

Trends in Hospital–Physician Integration in Medical Oncology

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Hospitals have rapidly acquired medical oncology practices in recent years.¹ It remains unclear whether this practice is unique to medical oncology or reflects a broader trend. Some stakeholders have argued that the trend is driven by advantageous acquisition costs for high-priced cancer drugs, particularly for hospitals participating in the Health Resources and Services Administration (HRSA)'s 340B program, which requires manufacturers to provide deep discounts for outpatient drugs.^{2,3} Other market factors favoring acquisition of physician practices are not specific to oncology, including hospital leverage to negotiate higher prices with commercial payers, higher payments for comparable services (eg, office visits) delivered in hospital outpatient departments, and infrastructure to support risk-based payment models.³⁻⁶ Comparison of contemporaneous prevalence of and trends in hospital–physician integration across specialties can provide policy makers with insights into whether general or oncology-specific factors are driving these trends in order to guide appropriate policy.

Understanding the factors driving hospital–physician integration is critically important as multiple policies have been proposed recently that will have direct effects on the medical oncology market. In 2015, HRSA released updated guidance for the 340B program,⁷ notably requiring that off-site clinics meet hospital outpatient department billing requirements to be eligible for discounts, potentially creating an additional incentive for integration. The Bipartisan Budget Act of 2015 requires CMS to implement site-neutral payments for comparable services delivered in freestanding clinics and clinics based in hospital outpatient departments, which may reduce incentives for hospital–physician integration.⁸ This legislation does not apply to practices that have already been acquired, and it is unclear whether newly acquired practices will be eligible for 340B discounts. CMS has considered experiments with alternative payment models for Medicare Part B drugs, including a proposal to reduce payments for high-cost drugs, which was subsequently withdrawn, that may have adversely impacted providers with

ABSTRACT

OBJECTIVES: Hospitals have rapidly acquired medical oncology practices in recent years. Experts disagree as to whether these trends are related to oncology-specific market factors or reflect a general trend of hospital–physician integration. The objective of this study was to compare the prevalence, geographic variation, and trends in physicians billing from hospital outpatient departments in medical oncology with other specialties.

STUDY DESIGN: Retrospective analysis of Medicare claims data for 2012 and 2013.

METHODS: We calculated the proportion of physicians and practitioners in the 15 highest-volume specialties who billed the majority of evaluation and management visits from hospital outpatient departments in each year, nationally and by state.

RESULTS: We included 338,998 and 352,321 providers in 2012 and 2013, respectively, of whom 9715 and 9969 were medical oncologists. Among the 15 specialties examined, medical oncology had the highest proportion of hospital outpatient department billing in 2012 and 2013 (35.0% and 38.3%, respectively). Medical oncology also experienced the greatest absolute change (3.3%) between the years, followed by thoracic surgery (2.4%) and cardiology (2.0%). There was marked state-level variation, with the proportion of medical oncologists based in hospital outpatient departments ranging from 0% in Nevada to 100% in Idaho.

CONCLUSIONS: Hospital–physician integration has been more pronounced in medical oncology than in other high-volume specialties and is increasing at a faster rate. Policy makers should take these findings into consideration, particularly with respect to recent proposals that may continue to fuel these trends.

Am J Manag Care. 2017;23(10):624-627

high acquisition costs and incentivized integration.⁹ The Medicare Payment Advisory Commission has recommended that CMS reduce Medicare payments to 340B hospitals for Part B drugs, potentially reducing the incentive for these hospitals to acquire physician practices.¹⁰ Finally, CMS is testing a value-based payment model for medical oncologists that rewards high-value care and could help support less-costly practices.¹¹

Previous evaluations have relied on surveys of physician practices to determine integration with hospitals, typically considering whether physician practices report ownership by hospitals. In contrast, we determined integration of practices by examining the site of care based on hospital outpatient department billing records. To qualify for this level of billing, physician practices must demonstrate financial integration that includes sharing income and expenses with the hospital. Physician practices must also meet clinical integration requirements, such as having medical directors report to the chief medical officer or similar official at the hospital and granting responsibility to the hospital's medical staff committee for clinical activities at the site. Physicians who are clinically and financially integrated with hospitals may bill for services at a higher rate, which is indicated on the claim. This approach allows for a complete national sample of physicians and reflects a well-defined degree of clinical and financial integration consistent across specialties.

METHODS

Our data are from the CMS Medicare Physician and Other Supplier data files.¹² These publicly available files contain billing information for individual physicians and other practitioners (hereafter referred to as "providers"). Providers are included if they delivered a service to at least 10 Medicare beneficiaries during a calendar year. We examined provider outpatient evaluation and management services (Healthcare Common Procedure Coding System codes 99201-99215) billed during the 2012 and 2013 calendar years.

