Hospital Ownership of Physician Practices

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Issue Summary: Over the past decade, hospitals have purchased large numbers of physician practices. In theory, the effect of hospital ownership of physician practices (vertical integration) on health spending and the quality of care is indeterminate. Empirically, however, vertical integration is associated with increases in spending but not with improvements in quality. Based on the existing academic literature, vertical integration has increased spending by enhancing physician and hospital market power, enabling physicians to exploit anomalies in reimbursement rules, and creating powerful incentives to shift care to more-costly sites of service.

Policy Proposals: First, the Federal Trade Commission (FTC) and the Department of Justice (DOJ) should increase antitrust scrutiny of vertically integrating physicians and hospitals. Second, Congress could facilitate this by amending the Hart-Scott-Rodino Act to lower the reporting threshold for mergers involving a physician practice. If Congress fails to amend the Act, the agencies should consider creating reporting requirements of their own if they can do so under existing law. Third, Medicare should continue to refine its reimbursement rules in order to eliminate the ability of physicians in vertically integrated practices to obtain higher payments for exactly the same treatments simply by virtue of their integrated status. Medicare should reduce other "site-of-service" payment differences that reward physicians and hospitals for treating patients in hospital outpatient departments in cases that could be appropriately managed in less-costly non-hospital settings.

Potential Savings: Absent intervention, vertical integration of physician practices and hospitals will continue. Over the past decade, vertical integration increased by 18.7 percentage points to 34.7% in 2018. If policy reforms could prevent a further 20 percentage point increase in vertical integration, they would reduce total medical spending by approximately 1%.

Related Literature and Evidence

Baker, Laurence, M. Kate Bundorf, Daniel Kessler. 2014. "Vertical Integration: Hospital Ownership of Physician Practices Is Associated with Higher Prices and Spending." *Health Affairs*, 33 (5): 756–63.

Baker, Laurence, M. Kate Bundorf, Daniel Kessler. 2016. "The Effect of Hospital/Physician Integration on Hospital Choice." *Journal of Health Economics*, 50: 1–8.

Capps, Cory, David Dranove, Christopher Ody. 2018. "The Effect of Hospital Acquisitions on Physician Practices on Prices and Spending." *Journal of Health Economics*, 59: 139–52.

Overview

Over the past decade, hospitals have acquired a large number of physician practices. According to the American Medical Association's Physician Practice Benchmark Surveys, the share of physicians employed in practices owned (at least in part) by hospitals increased from 16% in 2007–2008 to 34.7% in 2018 (Kane and Emmons 2013; Kane 2019).

In theory, the effect on consumers of hospital ownership of physician practices (vertical integration) is ambiguous. On the one hand, vertical integration could be beneficial for consumers if consolidating the services of physicians and hospitals into a commonly owned organization reduces the costs of coordination. In addition, vertical integration could bring efficiency gains if it enables physicians or hospitals to set prices efficiently for services that must be produced jointly.

However, on the other hand, vertical integration could harm consumers in several ways. First, vertical integration could enhance the market power of physicians, hospitals, or both. Hospital acquisitions of physician practices can consolidate physicians into large, commonly owned groups, thereby increasing physicians' bargaining leverage and enabling them to negotiate higher prices with commercial insurers. Vertical integration can also increase hospital market power; physicians control the flow of referrals to the hospital, and physicians in vertically integrated practices are much more likely to refer patients to the hospital that owns their practice than to other competing hospitals. This allows hospitals not only to increase their market share but also to "lock up" patients who are potential customers of competing hospitals. In this way, vertically integrated hospitals can gain an advantage over their rivals in a process sometimes described as "foreclosure."

Second, vertical integration gives physicians and hospitals the ability and powerful incentives to take advantage of rules that pay different amounts for the same outpatient care at different "sites of service." Most outpatient visits occur in one of three different sites of service: a physician's office, a non-hospital facility (such as a freestanding ambulatory surgery or imaging center), or a hospital outpatient department. For treatments in a physician's office, Medicare pays the physician a "professional" fee that compensates her for her time and office expenses. For treatments in a non-hospital facility or hospital outpatient department, Medicare makes two payments—a professional fee to the physician for her time and a "facility" fee to the facility.

When Medicare pays a separate facility fee, the sum of the professional and facility fee is generally greater than the professional fee that Medicare would pay, were the service to be supplied in a physician's office. Although such "site-of-service differentials" exist for both non-hospital facilities and hospital outpatient departments, they are particularly large for hospital outpatient departments. This aspect of Medicare reimbursement was originally based on the hypothesis that patients treated in a hospital outpatient department generally required support that was only available in a hospital. However, as technology has changed to allow a wider range of services to be provided in physicians' offices and non-hospital facilities, the economic basis for site-of-service differentials has eroded.

