

Evaluating the Impact of Policies to Regulate Involuntary Out-of-Network Charges on New Jersey Hospitals

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Key findings

- Among hospitals in New Jersey, revenues from involuntary out-of-network services accounted for less than 20 percent of commercial revenues but almost 40 percent of profits from treating the commercially insured.
- Our estimates suggest that implementing New Jersey Bill A1952, which proposes a limit of between 90 and 200 percent of Medicare rates for involuntary out-of-network hospital care, would have reduced payments for hospital care by commercial plans by between 6 and 10 percent. Assuming no change in operating expenses and no recoupment of lost out-of-network revenues, the cap would have led to an operating loss at between 48 and 70 percent of hospitals.
- If operating expenses remained unchanged and a cap of 250 percent of Medicare rates were applied to out-of-network care, major teaching hospitals and hospitals with more than 250 beds would have continued to operate with a margin of around 1 to 2 percent, but smaller hospitals would have had an operating loss of around 1 percent.

With hospital costs still accounting for about a third of health care spending, hospital payment regulations must balance the complex and sometimes conflicting objectives of ensuring access to care, limiting the financial burden on patients, and controlling overall costs. A case in point is the current debate about involuntary out-of-network payments for hospitals in New Jersey.

To manage costs, a health plan typically negotiates discounted rates with hospitals in exchange for preferred “in-network” status. Members of that plan then have to seek treatment at those in-network facilities for elective care or face substantially higher out-of-pocket spending if they elect to go to an out-of-network hospital. The situation is more complex for emergency care: A member who suffers a heart attack has little choice but to get admitted wherever the ambulance will go.

States differ in how they handle such involuntary out-of-network hospital care.¹ Colorado, for example, has limited patient protection for emergency out-of-network care. Facilities may bill the patient at their full (nondiscounted) rate and leave it to the patient to negotiate cost-sharing with the health plan. But some states, including New Jersey, emphasize patient protection, in that patients are only responsible for the portion of the cost that they would have incurred for in-network care, and health plans must pay the remainder of the provider’s charges.

The latter provision is seen as contentious by health plans, who argue that they have been made responsible for paying

whatever charges a hospital submits.² In response, proposals to limit payments for involuntary out-of-network care are being debated in the state legislature. Many hospitals are opposing such limits based on the argument that they depend on those high out-of-network payments to cross-subsidize loss-making activities, such as care for publicly insured patients.

Legislative Proposals to Regulate Payments for Involuntary Out-of-Network Hospital Services in New Jersey

Bill A1952, the Out-of-Network Consumer Protection, Transparency, Cost Containment and Accountability Act, has been introduced in the New Jersey State Assembly. It is identical to Bill S1285 and was discussed in the last legislative session as Bill A4444/ACS S20.

The bill proposes binding arbitration to resolve disputes over involuntary out-of-network charges and a range of 90 to 200 percent of the Medicare rate as target (as of October 15, 2016): “The arbitrator’s decision shall be binding on both parties and shall be a fixed amount that is within a range of 90% to 200% of the applicable payment rate under the federal Medicare program for that service. The arbitrator’s expenses and fees shall be split equally among the parties. Each party shall be responsible for its own costs and fees.”³ These provisions would take effect 90 days after enactment.

In this report, we seek to inform the current debate about hospital payment reform in New Jersey by answering the following three questions:

1. How dependent are New Jersey hospitals on out-of-network payments?
2. What would be the impact of Bill A1952 and similar policies on hospital finances?
3. How would an all-payer blended rate, similar to the payment model in Maryland, affect different payers?

TECHNICAL APPROACH

We used 2010–2014 New Jersey Acute Care Hospital Cost Reports and Medicare Hospital Cost Reports (Healthcare Cost Report Information System form 2552-10) to calculate trends in revenue and profits for New Jersey hospitals by payer type (such as Medicare, Medicaid, commercial insurance, and charity care). Combining the two cost reports allowed a richer analysis of hospitals’ financial condition. For example, the New Jersey cost reports provide information on charges and revenues by payer for inpatient versus outpatient services (which is not included in the Medicare hospital cost reports), and the Medicare cost reports provide information on Medicaid Disproportionate Share Hos-

pital (DSH) and other supplemental payments (which are not broken out in the New Jersey cost reports).

The analysis includes 71 nonfederal, general acute care hospitals. To be included, hospitals had to be certified by Medicare as a short-stay hospital and report into the New Jersey Acute Care Hospital Cost Reports, as well as have nonzero revenue in at least one of our five years.

Information on payments for in-network and out-of-network care was derived from the Truven MarketScan Commercial Claims data from 2010 to 2014. The data contain individual claims for about one million members of commercial health plans in New Jersey, which represents around one-fifth of the commercially insured population in the state. The MarketScan data have a flag for claims from out-of-network providers, which we used to calculate the proportion of overall inpatient and outpatient revenue that was generated from out-of-network claims. As the Truven data do not contain a hospital identifier, we used metropolitan statistical area–level estimates as an approximation. The Truven data do not distinguish between voluntary and involuntary out-of-network services. Kyanko et al. (2013) surveyed patients nationwide in 2011 regarding out-of-network care and found that 42 percent of out-of-network hospital care *episodes* were voluntary.⁴ We expected that patients would be more selective in deciding to seek out-of-network care for high-cost events and therefore assumed that 20 percent of the *charges* represented voluntary out-of-network utilization.

