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Out-Of-Network Billing And Negotiated Payments For Hospital-Based Physicians

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ABSTRACT When physicians whom patients do not choose and cannot avoid can bill out of network for care delivered within in-network hospitals, it exposes patients to financial risk and undercuts the functioning of health care markets. Using data for 2015 from a large commercial insurer, we found that at in-network hospitals, 11.8 percent of anesthesiology care, 12.3 percent of care involving a pathologist, 5.6 percent of claims for radiologists, and 11.3 percent of cases involving an assistant surgeon were billed out of network. The ability to bill out of network allows these specialists to negotiate artificially high in-network rates. Out-of-network billing is more prevalent at hospitals in concentrated hospital and insurance markets and at for-profit hospitals. Our estimates show that if these specialists were not able to bill out of network, it would lower physician payments for privately insured patients by 13.4 percent and reduce health care spending for people with employer-sponsored insurance by 3.4 percent (approximately \$40 billion annually).

Hospitals and physicians independently negotiate payment terms and network participation agreements with private insurers. As a result, it is possible for a commercially insured patient to be treated at an in-network hospital by a physician who is out of network with the patient's insurer. Various types of physicians work at hospitals and are not chosen—and therefore cannot reasonably be avoided—by patients, such as emergency department (ED) physicians, anesthesiologists, pathologists, radiologists, and assistant surgeons. When these physicians can bill out of network and cannot be avoided by patients, it undercuts the functioning of health care markets, raises health care costs, and exposes patients to significant financial risk.

A few states have enacted meaningful legislation to address out-of-network billing, other states are currently pursuing such legislation,

and several relevant bills are circulating in Congress.¹ However, more research is needed to understand how out-of-network billing is affecting consumers, where it is occurring, and the extent to which it is influencing the bargaining process between physicians and insurers.

Researchers have shown that more than 20 percent of in-network ED visits involve care from an out-of-network physician.^{2,3} While most observers focus on the impact of out-of-network billing on patients' out-of-pocket spending, Zack Cooper and colleagues (three of this article's coauthors) observed that the ability to bill out of network allows ED physicians to be paid in-network rates that are significantly higher than those paid to other specialists who cannot readily bill out of network.⁴ These higher payments get passed along to all consumers (including those who do not even access care) in the form of higher insurance premiums.

However, ED physicians are by no means the

only category of practitioners who face inelastic demand in the short run for their services (meaning that demand for their services does not vary with price). In this study we used data from a large commercial insurer that covers tens of millions of lives to explore the rates that anesthesiologists, pathologists, radiologists, and assistant surgeons bill out of network. Previous work in *Health Affairs* has identified the frequency with which patients receive out-of-network bills in these specialties.² We extended that analysis by analyzing whether out-of-network billing is concentrated in certain groups of hospitals, observing the conditional correlates of the rates of out-of-network billing at hospitals, and identifying the influence of the ability to bill out of network on in-network payments and total health care spending. We also describe the arguments for and against four policy options to address out-of-network billing.

Why would hospitals allow physicians who bill out of network to work inside their facilities when it likely exposes patients to financial risk and produces reputational harm? Cooper and coauthors⁴ found evidence that out-of-network providers offer transfers that bring economic benefits to hospitals that offset the hospitals' costs. These transfers can include waiving staffing fees or engaging in clinical behavior, such as ordering more imaging studies, that raises facility spending. As a result, a hospital can gain monetarily from allowing surprise billing. Given that, theory predicts that for-profit hospitals will be more likely than nonprofit or government hospitals to have providers who bill out of network working within their facilities.⁴ Compared to nonprofits, for-profit hospitals likely put a higher value on profits relative to patient welfare.⁵ In addition, hospitals in concentrated markets will presumably be less exposed to reputational harm generated by out-of-network billing (because patients have few alternative locations for care). As recent press accounts illustrate, the reputational harm physicians receive from out-of-network billing can be substantial.^{6,7} We explored these hypotheses.

