

Valuation of Internal Medicine Services: Technology

Introduction

There has been a rapid advancement, and subsequent adoption, of medical technological innovations in the U.S. over the last couple of decades, which has fundamentally changed the healthcare delivery system.¹ While internal medicine may not be considered a specialty in which technology plays a crucial role, advancements such as healthcare information technology (HIT), care coordination software, and telehealth are critical components of an internist's practice. This fifth and final installment of the five-part series on the valuation of internal medicine services will discuss technological advancements that impact the providers of internal medicine.

Health Information Technology

HIT includes a variety of software applications such as billing software; staffing models; and, electronic health records (EHR).² The effective use of HIT by internal medicine practices to facilitate quality improvement (QI) can help these practices improve their ability to deliver high quality care and improve patient outcomes.³ Research indicates that implementation of HIT may lead to improved efficiency and quality management.⁴ For example, use of EHRs have resulted in cost savings, improved quality, and better coordination of care.⁵ Physician practices in particular may experience the benefits of EHRs, as they have been shown to increase efficiencies and cost savings.⁶ Further, EHRs are linked to clinical improvements, which could financially benefit the operations of internal medicine physicians and their associated practices.⁷ Providers using EHRs can access a comprehensive view of each patient's history to gain a better understanding of patients' needs, and the content of every provider-to-provider and provider-to-patient telephone exchange and fax is captured electronically within this system.⁸ Providers also have access to progress notes from specialist visits and are notified of emergency department visits or hospitalizations.⁹ Such benefits become more crucial for internists who participate in value-based reimbursement (VBR) models, as these models require physicians to eliminate fragmented care and work with other providers in their model to provide streamlined, efficient care for a defined patient population.

Despite the potential benefits of HIT, adoption of this technology poses significant administrative and cost burdens to independent internal medicine physician practices.¹⁰ However, there are some exceptions to the Stark Law that protect:

- (1) The sharing of HIT with "community providers and practitioners, in order to enhance the community's overall health...;"¹¹
- (2) The donation of EHR items and services to a physician by an entity (e.g., hospital);¹² and,
- (3) The donation of cybersecurity technology and related services "necessary and used predominately to implement, maintain, or reestablish cybersecurity."¹³

So long as all of the factors contained within a given exception are met, the donation of these items and services by a hospital or other entity to an internist would be found to be compliant with the Stark Law, eliminating those aforementioned administrative and cost burdens.

Care Coordination Software

Care coordination software (also referred to as care coordination information technology, or CCIT) refers to software applications designed to enable various functions related to managing the care of a provider's patients.¹⁴ This technology has been the focus of many digital healthcare companies, with the U.S. care coordination software market expected to grow to \$3.18 billion by 2022 (up from \$1.55 billion in 2019).¹⁵ The components and capabilities of such software vary widely, but may perform tasks as automating: referral management; communication to a patient's care team (e.g., automated email updates to patient status and patient hospital admission/discharge); delivery of discharge instructions and next steps to a patient's primary care provider; and, reports that provide real-time utilization trends, outreach success rates, and no-show rates.¹⁶ These technologies are also being aided by artificial intelligence and blockchain technology, "which support data interoperability and normalization within a defined clinical network."¹⁷ Among other capabilities, these technologies allow for constant, two-way communication among providers in the acute, post-acute, and internal medicine spaces. This is significant as communication (or lack thereof) among providers in these spaces tends to be the root of many care

coordination issues. Besides automating referral management and boosting patient revenue and satisfaction, CCIT offers potential to communicate patient outcomes in real time and realize savings from improved chronic disease management and community health efforts. Internal medicine practices can benefit from utilizing CCIT because providers often care for patients with multiple chronic diseases.

Similar to HIT, CCIT, as well as other data analytics, will be needed by participants in VBR models, which typically rely on pre-established benchmarks and require participants to report on patient outcomes.¹⁸ However, much like HIT, adoption of these technologies poses significant administrative and cost burdens to small providers.¹⁹

Telehealth

Telehealth facilitates the delivery of health-related services via telecommunications technology.²⁰ Telehealth services can supplement or replace face-to-face encounters with physicians. Telehealth services show great potential for helping to meet the growing demand for medical services and the shortage of physicians. Moreover, telehealth services can be more cost efficient for both the patient and the provider than face-to-face encounters.²¹ As more studies validate the efficacy of telehealth services, more payors are offering coverage of telehealth services.²² The COVID-19 public health emergency (PHE), which began in March 2020, was a catalyst for unprecedented increases in telehealth utilization across the U.S.²³ Several policies and developments have helped to fuel this rapid expansion. A number of relaxations and flexibilities for telehealth reimbursement and coverage were put in place by the Centers for Medicare & Medicaid Services (CMS), including allowing beneficiaries to receive care wherever they were located – even from out-of-state providers.²⁴ These measures represented dramatic changes from the previous policies, which only covered telehealth for rural patients, had stringent restrictions on the originating site for the care, and only allowed internal medicine physicians to utilize the technology to provide care to

established patients (i.e., not new patients) in the same state in which they were licensed.

