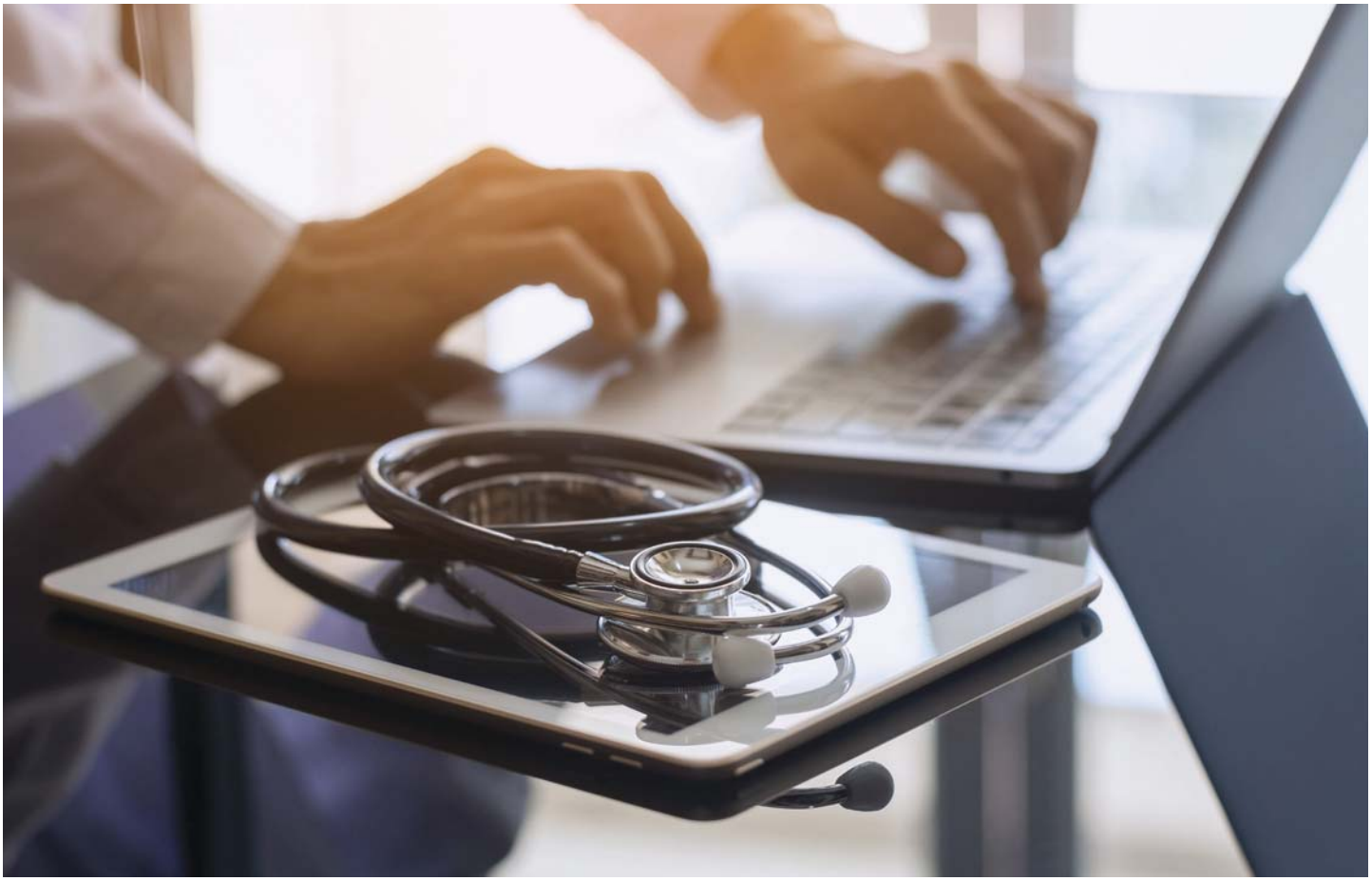
34 Ibid.