Study Data And Methods

CONSTRUCTION OF ANALYTIC SAMPLE We analyzed data for 2015 provided by a large commercial insurer that covers tens of millions of lives, collectively, in all fifty states and the District of Columbia. We focused on insurance claims for people younger than age sixty-five with employer-sponsored coverage in fully insured and administrative services only (ASO) plans (plans in which the insurer administers the plan but does not bear financial risk). We analyzed care deliv-

ered at in-network hospitals that involved services rendered by anesthesiologists, pathologists, radiologists, or assistant surgeons, which we identified using the clinical codes on each physician claim (details about the codes are in online appendix A).⁸ We chose these specialties because, along with ED physicians (which we have studied), these are physicians who are hospital based and not chosen by patients.

Our data set included a flag for whether the services on a physician claim were rendered by an out-of-network provider. We identified physicians' in-network payments as the sum of the patient and negotiated insurer contributions (the allowed amounts). Unfortunately, consistent with previous research in this area, we did not have data on what physicians were able to collect from patients beyond the usual cost sharing (for example, we did not observe whether patients were sent or paid a balance bill).

ANALYSIS We present physician charges and in-network payments as percentages of Medicare Part B physician payments. We compared private prices to Medicare payments because the latter are designed by the Centers for Medicare and Medicaid Services (CMS) to approximate the costs of providing care across regions (although CMS's calculations may be imperfect). Our calculation of payments as a percentage of Medicare Part B payments considered the geographic location where care was delivered and adjusted for the work relative value unit (RVU) of each service, the practice expenses RVU, and the malpractice insurance RVU that were specific to a provider's address. All payments were adjusted using the geographic practice cost indexes and the relevant conversion factor, based on the CMS payment rules for 2015.⁹ We measured patients' potential balance bill as the difference between physician charges and median in-network payments (as a percentage of Medicare payments).

We limited our analysis to cases of care delivered at in-network hospitals that were registered with the American Hospital Association, had delivered more than ten cases per specialty in our study, and were not critical access hospitals. We defined a *case* as the span of time from hospital entry to exit. To avoid idiosyncratically expensive or inexpensive observations, we winsorized the top and bottom 1 percent of physician charges and physician in-network payments (although our results were robust to not winsorizing). We also excluded cases whose claims did not have both facility and physician payments, observations in which patients had coordinated medical benefits, and cases in which the same physician billed as both in and out of network.

We also examined the conditional correlates of the share of out-of-network care delivered at each

hospital. To do this, we carried out ordinary least squares regression in which the dependent variable was the share of out-of-network cases by hospital. We merged data on hospital concentration used by Cooper and coauthors;¹⁰ insurer market concentration from Decision Resources Group's Managed Market Surveyor Suite database;¹¹ and local area characteristics from Opportunity Insights,¹² the Census Bureau, and the Area Health Resources Files of the Health Resources and Services Administration. We measured hospital concentration by creating indicator variables for whether a hospital was in a monopoly, duopoly, or triopoly market (based on the count of hospitals within a fifteen-mile circular area drawn around each hospital). We measured Herfindahl-Hirschman Indexes to capture insurance market concentration by county.¹³

The standard errors in our regression were clustered around hospitals. The continuous independent variables were scaled so that they had a mean of 0 and a standard deviation of 1. As a result, the point estimates on continuous variables show the effect of a one-standard-deviation change in those variables.

This project was deemed exempt by the Yale University Social Sciences Institutional Review Board.

LIMITATIONS There were four core limitations to this work. First, we analyzed data from a single large commercial insurer. As a result, we were analyzing a sample of privately insured claims. However, previous analyses of the frequency of out-of-network billing by ED physicians using this database (for example, that by Cooper and Fiona Scott Morton)³ produced results that were very similar to those of a later analysis by Christopher Garmon and Benjamin Chartock² that was carried out on wholly separate data.

Second, we did not observe whether patients received balance bills directly from the out-of-network physicians who treated them. As a result, while we could estimate patients' potential out-of-pocket spending exposure, we could not know precisely what costs patients were exposed to when they were treated by an out-of-network provider. To our knowledge, there are no data sets that systematically capture the amounts of patients' balance bills.