We estimated the distribution of commercial out-of-network payments relative to in-network rates for comparable services. To compare in-network and out-of-network payment rates for inpatient care, we used diagnosis-related groups to classify stays, and for outpatient care we used a combination of revenue codes and Healthcare Common Procedure Coding System codes to identify comparable sets of services. Our comparison of in-network and out-of-network rates included all inpatient stays, and we analyzed a subset of outpatient services, including emergency department visits and imaging services.

We expected that limiting commercial payment rates for involuntary out-of-network care would have a dynamic effect beyond the direct reduction in revenues for out-of-network services. In-network rates are the result of negotiations between hospitals and payers, and they reflect the relative bargaining position of both parties. Payers can push for lower rates with the threat of cutting a hospital out of their network, and hospitals can threaten to leave the network and charge higher out-of-network rates if the offered rates are seen as too low.

In principle, the range of possible spillover effects on in-network rates is quite wide. Hospitals facing a loss of revenues from involuntary out-of-network services might draw on previously untapped negotiating leverage and demand higher in-network rates to recoup some or even all of those revenues. If hospitals recouped all of their lost revenues by increasing their in-network rates, then they would face no change in overall revenues. We viewed recouping as an unlikely outcome, however.⁵ Instead, we expected that the main effect of regulating out-of-network rates would be to lessen an important source of bargaining leverage for hospitals, which we expected to lead to spillover reductions in the in-network rates and, thus, commercial revenue.

To estimate the spillover effects of out-of-network caps on in-network rates, we created a simulation model of hospital health plan rate negotiations. In general, for health plans, agreeing to a network contract with a hospital increases its attractiveness to potential members and the premiums that the plan can charge, and it allows the plan to avoid paying out-of-network rates for care provided by that hospital. For hospitals, agreeing to a network contract increases the volume of services provided to enrollees of the plan, but it limits revenues from higher-margin out-of-network care.

We assumed that hospitals would seek to maximize a combination of the volume of services they provide and the margins generated on those services, while health plans would seek to maximize profits. We populated our simulation model with the 64 hospitals in New Jersey for which we had historical data from the Medicare hospital cost reports on case mix–adjusted operating expenses per inpatient discharge, negotiated private payment rates (estimated following Dafny’s [2009] method),⁶ the volume of services provided to the privately insured, and charge-to-cost ratios.

Our simulation used a simplified version of the negotiations described in Gal-Or (1997).⁷ For each of the 64 hospitals, we simulated negotiations with a single hypothetical health plan, starting with a wide range of possible negotiated

in-network rates per discharge (from \$500 to \$100,000, in \$500 increments). For each of the possible negotiated rates, we simulated the payoff to a hospital if it did and did not agree to a network contract at that rate. The payoff to the hospital equals revenues (the volume of services multiplied by either the in-network or out-of-network rate) minus marginal operating expenses (the volume of services multiplied by average operating expenses multiplied by a 70 percent marginal cost factor) plus a size factor (the volume of services multiplied by a per-discharge nonmonetary payoff).

We assumed that the volume of services provided by the hospital to members of the health plan would drop by 70 percent if it did not agree to a network contract. That estimate was based on reported changes in utilization of hospitals in the Partners system in Massachusetts after being dropped by Network Health.⁸

We also simulated payoffs to the health plan if a given hospital did or did not agree to a network contract for each possible negotiated rate. The payoff to the health plan was equal to the number of enrollees multiplied by per-enrollee premiums minus paid claims. Premiums and enrollment were simulated endogenously, assuming profit maximization and a linear demand response taking into account the desirability of the hospital and whether the hospital was in network.⁹ Then, for each hospital and each possible negotiated rate, we calculated the net payoff to the hospital from agreeing to a network contract (that is, the difference between the in-network and out-of-network payoffs) and the net payoff to the health plan from agreeing to a network contract (again, the difference between the in-network and out-of-network payoffs).

We assumed a Nash equilibrium with equal bargaining power for the hospital and health plan. This means that the negotiated outcome maximizes the product of the square root of the net payoff to the hospital from agreeing to the network contract and the square root of the net payoff to the plan from agreeing to the network contract. Each hospital will only agree

We expected that the main effect of regulating out-of-network rates would be to lessen an important source of bargaining leverage for hospitals, which we expected to lead to spillover reductions in the in-network rates and, thus, commercial revenue.

to a contract with the health plan if there is a negotiated rate with a positive payoff both to the hospital and the plan.

We calibrated the model to match key benchmarks, including the average payment rate and the share of revenues from out-of-network care. In this model, the negotiated in-network rate—and whether plans and hospitals agree on a contract at all—both depend, in part, on the share of billed charges that a hospital can collect when providing out-of-network care. We then simulated the change in in-network rates that resulted from applying various caps on payments for out-of-network care. These spillover effects on in-network rates are more complicated and uncertain than the direct effects of the caps, as they emerge from a negotiation process that is complex, secret, and poorly understood by researchers. It is also more difficult to predict the effect on profits because the negotiations would play out over time, giving hospitals the opportunity to adjust their cost structure.