We considered providers to be based in hospital outpatient departments if the majority (more than 50%) of visits during the year were billed from a hospital outpatient department. We calculated the proportion of hospital outpatient department providers for each specialty in each year among the 15 specialties with the highest volume of

TAKEAWAY POINTS

Hospitals have rapidly acquired medical oncology practices in recent years. It is unknown whether this is due to oncology-specific factors or reflects a general trend. We analyzed publicly available physician-specific billing data and found:

- ▶ In 2012, 35.0% of medical oncologists, and in 2013, 38.3%, were primarily billing from hospital outpatient settings, a proportion substantially higher than in other high-volume specialties.
- ▶ There was wide geographic variation in the proportion of hospital-based medical oncologists by state, ranging from 0% in Nevada to 100% in Idaho.

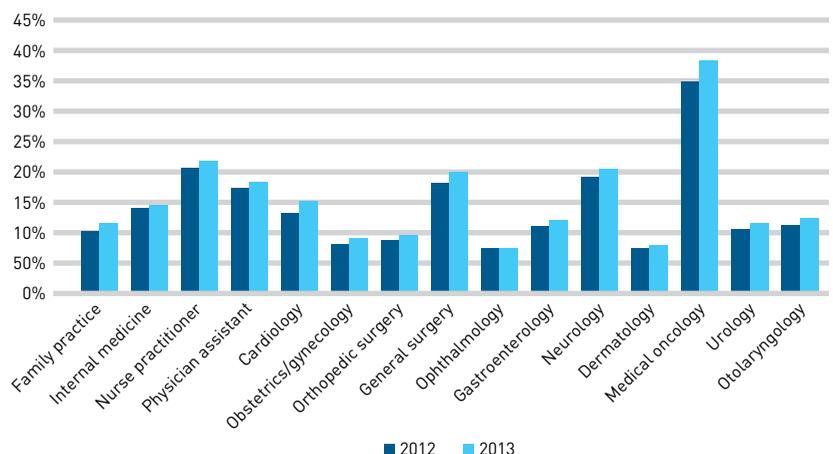
outpatient visits. We combined "hematology/oncology" and "medical oncology" into medical oncology. For medical oncology, we also calculated the proportion of hospital outpatient department providers by state in 2013.

The institutional review board of the Duke University Health System approved the study.

RESULTS

We included 338,998 and 352,321 providers in 2012 and 2013, respectively, of whom 9715 and 9969 were medical oncologists. Among the 15 specialties, the proportion of providers in hospital outpatient departments varied markedly, with medical oncology having the highest proportions in 2012 and 2013 (35.0% and 38.3%, respectively). Medical oncology also experienced the greatest absolute change (3.3%) between the 2 years, followed by thoracic surgery (2.4%) and cardiology (2.0%) (Figure 1). Cardiology experienced the greatest relative increase (15.2%) and ophthalmology the smallest (1.4%), with medical oncology at 9.4%.

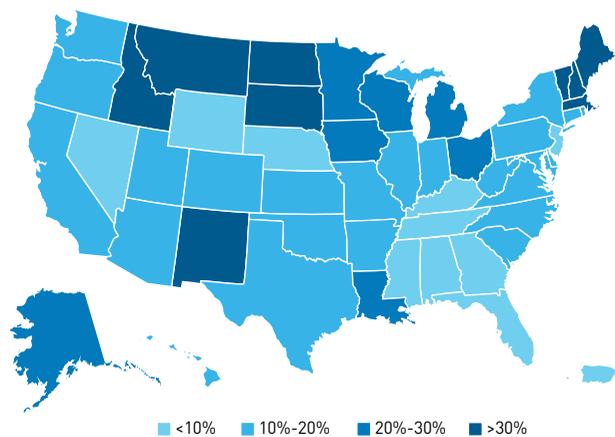
FIGURE 1. Proportion of Providers by Specialty Billing Predominantly in the Hospital Outpatient Setting^a



^aSpecialties are ordered by total volume of annual visits. Each bar represents the proportion of providers for the indicated specialty with more than 50% of evaluation and management visits billed from the hospital outpatient department in the indicated year.

TRENDS FROM THE FIELD

FIGURE 2. State-Level Variability in Proportion of Hospital-Based Medical Oncologists^a



^aFor each state and territory, the shaded value indicates the proportion of medical oncologists billing predominantly in the hospital outpatient setting in 2013.