Third, we estimated the associations between hospital and local area characteristics and the frequency with which hospitals had out-of-network specialists working from their facilities. These results should not be read as causal.

Fourth, for our policy counterfactuals, we assumed that the driver of differentially high in-network prices for the four groups of physicians we studied was their ability to bill out of network. This is consistent with the empirical work and

theory developed by Cooper and coauthors.⁴ However, there could be other drivers of these differences—for example, supply-side characteristics such as physicians per capita.

Study Results

Our analytic data set, described in appendix exhibit 1,⁸ included 606,128 hospital-based cases involving anesthesia services, 420,800 cases involving pathology services, 2,890,017 cases that included a radiologist claim, and 37,252 cases that involved an assistant surgeon. More than 99.5 percent of the cases in our data set with care delivered at a hospital involved care that was delivered at an in-network hospital. Approximately 73.2 percent of cases involved a beneficiary enrolled in an ASO insurance plan.

In exhibit 1 we show the distribution of cases delivered at in-network hospitals that involved an out-of-network anesthesiologist, pathologist, radiologist, assistant surgeon, or orthopedist performing knee replacements. Orthopedists performing knee replacements can generally be chosen (or avoided) in advance by patients, so they served as the reference specialty in this analysis. The mean share of cases involving an out-of-network physician were 11.8 percent for anesthesiologists, 12.3 percent for pathologists, 5.6 percent for radiologists, and 11.3 percent for assistant surgeons. By contrast, the mean share of cases where out-of-network orthopedists performed knee replacements from in-network hospitals was less than 1 percent.

A key finding from our analysis is that out-of-network billing was concentrated in a minority of hospitals. Indeed, for anesthesiologists, 46.2 percent of patients at hospitals in the ninetieth percentile of the out-of-network billing distribution were treated by an out-of-network anesthesiologist. The analogous numbers were 50.0 percent for pathologists, 13.2 percent for radiologists, and 35.7 percent for assistant surgeons. By contrast, hospitals with less than 2 percent out-of-network billing for anesthesiologists, for example, made up 64 percent of the hospitals in our sample (data not shown).

Physicians with the ability to bill out of network without losing patient volume are able to negotiate significantly higher in-network payments from insurers, compared to physicians without a strong outside option. For example, on average, orthopedists performing knee replacements were paid 164 percent of Medicare rates (exhibit 1). By contrast, in-network rates were 367 percent of Medicare rates for anesthesiologists, 343 percent for pathologists, 195 percent for radiologists, and 176 percent for assistant surgeons.

EXHIBIT 1
Out-of-network billing frequency, in-network physician payments, out-of-network physician charges, and potential balance bills, by physician specialty, 2015

	Mean	SD	Percentile			
			25th	50th	75th	90th
Frequency of out-of-network billing at in-network hospitals (%)						
Anesthesiologists	11.8	24.4	0.0	0.0	9.4	46.2
Pathologists	12.3	25.6	0.0	0.0	8.8	50.0
Radiologists	5.6	17.7	0.0	0.0	0.9	13.2
Assistant surgeons	11.3	18.2	0.0	2.8	15.8	35.7
Orthopedists performing knee replacements ^a	0.9	4.5	0.0	0.0	0.0	0.0
In-network physician payments (% of Medicare payments)						
Anesthesiologists	367	166	271	327	430	532
Pathologists	343	399	133	212	399	698
Radiologists	195	98	132	175	225	312
Assistant surgeons	176	244	106	132	180	274
Orthopedists performing knee replacements ^a	164	80	120	147	189	257
Out-of-network physician charges (% of Medicare payments)						
Anesthesiologists	802	560	478	638	903	1,408
Pathologists	562	576	211	384	699	1,203
Radiologists	452	251	313	398	528	732
Assistant surgeons	2,652	3,519	659	1,561	3,091	6,219
Potential balance bills from seeing an out-of-network physician (\$) ^b						
Anesthesiologists	1,171	1,551	321	648	1,336	2,979
Pathologists	177	317	0	69	195	469
Radiologists	115	158	24	58	133	303
Assistant surgeons	7,420	10,578	1,028	3,134	8,562	23,419