The problem is that Medicare payment rules give vertically integrated physicians and hospitals the ability and powerful incentives to collect both a "professional" and a "facility" fee. The most anomalous example of this is the ability of vertically integrated physicians and hospitals to collect both a professional and a facility fee simply by designating the location of the physician's practice—even if it was an office that was physically separate from the hospital's campus—to be a branch of the hospital's outpatient department.[1] Physician practices not owned by a hospital do not have this ability. Through this anomaly, vertically integrated physicians and hospitals have been able to obtain substantially greater reimbursement for exactly the same treatments simply by virtue of their integrated status.

Distortions from site-of-service differentials, however, extend beyond this special case. As explained above, site-of-service differentials exist not only between physician offices and hospital outpatient departments but also between non-hospital facilities and hospital outpatient departments. Although unintegrated physicians and hospitals have as much ability to exploit this second type of site-of-service differential as do vertically integrated physicians and hospitals, vertically integrated physicians and hospitals have more powerful joint incentives to do so. Hospitals that own physician practices can reward or even require their integrated physicians to deliver care in (more-costly) hospital outpatient departments, even when a (less-costly) non-hospital facility would be just as effective. For example, hospitals may provide incentives for or even require their physicians to conduct imaging studies in the hospital instead of an imaging center. Of course, legal and contractual restrictions generally prohibit a hospital from making direct cash payments to physicians in exchange for this behavior. However, these restrictions can be circumvented, at least in part, by vertical integration. Because it is extremely difficult to police payments between parties that share fixed assets or a complex contractual relationship, it is hard to prevent a hospital from making implicit payments for referrals to physicians whose practices it owns.

Although commercial insurers are not required to follow Medicare's policy of paying different amounts for the same service supplied at different sites, some do (MedPAC 2020a, 477). As explained below, there is substantial evidence that the distortions from site-of-service differentials in Medicare spill over to commercial insurance.

In general, the academic literature on vertical integration suggests that hospitals' acquisitions of physician practices raise health spending without increasing efficiency or improving quality. Indeed, in a review of the literature, Post, Buchmueller, and Ryan (2018) conclude that "integration [between hospitals and physicians] poses a threat to the affordability of health services." This brief outlines three policy reforms to mitigate the costs of potentially harmful increases in vertical integration.

Vertical Integration and Market Power

A large body of research finds that vertical integration increases both hospital and physician market power. Baker, Bundorf, and Kessler (2014) find that increases in the market share of vertically integrated hospitals were associated with greater growth rates in inpatient hospital prices. In particular, they find that a one standard deviation increase in the market share of vertically integrated hospitals—which is approximately what would result from one hospital in a four-hospital market acquiring a physician prac-

tice—was associated with an increase in inpatient prices of 3.2%. There is evidence that these effects are caused by hospitals using vertical integration to influence where physicians refer their patients. Baker, Bundorf, and Kessler (2016) find that physicians in vertically integrated practices are much more likely to refer patients to their integrated hospital than to other competing hospitals. Moreover, patients were more likely to choose a high-cost, low-quality hospital when their physician was in a practice that was owned by the hospital.

On the outpatient side, Neprash et al. (2015) find that increases in the market share of vertically integrated hospitals were associated with greater growth rates in outpatient prices, holding constant other market characteristics including physician market competitiveness. Along the same lines, Capps, Dranove, and Ody (2018) find that in the three years after a physician practice integrates with a hospital, the physicians' prices increased by 14.1%, approximately half of which was due to market power. They also find that vertical integration increased physician prices by more when it was undertaken by a larger hospital, consistent with the hypothesis that hospital market power interacts with vertical integration to increase physician as well as hospital prices.

Baker, Bundorf, and Kessler (2014), Neprash et al. (2015), and Capps, Dranove, and Ody (2018) all find that price increases due to vertical integration are not offset by volume decreases, which means that vertical integration increases health spending as well as prices. This is confirmed by Scheffler, Arnold, and Whaley (2018), who find that increases in vertical integration in highly concentrated hospital markets were associated with a 12% increase in marketplace insurance policy premiums.

Vertical Integration and Site of Service

Koch, Wendling, and Wilson (2017) show that physicians and hospitals that vertically integrate exploit their newfound ability to collect both a "professional" and a "facility" fee from Medicare. In particular, they find that acquisition of a Medicare beneficiary's physician practice by a hospital system increased outpatient spending by 18%, holding other factors constant. MedPAC (2020a, 480-481) shows that the share of Medicare patients' evaluation and management visits in hospital outpatient departments grew more slowly in Maryland than in the rest of the country after Maryland adopted policies in 2014 that reduced the add-on payments that vertically integrated providers could receive. Capps, Dranove, and Ody (2018) show that this billing anomaly also affects commercial insurance prices; according to them, around half of the approximately 14% increase in physician prices not due to market power was due to the ability to bill both a professional and a facility fee.

