

## Study: Vertical Integration Not Financially Beneficial for Physicians

A study released in the December 2021 issue of *Health Affairs* examined the correlation between hospital/health system ownership of physician practices and physician compensation. While a number of studies have analyzed the “rapidly growing trend” of vertical integration from the hospital/health system perspective, this is the first study to evaluate vertical integration from the physician practice perspective.<sup>1</sup> The researchers found that those physicians whose practices were acquired by a hospital or health system received slightly less compensation under hospital ownership, with some differences among specialties; further, hospital-owned physician practices were “associated with larger reductions in physician income in more competitive hospital markets and in nonprofit hospitals.”<sup>2</sup> This *Health Capital Topics* article will discuss the study’s findings and potential implications.

Vertical integration may be defined as “[t]he combination in one firm of two or more stages of production normally operated by separate firms.”<sup>3</sup> Firms engage in vertical integration transactions in pursuit of certain benefits typically associated with this form of organization, including:

- (1) The development of economies of scale,<sup>4</sup> i.e., the ability of large firms to produce large quantities of a good at a reduced cost per unit;<sup>5</sup>
- (2) The development of economies of scope,<sup>6</sup> i.e., the ability of large firms to produce a variety of goods more cheaply than producing those goods separately;<sup>7</sup> and,
- (3) Vertically integrated firms with centralized management structures can, if strategically constructed and implemented, create superior production efficiencies relative to more fragmented business structures and markets.<sup>8</sup>

In the U.S. healthcare industry, vertical integration describes the “integration of providers at different points along the continuum of care, such as a hospital partnering with a skilled nursing facility (SNF) or a physician group,”<sup>9</sup> which organizational model can provide additional benefits to healthcare delivery organizations, as well as, to the communities they serve. The latest iteration in the push toward value-based reimbursement (VBR), which commenced in 2010 with the passage of the Patient Protection and Affordable Care Act (ACA), has driven the pursuit of closer relationships between

hospitals and physicians through strategies such as vertical integration. In fact, from 2010 to 2018, hospital/health system ownership of physician practices increased 89.2%, from 24.1% of physician practices owned by a hospital/health system in 2010 to 45.6% by 2018.<sup>10</sup> While research has found that hospitals profit from vertical integration (an approximately 19% increase in revenue), “little is known about the degree to which the income of physicians whose practices have been acquired has been affected.”<sup>11</sup>

In analyzing physician compensation and physician practice ownership, the *Health Affairs* researchers examined data for 41,648 physicians (48.3% of whom were in independent practices and 51.7% of whom were in hospital-acquired practices), during the study period of 2014 through 2018.<sup>12</sup> Physician compensation data was obtained from the Career Navigator Survey conducted by Doximity, “an online social network for physicians...that includes more than 70 percent of US physicians.”<sup>13</sup> This data was then compared to information on practice ownership data during the period of 2010 to 2018 from the SK&A Office-Based Physicians Database administered by IQVIA, “a commercial database of health care providers, which provides a nearly complete sampling frame of US office based physicians,” i.e., over 95% of office-based physicians.<sup>14</sup> This compensation and ownership data was then matched up at the physician level and analyzed from a myriad of angles. First, the researchers examined the association between vertical integration and physician compensation among overarching physician specialty types – primary care, nonsurgical specialists, and surgical specialists.<sup>15</sup> Second, the researchers analyzed whether this association varied by the tax status of the hospital – for-profit or non-profit. Third, the association was examined by the competitiveness of the market in which the hospital operated (at the county level) – concentrated or competitive.<sup>16</sup>

While physicians overall generally saw a small reduction in compensation of 0.8% post-integration (an absolute difference of -\$2,987), the change in physician compensation post-integration varied depending on the specialty of the physician.<sup>17</sup> Nonsurgical specialists experienced a *decrease* of approximately 2.4% (an absolute difference of -\$9,652) post-integration, while primary care physicians saw an *increase* of approximately 1.2% (an absolute difference of \$3,179)

and surgical specialists saw an increase of 2.1%, in compensation (an absolute difference of 10,741), post-integration.<sup>18</sup>

The association between physician income and vertical integration also varied depending on the marketplace in which the hospital operated. Physician income did not significantly change post-integration in highly concentrated markets, but it did decrease approximately 2.2% in competitive (i.e., not highly concentrated) markets.<sup>19</sup> Further, physicians acquired by a non-profit hospital saw a 1.9% reduction in their annual compensation; in contrast, physicians acquired by a for-profit hospital saw no statistically significant change in their income.<sup>20</sup> The researchers theorized that the variances between these two attributes (competitive marketplace and tax status) may be due to “differential bargaining power between physicians and hospitals in less concentrated hospital markets and with for-profit hospitals.”<sup>21</sup>

The researchers noted that while physicians may not experience the same level of financial benefit from vertical integration as hospitals (or any financial benefit at all), there may be other, non-financial benefits

associated with integration that were not captured by the study. For example, physicians may be willing to sacrifice some part of their income for a steady paycheck and consistent schedule; this “risk protection” may be more favorable than the variable income and scheduling that results from practice ownership.<sup>22</sup> Additionally, physicians may appreciate hospitals taking on the administrative services (e.g., billing) and regulatory responsibilities (e.g., compliance), as well as interactions with insurance companies, that are required to operate a physician practice. As office-based physicians have experienced tightening reimbursement over the last few years, at the same time that they are being required to heavily invest in capital-intensive infrastructure such as healthcare information technology (e.g., electronic health records) that aggregates the requisite data and information required to report the metrics to the federal government (or commercial insurers), it is understandable that they may be willing to sacrifice some degree of autonomy and income for the relative stability of hospital ownership. In essence, physicians may prefer to make less money in return for being able to focus solely on treating patients.

1 “Physician Compensation in Physician-Owned and Hospital-Owned Practices” By Christopher M. Whaley, et al., *Health Affairs*, Vol. 40, No. 12 (December 2021), available at: <https://www.healthaffairs.org/doi/10.1377/hlthaff.2021.01007> (Accessed 12/13/21), p. 1872.

2 *Ibid.*, p. 1865.

3 “Oxford Dictionary of Economics” By John Black, Oxford University Press: New York, NY, 2002, p. 495.

4 “Principles of Economics” By Alfred Marshall, Eighth Edition, London, England: Macmillan and Co., 1890, Book IV, Chapter XI, p. 232-233.

5 “The Dictionary of Health Economics” By Anthony J. Culyer, Second Edition, Northampton, MA: Edward Elgar Publishing, Inc., 2010 (originally published in 2005), p. 167.

6 “The Nature of the Firm” By R. H. Coase, *Economica*, New Series, Vol. 4, No. 16 (November 1937), p. 402.

7 Culyer, Second Edition, Northampton, MA: Edward Elgar Publishing, Inc., 2010 (originally published in 2005), p. 168.

8 Marshall, Eighth Edition, London, England: Macmillan and Co., 1890, Book IV, Chapter XIII, p. 232-233, 265; Coase, *Economica*, p. 388, 392.

9 “The Value of Provider Integration” American Hospital Association, March 2014, <http://www.aha.org/content/14/14mar-provintegration.pdf> (Accessed 1/14/16) p. 2.

10 Whaley, et al., p. 1869.

11 *Ibid.*, p. 1865.

12 *Ibid.*, p. 1868.

13 *Ibid.*, p. 1866.

14 *Ibid.*

15 *Ibid.*, p. 1867.

16 *Ibid.*

17 *Ibid.*, p. 1869.

18 *Ibid.*

19 *Ibid.*, p. 1871.

20 *Ibid.*

21 *Ibid.*, p. 1872.

22 *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.