SOURCE Authors' analysis of data for 2015 from a large commercial insurer. **NOTES** The percentiles are those of the distribution of the variable in the row. Bills are calculated at the hospital level for frequency of out-of-network billing at in-network hospitals and at the case level (defined in the text) in the rest of the exhibit. SD is standard deviation. ^aPrices for orthopedists represent the average in-network rates for knee replacements, expressed as a percentage of Medicare rates under Part B. ^bDifference between physician charges and median in-network payments.

In the event that a patient's insurer does not cover care delivered by an out-of-network provider, physicians will seek to collect their charges directly from patients. Mean out-of-network physician charges were 802 percent of Medicare payments for anesthesiologists, 562 percent for pathologists, 452 percent for radiologists, and 2,652 percent for assistant surgeons (exhibit 1)—or \$2,130, \$311, \$194, and \$7,889, respectively (data not shown).

Recall that we calculated a potential balance bill as the difference between physician charges and median in-network payments (164 percent of Medicare payments). Based on these calculations, balance bills can be substantial. We estimated that the mean potential balance bills for anesthesiologists, pathologists, radiologists, and assistant surgeons were \$1,171, \$177, \$115, and \$7,420, respectively.

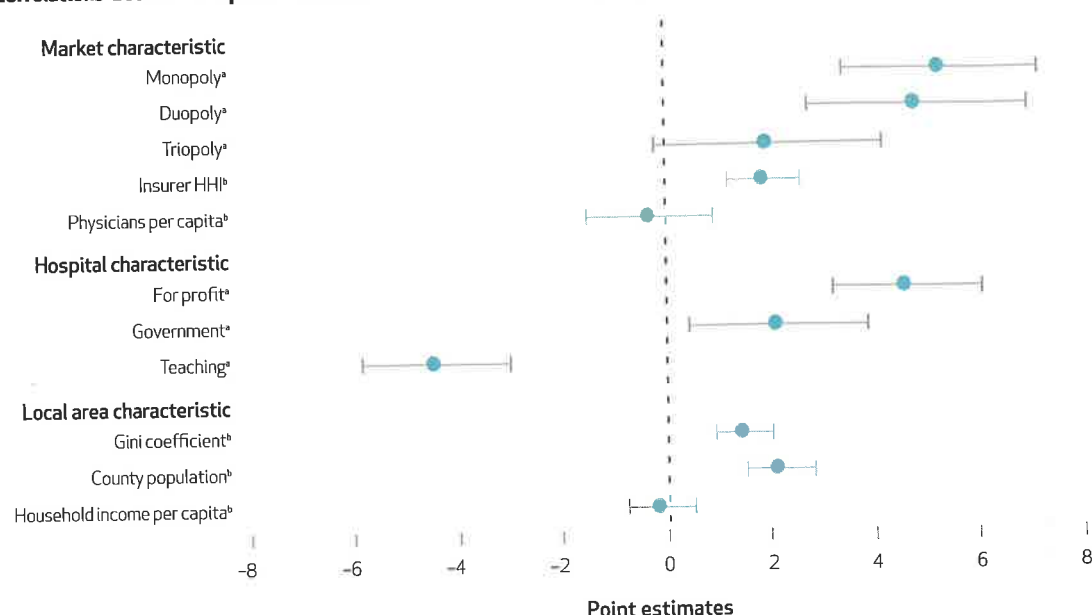
Appendix exhibit 2 contains maps with the share of out-of-network billing physicians per hospital referral region, by specialty.⁸ As the maps illustrate, there was heterogeneity in the frequency of out-of-network billing by specialty across regions. However, across all specialties, the share of out-of-network billing was highest in

Alabama, Idaho, Mississippi, and Montana.