In addition to giving physicians and hospitals the ability to collect two fees instead of one, vertical integration increases spending in both Medicare and commercial insurance by enhancing the joint incentives of physicians and hospitals to redirect patients to (higher-priced) hospital outpatient departments from (lower-priced) non-hospital facilities. Chernew et al. (2019) find that vertical integration was associated with an increased likelihood of the integrated physicians' patients being referred to (more-costly) hospital-based rather than free-standing imaging facilities. Richards, Seward, and Whaley (2020) find that

physicians in practices acquired by a hospital shifted nearly 10% of the procedures they perform away from ambulatory surgery centers to hospital outpatient departments.

Vertical Integration, Quality, and Efficiency

Despite evidence that vertical integration of hospitals and physician practices increases prices and spending, there is scant evidence that vertical integration increases productivity or clinical quality. Scott et al. (2016) find that neither clinical measures of hospital quality nor patient satisfaction was associated with vertical integration after controlling for location and other hospital characteristics. Kerrissey et al. (2017) find that even vertical integration involving documented changes to the medical care production process was not associated with aspects of patient/physician engagement generally considered important for improved quality. In particular, according to patients' observations, vertical integration was not associated with greater physician or staff knowledge of the patient's medical history, not associated with greater support for self-directed care or medication/home health management, and not associated with better communication of test results. Short and Ho (2020) find that vertical integration is significantly associated with higher quality on only two of the 29 quality measures they analyze. Koch, Wendling, and Wilson (2020) find that acquisition of a Medicare beneficiary's physician practice by a hospital system did not reduce adverse health outcomes related to the treatment of hypertension and diabetes of the practice's Medicare patients, including mortality, heart attack, ischemic heart disease, glaucoma, and other potentially avoidable complications.

Policies to Mitigate Costs of Vertical Integration

Several policy reforms have the potential to reduce the costs of vertical integration. First, the FTC and DOJ should increase antitrust scrutiny of vertically integrating physicians and hospitals. Currently, scrutiny of vertical transactions is essentially nonexistent. Indeed, neither agency has ever challenged any hospital acquisition of a physician practice on the basis of anticompetitive harm from vertical integration (Greaney 2019). Although the former Director of the Bureau of Competition at the FTC has acknowledged that foreclosure from vertical integration in markets for health services could in theory raise anticompetitive concerns (Federal Trade Commission 2014), neither agency has acknowledged that vertical integration could inhibit competition simply by increasing a hospital's market share. It is time to reconsider that position.

Second, Congress should consider amending the Hart-Scott-Rodino Act to lower the reporting threshold for mergers involving a physician practice. Under the Act, acquisitions must only be reported if they involve transactions greater than $94 million (Federal Trade Commission 2020). But most acquisitions of physician practices fall below that threshold (Capps, Dranove, and Ody 2017). As Wollman (2019) shows, mergers that fall below the Hart-Scott-Rodino threshold rarely receive antitrust scrutiny from the agencies. If Congress fails to amend the Act, the agencies should consider creating reporting requirements of their own if they can do so under existing law.

Third, Medicare should continue to refine its reimbursement rules. In particular, Medicare should eliminate the ability of physicians in vertically integrated practices to obtain higher payments for exactly the same treatments simply by virtue of their integrated status, and should reduce “site-of-service” payment differences that reward physicians and hospitals for treating patients in hospital outpatient departments in cases that could be appropriately managed in less-costly non-hospital settings. Extensive research by MedPAC (2013; 2014, 75-78; 2017, 142) shows how such reforms could be implemented. Recent research by Dranove and Ody (2019) suggests that such reforms could have an economically significant effect on integration behavior.

Potential Savings

Capps, Dranove, and Ody (2018) estimate that the vertical integration of primary care physicians increased commercially insured patients’ health spending by 4.9%. Koch, Wendling, and Wilson (2017) estimate that acquisition of a physician practice by a hospital system increased Medicare beneficiaries’ outpatient spending by 18%. In Medicare, outpatient spending in 2019 was approximately 25% of total spending (MedPAC 2020b, Chart 1-2), so vertical integration would increase the average Medicare patient’s total spending by approximately 4.5% (= 0.25 × 0.18).

Over the past decade, vertical integration increased by 18.7 percentage points, to 34.7% in 2018. If the policy reforms discussed above could prevent a further 20 percentage point increase in vertical integration, and the effect of vertical integration on other patients’ spending is similar to the effect on commercially insured patients and Medicare beneficiaries, then the policy reforms would reduce total medical spending by approximately 1% (between 0.009 = 0.2 × 0.045 and 0.0098 = 0.2 × 0.049).

Footnotes

1. The Bipartisan Budget Act of 2015 prohibited providers from billing a separate hospital outpatient facility fee after January 1, 2017, if a) they began billing under the outpatient prospective payment system (OPPS) on or after November 2, 2015, and b) they are not located on a hospital campus. CMS has successfully imposed additional restrictions on billing for certain evaluation and management services in off-campus “hospital outpatient” departments (American Hospital Association v. Azar). However, off-campus hospital outpatient departments can still receive a separate facility fee for other services.

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