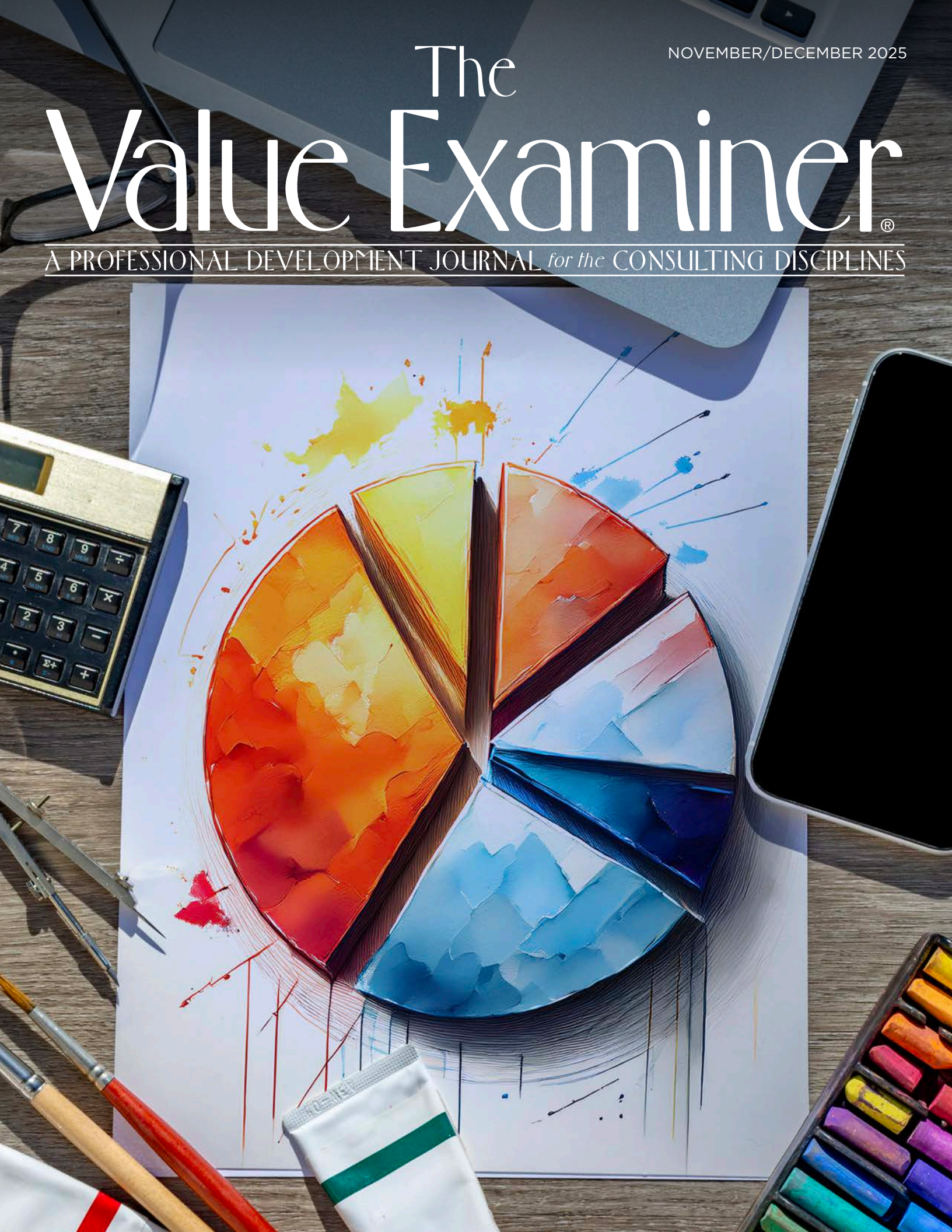
NOVEMBER/DECEMBER 2025

The Value Examiner®

A PROFESSIONAL DEVELOPMENT JOURNAL *for the* CONSULTING DISCIPLINES



Valuation of Care Coordination Services (Part I of II)

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

The U.S. healthcare industry has undergone a fundamental transformation over the past decade, driven by the shift from volume-based to value-based care delivery models and the growing recognition that fragmented care systems contribute to suboptimal patient outcomes and inflated costs. Care coordination services have emerged as a critical infrastructure component, bridging the gaps between primary care providers (PCPs), specialists, hospitals, post-acute care facilities, and community-based organizations. This evolution has been accelerated by federal government initiatives, such as the Medicare Shared Savings Program (MSSP), accountable care organizations (ACOs), and various payment models from the Centers for Medicare & Medicaid Services (CMS) Innovation Center that financially incentivize coordinated care.

