



Compensation Study

Spotlight on Hematology/Oncology

February 2020

Introduction

As America's population booms and the elderly population grows, the number of new cancer cases is increasing. According to the American Cancer Society's *Cancer Facts & Figures*, more than 1.8 million new cancer cases are expected to be diagnosed in 2020, up from the 1.7 million that were expected in 2019.¹ Further, while cancer death rates have declined, it is the second most common cause of death in the U.S., surpassed only by heart disease.² Yet, as a large number of oncologists retire,³ a national shortage of approximately 2,200 oncologists is expected by 2025.⁴ Furthermore, access to oncologists in rural areas is another issue, as 19% of Americans reside in rural areas, but only 7% of oncologists practice there.⁵ PYA's "Spotlight on Hematology/Oncology" infographic takes a look at the market trends related to supply and demand for hematologist/oncologists, in addition to the effects that a larger, more dispersed older population, among other factors, is having on hematology/oncology physician compensation.⁶

Demand for Oncology Services

Globally, about 1 in 6 deaths are caused by cancer; in 2018, approximately 9.6 million people died from the disease.⁷ Even though recent medical advancements have enhanced the early detection of cancer and led to the development of new treatment methods, the global cancer burden is expected to increase, reaching 13 million deaths per year by 2030.⁸ Further, the incidence rate of cancer is expected to increase by 11% between 2017 and 2022.⁹ Additionally, there were more than 16.9 million Americans living with, and having a history of, cancer as of early 2019, up from 15.5 million in 2016.¹⁰

Known or suspected cancer risk factors include, but are not limited to, age, alcohol consumption, chronic inflammation, diet, genetics, immunosuppression, infectious agents, obesity, radiation exposure, sunlight exposure, and tobacco consumption. This combination of risk factors includes some avoidable choices and other factors that are not, such as genetics and age, the latter of which is correlated with the increase in the number of cancer diagnoses.¹¹ Between 2010 and 2030, the U.S. population age 65 and older is expected to increase by 55%,¹² and reach 89 million by 2050—more than double the elderly population in 2010.¹³ Of the people in this age group, 81% report having one or more chronic diseases, such as cancer.¹⁴

1 American Cancer Society. *Cancer Facts & Figures*, 2019 and 2020.

2 Ibid.

3 <https://www.ascopost.com/News/59357>.

4 American Society of Clinical Oncology. *Projected Supply of and Demand for Oncologists and Radiation Oncologists Through 2025*, 2014.

5 <https://www.asco.org/practice-policy/policy-issues-statements/asco-in-action/media-issue-brief-rural-cancer-care>.

6 Medical oncology is distinct from radiation oncology and surgical oncology. Hematology is a subspecialty of medical oncology. Throughout this article, we refer to medical oncology and hematology/oncology interchangeably.

7 <https://www.who.int/news-room/fact-sheets/detail/cancer>.

8 <https://connection.asco.org/blogs/world-cancer-research-day-future-cancer-research-depends-all-us>.

9 The Advisory Board. *Oncology Market Trends*, 2019.

10 American Cancer Society. *Cancer Facts & Figures* 2019 and 2020.

11 <https://www.cancer.gov/about-cancer/causes-prevention/risk>.

12 United States Census Bureau. *The Baby Boom Cohort in the United States: 2012 to 2060*, 2014.

13 <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.0714>.

14 RAND Corporation. *Multiple Chronic Conditions in the United States*, 2017.

Several years ago, *Health Affairs* reported on the effects that the aging population will have on the healthcare workforce in the U.S. One conclusion: the aging population and growing burden of disease will increase demand for most physician specialists, including hematologist/oncologists. Notably, the projected growth in office visits to hematologist/oncologists could increase by as much as 15% from 2013 to 2025.¹⁵ As a result of the increasing number of cancer diagnoses and cancer survivors, the overall demand for cancer services will increase by at least 40% by 2025.¹⁶

In addition, physician specialists are also in high demand in rural areas of the country. For example, the Centers for Disease Control (CDC) reports that Americans living in rural areas are more likely to die from one of the five leading causes of death, including cancer, than their urban counterparts. The CDC also reports that the rural population, in addition to trending older and sicker, usually has less access to healthcare.¹⁷ Additionally, per the American Society of Clinical Oncology, although approximately 19% of the population lives in rural areas, only about 7% of hematologist/oncologists practice there, which limits patient access to high-quality cancer care and negatively contributes to survival outcomes.¹⁸