Exhibit 2 shows the conditional correlates of the share of out-of-network physicians per hospital. Descriptive statistics for each variable in the regression are in appendix exhibit 3.⁸ Relative to hospitals in quadropoly or less concentrated markets, hospitals in monopoly and duopoly markets had a higher share of out-of-network providers. Indeed, the share of out-of-network billing increased monotonically as hospital concentration increased. Across the hospital-based out-of-network specialists we studied, the mean hospital had 10.1 percent of specialists that were out of network (appendix exhibit 3).⁸ The prevalence of out-of-network specialist billing at monopoly hospitals was 5.3 percentage points higher than it was at hospitals in quadropoly markets (exhibit 2). By contrast, we observed that the share of out-of-network billing at hospitals increased as insurance market concentration increased. These results were robust to measuring hospital concentration using Herfindahl-Hirschman Indexes calculated in hospital markets defined using fixed and variable radii, following the approach described in appendix C1 of Cooper and coauthors.¹⁰ These results were

EXHIBIT 2

Correlations between hospitals' selected characteristics and frequency of out-of-network billing



SOURCE Authors' analysis of data for 2015 from a large commercial insurer. **NOTES** The exhibit shows the point estimates from an ordinary least squares regression of the frequency of hospital-level out-of-network billing on key variables. Each observation is the hospital-specialty frequency of out-of-network billing. The standard errors are clustered around hospitals. The error bars indicate 95% confidence intervals. For hospital concentration (monopoly, duopoly, and triopoly), the reference category is quadropoly or more concentrated markets. (As a point of reference, the mean hospital in our study had 10.1 percent of specialists that were out of network.) For for-profit and government hospitals, the reference category is nongovernment nonprofit hospitals. HHI is Herfindahl-Hirschman Index. ^aBinary variables. The point estimate illustrates the impact of having the variable take a value of 1. ^bContinuous variables. The point estimates can be interpreted as the percentage-point change in out-of-network billing for an increase in the explanatory variable of one standard deviation.

also robust when we looked at the unconditional correlations.

Consistent with our predictions, relative to nonprofit hospitals, for-profit hospitals had 4.6 percentage points more out-of-network providers, from a base of 10.1 percent (exhibit 2). For-profit hospitals have an incentive to take a share of the profits earned from physicians' surprise billing. We also observed that hospitals located in areas with more economic inequality, measured using Gini coefficients (which measure the dispersion of income in an area, with a higher coefficient implying greater inequality), had higher shares of out-of-network providers.¹⁴

To give a rough estimate of the savings that could be achieved by eliminating the ability of these four types of specialists to readily bill out of network, we simulated what would happen if all of these specialists received the same average payments as orthopedic surgeons did (164 percent of Medicare rates). An important caveat is that this simulation ignored general equilibrium effects. For example, lowering physician payments could affect the amount of care provided or the number of physicians per capita. Also, setting physician payment rates below market

rates could cause an offsetting increase in insurers' payments to facilities.

Spending on anesthesiologists, pathologists, radiologists, and assistant surgeons in our data accounted for 6.8 percent, 14.0 percent, 16.3 percent, and 0.8 percent of total physician spending, respectively (data not shown). We estimated that if these physicians were paid the same average rate as orthopedists for all of the services that they delivered in our sample, spending would be lowered on anesthesiologists by 53.5 percent, on pathologists by 47.4 percent, on radiologists by 16.3 percent, and on assistant surgeons by 46.2 percent (details about how to calculate these numbers are in appendix C).⁸ Therefore, a policy change that affected these four specialties and reduced their in-network payments to 164 percent of Medicare rates would result in a total reduction in physician spending of 13.4 percent. Given that physician spending accounts for approximately 25 percent of total health care spending,¹⁵ savings of this magnitude would lower total spending for people with employer-sponsored insurance by approximately 3.4 percent (or approximately \$40 billion annually).¹⁶ Paying these specialists 150 percent of Medicare

rates would reduce physician spending by 15.5 percent.

Discussion

Patients receiving care at in-network hospitals have a significant risk of being treated by out-of-network anesthesiologists, pathologists, radiologists, or assistant surgeons. Because these physicians have a strong outside option in negotiations, they are able to negotiate high in-network payments with insurers. We found that for-profit hospitals and hospitals located in concentrated markets had a higher incidence of out-of-network providers.