Healthcare providers increasingly rely on dedicated care coordinators, nurse navigators, and interdisciplinary care teams to manage complex patient populations, reduce readmissions, improve medication adherence, and ensure seamless transitions across care settings. The COVID-19 pandemic highlighted the essential nature of these services as the healthcare industry scrambled to maintain continuity of care while managing resource constraints. As healthcare continues its trajectory toward more risk-based contracts and population health management, the strategic importance and financial value of care coordination services have become paramount considerations for healthcare executives, investors, startups, and other industry stakeholders.

While there is no universal definition of care coordination,[1] the Department of Health & Human Services (HHS), Agency for Healthcare Research and Quality (AHRQ) defines care coordination as follows:

> The deliberate organization of patient care activities between two or more participants (including the patient) involved in a patient's care to facilitate the appropriate delivery of health care services. Organizing care involves the marshalling of personnel and other resources needed to carry out all required patient care activities and is often managed by the exchange of information among participants responsible for different aspects of care.[2]

1 A 2007 systematic review identified over 40 different definitions of the term. Katheryn M. McDonald et al., "Closing the Quality Gap: A Critical Analysis of Quality Improvement Strategies," *Technical Reviews* 7, no. 9 (June 2007).

2 Kathryn M. McDonald et al., "What is Care Coordination?," chap. 2 in *Care Coordination Measures Atlas, Updated June 2014* (Agency for Healthcare Research and Quality, 2014), https://www.ahrq.gov/ncepcr/care/coordination/atlas/chapter2.html#ref2.

The principal goal of care coordination is "to meet patients' needs and preferences in the delivery of high-quality, high-value health care," which requires the patient's needs and preferences to be known and communicated to the correct parties at the pertinent time, in order to "guide the delivery of safe, appropriate, and effective care."[3] On a macro level, care coordination may be a key strategy to improve the effectiveness, safety, and efficacy of the U.S. healthcare system.[4]

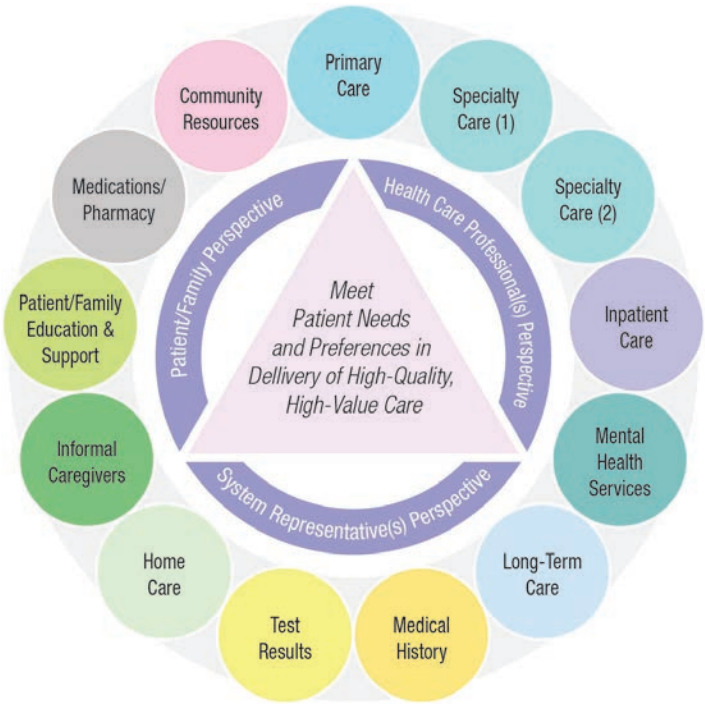
In achieving these goals, several parties must be involved in care coordination, including:

- The patient and the patient's family (or other informal caregivers);
- Healthcare professionals (e.g., physicians, nurses, social workers, care managers, supporting staff);
- Healthcare entities (e.g., primary care or specialty care practice, hospital or hospital department, urgent care clinic); and
- Systems of care (e.g., ACOs, independent physician associations).[5]

See Figure 1 for an illustration of what AHRQ has termed a "care coordination ring."