Lastly, we modeled all-payer blended rates as a policy alternative to limiting payments for involuntary out-of-network care. For each hospital, we identified a base payment rate that would maintain total revenues from patient care while allowing public payers to pay a discounted rate. This approach has been employed in Maryland for 39 years under a Medicare waiver and was recently updated under a Centers for Medicare & Medicaid Services (CMS) Innovation Model.¹⁰ Historically, the Maryland Health Services Cost Review Commission has set a standard rate for inpatient and outpatient services for each hospital while allowing a 6-percent discount for public payers.¹¹ The rate-setting approach obviates the need for direct rate negotiations between hospitals and health plans and can eliminate the financial reward to hospitals that go out of network.

Analyses were conducted, combining all 71 hospitals in our sample and breaking down hospitals into the following categories:

- major teaching hospital (defined as having a resident-to-bed ratio above 0.25)
- high DSH hospitals (defined as having a DSH patient percentage above 0.3)
- low DSH hospitals (defined as having a DSH patient percentage at or below 0.3)
- large hospitals (defined as having more than 250 beds)
- small hospitals (defined as having 250 beds or fewer).

RESULTS

Baseline Findings

As shown in Table 1, the profit margin on patient care in New Jersey hospitals averaged around 3 percent from 2010 through 2014. In line with the national trend, operating margins in New Jersey rose by 1 percentage point in 2014, following the implementation of the Affordable Care Act coverage expansions.¹² While involuntary out-of-network services contributed less than 20 percent of commercial revenue, they accounted for almost 40 percent of hospital profits from treating the commercially insured. This is because the average payments per service are roughly double the in-network rates.

The overall operating margins reflect a mixture of relatively low payment rates from public payers, which cover about 80 to 90 percent of the cost, and higher payment rates from com-

Table 1. Contribution of Involuntary Out-of-Network Payments to New Jersey Hospitals' Revenues and Profits, 2010–2014

Type of Revenue or Profit	2010	2011	2012	2013	2014	Average
Operating margin	2.6%	2.7%	3.0%	2.9%	4.1%	3.1%
Share of commercial revenue derived from involuntary out-of-network services						
Inpatient care	18.4%	15.9%	16.6%	14.5%	12.9%	15.7%
Outpatient care	14.7%	22.6%	21.8%	20.0%	18.5%	19.5%
Share of commercial profits derived from involuntary out-of-network services	34.3%	47.2%	40.0%	34.1%	34.6%	38.0%
Share of admissions representing involuntary out-of-network services	11.1%	7.9%	6.3%	6.7%	8.3%	8.1%

SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports and Truven MarketScan claims data.

Our estimates suggest that implementing New Jersey Bill A1952, which proposes a limit of between 90 and 200 percent of Medicare rates for involuntary out-of-network care, would have reduced payments for hospital care by commercial plans by between 6 and 10 percent.

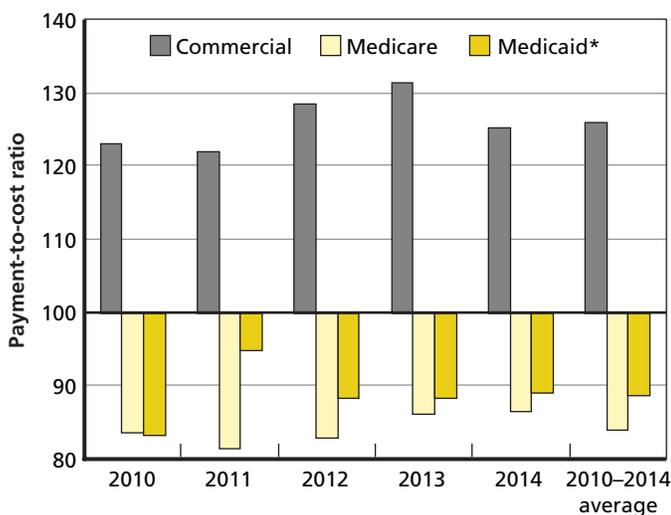
mercial health plans, which paid about 26 percent above cost during the 2010–2014 period (see Figure 1).

Simulation of Effect of Caps on Out-of-Network Services—Direct Effects

Figure 2 illustrates the direct effects of limiting out-of-network payments to 650 percent, 550 percent, 450 percent, 350 percent, and 250 percent of Medicare rates, holding in-network rates constant and assuming no changes in operating expenses. The results suggest that capping rates at 250 percent of Medicare rates would have reduced the average operating margin to 1.2 percent and caused a loss at 33 out of 71 hospitals.¹³

Our estimates suggest that implementing New Jersey Bill A1952, which proposes a limit of between 90 and 200 percent of Medicare rates for involuntary out-of-network care,

Figure 1. Average Payment-to-Cost Ratios for New Jersey Hospitals by Payer Type, 2010–2014



* Includes Medicaid-related DSH payments.

