### Valuation of Care Coordination Services: Competitive Environment

The demand for care coordination services is likely to increase in the near future, 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 primary care providers is insufficient to meet current demand, much less this greater future demand. This second installment in a five-part series on the valuation of care coordination services reviews the demand for, and supply of, care coordination services.

#### **Demand for Care Coordination Services**

As noted in the first installment in this series, the U.S. healthcare delivery system is shifting from volume-based to value-based reimbursement, which requires providers to work together to reduce cost and increase quality, drives demand for care coordination services. In fact, care coordination to prevent fragmentation is a sine qua non of value-based payment models such as accountable care organizations (ACOs).1 Some of the "low hanging fruit" for providers seeking to streamline costs and improve quality may be focusing on providing higherquality, 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 costs of chronic disease management by over \$4,500 over three years with no improvements in the quality of care.<sup>2</sup> More and more value-based reimbursement models are 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.<sup>3</sup> Consequently, care coordination services have emerged as a critical infrastructure component, bridging the gaps between primary care providers, specialists, hospitals, post-acute care facilities, and community-based organizations. 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.

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.<sup>4</sup> By 2030, 20% of the U.S. population

will be age 65 and older.<sup>5</sup> The growing elderly patient population utilizes a greater proportion of (and expenditures related to) medical services relative to the rest of the general population,<sup>6</sup> and as such may comprise an outsized portion of the patient population in future years. Notably, older adults are also more likely to suffer from chronic diseases.<sup>7</sup>

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.<sup>8</sup> 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% having two or more chronic diseases, and 12% having five or more.<sup>9</sup> Among older adults, approximately 95% have at least one chronic disease, and nearly 80% have at least two.<sup>10</sup> The prevalence of these various chronic diseases are set forth below in Table 1.

Table 1: Percent of U.S. Population with Various Chronic Health Diseases<sup>11</sup>

| 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%  |

Notably, the most frequent diagnoses for hospitalizations include heart failure and diabetes, two chronic diseases. <sup>12</sup>

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. This has manifested in a substantial increase in patient visits to rural emergency departments. The provided himself of the services of the provided has been department to the provided himself of the provided himself of the provided has been department to the provided himself of the provided himself of the provided has been department to the provided himself of the provided himself of the provided has been department to the provided himself of the provided himself of the provided has been department to the provided himself of the provide

Four common behaviors responsible for the majority of illness, disability, and premature death related to chronic diseases include: smoking; excessive alcohol use; poor nutrition; and poor physical activity. <sup>15</sup> As such, 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.

Not only will demand for care coordination services likely increase in the future, but demand does not seem to be met by the current supply of care coordination services. A 2022 study found that "[a]pproximately 42% of older adults perceived poor care coordination" and only 33% had ever met with a formal care coordinator. A 2016 CareMore Health and Harris Poll found that 70% of elderly patients managing a chronic illness reported needing stronger care coordination from their clinicians. To

#### **Supply of Care Coordination Services**

As alluded to in this series, all of a patient's providers are required to have effective team care coordination. First and foremost, it is important that the care coordination team have a "quarterback." 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."19 While this role is often assigned to the primary care provider (PCP), some industry stakeholders argue that PCPs should not be the process's point person because many physicians simply do not have the time to address care coordination.<sup>20</sup> While physicians are necessary for the patient diagnosis and the development of a treatment plan, the remaining tasks can be taken on by others.<sup>21</sup> Therefore, the supply of care coordination services (the need of which is triggered by the referral of a patient by a PCP 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.

By 2028, approximately 40% of the U.S. physician workforce will be over the age of 65.<sup>22</sup> Compared to physicians under the age of 40:

- Physicians aged 60-64 work 1.7 fewer hours per week;
- (2) Physicians aged 65-69 work 5.5 fewer hours per week; and,
- (3) Physicians over the age of 70 work 11.4 fewer hours per week.<sup>23</sup>

Combined with the strong growth in demand from the number of 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 number of overall hours worked by physicians approaching retirement, the impending internist 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).<sup>24</sup> In fact, less than 25% of all physicians practice in a primary care specialty, less than half of the ideal ratio of 50%.<sup>25</sup> Further, fewer physicians

are choosing to specialize in family medicine and obstetrics and gynecology, while the number of internists and pediatricians continues to rise. Nevertheless, by 2034, the shortfall of PCPs is estimated be somewhere between 17,800 and 48,000 full-time equivalents (FTEs). 27

In 2023, there were 33 family/general practice physicians per 100,000 population in the U.S.,<sup>28</sup> which equates to approximately 2,360 adults per PCP. This estimate is in line with the 2,500 patients-per-physician ratio often previously cited as the standard for panel size.<sup>29</sup> 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 1,900.30 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;" 31 the issue is much more pronounced in the younger adult population.<sup>32</sup> 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 aforementioned 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," 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.