Care coordination often commences with the referral of a patient from primary care to specialty care. As specialty care has become an important element of outpatient care, primary-to-specialty care referrals have increased exponentially.[6] This referral is "a critical first step in coordination of specialty care" and should "convey a clear question and sufficient historical information about the patient and their condition to focus the consultation (i.e., the clarity and completeness of the referral)."[7] However, primary-to-specialty care referrals "can be difficult to coordinate, and shortcomings are longstanding."[8] While "appropriate, clear, and complete referrals increase the likelihood that the specialist can provide timely, thorough, and efficient care," referrals that do not meet these standards (a common issue) can result in delayed, duplicative, or incomplete specialty care evaluations, which could negatively impact the quality of patient care.[9]

Figure 1: Care Coordination Ring



Source: Kathryn M. McDonald et al., "What is Care Coordination?," chap. 2 in *Care Coordination Measures Atlas, Updated June 2014* (Agency for Healthcare Research and Quality, 2014), https://www.ahrq.gov/ncepcr/care/coordination/atlas/chapter2.html#ref2.

Therefore, the quality of the primary-to-specialty care referral is necessary in order to properly coordinate services and ensure the patient receives high-quality care.

Competition

Given current conditions in the healthcare industry—and, specifically, the care coordination sector—the increasingly important role of, and demand for, care coordination services is clear. While primary care referrals to specialists (the first step in care coordination) are increasing, they are often substandard, leading to delayed, duplicative, or incomplete specialty care evaluations. As a result, there is a significant market for those who can perform some or all of these services on behalf of PCPs. This market opportunity is

3 "Care Coordination," Agency for Healthcare Research and Quality, November 2024, https://www.ahrq.gov/ncepcr/care/coordination.html.
4 Ibid.
5 Kathryn M. McDonald et al., "What is Care Coordination?"
6 Between 1999 and 2009, referrals in the U.S. more than doubled, from 41 million to 105 million. Varsha Vimalananda et al., "Patient, PCP, and Specialist Perspectives on Specialty Care Coordination in an Integrated Health Care System," *Journal of Ambulatory Care Management* 41, no. 1 (January/March 2018): 15–24, https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5726433.
7 Varsha G. Vimalananda et al., "Tools to Improve Referrals from Primary Care to Specialty Care," *American Journal of Managed Care* 25, no. 8 (August 2019): e237, http://ajmc.s3.amazonaws.com/_media/_pdf/AJMC_08_2019_Vimalananda%20final.pdf.
8 Ibid., e239.
9 Ibid., e237, e239.

The shift from volume-based to value-based reimbursement requires providers to work together to reduce cost and increase quality, driving demand for care coordination services.

further underscored by both the primary care shortage and the limited time PCPs have for administrative tasks such as care coordination services. These services are an important piece of the healthcare system that can:

- Help bridge gaps between the supply and demand for healthcare services and between higher quality and lower cost of care,
- Allow PCPs to spend more time on clinical tasks, and
- Promote successful transitions of care between PCPs and specialists.

Studies have found care coordination to be effective. For example, a 2024 study found that high care coordination was associated with decreases in 30-day hospital readmission, mortality, and costs for heart failure.[10] Another more extensive study found that "healthcare fragmentation is strongly associated with substantially higher costs, particularly among adults with multiple chronic conditions."[11]

The demand for care coordination services is anticipated to increase due to the shift in the U.S. healthcare delivery system from volume-based to value-based reimbursement, the aging baby boomer population, and the increasing prevalence of chronic diseases. At the same time, the supply of PCPs is insufficient to meet current demand, much less this greater future demand.