There are three potential outcomes when a patient is treated by an out-of-network provider. First, the insurer can refuse to cover the physician's bill in its entirety. As we illustrated, if patients are exposed to the entirety of physician charges, this can mean bills of hundreds or thousands of dollars. Indeed, the median charge for an assistant surgeon in our data was \$3,134. Second, the insurer can pay the out-of-network policyholder some standard rate (for example, its median in-network rate). Above, we showed that even if insurers paid physicians their median in-network payment, physicians could balance bill patients for significant amounts of money (the median potential balance bill for patients treated by an out-of-network anesthesiologist was \$648). Finally, the insurer can cover an out-of-network physician's charges in their entirety. However, these higher payments will likely be passed along to all consumers in the form of higher insurance premiums.

Most of the attention on out-of-network billing has been focused on patients' exposure to large, unexpected out-of-pocket spending.¹⁷ While this attention is warranted, the impact of out-of-network billing on total health care spending is also problematic. When physicians whom patients do not choose and cannot avoid can bill out of network while working within hospitals that are in network with their patients' insurers, it strengthens physicians' outside options in negotiations with insurers and raises in-network payment rates. These higher in-network payments get passed along to all consumers in the form of higher insurance premiums.

To illustrate the scale of the increase in total spending created by the ability of certain physician specialists to bill out of network, we estimated the savings that would be produced if anesthesiologists, pathologists, radiologists, and assistant surgeons were paid the same in-network rates (as a percentage of what Medicare pays for their services) as orthopedic surgeons were paid for performing in-network knee re-

placement. We estimated that if policies were introduced that precluded these four physician specialties from billing out of network and thus lowered their in-network payments to 164 percent of Medicare payments, the savings would equal 13.4 percent of physician spending and 3.4 percent of spending for people with employer-sponsored insurance. For reference, it has been estimated that approximately \$1.2 trillion was spent on people with commercial health insurance in 2017.¹⁶ As a result, this would amount to approximately \$40 billion in savings annually.

To succeed, any policy to address out-of-network billing must achieve two aims. First, it must protect patients from financial harm in the event that they are treated by an out-of-network physician whom they could not reasonably avoid. Second, it must introduce a competitively set price for physician services or identify the amount insurers must pay providers if a policyholder is treated by an out-of-network physician.

Protecting patients from financial harm is fairly straightforward. Most existing state legislation includes a "hold harmless" provision that stipulates that if a patient is treated by an out-of-network provider who could not be avoided, the patient is liable for only the cost sharing they would have paid had the physician been in network.¹⁸⁻²⁰ Early evidence from recent efforts in New York State suggest that this provision has been successful.²¹

The harder problem for policy makers is determining how an out-of-network physician should be paid for delivering care when they are working from an in-network hospital. In general, there are four options.

First, policy makers could set a regulated price for out-of-network providers. This rate would be used as the reimbursement for physicians and would apply anytime a patient was treated at an in-network hospital by a physician who was out of network with the patient's insurer. For example, the regulated price could be set as a percentage of Medicare payment rates or as the median in-network payment. This is the type of approach that has been taken in New Jersey and California and in some early Senate proposals.²²⁻²⁴

The upside of this approach is that it is fairly straightforward to legislate and easily understood by stakeholders. However, there are significant downsides. First, regulated rates would be subject to vigorous and ongoing lobbying by providers and insurers. Second, regulated prices could be set too high or too low. A regulated price that was too high or too low would inevitably create significant distortions in behavior. For example, if the regulated out-of-network payments were set too low, insurers would be reluctant to form networks, since they would save

money by falling back on the regulated payments. Likewise, in the extreme, a regulated payment that was set too low could lead to physician shortages, which hospitals might try to overcome by raising their subsidies to physicians (and seeking to recoup this money from insurers). By contrast, if the regulated payments were set too high, physicians would be unwilling to join networks, since they could make more money by refusing to participate in networks, and it could also lead to a surplus of physicians.