In addition to relaxing the originating site requirements, CMS also expanded the number of services that could be provided through telehealth. An additional 135 services, including emergency department visits, were added to the list of covered (and thus reimbursable) services for Medicare beneficiaries.²⁵ While all of these flexibilities and expansions were originally only valid for the length of the PHE (which is ongoing as of the publication of this article), CMS has been considering the extension of some expansions in covered services and reimbursement semi-permanently or permanently. For example, CMS's 2021 MPFS final rule included expansions to reimbursement for telehealth services.²⁶ Under the final rule, nine codes were covered permanently and 59 will be covered through the calendar year in which the PHE ends.²⁷ The 2022 MPFS final rule included an extension for those services that were temporarily added to the telehealth list during the PHE to 2023 (previously, coverage for these services would end at the conclusion of the PHE).²⁸ This will provide CMS additional time to gather sufficient data for those services, with the intent that they may be added on a permanent basis.²⁹

As it increases in ubiquity (and coverage), telehealth will likely augment care coordination activities, leading to new opportunities for internal medicine providers to reduce healthcare expenditures.

Conclusion

One of the keys to advancing the healthcare delivery system's shift toward VBR models is technological advancement. These models, which require providers to provide cost effective, high quality care and report numerous patient care metrics, require the use of EHRs, CCIT, and other HIT. Further, the ability to connect with patients quickly through telehealth, before a medical condition advances to the point of requiring hospitalization, will help internal medicine providers achieve VBR benchmarks, i.e., provide higher quality patient care at lower cost to more patients, the "trifecta" of healthcare.

1 "The Impact of Technology on Healthcare" American Institute of Medical Sciences and Education, June 2, 2019, <https://www.aimseducation.edu/blog/the-impact-of-technology-on-healthcare/> (Accessed 12/16/21).

2 "Understanding the Costs and Benefits of Health Information Technology in Nursing Homes and Home Health Agencies: Case Study Findings" By Andrew Kramer MD, et al., U.S. Department of Health and Human Services, June 2009, <https://aspe.hhs.gov/system/files/pdf/75876/HITcsf.pdf> (Accessed 12/16/21), p. 1.

3 "Using Health Information Technology to Support Quality Improvement in Primary Care" Mathematica Policy Research, December 16, 2021, <https://pcmh.ahrq.gov/page/using-health-information-technology-support-quality-improvement-primary-care> (Accessed 12/16/21).

4 Kramer MD, et al., U.S. Department of Health and Human Services, June 2009, p. iv-v.

5 American Institute of Medical Sciences and Education, June 2, 2019.

6 "Medical Practice Efficiencies and Cost Savings" HealthIT, August 13, 2018, <https://www.healthit.gov/providers->

professionals/medical-practice-efficiencies-cost-savings (Accessed 12/16/21).

7 "Improved Diagnostics and Patient Outcomes" HealthIT, June 4, 2019, <https://www.healthit.gov/providers-professionals/improved-diagnostics-patient-outcomes> (Accessed 12/16/21).

8 Policy Research, December 16, 2021.

9 *Ibid.*

10 "EHRs: The Challenge of Making Electronic Data Usable and Interoperable" By Miriam Reisman, P&T, Vol. 42, No. 9 (September 2017), available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5565131/pdf/ptj4209572.pdf> (Accessed 12/16/21), p. 574; "Do Small Physician Practices Have a Future?" By David Squires and David Blumenthal, M.D., To The Point, The Commonwealth Fund, May 26, 2016, <https://www.commonwealthfund.org/blog/2016/do-small-physician-practices-have-future> (Accessed 12/16/21).

11 "Exceptions to the referral prohibition related to compensation arrangements" 42 C.F.R. § 411.357(u).

12 "Exceptions to the referral prohibition related to compensation arrangements" 42 C.F.R. § 411.357(w).