Demand for Care Coordination Services

The shift from volume-based to value-based reimbursement requires providers to work together to reduce cost and increase quality, driving demand for care coordination services. In fact, care coordination to prevent fragmentation is a *sine qua non* of value-based payment models such as ACOs.[12] Providers seeking to streamline costs and improve quality may find "low-hanging fruit" in delivering higher-quality, cost-effective care to elderly patients and patients with one or more chronic diseases. For example, a 2015 study found that inadequate care coordination may increase the average cost of chronic disease management by over $4,500 over three years with no improvements in the quality of care.[13] Additionally, a 2025 study found that highly coordinated care (i.e., no fragmentation) resulted in mean annual per-patient healthcare expenses of $909, compared to mean annual expenses of $34,956 for highly fragmented care—a 38-fold increase.[14]

Value-based reimbursement models are increasingly requiring care coordination in order to achieve financial rewards (e.g., by avoiding underpayments due to more readmissions and higher costs due to preventable system utilization), especially for episode-based payments.[15] Consequently, care coordination services have emerged as a critical infrastructure component, bridging the gaps between

10 Guann-Ming Chang and Yu-Chi Tung, "Impact of Care Coordination on 30-Day Readmission, Mortality, and Costs for Heart Failure," *American Journal of Managed Care* 30, no. 4 (April 2024), https://www.ajmc.com/view/impact-of-care-coordination-on-30-day-readmission-mortality-and-costs-for-heart-failure#:~:text=One%20study's%20findings%20show%20that,for%20discharged%20patients%20with%20HF.

11 Andrew Bouras, "Healthcare Utilization Fragmentation and Total Costs Among Adults with Multiple Chronic Conditions: Evidence from the Medical Expenditure Panel Survey," preprint, medRxiv, August 21, 2025, https://www.medrxiv.org/content/10.1101/2025.08.17.25333878v1.full.pdf+html.

12 Vimalananda et al., "Patient, PCP, and Specialist Perspectives."

13 Brigham R. Frandsen et al., "Care Fragmentation, Quality, and Costs Among Chronically Ill Patients," *American Journal of Managed Care* 21, no. 5 (May 2015), https://www.ajmc.com/view/care-fragmentation-quality-costs-among-chronically-ill-patients.

14 Bouras, "Healthcare Utilization Fragmentation."

15 Greg Caressi and Koustav Chatterjee, "Care Management: It's More than Population Health," Frost & Sullivan white paper, 2017, https://www.experian.com/content/dam/marketing/na/healthcare/white-papers/frost-sullivan-care-management-population-health-outcomes.pdf.

The Authority in Matters of Value®

Credentialing

Databases / Software

Continuing Professional Education

NACVA's Certified Valuation Analyst® (CVA®) and Master Analyst in Financial Forensics® (MAFF®) designations are the *only* valuation and financial forensic credentials accredited by the National Commission for Certifying Agencies® (NCCA®), the accreditation body of the Institute for Credentialing Excellence™ (ICE™). The CVA designation is also accredited by the ANSI National Accreditation Board® (ANAB®)

NACVA.com | NACVA1@NACVA.com | (800) 677-2009

PCPs, specialists, hospitals, post-acute care facilities, and community-based organizations. A growing number of healthcare providers rely on dedicated care coordinators, nurse navigators, and interdisciplinary care teams to manage complex patient populations, reduce readmissions, improve medication adherence, and ensure seamless transitions across care settings.

In addition to the shift to value-based care, the demand for care coordination services—driven by the demand for healthcare services generally—is expected to rise with the aging American population, particularly the baby boomer cohort.[16] By 2030, 20 percent of the U.S. population will be age 65 or older.[17] The growing elderly patient population utilizes a greater proportion of (and expenditures related to) medical services relative to the rest of the general population,[18] and as such may make up an outsized portion of the patient population in future years. Notably, older adults are also more likely to suffer from chronic diseases.[19]

Demand for care coordination services is also likely to increase in the near future due to the increasing prevalence of chronic diseases, which are the leading cause of illness, disability, and death in the U.S.[20] The prevalence of chronic disease (e.g., heart disease, cancer, diabetes, obesity, hypertension) nationwide has been on the rise, with approximately 129 million Americans suffering from at least one chronic disease, 42 percent having two or more chronic diseases, and 12 percent having five or more.[21] Among older adults, approximately 93 percent have at least one chronic disease, and nearly 80 percent have at least two.[22] The prevalence of various chronic diseases are set forth in Table 1.