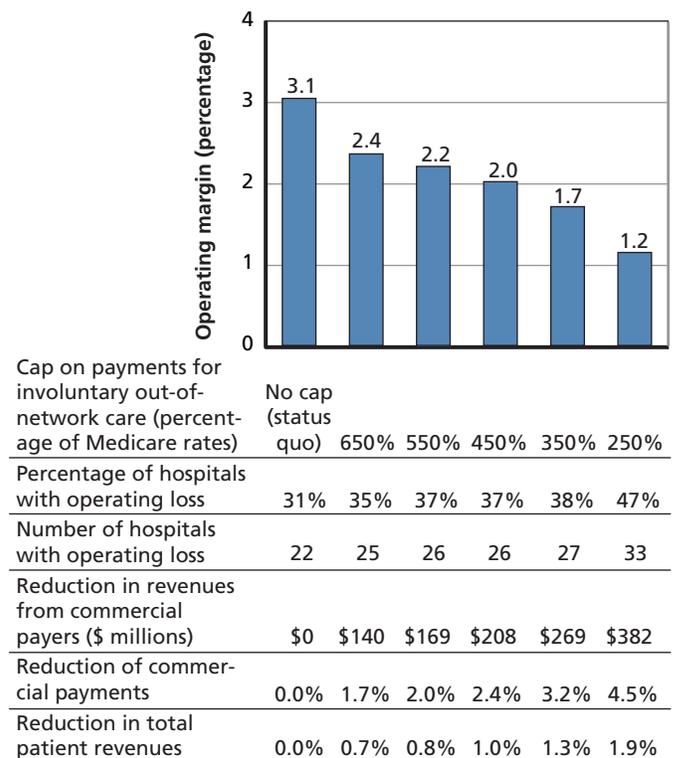
SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports.

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would have reduced payments for hospital care by commercial plans by between 6 and 10 percent. Assuming no change in operating expenses and no recoupment of lost out-of-network revenues, the cap would have led to an operating loss at between 48 and 70 percent of hospitals. Capping at the level of in-network commercial rates would have reduced the average operating margin to 0 percent and caused an operating loss at 45 out of 71 hospitals (63 percent).

Hospitals differ in their financial position and their ability to withstand sudden changes in payment policies. Major teaching hospitals and hospitals with more than 250 beds had

Figure 2. Simulated Direct Effect of Caps on Payments for Involuntary Out-of-Network Services on New Jersey Hospitals



SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports and Truven MarketScan claims data.

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an average operating margin of 3 to 5 percent over the five years from 2010 through 2014, while facilities with fewer than 250 beds averaged only 0 to 1 percent. If operating expenses remained unchanged and a cap of 250 percent of Medicare rates were applied to involuntary out-of-network care, major teaching hospitals and hospitals with more than 250 beds would have continued to operate with a margin of around 1 to 2 percent, but smaller hospitals would have had an operating loss of around 1 percent (see Figure 3).¹⁴

Simulation of Indirect Effect of Out-of-Network Caps on In-Network Rates

Limiting payments for involuntary out-of-network services provided to commercially insured patients affects hospitals' revenues but also the relative bargaining position of hospitals and health plans. As explained in the "Technical Approach" section, we expected, therefore, that such limits would indirectly reduce in-network negotiated rates. Whereas our model can predict the changes in payment rates and, thus, hospitals' revenue from commercial payers, the effects on profits are less predictable because the negotiations would play out over time, giving hospitals the opportunity to adjust their cost structure.

Based on our game-theoretic model of negotiation behavior, we estimated that a 1-percent reduction of out-of-network rates would reduce negotiated in-network rates by half a percent. Table 2 shows the impact of out-of-network caps on hospi-

tals' revenues when taking this indirect effect into account. The results suggest that capping rates at 250 percent of Medicare rates would have reduced hospitals' total commercial revenues by 5 percent, or around \$1.1 billion per year, which is roughly triple the direct effect of the cap (\$382 million). These indirect effects are more uncertain and difficult to estimate than the direct effects, but they may also be more meaningful.

Figure 4 illustrates how capping out-of-network rates would have affected individual hospitals. Each dot in the figure represents one hospital in our sample. A gray dot indicates that the hospital has a positive operating margin, and a red dot indicates an operating loss. The map at the left shows how hospitals have performed under current payment rates. The other two maps indicate operating margins, assuming out-of-network rates that are capped at 250 percent of Medicare rates without indirect effects on in-network rates (center map) and with indirect effects on in-network rates (right map). Hospitals that are gray in the leftmost map but red in the other maps would face an operating loss unless they could reduce operating expenses.

Simulation of All-Payer Blended Rates

We simulated the impact of two types of regulated all-payer rates as an alternative model to limit high payment rates for involuntary out-of-network services. The results are shown in Figure 5. One scenario used a simplified version of the model

Figure 3. Estimated Operating Margins of New Jersey Hospitals Under Different Caps for Involuntary Out-of-Network Services, by Hospital Type