In order to ameliorate the primary care shortage and meet the growing demand for healthcare services, healthcare organizations are increasingly relying upon nonphysician, advanced practice providers (APPs) such as nurse practitioners (NPs) and physician assistants (PAs), in soliciting a vertical expansion in the role of the nonphysician workforce to provide services that supported, supplemented, and paralleled physician services. In light of the fact that the gap between the supply and demand for physician services is increasing as the sources of physician manpower remain insufficient and the drivers of demand intensify, the APP workforce has seen continued growth in both scope and volume, as organizations adopt care models that strategically allocate physician and non-physician manpower resources. According to the U.S. Bureau of Labor Statistics, NP job growth is expected to be 35%, and PA job growth is expected to be 20%, from 2024 to 2034, far exceeding the 3% average growth rate for all occupations.34

#### Conclusion

In order to meet the growing demand for healthcare services – driven by the shift to value-based care, aging population, and rising prevalence of chronic diseases – amidst a primary care shortage that is resulting in a shortage in the sheer number of PCPs, as well as in the amount of time available to devote to the tasks involved in a primary-to-specialist care referral, the outsourcing of

care coordination services to other medical staff members and/or through the utilization of care coordination software may be necessary in order to free up the clinician to focus on treating the patient.

Accordingly, the next installment in this five-part series will explore the technological advancements supporting care coordination.

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Todd A. Zigrang, MBA, MHA, FACHE, CVA, ASA, ABV, 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 30 years of experience providing valuation, financial, transaction and strategic advisory services nationwide in over 2,500 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" [AICPA-2015], numerous chapters in legal treatises and anthologies, and peer-reviewed and industry articles such as: The Guide to Valuing Physician Compensation and Healthcare Service Arrangements (BVR/AHLA); The Accountant's Business Manual (AICPA); Valuing Professional Practices and Licenses (Aspen Publishers); Valuation Strategies; Business Appraisal Practice; and, NACVA QuickRead. Additionally, Mr. Zigrang has served as faculty before professional and trade associations such as the American Society of Appraisers (ASA); the National Association of Certified Valuators

and Analysts (NACVA); the American Health Lawyers Association (AHLA); the American Bar Association (ABA); the Association of International Certified Professional Accountants (AICPA); the Physician Hospitals of America (PHA): the Institute of Business Appraisers (IBA); the Healthcare Financial Management Association (HFMA); and, the CPA Leadership Institute. He also serves on the Editorial Board of The Value Examiner and QuickRead, both of which are published by NACVA.

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 Certified Valuation Analyst (CVA) designation from NACVA. Mr. Zigrang also holds the Accredited in Business Valuation (ABV) designation from AICPA, and the Accredited Senior Appraiser (ASA) designation from the American Society of Appraisers, where he has served as President of the St. Louis Chapter. He is also a member of the America Association of Provider Compensation Professionals (AAPCP), AHLA, AICPA, NACVA, NSCHBC, and, the Society of OMS Administrators (SOMSA).









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 (American Bar Association); Physician Leadership Journal (American Association for Physician Leadership); The Journal of Vascular Surgery; St. Louis Metropolitan Medicine; Chicago Medicine; The Value Examiner (NACVA); and QuickRead (NACVA). She has previously presented before the American Bar Association (ABA), the American Health Law Association (AHLA), the National Association of Certified Valuators & Analysts (NACVA), the National Society of Certified Healthcare Business Consultants (NSCHBC), and the American College of Surgeons (ACS).







Janvi R. Shah, MBA, MSF, CVA, serves as Senior Financial Analyst of HCC. Mrs. Shah holds a M.S. in Finance from Washington University Saint Louis and the Certified Valuation Analyst (CVA) designation from NACVA. 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.

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