Table 1: Percentage of U.S. Population with Various Chronic Health Diseases

Chronic Health Indicator Question	U.S.
Adults who have ever been told they have asthma	10.4%
Ever told you have COPD?	6.9%
Have you ever been told by a doctor that you have diabetes?	11.5%
Ever told you have kidney disease?	3.5%
Ever told you had angina or coronary heart disease?	4.4%
Ever told you had a stroke?	3.4%

Source: "BRFSS Prevalence & Trends Data," Centers for Disease Control and Prevention, accessed September 18, 2025, https://www.cdc.gov/brfss/brfssprevalence/index.html.

Notably, the most frequent diagnoses for hospitalizations include heart failure and diabetes, two chronic diseases.[23]

The prevalence of chronic diseases may be higher in rural areas, where residents are generally less healthy than those in urban areas; they also face healthcare access issues (particularly to primary care), as rural areas have more acute physician shortages and rural hospitals typically operate on much thinner operating margins, hindering the breadth of services offered.[24] This has manifested in a substantial increase in patient visits to rural emergency departments.[25]

Four common behaviors are responsible for the majority of illnesses, disabilities, and premature deaths related to chronic diseases: smoking, excessive alcohol use, poor nutrition, and poor physical activity.[26] Thus, despite the fact that chronic diseases are among the most common and costly health problems in the U.S., they are also the most preventable.

16 "Healthcare Industry Forecast: High Demand Due to Aging, Economy," AMN Healthcare, April 21, 2017, https://www.amnhealthcare.com/latest-healthcare-news/healthcare-industry-forecast/.
17 Terry Fulmer et al., "Actualizing Better Health and Health Care for Older Adults," *Health Affairs* 40, no. 2 (February 2021): 219–225, https://www.healthaffairs.org/doi/epdf/10.1377/hlthaff.2020.01470.
18 "Per person personal health care spending for the 65 and older population was $22,356 in 2020, over 5 times higher than spending per child ($4,217) and almost 2.5 times the spending per working-age person ($9,154)." "NHE Fact Sheet," Centers for Medicare & Medicaid Services, last modified June 24, 2025, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NHE-Fact-Sheet.
19 "Chronic Conditions Among Older Americans," part 1 of *Chronic Care: A Call to Action for Health Reform* (American Association of Retired Persons, 2009), 15, http://assets.aarp.org/rgcenter/health/beyond_50_hcr_conditions.pdf.
20 "About Chronic Diseases," Centers for Disease Control and Prevention, October 4, 2024, https://www.cdc.gov/chronic-disease/about/index.html.
21 Gabriel A. Benavidez et al., "Chronic Disease Prevalence in the US: Sociodemographic and Geographic Variations by Zip Code Tabulation Area," Centers for Disease Control and Prevention, Preventing Chronic Disease, February 29, 2024, https://www.cdc.gov/pcd/issues/2024/23_0267.htm.
22 "Get the Facts on Healthy Aging," National Council on Aging, May 9, 2025, https://www.ncoa.org/article/get-the-facts-on-healthy-aging.
23 "Hospitalization," Centers for Disease Control and Prevention, National Center for Health Statistics, last updated June 2023, https://www.cdc.gov/nchs/hus/topics/hospitalization.htm#explore-data.
24 Margaret B. Greenwood-Ericksen and Keith Kocher, "Trends in Emergency Department Use by Rural and Urban Populations in the United States," *Jama Network Open 2*, no. 4 (April 12, 2019): 1, https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2730472.
25 Ibid., 6.
26 "About Chronic Diseases."

Not only is demand for care coordination services likely to increase in the future, but it already appears to exceed the current supply.