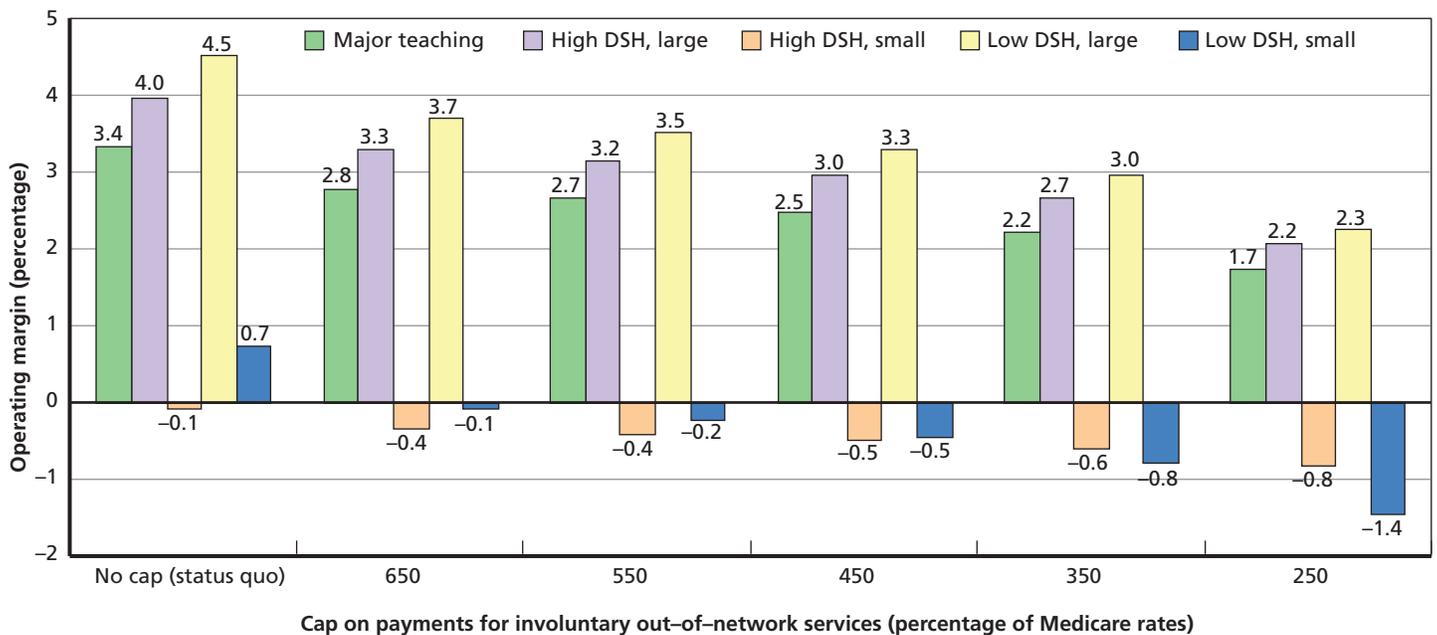
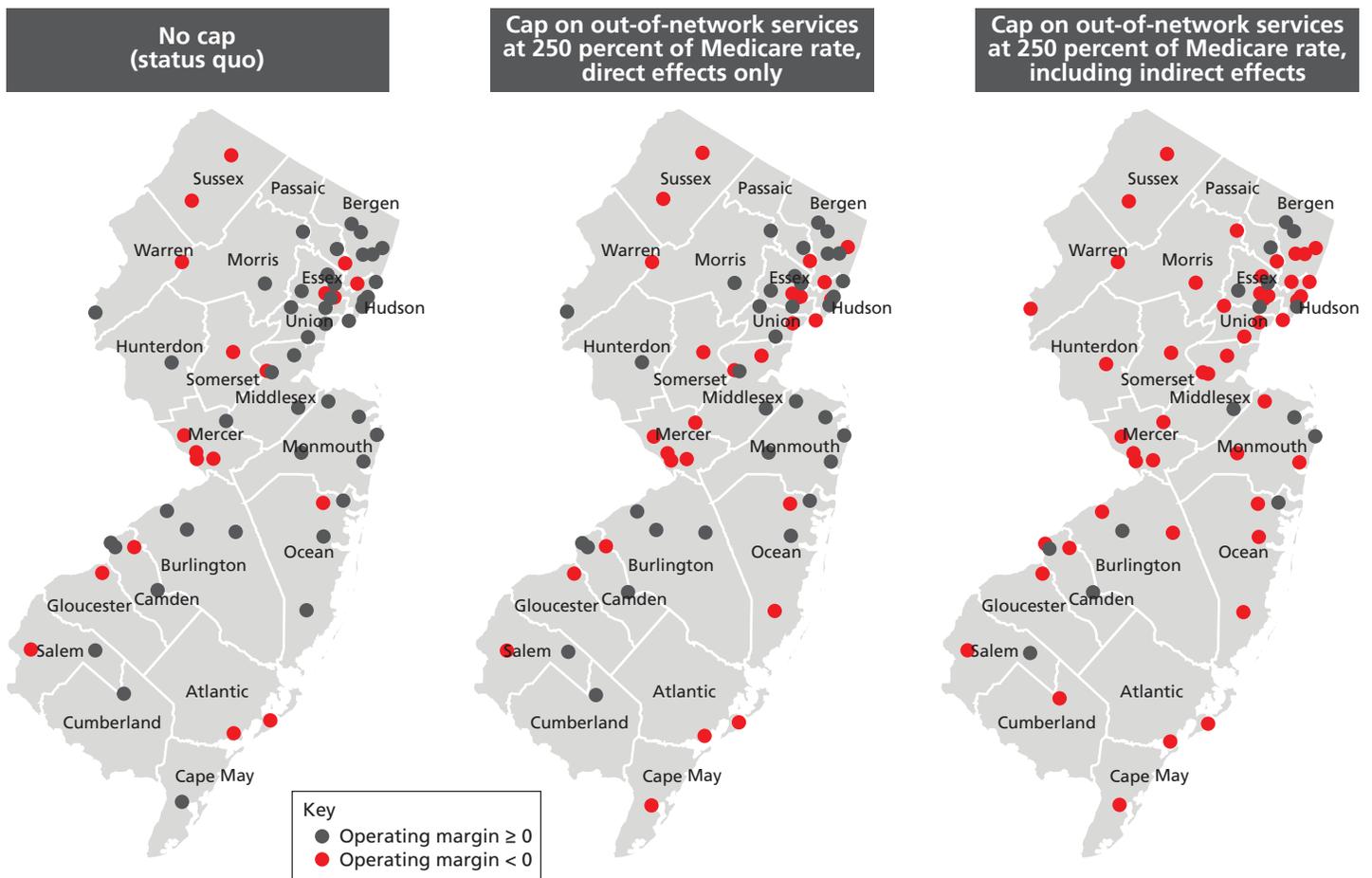