Supply of Hematologist/Oncologists

The Association of American Medical Colleges reported that there were approximately 15,410 active hematologist/oncologists in the workforce in 2017.¹⁹ However, hematology/oncology has the sixth-highest “absolute demand,” or the number of search assignments as a percent of all active physicians in a given specialty, according to Merritt Hawkins. Absolute demand has increased by 21% between 2016/2017 and 2017/2018 for this specialty.²⁰

Further, the supply of oncologists is only expected to increase slightly, leading to a potential shortage of approximately 2,200 oncologists in 2025.²¹ This projected shortage is the result of the increased demand for oncology services, as well as the increased retirement rate of practicing oncologists. The expected retirement age for oncologists is 64.3 years old, and in a survey of the largest 50 U.S. metropolitan statistical areas, more than 20% of practicing oncologists are over age 65.²² The American Society of Clinical Oncology (ASCO) reported in 2017 that oncologists age 64 years and older (18.4% of respondents) currently outnumber the oncologists younger than 40 (13.3% of respondents) who have recently entered this specialty.²³

In addition to the growing hematology/oncology shortage, the oncology physician workforce is unevenly distributed throughout the U.S. Rural areas are experiencing a shortage in oncologists, most of whom tend to cluster in metropolitan areas. In fact, rural areas have disproportionately fewer oncologists compared to the number of individuals seeking cancer care. Often rural patients must travel long distances to gain access to cancer care and treatments.²⁴ As a result, low oncologist density in rural communities is strongly correlated with access to, and timeliness of, care received, which contributes to overall prognoses for cancer patients.

One solution to bridge the gap between the future demand for hematology/oncology services and the current supply of

15 <https://www.healthaffairs.org/doi/pdf/10.1377/hlthaff.2013.0714>.

16 <https://www.modernhealthcare.com/article/20170614/NEWS/170619950/advanced-practitioners-called-on-to-ease-cancer-care-shortage-but-challenges-remain>.

17 <https://www.cdc.gov/ruralhealth/cause-of-death.html>.

18 <https://www.ascopost.com/issues/june-25-2019/asco-launches-task-force-to-address-the-cancer-care-gap-in-rural-america/>.

19 <https://www.aamc.org/data/workforce/reports/492556/1-1-chart.html>.

20 Merritt Hawkins. *2018 Review of Physician and Advanced Practitioner Recruiting Incentives*.

21 American Society of Clinical Oncology. *Projected Supply of and Demand for Oncologists and Radiation Oncologists Through 2025*, 2014.

22 Doximity. *2018 National Oncologists Workforce Study*.

23 American Society of Clinical Oncology. *The State of Cancer Care in America*, 2017.

24 <https://www.asco.org/practice-policy/policy-issues-statements/asco-in-action/media-issue-brief-rural-cancer-care>.

physicians is the increased use of advanced practice providers (APPs)²⁵—75% of cancer providers who responded to the ASCO Oncology Practice Census Survey claim to use APPs to meet the current demands. However, the use of APPs varies even among practices.²⁶ APPs are predominately involved in counseling, prescribing, managing, and following up with patients. As the number of cancer survivors continues to increase, the opportunity for APPs to provide survivorship care and increase their roles as part of the cancer care team is expected to grow as well.²⁷

Hematology/Oncology Compensation

Hematologist/oncologists may be compensated for various services including clinical, medical directorship, APP supervision, and quality. According to SullivanCotter’s *Physician Compensation and Productivity Survey Report*, 52% of physicians receive additional compensation for APP supervision, on top of their base salaries. And, 40% of those receive a flat annual supervisory stipend, of which the median is \$10,000.²⁸