Not only is demand for care coordination services likely to increase in the future, but it already appears to exceed the current supply. A 2022 study found that "approximately 42% of older adults perceived poor care coordination" and only 33 percent had ever met with a formal care coordinator.[27] A 2016 CareMore Health and Harris Poll found that 70 percent of elderly patients managing a chronic illness reported needing stronger care coordination from their clinicians.[28]

Supply of Care Coordination Services

Effective team care coordination requires the input and effort of all of a patient's providers. First and foremost, it is important that the care coordination team have a "quarterback."[29] The quarterback is typically responsible for: "Overseeing care; coordinating diagnoses, tests, and treatments; advocating for patients; identifying and respecting patient values; proactively communicating; and solving problems."[30] While this role is often assigned to the PCP, some industry stakeholders argue that PCPs should not be the point person because many physicians simply do not have the time to address care coordination.[31] While physicians are necessary for patient diagnosis and the development of a treatment plan, the remaining tasks can be taken on by others.[32] Therefore, the supply of care coordination services (the need for which is triggered by the PCP's referral of a patient to another physician) may be determined in part by (1) the number of PCPs and (2) the time that PCPs are able to devote to care coordination services.

It is estimated that by 2031, over 40 percent of U.S. physicians will be age 65 or older.[33] Compared with physicians under 40, older physicians work significantly fewer hours:

- Those aged 60–64 work 1.7 fewer hours per week,
- Those aged 65–69 work 5.5 fewer hours per week, and
- Those aged 70 and older work 11.4 fewer hours per week.[34]

Combined with strong growth in demand from Americans over the age of 65, this indicates that the U.S. may soon face a serious shortage of PCPs. In addition to retiring physicians and fewer overall hours worked by physicians approaching retirement, the impending primary care workforce shortage may be further exacerbated by the lower number of medical students who are choosing to specialize in primary care over other specialties (primarily because of wage considerations).[35] In fact, less than 25 percent of all physicians practice in a primary care specialty, less than half

27 Marisa R. Eastman, Viktoryia A. Kalesnikava, and Briana Mezuk, "Experiences of Care Coordination Among Older Adults in the United States: Evidence from the Health and Retirement Study," *Patient Education Counseling* 105, no. 7 (July 2022), https://pmc.ncbi.nlm.nih.gov/articles/PMC9203919/.

28 "The Importance of Coordinated Care for Seniors," *LTC News*, updated February 21, 2023, https://www.ltcnews.com/articles/importance-of-coordinated-care-for-seniors.

29 Marlaine Figueroa Gray et al., "Function of the Medical Team Quarterback: Patient, Family, and Physician Perspectives on Team Care Coordination in Patient- and Family-Centered Primary Care," *The Permanente Journal* 23, no. 4 (December 1, 2019), https://www.thepermanentejournal.org/doi/epdf/10.7812/TPP/18.147.

30 Ibid.

31 Rachel Zimlich, "Mastering Care Coordination," *Medical Economics Journal* 97, no. 9 (May 2020), https://www.medicaleconomics.com/view/mastering-care-coordination.

32 Ibid.

33 Association of American Medical Colleges, *The Complexities of Physician Supply and Demand: Projections from 2021 to 2036* (Association of American Medical Colleges, March 2024), vii, https://www.aamc.org/media/75236/download.

34 IHS Inc., *The Complexities of Physician Supply and Demand: Projections from 2013 to 2025* (Association of American Medical Colleges, March 2015), 52–53, https://www.kff.org/wp-content/uploads/sites/3/2015/03/ihsreportdownload.pdf.

35 Anna Miller, *IBISWorld Industry Report 62111b: Specialist Doctors in the US* (IBIS World, October 2020), 13.

of the ideal ratio of 50 percent.[36] By 2034, the shortfall of PCPs is estimated to be somewhere between 20,200 and 40,400 full-time equivalents (FTEs).[37]

In 2023, there were 33 family/general practice physicians per 100,000 population in the U.S.,[38] which equates to approximately 2,360 adults per PCP. This estimate is in line with the 2,500 patients-per-physician ratio often cited as the standard for panel size.[39] However, research has found that PCPs would have to work 21.7 hours per day to maintain a patient panel size of 2,500, and actual patient panel sizes range from 1,200 to 1,900.[40] Further, the number of Americans with a PCP has been falling. Currently, only two-thirds of Americans have access to a "usual source of primary care,"[41] and the issue is much more pronounced in the younger adult population.[42] Although younger adults do not typically command a large portion of the medical services (and thus care coordination services), this may indicate looming difficulties in the future if there is no PCP quarterback to make the specialist referral or help oversee a care coordination team.