Table 2. Simulated Effect of Caps on Involuntary Out-of-Network Services on New Jersey Hospitals, Including Indirect Effects on In-Network rates, 2014

Out-of-Network Rate Cap Based on Medicare Rates	No Cap (Status Quo)	650 Percent	550 Percent	450 Percent	350 Percent	250 Percent
Reduction in annual revenues from commercial payers (millions of dollars)	\$0	\$394	\$478	\$593	\$774	\$1,108
Reduction in revenues from commercial payers	0.0%	4.4%	5.3%	6.6%	8.6%	12.3%
Reduction in overall revenues	0.0%	1.8%	2.2%	2.8%	3.6%	5.2%

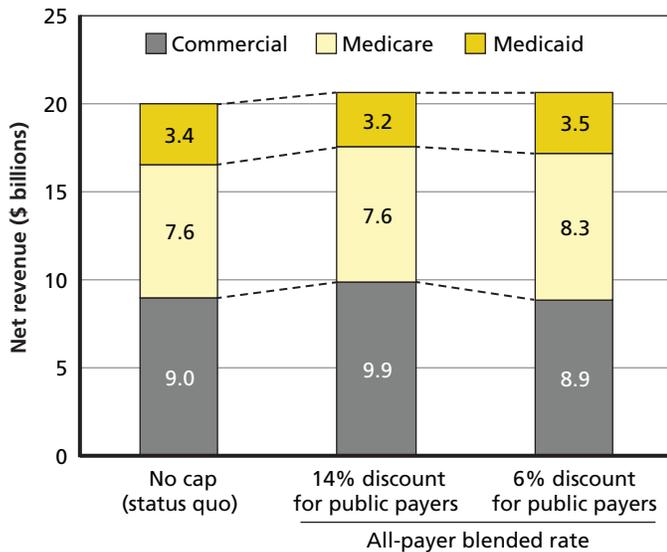
SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports and Truven MarketScan claims data.

Figure 4. Estimated Effect of Capping Involuntary Out-of-Network Rates at 250 Percent of Medicare Rates on Individual Hospitals, 2010–2014



SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports and Truven MarketScan claims data.
NOTE: Each dot represents one hospital in its approximate geographic location.

Figure 5. Estimated Effect of Blended All-Payer Rates



SOURCE: RAND analysis based on New Jersey and CMS hospital cost reports and Truven MarketScan claims data.

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historically used in Maryland, under which a uniform rate was set for all payers, with a 6-percent discount to public payers. In our modeling, we assumed that total revenues from patient care would be held constant for each hospital. In 2014, with the 6-percent discount, Medicare would have spent around \$700 million more on hospital care, and Medicaid around \$300 million more. It is highly improbable that public payers would accept that type of increase in payments. Therefore, we modeled a second scenario with a 14-percent discount for public payers relative to commercial payers. In that scenario, Medicare payments were kept in line with the base case. Hospital profit margins were held constant under both scenarios.

LIMITATIONS

Our analysis has important limitations. First, our simulations are based on data from 2010 through 2014 and may not have captured changes to hospital finances after New Jersey's Medicaid expansion that started in 2014. Second, we did not quantify potential changes to hospitals' operating efficiency in response to lower payment rates, which have been suggested as a likely response.¹⁵ Third, we assumed that 80 percent of out-of-network care was involuntary, based on a national patient survey regarding out-of-network physician care. That study is not specific to hospital care in New Jersey, and the study criteria

used to define voluntary versus involuntary may differ from those that would be applied in New Jersey. Fourth, our analysis did not consider possible effects of out-of-network caps on consolidation in the market for health plans in New Jersey. Lastly, hospitals may respond to caps on out-of-network revenues in ways that are not captured in our simulation model, such as exploiting possible untapped negotiating leverage to maintain commercial revenues.

CONCLUSIONS AND IMPLICATIONS

Similar to hospitals nationwide, New Jersey hospitals' operating profit margin has averaged around 3 percent from 2010 through 2013. The expansions of coverage under the Affordable Care Act have alleviated some financial pressure on hospitals by reducing the number of uninsured patients and reducing the burden of uncompensated care, as shown by the 1-percentage-point increase in average profit margins in 2014, the first year of New Jersey's Medicaid expansion.