Figure 2 is a map of the proportion of medical oncologists in hospital outpatient departments by state or territory in 2013. We observed marked variation, with 14 states and territories (including Washington, DC, and the US Virgin Islands) having more than 50% of medical oncologists in hospital outpatient departments. Conversely, 7 states had less than 15%. The proportion of medical oncologists in hospital outpatient departments ranged from 0% in Nevada to 100% in Idaho. New England, Pacific Northwest, and Mountain West states tended to have higher concentrations of medical oncologists in hospital outpatient departments. However, there was marked variation among many regions, with several states having more than 50% of medical oncologists in hospital outpatient departments adjacent to states with less than 15%. We compared these data to recent estimates of accountable care organization penetration¹³ and noted that some states had high prevalence of both hospital outpatient department billing and accountable care organization activity (eg, Maine, Vermont, New Hampshire, Massachusetts, Wisconsin), some had low prevalence of both (eg, Nevada, Oklahoma, Alabama), and several states had marked discordance (eg, New Jersey, Kentucky, Alaska).

DISCUSSION

Among high-volume specialties, medical oncology had the highest proportion of providers billing from hospital outpatient departments in 2012 and 2013, as well as the highest absolute growth in this proportion. We found wide geographic variation in hospital–physician integration among medical oncologists, suggesting that local factors may also contribute. These findings suggest that

factors specific to medical oncology are influencing hospital–physician integration and predate the study period.

Our definition of integration differs from approaches taken by others. For medical oncology, our results are comparable to a recent survey in which 32.1% of oncology practices reported vertical integration with a health system or hospital in 2013.¹ Using Medicare claims data, the results of a study by Neprash et al¹⁴ examining the relationship between physician–hospital integration and commercial prices indicated that 32.2% of medical oncologists were based in hospital outpatient departments in 2012. Our results likely differ in part because we counted medical oncologists billing from multiple practices only once and required a minimum threshold of evaluation and management services.

For other physician specialties, surveys of hospital ownership have reported higher rates in 2012, including 45% for internists and 37% for family practitioners in single-specialty practice,¹⁵ as well as 35% for cardiologists¹⁶ compared with our findings of 13.2%, 10.0%, and 14.3% for the 3 specialties, respectively. This discrepancy may be partially explained by the possibility that these specialists are less likely to completely financially and clinically integrate with hospital owners. The study by Neprash et al¹⁴ reported rates of 23.9% and 28.4% for primary care physicians and cardiologists, respectively, in 2012, which may differ from our findings for the reasons noted previously. All approaches have strengths and limitations to evaluating hospital–physician integration. Ours represents a high degree of integration that has clear financial significance, as shifting the site of service for office visits results in direct price increases for the Medicare population, and clinical significance, as clinical care provided during these visits is brought under the purview of the hospital.

The geographic variation in integration suggests that these findings are unlikely to reflect clinical need; however, little is known about the impact on patient outcomes. Empirical evidence has demonstrated an association between integration and increased prices billed to commercial payers,^{17,18} with some evidence that integration may increase the use of care management processes.¹⁹ For the Medicare population, average payments are higher for patients treated in hospital outpatient departments for cancer compared with office settings; however, these results may relate to differences in patient populations across sites of care.²⁰ As commercial payers and patients may bear the financial brunt of integration while public policies are potentially driving this behavior, more research is needed to examine the impact of these trends on public payers and beneficiaries.

The 340B program in particular has been identified as a potential root cause of integration in medical oncology,² noting, for example, the increase in affiliated clinics and share of chemotherapy delivered by 340B clinics.²¹ Although our study results strongly support arguments that hospital–physician integration is substantially greater in medical oncology, further research is needed to delineate the specific causes.

It should be noted that our study has several limitations: 1) we did not evaluate lesser degrees of integration, 2) the study was limited to 2 years of data, and 3) we were unable to delineate the specific causes of integration.

CONCLUSIONS

A greater proportion of medical oncologists bill from hospital outpatient departments than providers in other high-volume specialties, with continued growth between 2012 and 2013. Policy makers should be cautious about further contributing to consolidation and monitor hospital–physician integration on an ongoing basis. Research is needed to better delineate the causes of consolidation and implications for patients, physicians, and payers. ■

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Source of Funding: This work was supported internally by the Duke Clinical Research Institute.

Author Disclosures: The authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

Authorship Information: Concept and design (JDC, MAD, KAS); acquisition of data (JDC); analysis and interpretation of data (JDC, MAD, KAS); drafting of the manuscript (JDC, MAD); critical revision of the manuscript for important intellectual content (JDC, MAD, KAS); statistical analysis (MAD); obtaining funding (JDC, KAS); and supervision (KAS).

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