A recent study found that "PCPs do not have enough time to provide the guideline-recommended primary care,"[43] corroborating the concerns of industry stakeholders. Consequently, it is reasonable to assume that if PCPs do not have adequate time to spend with their patients, they likely do not have the requisite amount of time to devote to the care coordination services that will result in high-quality care.

36 Edward P. Hoffer, "Primary Care in the United States: Past, Present and Future," *American Journal of Medicine* 137, no. 8 (August 2024): 702–705, https://www.amjmed.com/article/S0002-9343(24)00163-3/pdf.

37 Association of American Medical Colleges, *The Complexities of Physician Supply and Demand: Projections From 2019 to 2034* (Association of American Medical Colleges, June 2021), 7, https://collections.nlm.nih.gov/master/borndig/9918417887306676/9918417887306676.pdf.

38 "U.S. Physician Workforce Data Dashboard," Association of American Medical Colleges, accessed September 18, 2025, https://www.aamc.org/data-reports/report/us-physician-workforce-data-dashboard.

39 Melanie Raffoul et al., "A Primary Care Panel Size of 2500 Is neither Accurate nor Reasonable," *Journal of the American Board of Family Medicine* 29, no. 4 (July-August 2016): 496–497.

40 Ibid.

41 "Closing the Primary Care Gap," National Association of Community Health Centers, February 2023, https://www.nachc.org/wp-content/uploads/2023/06/Closing-the-Primary-Care-Gap_Full-Report_2023_digital-final.pdf.

42 Linda Carroll, "Declining Numbers of Americans Have a Primary Care Provider," Reuters, December 16, 2019, https://www.reuters.com/article/us-health-pcp-trends/declining-numbers-of-americans-have-a-primary-care-provider-idUSKBN1YK1Z4.

43 Justin Porter et al., "Revisiting the Time Needed to Provide Adult Primary Care," *Journal of General Internal Medicine* 38, no. 1 (January 2023): 147–155, https://pubmed.ncbi.nlm.nih.gov/35776372.

As healthcare shifts toward value-based care, which emphasizes quality over quantity, care coordination becomes more critical.

To ameliorate the primary care shortage and meet the growing demand for healthcare services, healthcare organizations are increasingly relying on nonphysician, advanced practice providers (APPs), such as nurse practitioners (NPs) and physician assistants (PAs). Reliance on APPs promotes a vertical expansion in the role of the nonphysician workforce to provide services that support, supplement, and parallel physician services. The widening gap between the supply and demand for physician services—owing to limited physician manpower and intensifying demand—has driven continued growth in the APP workforce (in both scope and volume), as organizations adopt care models that strategically allocate physician and nonphysician manpower. The U.S. Bureau of Labor Statistics predicts that NP jobs will grow by 35 percent and PA jobs will grow by 20 percent from 2024 to 2034, far exceeding the 3 percent average growth rate for all occupations.[44]

Valuation Implications

As healthcare shifts toward value-based care, which emphasizes quality over quantity, care coordination becomes more critical. Often, care coordination services are provided by multiple, unrelated providers, such as physicians, therapists, or even specialized care coordination companies. Payment for the services performed by these providers is subject to the same regulatory requirements—under laws like the Stark Law and the Anti-Kickback Statute (AKS)—as other healthcare providers. As a result, care coordination is a growing segment for healthcare valuators. Fair market value opinions help create a framework in which providers are compensated for coordinated, effective care rather than the number of services they provide.

Part II of this series will explore the regulatory environment that governs how these services may be rendered, the reimbursement environment in which care coordination service providers operate, and the technological advancements supporting care coordination. VE

Todd A. Zigrang, MBA, MHA, FACHE, CVA, ASA, ABV, 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 senior vice president and general counsel of Health Capital Consultants. 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. Email: jbailey@healthcapital.com.

44 "Occupational Outlook Handbook: Nurse Anesthetists, Nurse Midwives, and Nurse Practitioners," Bureau of Labor Statistics, U.S. Department of Labor, last modified August 28, 2025, https://www.bls.gov/ooh/healthcare/nurse-anesthetists-nurse-midwives-and-nurse-practitioners.htm; "Occupational Outlook Handbook: Physician Assistants," Bureau of Labor Statistics, U.S. Department of Labor, last modified August 28, 2025, https://www.bls.gov/ooh/healthcare/physician-assistants.htm.