Bill A1952 proposes to limit payments for involuntary out-of-network care to 200 percent of Medicare rates. We estimate that the direct effect of that cap, holding operating expenses constant, would have led to a loss at 48 percent of New Jersey hospitals during 2010 to 2014. With a limit of 90 percent of Medicare rates, the lower bound of the legislative proposal, less than a third of hospitals in New Jersey would have remained profitable. At the same time, the limits would have reduced overall payments by commercial carriers to hospitals by 6 to 10 percent, respectively. Because hospital payments account for about a third of overall payments, overall payments by commercial health plans would have declined by about 2 to 3 percent.

Limiting out-of-network rates would also have long-term effects because hospitals' leverage in their negotiations with health plans would be weakened. When accounting for such dynamic effects, we estimate that capping out-of-network rates at 250 percent of Medicare rates would reduce hospitals' revenues from commercial payers by 12 percent. The long-term effects on profitability would depend on how hospitals adjust their cost structure in response to lower payment rates.¹⁶

Hospitals may take several measures to remain financially viable under lower payment rates, such as laying off staff, limiting capital outlays, eliminating unprofitable service lines, forgoing expansions, and merging with competitors. It is unclear whether New Jersey hospitals have the scope to cut expenses

enough to compensate for the loss of revenues under some of the cap scenarios, especially over the short term. Some cost-cutting measures would increase the efficiency of the hospital industry,¹⁷ but some would be undesirable from the perspective of public policy if they reduce access to care for the most vulnerable patients or erode quality of care and outcomes over the long term.¹⁸

An alternative to capping out-of-network rates would be all-payer regulated rates, which have historically been used in Maryland. Such blended rates would ensure that New Jerseyans keep their protection against high cost-sharing for involuntary out-of-network services but would shield health plans and

patients from unexpectedly high charges and provide predictable and sustainable payment levels for hospitals. It is important to acknowledge, however, that implementing a rate-setting model is technically and politically difficult and has failed in New Jersey before.¹⁹

To summarize, New Jersey hospitals' current financial balance depends, to some degree, on high-margin involuntary out-of-network care. Changes to payment policies should be designed prudently to balance the objectives of safeguarding access and controlling cost and should be phased in over time to give hospitals time to adapt to a new operating environment.

NOTES

¹ A lesser-known case on involuntary out-of-network care arises with nonparticipating providers: A patient might undergo elective surgery at an in-network hospital, but the hospital may have contracted with an out-of-network radiology group for imaging. Technically, getting postoperative X-rays would then constitute nonemergency use of out-of-network care, but it is usually regarded as involuntary, as patients have limited means of identifying and remedying this issue.

² Avalere Health LLC, *An Analysis of Policy Options for Involuntary Out-of-Network Charges in New Jersey*, March 2015. As of November 17, 2016: http://avalere-health-production.s3.amazonaws.com/uploads/pdfs/1427291367_AH_Analysis_of_Policy_Options__WP_v3b2.pdf

³ New Jersey State Legislature, “A1952 AcaAca (2R) ‘Out-of-Network Consumer Protection, Transparency, Cost Containment and Accountability Act,’” undated. As of November 17, 2016: <http://www.njleg.state.nj.us/bills/BillView.asp?BillNumber=A1952>.

⁴ Kelly A. Kyanko, Leslie A. Curry, and Susan H. Busch, “Out-of-Network Physicians: How Prevalent Are Involuntary Use and Cost Transparency?” *Health Services Research*, Vol. 48, No. 3, 2013, pp. 1154–1172.

⁵ The notion that hospitals can recoup lost revenues from out-of-network services by raising in-network rates is similar to the theory of dynamic cost-shifting. Dynamic cost-shifting occurs when cuts in payments from public programs lead hospitals to extract higher payment rates from commercial payers. Recent evidence has not supported the dynamic cost-shifting theory and has suggested instead that cutting payments from public programs leads to spillover reductions in private rates. See Jeffrey Stensland, Zachary R. Gaumer, and Mark E. Miller, “Private-Payer Profits Can Induce Negative Medicare Margins,” *Health Affairs*, Vol. 29, No. 5, 2010, pp. 1045–1051 (as of November 17, 2016: <http://content.healthaffairs.org/cgi/content/abstract/29/5/1045>); and Chapin White, “Contrary to Cost-Shift Theory, Lower Medicare Hospital Payment Rates for Inpatient Care Lead to Lower Private Payment Rates,” *Health Affairs*, Vol. 32, No. 5, May 2013, pp. 935–943 (as of November 17, 2016: <http://content.healthaffairs.org/content/32/5/935.abstract>).

⁶ Leemore Dafny, “Estimation and Identification of Merger Effects: An Application to Hospital Mergers,” *Journal of Law and Economics*, Vol. 52, 2009, pp. 523–550. As of November 17, 2016: <http://www.kellogg.northwestern.edu/~media/Files/Faculty/Research/ArticlesBookChaptersWorkingPapers/Identification%20and%20Estimation%20of%20Merger%20Effects.ashx>

⁷ Esther Gal-Or, “Exclusionary Equilibria in Health-Care Markets,” *Journal of Economics and Management Strategy*, Vol. 6, No. 1, 1997, pp. 5–43. As of November 17, 2016: <http://onlinelibrary.wiley.com/doi/10.1111/j.1430-9134.1997.00005.x/abstract>