In the second option, policy makers could introduce arbitration for out-of-network physicians and insurers. If physicians and insurers were unable to reach an agreement about a fair compensation rate for an individual bill, they could seek a ruling from an approved arbitrator designated by the state or federal government. In New York State, policy makers introduced “baseball rules” arbitration in 2014, according to which the arbitrator must select a payment from one of two options: the physician’s initial charge or the insurer’s initial offer.

Early evidence from the New York arbitration process has been positive. Work by Cooper and coauthors⁴ showed that this program reduced the frequency of out-of-network billing by 6.8 percent. In addition, by weakening physicians’ outside option, the program also reduced in-network payment rates by 13 percent.

However, there are challenges with introducing arbitration to address out-of-network bills. First, when introduced at the state level, these rules apply only to people enrolled in fully insured plans. Second, arbitrators could be overwhelmed, particularly in regions where physicians who bill out of network are prevalent.²⁵ Third, while an arbitration process may be present, consumers are often unaware that one exists, and thus they might not avail themselves of its protections. Fourth, most arbitration policies apply only to bills over a certain amount (for example, more than \$500). Fifth, the outcome of the arbitration process will depend on how the process is designed. For example, instructing arbitrators to consider how physician and insurer payments were related to the eightieth percentile of charges could lead to higher in-network payments and create perverse incentives for physicians to game the process and artificially inflate their charges.

A third option would be to require physicians to participate in the same insurance networks as the hospitals where they work. This has two distinct advantages. First, it would prevent a patient from ever going to an in-network hospital and seeing an out-of-network provider (and subsequently receiving an unexpected bill) without requiring any behavioral changes by the patient.

Second, the policy is straightforward to implement and easily understood. However, this approach would give more bargaining leverage to insurers in negotiations with physicians. An insurer that had a contract with a hospital would know it could offer local physicians a low rate, because otherwise they could not work in their local hospital. This concern could be addressed by creating an arbitration process that would be initiated by physicians to settle disputes between physician groups and insurers. Likewise, it is possible that hospitals could make up any shortfall in physician payments.

A fourth option would be to regulate the contracts of physicians who work in hospitals and are not chosen by patients. This is our preferred policy approach. Under this policy, hospitals would be required to sell a bundled package of services that included the fees for ED physicians, anesthesiologists, pathologists, radiologists, and assistant surgeons. As a result, for example, hospitals would bill for anesthesiology services and then be responsible for recruiting anesthesiology providers to work in their facilities. Those anesthesiologists could be employees of the hospital or independent contractors and could bargain over compensation with the hospital.

There are several upsides to this type of policy. First, it would eliminate the possibility of patients seeing an out-of-network provider at an in-network hospital. Moreover, unlike arbitration, it would protect patients without requiring them to take action. Second, it would restore a competitively set rate for physicians who are not chosen by the patient. Absent an intervention, these physician specialties face inelastic demand. Under this bundled care approach, physicians would compete to offer their services on the basis of price and quality. Hospitals would compete with one another on the price and quality of their care, including the services provided by the physicians they recruited. Hospitals would also need to compete to retain physicians.

This approach would require a shift in how certain physician specialties contract with hospitals. However, given the dysfunction in these particular physician markets and the harm that is causing to patients, a mild change of this type seems warranted. In addition, it is likely to be superior to setting prices by regulation. Moreover, these sorts of policies are not without precedent. Numerous professionals—for example, nurses and custodial staff—do not separately bill patients for their services.

Conclusion

When physicians whom patients cannot avoid can work out of network from in-network hos-

pitals, it exposes patients to significant financial risk and raises physicians' in-network payments. Anesthesiologists, pathologists, radiologists, and assistant surgeons are out of network in approximately 10 percent of cases. We estimated that these specialists' ability to bill out of network raises total health care spending for people

with employer-sponsored insurance by approximately 3.4 percent (\$40 billion). Our proposed policy solution—requiring hospitals to sell a package of facility and physician services—would protect patients, restore a competitively determined price for physician services, and lower commercial health spending. ■

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