35 Ibid.

36 Association of American Medical Colleges, *The Complexities of Physician Supply and Demand: Projections From 2018 to 2033,* June 2020, vii, https://www.aamc.org/system/files/2020-06/stratcomm-aamc-physician-workforce-projections-june-2020.pdf.

37 Ibid.

38 "Telehealth: Technology meets health care," Mayo Clinic, May 15, 2020, https://www.mayoclinic.org/healthy-lifestyle/consumer-health/in-depth/telehealth/art-20044878; Eric Wicklund, "Using Telehealth to Make Patient Rounding More Efficient and Effective," *mHealth Intelligence,* September 28, 2020, https://mhealthintelligence.com/news/using-telehealth-to-make-patient-rounding-more-efficient-and-effective.



through telemedicine, which allows one physician to see and monitor a greater number of patients. By contrast, the entrant of a new competitor into the market—the telemedicine companies themselves—may create more competition for physician talent.[39] Because telemedicine does not need to be conducted through a traditional health system or healthcare provider, many patients may be able to access symptom monitoring, educational materials, and referrals directly from a telemedicine company.[40] Health systems may find themselves competing with the telemedicine providers directly for patients, physicians, and non-physician providers, especially if telemedicine continues to be commonly utilized by patients in the future and the technology continues to develop and expand the limits of telemedicine.

Barriers to Entry

In order to realize the full potential of telemedicine, providers will have to continue to supply telemedicine services in the long term, not just during the current PHE, and patients will have to be willing to regularly utilize telemedicine in the course of their medical regimen. Recent decreases in both the supply and demand of telemedicine services may call both of these assumptions into question. On the demand side, rural patients, who have the greatest need for these services, still struggle to access telemedicine due to limited broadband availability, which may significantly affect their demand for these services.[41] On the supply side, the up-front costs of the hardware, software, and human resources needed to begin offering telemedicine

39 John Lynn, "Will There Be Competition for Doc Talent Because of Telehealth?" *Healthcare IT Today,* August 14, 2020, https://www.healthcareittoday.com/2020/08/14/will-there-be-competition-for-doc-talent-because-of-telehealth/.

40 Ibid.

41 *See* Todd Zigrang and Jessica Bailey-Wheaton, "Valuation of Telemedicine: Reimbursement (Part II of V)," *The Value Examiner* (September/October 2021): 30–35.

may also be a steep barrier for providers, particularly for smaller practices.[42] These barriers will likely set limits on who can provide telemedicine, especially given the uncertainty of expanded reimbursement post-COVID-19.[43] Despite these myriad issues, experts remain confident that telemedicine will continue to grow. Telemedicine's full effect on the healthcare industry is uncertain and will depend on the factors discussed in previous articles in this series as well as the final installment of this series, which will discuss the technology available to telemedicine providers, how that technology has evolved, and its anticipated development going forward. VE

Todd A. Zigrang, MBA, MHA, FACHE, CVA, ASA, is president of Health Capital Consultants, where he focuses on the areas of valuation and financial analysis for hospitals and other healthcare enterprises. Mr. Zigrang has significant physician integration and financial analysis experience and has participated in the development of a physician owned, multispecialty management service organization and networks involving a wide range of specialties, physician owned hospitals, as well as several limited liability companies for acquiring acute care and specialty hospitals, ASCs, and other ancillary facilities. Email: tzigrang@healthcapital.com.

Jessica L. Bailey-Wheaton, Esq., serves as vice president and general counsel of Health Capital Consultants, where she conducts project management and consulting services related to the impact of both federal and state regulations on healthcare exempt organization transactions, and provides research services necessary to support certified opinions of value related to the fair market value and commercial reasonableness of transactions related to healthcare enterprises, assets, and services. Email: jbailey@healthcapital.com.

42 Ibid.
43 Ibid.