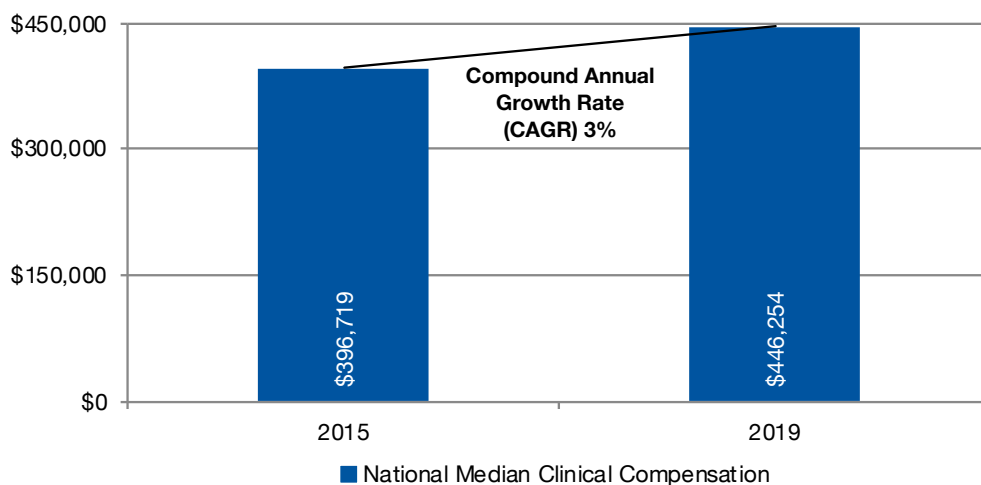
Similar to the trend in other physician specialties, hematologist/oncologists are increasingly seeing a portion of their total compensation, often in the form of bonus compensation, tied to the achievement of defined quality metrics. Oncology metrics originate from a number of sources, including but not limited to, governmental and commercial payer models, professional associations, and other organizations focused on improving the quality of cancer patient care. Common metric categories include patient experience, access to care, and adherence to clinical pathways, among others.

PYA has reviewed and presented hematology/oncology benchmark data in the following figures to provide an illustration of recent trends.

National Total Compensation Benchmarks

- As seen in **Figure 1**, total compensation for hematology/oncology was observed to grow at a compound annual growth rate (CAGR) of 3% between 2015 and 2019.

Figure 1 – Trends in Total Compensation – Hematology/Oncology^{1,2}



- 1 Average of national median clinical compensation from several survey resources.
- 2 The total compensation received by the physician reported as direct compensation, which may include salary, bonus and/or incentive payments, research stipends, honoraria, profit-sharing, clinical medical directorships, call coverage, voluntary salary reductions, and advanced practice provider supervision. The compensation reported excludes fringe benefits paid by the medical practice (e.g., retirement plan contributions and health insurance).

25 American Society of Clinical Oncology. *Projected Supply of and Demand for Oncologists and Radiation Oncologists Through 2025*, 2014.

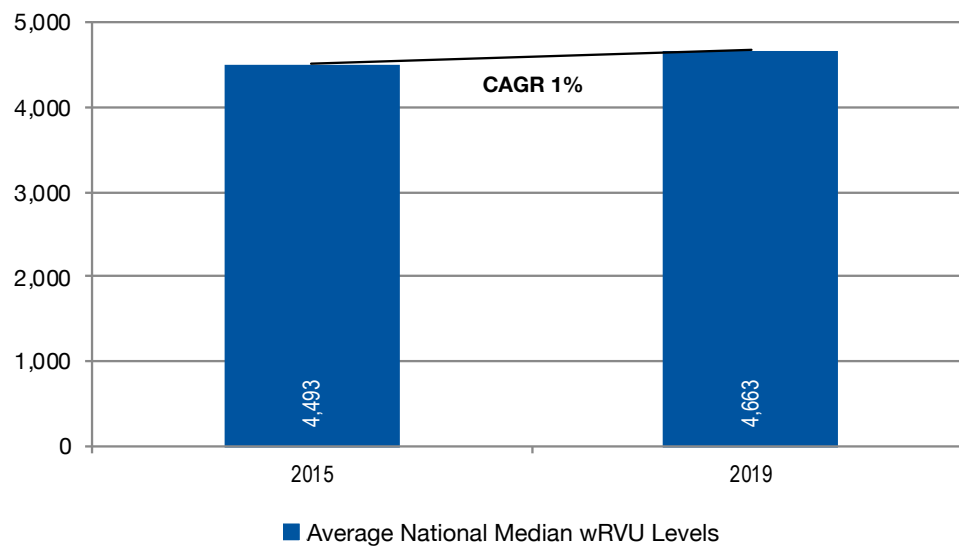
26 American Society of Clinical Oncology. *The State of Cancer Care in America*, 2017.

27 American Society of Clinical Oncology. *Understanding the Role of Advanced Practice Providers in Oncology in the United States*, 2018.