- 13 “Exceptions to the referral prohibition related to compensation arrangements” 42 C.F.R. § 411.357(bb).
- 14 “Lumeon wins big in Frost & Sullivan’s latest research on the US Care Coordination Market” Frost & Sullivan, <https://www.frost.com/frost-perspectives/lumeon-wins-big-in-frost-sullivans-latest-research-on-the-us-care-coordination-market/> (Accessed 12/16/21); “AI-powered Care Coordination Software Gives Vendors Competitive Edge in the Era of Personalized Healthcare” By Mariana Fernandez, Frost & Sullivan, April 10, 2019, <https://www.frost.com/news/press-releases/ai-powered-care-coordination-software-gives-vendors-competitive-edge-in-the-era-of-personalized-healthcare/> (Accessed 12/16/21).
- 15 *Ibid.*
- 16 “Care Management: It’s More than Population Health” By Greg Caressi & Kustav Chatterjee, Frost & Sullivan, 2017, available at: <https://www.experian.com/content/dam/marketing/na/healthcare/white-papers/frost-sullivan-care-management-population-health-outcomes.pdf> (Accessed 12/16/21), p. 4.
- 17 “AI-powered Care Coordination Software Gives Vendors Competitive Edge in the Era of Personalized Healthcare” Frost & Sullivan, Press Release, April 10, 2019, <https://www.frost.com/news/press-releases/ai-powered-care-coordination-software-gives-vendors-competitive-edge-in-the-era-of-personalized-healthcare/> (Accessed 12/16/21).
- 18 “Industry Report OD5774: Medical Case Management Services” By Marley Bocker, IBISWorld, October 2021, p. 15.
- 19 “EHRs: The Challenge of Making Electronic Data Usable and Interoperable” By Miriam Reisman, P&T, Vol. 42, No. 9 (September 2017), available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5565131/pdf/pj4209572.pdf> (Accessed 12/16/21), p. 574; “Do Small Physician Practices Have a Future?” By David Squires and David Blumenthal, M.D., To The Point, The Commonwealth Fund, May 26, 2016, <https://www.commonwealthfund.org/blog/2016/do-small-physician-practices-have-future> (Accessed 12/16/21).
- 20 “IBISWorld Industry Report OD5775: Telehealth Services in the US” Jack Curran, IBISWorld, August 2020, p. 5.
- 21 *Ibid.*, p. 10.
- 22 *Ibid.*, p. 12, 22.
- 23 “HHS Issues New Report Highlighting Dramatic Trends in Medicare Beneficiary Telehealth Utilization amid COVID-19” Department of Health and 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> (Accessed 12/16/21).
- 24 *Ibid.*; “Medicare Telemedicine Health Care Provider Fact Sheet” Centers for Medicare & Medicaid Services, March 17, 2020, <https://www.cms.gov/newsroom/fact-sheets/medicare-telemedicine-health-care-provider-fact-sheet> (Accessed 12/16/21).
- 25 “Early Impact Of CMS Expansion Of Medicare Telehealth During COVID-19” By Seema Verma, Health Affairs, July 15, 2020, <https://www.healthaffairs.org/doi/10.1377/hblog20200715.454789/full/> (Accessed 12/16/21).
- 26 “Proposed Policy, Payment, and Quality Provisions Changes to the Medicare Physician Fee Schedule for Calendar Year 2021” Centers for Medicare & Medicaid Services, August 3, 2020, <https://www.cms.gov/newsroom/fact-sheets/proposed-policy-payment-and-quality-provisions-changes-medicare-physician-fee-schedule-calendar-year-4> (Accessed 12/16/21).
- 27 “Medicare Program; CY 2021 Payment Policies Under the Physician Fee Schedule and Other Changes to Part B Payment Policies; Medicare Shared Savings Program Requirements; Medicaid Promoting Interoperability Program Requirements for Eligible Professionals; Quality Payment Program [etc.]” Vol. 85, No. 248, Federal Register, December 28, 2020, Table 16.
- 28 “Calendar Year (CY) 2022 Medicare Physician Fee Schedule Final Rule” Centers for Medicare & Medicaid Services, November 2, 2021, <https://www.cms.gov/newsroom/fact-sheets/calendar-year-cy-2022-medicare-physician-fee-schedule-final-rule> (Accessed 1/17/22).
- 29 *Ibid.*

FREE eBook DOWNLOAD

HEALTH CAPITAL
Topics
2021

DOWNLOAD HERE



(800)FYI - VALU

*Providing Solutions
in the Era of
Healthcare Reform*

Founded in 1993, HCC is a nationally recognized healthcare economic financial consulting firm