⁸ Mark Shepard, *Hospital Network Competition and Adverse Selection: Evidence from the Massachusetts Health Insurance Exchange*, Harvard Kennedy School and the National Bureau of Economic Research, July 14, 2015. As of November 17, 2016: <https://www.ftc.gov/system/files/attachments/bureau-economics-seminar-series/150714hospitalnetwork.pdf>

⁹ We estimated the demand for each hospital, and the corresponding loss of health plan enrollment if the hospital were out of the plan’s network, using the hospital fixed effects from a logistic regression of hospital utilization on travel time (for a description of this general approach, see Robert Town and Gregory Vistnes, “Hospital Competition in HMO Networks,” *Journal of Health Economics*, Vol. 20, No. 5, 2001, pp. 733–753 [as of November 17, 2016: <http://www.sciencedirect.com/science/article/pii/S0167629601000960>]). That regression used the Medicare Hospital Service Area file, which reflects utilization patterns in a plan (traditional Medicare) that includes all hospitals.

¹⁰ Centers for Medicare & Medicaid Services, “Maryland All-Payer Model,” last updated February 6, 2016. As of November 17, 2016: <https://innovation.cms.gov/initiatives/Maryland-All-Payer-Model>

¹¹ Robert Murray and Robert A. Berenson, *Hospital Rate Setting Revisited: Dumb Price Fixing or a Smart Solution to Provider Pricing Power and Delivery Reform?* Washington, D.C.: Urban Institute, November 2015. As of November 17, 2016: <http://www.urban.org/sites/default/files/alfresco/publication-pdfs/2000516-Hospital-Rate-Setting-Revisited.pdf>

¹² See Chapter 3 in Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy*, March 2016. As of November 17, 2016: <http://medpac.gov/docs/default-source/reports/march-2016-report-to-the-congress-medicare-payment-policy.pdf>

¹³ We tested the sensitivity of the results to the share of out-of-network care that is voluntary. If 42 percent of out-of-network hospital care is voluntary (rather than 20 percent, as assumed in the main analyses), then a cap on payments for involuntary out-of-network care at 250 percent of Medicare rates would result in a 3.3 percent reduction in commercial revenues (rather than 4.5 percent in the main analysis) and an average operating margin of 1.7 percent (rather than 1.2 percent in the main analysis).

¹⁴ In general, health plans benefit from a more competitive hospital market and thus have some incentive to maintain the financial viability of smaller hospitals. It is possible, therefore, that health plans would seek to mitigate negative financial impacts from out-of-network caps on smaller hospitals.

¹⁵ Jeffrey Stensland, Zachary R. Gaumer, and Mark E. Miller, “Private-Payer Profits Can Induce Negative Medicare Margins,” *Health Affairs*, Vol. 29, No. 5, 2010, pp. 1045–1051. As of November 17, 2016: <http://content.healthaffairs.org/cgi/content/abstract/29/5/1045>

¹⁶ Chapin White and Vivian Yaling Wu, “How Do Hospitals Cope with Sustained Slow Growth in Medicare Prices?” *Health Services Research*, Vol. 49, No. 1, February 2014, pp. 11–31. As of November 17, 2016:
<http://onlinelibrary.wiley.com/doi/10.1111/1475-6773.12101/abstract>

¹⁷ See Chapter 3 in Medicare Payment Advisory Commission, *Report to the Congress: Medicare Payment Policy*, 2013. As of November 17, 2016:
<http://medpac.gov/docs/default-source/reports/march-2016-report-to-the-congress-medicare-payment-policy.pdf>

¹⁸ Vivian Y. Wu and Yu-Chu Shen, “Long-Term Impact of Medicare Payment Reductions on Patient Outcomes,” *Health Services Research*, Vol. 49, No. 5, October 2014, pp. 1596–1615. As of November 17, 2016:
<http://onlinelibrary.wiley.com/doi/10.1111/1475-6773.12185/abstract>

¹⁹ Kevin G. Volpp and Bruce Siegel, “State Model: New Jersey. Long-Term Experience with All-Payer State Rate Setting,” *Health Affairs*, Vol. 12, No. 2, May 1993, pp. 59–65. As of November 17, 2016:
<http://content.healthaffairs.org/content/12/2/59.full.pdf>

About This Report

Policymakers must balance the complex and sometimes conflicting objectives of ensuring access to care, limiting the financial burden on patients, and controlling overall costs. A case in point is the current debate about involuntary out-of-network charges for hospitals in New Jersey—i.e., payment for care when a patient does not have the option of selecting a hospital in his or her health plan's network.

States differ in how they handle such involuntary out-of-network hospital care. New Jersey's current regulations emphasize patient protection, in that patients are only responsible for the portion of the cost that they would have incurred for in-network care, and health plans must pay the remainder of the provider's charges. This policy is seen as contentious by health plans, who argue that they have been made responsible for paying whatever charges a hospital submits, and proposals to limit payments for involuntary out-of-network care are being debated in the state legislature.

This report seeks to inform the current debate (as of October 2016) by analyzing the role of out-of-network payments in New Jersey hospitals' financial performance and simulating the effect of policies to limit charges for involuntary out-of-network care. It studies the impact of using all-payer blended rates, similar to the payment model in Maryland, as an alternative approach. This report will be of interest to policymakers, hospital and health plan executives, and providers and patients in New Jersey and other states that are contemplating hospital payment reforms.

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