28 SullivanCotter. *Physician Compensation and Productivity Survey Report*, 2018.

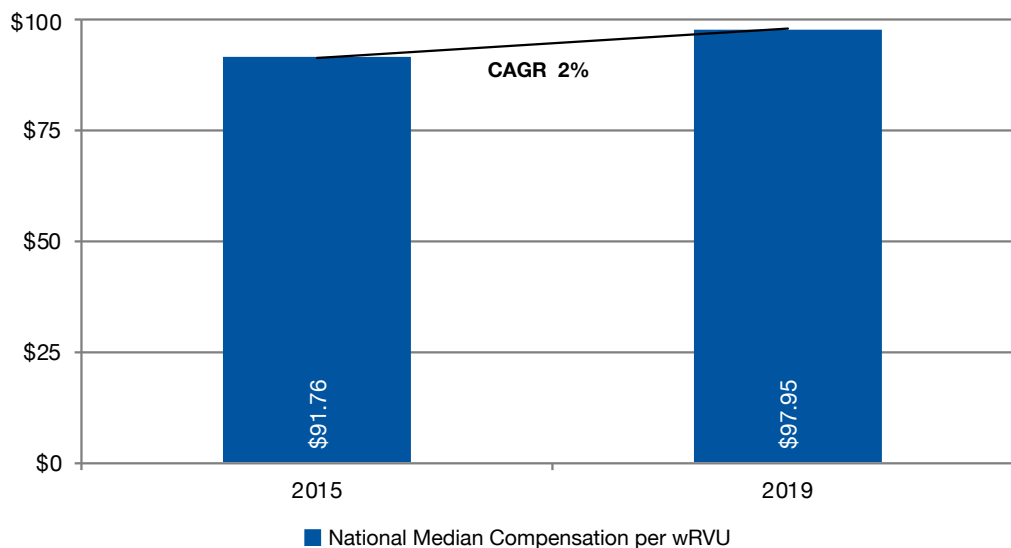
- As seen in **Figure 2**, growth in physician work relative value units (wRVUs)²⁹ was less than the growth in total compensation. For hematologist/oncologists, the CAGR for wRVUs was only 1% between 2015 and 2019, which suggests that factors outside of productivity may be driving the increase in hematology/oncology compensation. As indicated earlier, hematologist/oncologists' total compensation may also be composed of compensation tied to medical directorship positions, APP supervision, or the attainment of defined quality metrics.

Figure 2 – Trends in Physician Productivity as Measured by Work Relative Value Units (wRVUs) – Hematology/Oncology



- In **Figure 3** below, compensation per wRVU between 2015 and 2019 had a CAGR of 2%, which is reflective of the trends in **Figures 1 and 2**, given this metric is derived from and represents the amount of compensation earned for each wRVU produced.

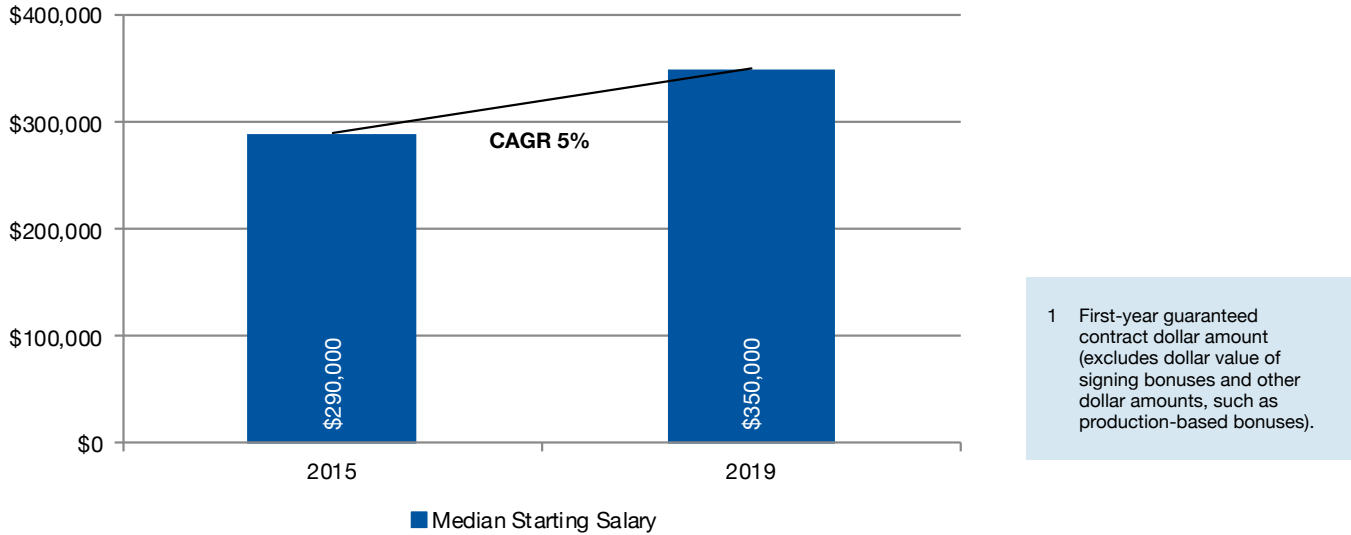
Figure 3 – Trends in Compensation per wRVU – Hematology/Oncology