- [HCC Home](#)
- [Firm Profile](#)
- [HCC Services](#)
- [HCC Experts](#)
- [Clients & Projects](#)
- [HCC News](#)
- [Upcoming Events](#)
- [Contact Us](#)
- [Email Us](#)

HCC Services

- [Valuation Consulting](#)
- [Commercial Reasonableness Opinions](#)
- [Commercial Payor Reimbursement Benchmarking](#)
- [Litigation Support & Expert Witness](#)
- [Financial Feasibility Analysis & Modeling](#)
- [Intermediary Services](#)
- [Certificate of Need](#)
- [ACO Value Metrics & Capital Formation](#)
- [Strategic Consulting](#)
- [Industry Research Services](#)



[Todd A. Zigrang](#), MBA, MHA, CVA, ASA, FACHE, is the President of HEALTH CAPITAL CONSULTANTS (HCC), where he focuses on the areas of valuation and financial analysis for hospitals, physician practices, and other healthcare enterprises. Mr. Zigrang has over 25 years of experience providing valuation, financial, transaction and strategic advisory services nationwide in over 2,000 transactions and joint ventures. Mr. Zigrang is also considered an expert in the field of healthcare compensation for physicians, executives and other professionals.

Mr. Zigrang is the co-author of "[The Adviser's Guide to Healthcare – 2nd Edition](#)" [2015 – AICPA], numerous chapters in legal treatises and anthologies, and peer-reviewed and industry articles such as: *The Accountant's Business Manual* (AICPA); *Valuing Professional Practices and Licenses* (Aspen Publishers); *Valuation Strategies; Business Appraisal Practice*; and, *NACVA QuickRead*. In addition to his contributions as an author, Mr. Zigrang has served as faculty before professional and trade associations such as the American Society of Appraisers (ASA); American Health Lawyers Associate (AHLA); the American Bar Association (ABA); the National Association of Certified Valuators and Analysts (NACVA); Physician Hospitals of America (PHA); the Institute of Business Appraisers (IBA); the Healthcare Financial Management Association (HFMA); and, the CPA Leadership Institute.

Mr. Zigrang holds a Master of Science in Health Administration (MHA) and a Master of Business Administration (MBA) from the University of Missouri at Columbia. He is a Fellow of the American College of Healthcare Executives (FACHE) and holds the Accredited Senior Appraiser (ASA) designation from the American Society of Appraisers, where he has served as President of the St. Louis Chapter, and is current Chair of the ASA Healthcare Special Interest Group (HSIG).



[Jessica L. Bailey-Wheaton](#), Esq., is Senior Vice President and General Counsel of HCC. Her work focuses on the areas of Certificate of Need (CON) preparation and consulting, as well as project management and consulting services related to the impact of both federal and state regulations on healthcare transactions. In that role, Ms. Bailey-Wheaton 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.

Additionally, Ms. Bailey-Wheaton heads HCC's CON and regulatory consulting service line. In this role, she prepares CON applications, including providing services such as: health planning; researching, developing, documenting, and reporting the market utilization demand and "need" for the proposed services in the subject market service area(s); researching and assisting legal counsel in meeting regulatory requirements relating to licensing and CON application development; and, providing any requested support services required in litigation challenging rules or decisions promulgated by a state agency. Ms. Bailey-Wheaton has also been engaged by both state government agencies and CON applicants to conduct an independent review of one or more CON applications and provide opinions on a variety of areas related to healthcare planning. She has been certified as an expert in healthcare planning in the State of Alabama.

Ms. Bailey-Wheaton is the co-author of numerous peer-reviewed and industry articles in publications such as: *The Health Lawyer*; *Physician Leadership Journal*; *The Journal of Vascular Surgery*; *St. Louis Metropolitan Medicine*; *Chicago Medicine*; *The Value Examiner*; and *QuickRead*. She has previously presented before the ABA, the NACVA, and the NSCHBC. She serves on the editorial boards of NACVA's *QuickRead* and AHLA's *Journal of Health & Life Sciences Law*.



[Janvi R. Shah](#), MBA, MSF, serves as Senior Financial Analyst of HCC. Mrs. Shah holds a M.S. in Finance from Washington University Saint Louis. She develops fair market value and commercial reasonableness opinions related to healthcare enterprises, assets, and services. In addition she prepares, reviews and analyzes forecasted and pro forma financial statements to determine the most probable future net economic benefit related to healthcare enterprises, assets, and services and applies utilization demand and reimbursement trends to project professional medical revenue streams and ancillary services and technical component (ASTC) revenue streams.