29 A wRVU reflects the relative time and intensity associated with furnishing a service per the Medicare Physician Fee Schedule.

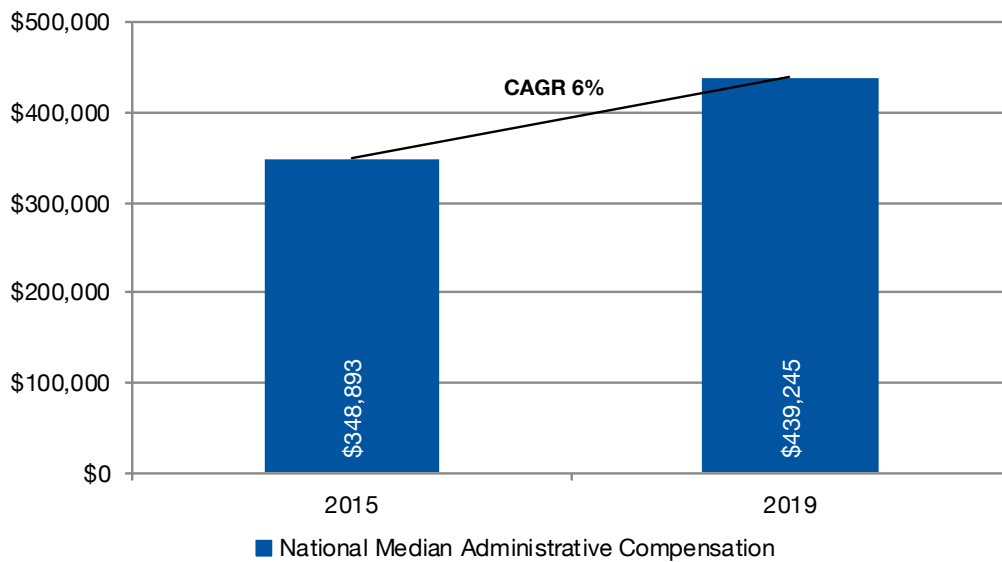
- Starting salary from 2015 to 2019 for hematologist/oncologists had a CAGR of 5%, seen in **Figure 4**. This is greater than the total compensation CAGR of 3% (**Figure 1**), which indicates the collective market forces (among other things) to help attract new hematologist/oncologists.

Figure 4 – Trends in Starting Salary – Hematology/Oncology¹



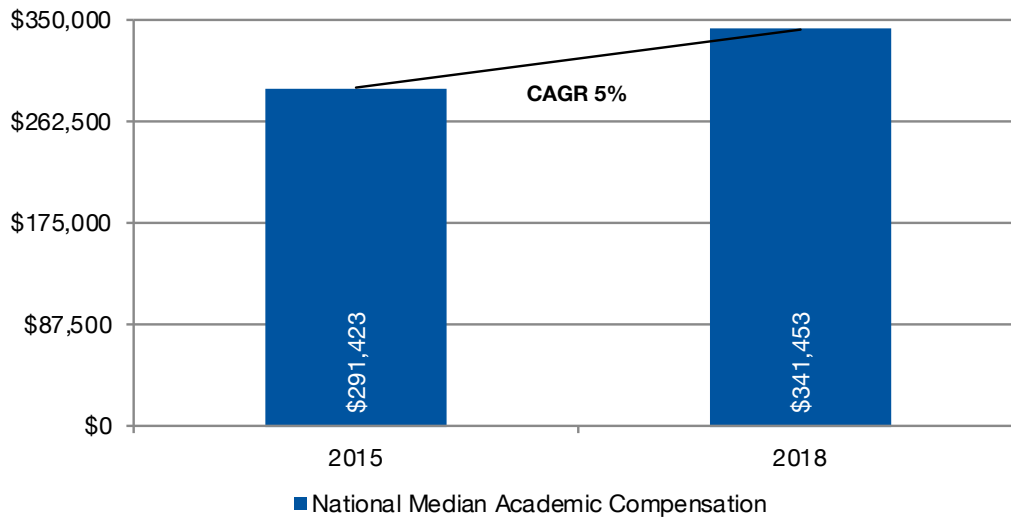
- Further, administrative compensation between 2015 and 2019 had a CAGR of 6%. This increase in compensation may be attributed to the increase in the skills required for successful completion of administrative and supervisory responsibilities held by hematologist/oncologists.

Figure 5 – Trends in Administrative Compensation – Hematology/Oncology



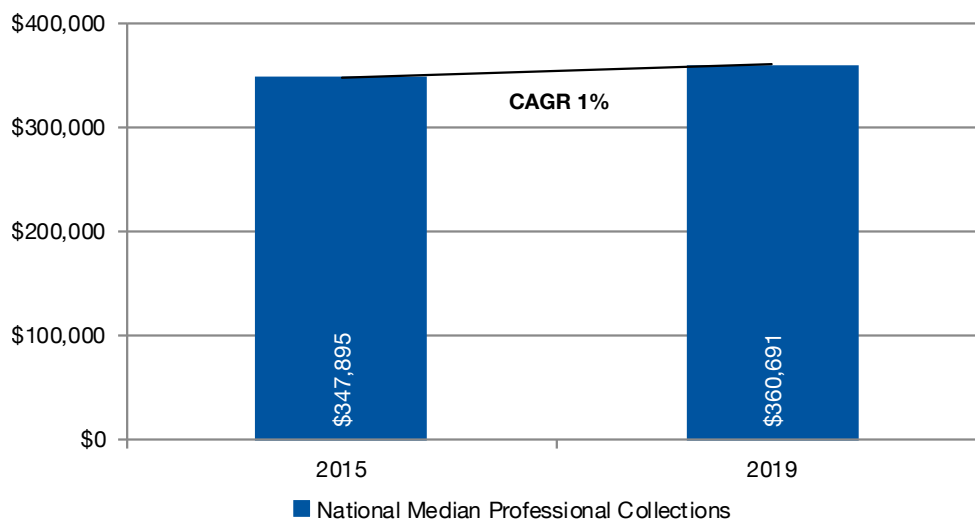
- Between 2015 and 2018, the CAGR for academic³⁰ compensation for hematologist/oncologists was also 5%, seen in **Figure 6**. Due to the limited number of data points for 2019, PYA considered 2018 data only. This trend is greater than that shown in **Figure 1**, indicating potentially more demand for academic hematologist/oncologists than private practice and/or community hospital-employed physicians.

Figure 6 – Trends in Academic Compensation – Hematology/Oncology



- Finally, as seen in **Figure 7**, professional collections had a CAGR of 1% from 2015 to 2019. The relatively higher increases in compensation per **Figures 1, 4, and 6**, as compared to collections, further supports reasons other than professional collections (e.g., the stated demand for hematologist/oncologists) impacting hematology/oncology compensation.

Figure 7 – Trends in Professional Collections – Hematology/Oncology



30 Data was taken from a blend of academic faculty ranks, including the positions of instructor, assistant professor, associate professor, professor, and department chair.

Conclusion

Benchmark data seems to suggest that, while physician compensation and productivity for hematologist/oncologists is increasing, these increases are modest when compared to the high demand and low supply of physicians in this specialty. Demand for hematologist/oncologists is driven by many factors, including a growing general and elderly population and an uneven distribution of oncology resources. As many hematologist/oncologists age out of practice, compensation for this physician specialty may need to increase at a more accelerated rate to address the growing gap between supply and demand for these physicians.

About PYA

PYA provides independent and objective valuation and consulting services for a broad range of healthcare organizations. We support our clients' many needs, including physician employment arrangements, medical directorships, call coverage, and many other types of arrangements associated with various acquisitions and/or affiliations. PYA provides more than 1,200 fair market value opinions each year and has worked with hospitals, health systems, and other such organizations negotiating compensation arrangements in many specialties, including hematology/oncology.



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